ARCADIS Design & Consultancy for natural and built assets

CSX Transportation, Inc.

REVISED REMEDIATION WORK PLAN

Part 1 of 6

Former Indiana Creosoting Company Facility
VRP #6970403
240 West Country Club Drive, Bloomington, Indiana

April 23, 2020

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Former Indiana Creosoting Company Facility
240 West Country Club Drive
Bloomington, Indiana
IDEM VRP Site #6970403

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Appendix B *Screening-Level Ecological Risk Assessment for Clear Creek* (June 2011)

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Appendix D *Current Conditions Report* (May 24, 2019)

Appendix E	*Current Conditions Report Comment Letter* (IDEM – July 25, 2019), *Response to Current Conditions Comment Letter* (Arcadis – December 12, 2019), *Response to Comments* (IDEM – January 24, 2020)
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ACRONYMS AND ABBREVIATIONS

Arcadis	Arcadis U.S., Inc.
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CCR	Current Conditions Report
COC	constituent of concern
CSM	conceptual site model
CSXT	CSX Transportation, Inc.
CVOC	chlorinated volatile organic compound
DBH	diameter-at-breast-height
EPC	exposure point concentration
ERC	Environmental Restrictive Covenant
ERO	Environmental Restrictive Ordinance
FARA	Floodplain Analysis / Regulatory Assessment
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
HASP	Health and Safety Plan
HHRA	Human Health Risk Assessment
ICC	Indiana Creosoting Company
IDEM	Indiana Department of Environmental Management
IGS	Indiana Geological Survey
L&N	Louisville & Nashville
LRA	Limited Risk Assessment Report
LQG	large quantity generator
LRC	Lower Ramp Creek
mg/kg	milligrams per kilogram
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyl
PNA	polynuclear aromatics
PVC	polyvinyl chloride

QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RCG	Remediation Closure Guide
ROW	right-of-way
RWP	Remediation Work Plan
RRWP	Revised Remediation Work Plan
Site	Former Indiana Creosoting Company Facility Voluntary Remediation Program (VRP) #6970403 site, located at 240 West Country Club Drive in Bloomington, Indiana
SGS Labs	SGS North America, Inc.
SMP	Site Management Plan
SQG	small quantity generator
SVOC	semi volatile organic compound
µg/L	micrograms per liter
URC	Upper Ramp Creek
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VI	vapor intrusion
VRP	Voluntary Remediation Program

EXECUTIVE SUMMARY

This *Revised Remediation Work Plan* (*RRWP*) has been prepared at the request of CSX Transportation, Inc. (CSX) to document the extensive environmental-related investigations, assessments, sampling, characterizations, and remediation completed at the Former Indiana Creosoting Company (ICC) facility (Site) located 240 West Country Club Drive, Bloomington, Monroe County, Indiana (**Figure 1**). The investigation and remediation activities are detailed in this *RRWP* to support obtaining closure through the Indiana Department of Environmental Management (IDEM) Voluntary Remediation Program (VRP) for the Site (IDEM VRP #6970403).

The Site is part of a Brownfields success story which has involved collaboration between the City of Bloomington and CSX for the planning, preparation and purchase of properties associated with the former Louisville & Nashville (L&N) McDoel Switchyard. These activities have been completed over the past 15 years. The Site was originally part of the L&N McDoel Switchyard with an adjacent main rail line which ran through Bloomington from north to south. Bloomington purchased 8.74 miles of the main rail line in 1993 to initiate a Rails-to-Trails project. In 2005, the City then purchased the secondary rail line and a smaller right-of-way (ROW) portion of the CSX property along the north side of Country Club Road. The secondary rail line was purchased to connect the northern Rails-to-Trails to the southern portion and the CSX ROW north of Country Club Road was purchased to install a pedestrian walk bridge connecting the western residential neighborhoods to the commercial businesses along Walnut Street. The McDoel Switchyard was purchased in 2015 and the City of Bloomington is in the final stages of redeveloping the McDoel Switchyard into a multi-use park and recreational area (to include a performance stage, event lawn, main pavilion, community gardens, street skate park, basketball courts, bocce courts, exercise equipment, etc.). The City of Bloomington continues to express interest in the VRP Site portion.

Investigations at the Site have dated back to 1987 when the IDEM conducted an initial assessment that included soil, sediment and surface water sampling. Several investigations, assessments and remedial actions occurred over the following 10 years at which time the Site was accepted into the IDEM VRP Program in 1997. Additional investigations, assessments and remedial activities (to include Phase II Work Plan, Phase II Investigation, Wetlands Delineation, Risk Assessments, Further Site Investigations, Pedestrian Bridge Installation, Creek Liner Installation, US ACE Permitting, etc.) were conducted prior to the original *Remediation Work Plan* (*RWP*) being submitted in 2009. The original *RWP* (Arcadis 2009) was submitted to the IDEM VRP in December 2009 to document the activities which had been completed at the Site up to that date. At that time, both IDEM and CSX agreed additional assessments and remedial activities would be required prior to approval of a final RWP.

Since the original *RWP* submittal, the IDEM, CSX and Arcadis have conducted numerous meetings to discuss the remedial objectives, technical approaches and investigations over the last 10 years. Those meetings have resulted in documenting work activities in several primary reports, all of which are incorporated by reference and are part of this RRWP. These reports included the *Geology and Hydrogeology Report* - Arcadis 2011a **(Appendix A),** *Screening-Level Ecological Risk Assessment* - Arcadis 2011c **(Appendix B),** *Limited Risk Assessment* - Arcadis 2015 **(Appendix C),** and the *Current Conditions Report* - Arcadis 2019a **(Appendix D).** The IDEM has reviewed these comprehensive reports and issued a final comment letter dated July 25, 2019 (IDEM 2019). After a meeting with the IDEM to discuss their comments, Arcadis submitted the *Response to the Current Conditions Report Comments*

dated December 18, 2019 (Arcadis 2019b). The IDEM issued their approval to the Arcadis Response Letter on January 24, 2020 (IDEM 2020). These three documents are contained in **Appendix E**.

With the IDEM approval of the *Response to the Current Conditions Report Comments* dated December 18, 2019, CSX and Arcadis are submitting this *RRWP* for IDEM review. The primary objective of this *RRWP* is to present a comprehensive report that summarizes investigation and remediation activities that have been completed since IDEM VRP application and acceptance in 1997 (IDEM VRP # 6970403) and propose a closure strategy for residual impacts remaining at the Site through a combination of nature and extent delineation, monitoring, remedial activities, risk assessment, and institutional controls.

Throughout the history of the project, CSX has conducted numerous investigations and assessments, as well as proactive remedial actions to reduce potential risk associated with former operations at the Site. Some of the more significant assessments and remedial efforts are summarized as follows:

- Over 500 soil borings have been completed at the Site for nature and extent characterization,
- Over 1,000 soil samples have been collected at the Site for laboratory analysis,
- Installation of 119 monitoring wells, 19 recovery wells, and 4 pilot holes as part of the project,
- Collected over 1,300 groundwater samples for laboratory analysis,
- Recovered over 10,500 gallons of dense non-aqueous phase liquids (DNAPL) creosote and water from recovery wells and monitoring wells at the Site (5,420 gallons being free product only) and documented a significant decrease in the volume of recoverable free product due to the DNAPL creosote recovery program as seen on the trend graphs located in **Table 4** and **Appendix G**,
- Excavation and off-site disposal of over 11,500 tons of impacted soil and creosote during the removal of a 40,000-gallon process tank in 1991,
- Excavation and off-site disposal of approximately 900 tons of soil and bedrock while assisting the City of Bloomington with installing the pedestrian walk bridge in 2006,
- Installation of a creek liner along an approximate 170-foot section of Clear Creek in 2007, immediately adjacent to the former operations area, where approximately 1,875 tons of soil, bedrock, and sediment were excavated and disposed off-site,
- Excavation and off-site disposal of over 9,000 tons of impacted soils from twenty (20) areas across the northern and southern tracts of the Site from 2011 to 2013 to reduce the calculated Exposure Point Concentration (EPC) below the IDEM screening level,
- Excavation and off-site disposal of over 550 tons of sediment from two (2) point bar areas within Clear Creek in 2012,
- Conducted two years of tracer testing and monitoring to ensure a thorough understanding of the geologic subsurface groundwater flow pathways,
- A Vapor Intrusion (VI) Assessment was conducted on the commercial businesses (Walnut Station Commercial Plaza) on the eastern portion of the site in 2010. Sub-slab and Indoor Air samples were collected from each of the tenant spaces of the commercial plaza as part of the assessment. Site constituents of concern (COC) concentrations were below the IDEM VI screening levels and indicate vapor intrusion is not an issue related to the Site,
- Conducted risk assessments to evaluate risk from the residual Site impacts as documented in the *Limited Risk Assessment* (Arcadis 2015) and *Screening-Level Ecological Risk Assessment* (Arcadis 2011c). These risk assessments conclude that there is no significant unacceptable and unmanageable risk associated with the Site.

- Conducted several public outreach programs to include a public open house meeting at Lora L. Batchelor Middle School on December 7, 2011. The purpose of the public open house was to update the public on site activities and inform the public that the Site was being overseen by IDEM.

A list of Site COCs requested for coverage under the "Covenant Not-to-Sue" (CNTS) and their respective IDEM Default Closure Goals for each media are summarized in **Table 1**. The Site specific COCs include benzene, toluene, ethylbenzene, total xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), phenolic compounds, phthalates, lead and arsenic; the typical constituents found in creosote wood treating compounds. This RRWP presents an integrated, remediation and exposure prevention strategy that reduces Site-related COCs, prevents exposure, protects receptors and provides appropriate measures to manage remaining risk from residual COCs. The objective of this RRWP is to achieve a "Certificate of Completion" and a CNTS in accordance with a Site-specific, risk-based approach, as provided for in IDEM's Guidance applicable to this Site and the VRP statute, specifically including Ind. Code 13-25-5-8.5 (as amended by H.E.A. 1162 (2009). The release of petroleum and hazardous substances that are addressed by and are the subject of this RRWP covers the list of COCs in Table 1. CSX is seeking a Certificate of Completion and CNTS under Indiana Code 13-25-5-16 and 18, respectively, that (a) cover all the COCs in Table 1; and, (b) covers the entire Site and areas off-Site where COCs have migrated or may potentially migrate in the future.

The Voluntary Remediation Agreement was signed in 1997, therefore, the 1996 VRP Resource Guide, including the IDEM Tier II Non-residential Closure Goals were utilized for evaluation purposes of the data collected. If cleanup goals for specific COCs were not established in the 1996 manual (IDEM 1996a), then other cleanup goals were utilized. These additional cleanup goals are included as part of the 1996 IDEM Non-Rule Lead Policy (IDEM 1996b) and 2006 RISC Default Industrial Goals (IDEM 2006). Current 2020 IDEM RCG guidance and screening levels were used for evaluation of off-site surface soils.

In addition to the extensive investigations, assessments and remediation actions completed at the Site, a combination of institutional controls (Environmental Restrictive Covenants (ERCs) and/or an Environmental Restrictive Ordinance (ERO)) are proposed for residual impacts remaining at the Site and/or groundwater impacted off-site properties. The primary Site ERC will include restrictions on future land use, groundwater use, structure VI screening/mitigation, and outline required soil management practices. ERCs may also be developed to prohibit the use of groundwater on off-site properties. In lieu of off-site ERCs (and to augment the proposed on-site ERC) and as a primary initiative towards mitigating potential off-site risk, a proposed ERO will include a restriction on the use of groundwater at the Site and at impacted off-site properties. If CSX is unable to secure these types of institutional controls, then it will provide alternative measures to IDEM for consideration and implementation to ensure there are no unacceptable future risks associated with the site.

Since the submittal of the *Current Conditions Report* (*CCR*) Arcadis 2019a (**Appendix D**) which documented Site activities from October 2011 through December 2018, Arcadis has continued to perform routine DNAPL creosote recovery at the Site. Since initiating the DNAPL Recovery Program, Arcadis has recovered over 10,500 gallons of DNAPL/water mixture (5,420 gallons being free product only) from a combination of recovery well and monitoring well locations through the end of 2019. Additionally, since peak recovery in 2013, Arcadis has seen a steady decline in the recharge of DNAPL creosote at these locations, which indicates the DNAPL recovery program has been very effective and has reached a point

of asymptotic returns. This asymptotic return is indicative of recovery to extents practicable. The graphs showing the overall DNAPL recovery trend for the Site and individual well recovery trends are contained in **Appendix G**.

At the request of the IDEM and as part of the path to closure, Arcadis began quarterly sampling of select groundwater monitoring wells across the Site in December 2019. As requested by the IDEM, Arcadis will collect groundwater samples from monitoring wells at the Site for a period of eight (8) consecutive quarters. During one of the sampling events, groundwater samples are to be collected during a single qualifying stormwater sampling event. These discussions are provided in the documents contained in **Appendix E**.

The institutional controls and other risk management measures proposed in this *RRWP*, coupled with historical remediation and delineation of groundwater to 1996 VRP Tier II Residential Cleanup Goals (IDEM 1996a), will mitigate potential future risks associated with Site-related impacts and facilitate closure of this Site consistent with applicable IDEM guidance.

The release that is the subject of, and is addressed by, this RRWP, are the conditions observed in surface soil, subsurface soil, and groundwater, which are summarized above and are described in detail in Arcadis' investigation reports and status reports listed in Section 3 and discussed in Section 5 of the RRWP. Upon successful completion of the actions proposed in this Revised RWP, CSX will prepare and submit a Remediation Completion Report.

1 INTRODUCTION

On behalf of CSX Transportation, Inc. (CSX), Arcadis U.S., Inc. (Arcadis) has prepared this Revised Remediation Work Plan (*RRWP*) for the Former Indiana Creosoting Company Facility (Site) located at 240 West Country Club Drive **(see Figure 1)** in Bloomington, Indiana (Site). This *RRWP* updates and replaces the *Remediation Work Plan* (Arcadis 2009) submitted on December 30, 2009. The primary objective of this *RRWP* is to present a comprehensive report that summarizes investigation and remediation activities that have been completed since Indiana Department of Environmental Management (IDEM) Voluntary Remediation Program (VRP) application and acceptance in 1997 (IDEM VRP # 6970403).

In addition to presenting comprehensive information related to historical investigations and activities at the Site, this *RRWP* summarizes activities completed since the submittal of the *CCR* (Arcadis 2019a) on May 24, 2019 (**Appendix D**). The *CCR* (Arcadis 2019a) documents Site activities through December 7, 2018.

A detailed Site history, background, and historical information/data have been presented to the IDEM in in numerous reports throughout the years; this *RRWP* incorporates and updates detailed information pertaining to Site location, historical land use, historical information/analytical data, ecological assessment information, geology/hydrogeological assessment results, Site safety plans, operation and maintenance plans, and/or community relations plans in those documents. The key reports to understanding the Site objectives and goals include the *Geology and Hydrogeology Report* - Arcadis 2011a **(Appendix A),** *Screening-Level Ecological Risk Assessment* - Arcadis 2011c **(Appendix B),** *Limited Risk Assessment* - Arcadis 2015 **(Appendix C),** and the *Current Conditions Report* - Arcadis 2019a **(Appendix D)**

The institutional controls and other risk management measures proposed in this *RRWP*, coupled with historical remediation and delineation of groundwater to 1996 VRP Tier II Residential Cleanup Goals (IDEM 1996a), will mitigate potential risks associated with Site-related impacts and facilitate closure of this Site consistent with applicable IDEM guidance.

2 SITE HISTORY AND BACKGROUND

The Site is located in Township 8 North, Range 1 West, Sections 9 and 16 within Perry Township in Bloomington, Indiana (**Figure 1**). The Site is bordered to the north and east by commercial/industrial properties and the recently redeveloped City of Bloomington McDoel Switchyard Park; and to the southeast, south and west by predominantly residential properties, although there is some commercial/industrial property along these boundaries as well. Except for the commercial land acquired by CSX in 2010, the Site occupies the valley floor of Clear Creek and is relatively flat, with a gentle slope toward the creek. The commercial property acquired in 2010 is also predominantly flat lying and is elevated about 10 feet above the valley floor. The exception is toward the western edge of this property, where the land surface drops off steeply to the valley floor.

The Site is a generally rectangular shaped parcel of land approximately 40 acres in size and is divided into two portions by Country Club Road (**Figure 2**). The first portion, approximately 14 acres in size, is located north of Country Club Road and is divided by Clear Creek, which flows from north to south through the portion. This entire portion of the site generally lies in or near the floodplain of Clear Creek. The area west of Clear Creek (north of Country Club Road) is where the former creosoting operations took place. Creosote storage tanks and various railroad spurs were also located here. The area to the east of Clear Creek is a marshy area of floodplain that was included among land that CSX purchased in 2006 to facilitate further delineation efforts and was not part of the former wood-treating operation.

The second portion of the Site is located south of Country Club Road and comprises approximately 26 acres, which is also divided by Clear Creek. The area to the west of Clear Creek was historically used to store untreated railroad ties and was never developed. The area to the east of Clear Creek consists of floodplain land that was included in CSX's 2006 purchase described in the preceding paragraph, as well as approximately 6 acres of commercial land located predominantly above the floodplain that CSX purchased in 2010. The commercial plaza was also purchased to facilitate further delineation efforts. The area (east of Clear Creek) but west of the commercial plaza has historically been undeveloped.

The Site is currently undeveloped, except for a portion of the land purchased in 2010, which contains a small strip mall and oil change facility. In the former operations area, a few concrete foundations remain below the ground surface on top of the bedrock (**Figure 2**). Most of the site is covered either with brush and grasses, or by trees (particularly along Clear Creek). Property access has been restricted by the installation of a fence along Country Club Road.

Wood-treating operations began circa 1914 by the American Creosoting Company and ceased in 1976. The Indiana Creosoting Company, a subsidiary of the Monon Railroad, purchased the property from the American Creosoting Company in 1961. The Monon Railroad merged with the Louisville and Nashville Railroad in 1971, which was the predecessor company to CSX. All creosote storage, handling, and use appears to have occurred north of Country Club Road in the former operations area. Known locations of creosote storage tanks and other former operational features are shown on **Figure 2**.

The Site was formally entered into the IDEM VRP upon receipt of a signed application acceptance letter dated May 13, 1997. The VRP Application and subsequent Voluntary Remediation Agreement (VRA) reflect CSX's intention to investigate and remediate the Site, as necessary, to achieve VRP closure for surface soil, subsurface soil, and groundwater for a non-residential property, and to ultimately obtain a

Certificate of Completion and Covenant Not to Sue. The current remediation and clean-up objectives for soil and groundwater at the Site are 1996 VRP Tier II Default Non-residential Cleanup Goals for on-site impacts and residential for off-site impacts (IDEM 1996a), unless an ERC is agreed upon by the off-site property owners and/or an ERO is agreed upon by Monroe County. CSX anticipates the future land-use of the Site to remain industrial.

The Site's constituents of concern (COCs) are BTEX (benzene, toluene, ethylbenzene, and xylenes), poly aromatic hydrocarbons (PAHs), phenolic compounds, phthalates, arsenic, and lead. The specific analytes requested for cover under the CNTS and their respective default closure levels are shown on **Table 1**. The affected media is surface soils, subsurface soils and bedrock, sediments and groundwater. If cleanup goals for specific COCs were not established in the 1996 manual (IDEM 1996a), then other cleanup goals were utilized including the 1996 IDEM Non-Rule Lead Policy (IDEM 1996b) and 2006 RISC Default Industrial Goals (IDEM 2006). Additionally, Exposure Point Concentrations (EPCs) were calculated for constituents which were detected above the applicable Cleanup Goals; these EPCs were compared to the applicable Cleanup Goals.

2.1 Site Name, Address and Owner Contact Information

Site Name:	Former Indiana Creosoting Facility
Facility Identification Number:	IDEM VRP No. 6970403
CSX Site Number	9415829
Site Address:	240 Country Club Drive Bloomington, Monroe County, Indiana 47401
Site Contact:	Daniel Dyer, CSX
Phone No:	(317) 267-4151
Property Owner Contact:	CSX Transportation, Inc. 500 Water Street Jacksonville, FL 32202 Phone No: (904) 475-0353

2.2 Site Contact Responsible for VRP Process

The CSX contact for the project is:

Mr. Daniel Dyer, CPG
Sr. Manager Environmental Remediation
CSX Transportation, Inc.
12125 E. 65th Street
#36061
Indianapolis, IN 46236
Phone No.: (317) 267-4151

CSX has contracted Arcadis to perform the investigations and remedial activities at the Site. The Arcadis contact is:

Mr. Steven C. Sharp, LPG

Principal Geologist/Senior Project Manager
150 West Market Street, Suite 728
Indianapolis, Indiana 46204
Phone No.: (317) 236-2829

3 HISTORICAL INVESTIGATION, REMEDIATION, AND SUPPORTING DOCUMENTATION

This section summarizes previously completed environmental investigations and corresponding documents that were reviewed for development of this revised *RRWP* and have also previously been submitted to the IDEM. The environmental investigations and supporting documents are listed in chronological order, followed by a brief summary. The majority of these reports can be found on the IDEM's Virtual File Cabinet (VFC), though several have been included as part of this RRWP. The reports not available on the VFC are referenced and summarized in other reports as detailed below.

3.1 August 1987 – Indiana Department of Environmental Management Site Investigation

In August 1987, the IDEM conducted a site investigation of the Former Indiana Creosoting Company. During this investigation, IDEM noted a vat containing creosote and a pipe possibly directed toward Clear Creek. An unknown number of samples were acquired from creek sediments, creek surface water both upstream of the pipe and downstream of the pipe, and the creosote contained in the vat. The IDEM investigation noted elevated levels of polynuclear aromatics (PNAs) throughout the property. A complete copy of this report was issued to the IDEM VRP on May 7, 1998 as an Appendix (Appendix C) of the Remedial Investigation/Hazard Characterization Former Indiana Creosoting Site Volumes I-III.

3.2 January 1989 – Limited Recovery Activity - ENSR

In June 1988, a 500-gallon gasoline underground storage tank, dispenser pump system, and galvanized piping were removed and disposed off-site. In addition, 10 gallons of creosote were removed from a vat bottom, soils were excavated along a concrete wall, and additional soils were excavated near a railroad spur (No. 3). A complete copy of this report was issued to the IDEM VRP on May 7, 1998 as an Appendix (Appendix D) of the Remedial Investigation/Hazard Characterization Former Indiana Creosoting Site Volumes I-III.

3.3 December 1989 – Initial Assessment – ATEC

This report is referenced in the March 1990, Soil Sampling and Analysis Report; however, all efforts to locate a copy have failed. It is believed that no copies of this initial assessment currently exist, and it cannot be reproduced.

3.4 March 1990 – Soil Sampling and Analysis Report – ATEC

In March 1990, ATEC submitted an environmental assessment, to the Wininger Stolberg Group, regarding the Southern Tract of the current Site. Activities involved the excavation and removal of soil from localized stained areas. Excavations ranged in depth from 0.5 feet to 3.0 feet. In addition, six soil samples were gathered and submitted for laboratory analysis of SVOC and Arsenic; one sample of stained soil and five samples of the clean soil located under stained soil. All five samples, taken of the

clean underlying soils, yielded results that were below the VRP Tier II Residential Cleanup Goals. The sixth sample, taken from a stained area, had detections of SVOC compounds. A complete copy of this report was issued to the IDEM VRP on May 7, 1998 as an Appendix (Appendix D) of the Remedial Investigation/Hazard Characterization Former Indiana Creosoting Site Volumes I-III.

3.5 March 1990 – Site Characterization Work Plan – Weston, Inc.

In March 1990, Weston, Inc. prepared a work plan for initial site characterization on the Indiana Creosoting Company property. This plan called for the installation of 12 monitoring wells, approximately 40 soil borings, approximately 5 test pits, sediment sampling, and a geophysical survey via electromagnetic technique. It is unknown whether this work plan was ever implemented. A complete copy of this report was issued to the IDEM VRP on May 7, 1998 as an Appendix (Appendix A) of the Remedial Investigation/Hazard Characterization Former Indiana Creosoting Site Volumes I-III.

3.6 January 1991 – Sampling and Analysis Plan – Arcadis G&M

In January 1991 ARCADIS developed a Sampling and Analysis Plan proposing to use electromagnetic survey and multiple soil borings to identify potential creosote source areas. In addition, thirteen test pit locations were proposed, six stream sediment samples were to be collected, and fourteen monitoring wells were to be installed. It is important to note that this was a plan of work activities to be performed and not a report of completed work. This plan was never implemented because CSXT opted for a large source area removal as indicated in the Soil Remediation Report for March 1992. A complete copy of this report was issued to the IDEM VRP on May 7, 1998 as an Appendix (Appendix E) of the Remedial Investigation/Hazard Characterization Former Indiana Creosoting Site Volumes I-III.

3.7 March 1992 – Soil Remediation Report – Arcadis G&M

Between May 1991 and November 1991, Arcadis G&M performed a removal of impacted soils at the Site. In addition, a 40,000-gallon underground storage tank was located and removed. The removal effort included the excavation and disposal of over 11,500 cubic yards of impacted soil, creosote, and various metal parts. The approximate locations of these removal activities are depicted in Figure 4 of the *CCR* (Arcadis 2019a) (**Appendix D**). A complete copy of this report was issued to the IDEM VRP on May 7, 1998.

3.8 August 1992 – Remedial Investigation / Hazard Characterization – Arcadis G&M

A total of 35 borings were advanced and characterized, in order to evaluate the extent of creosote impacts. Field screening was performed, and 20 samples were submitted for laboratory analysis of base neutral acids (BNAs), volatile organic compounds (VOCs), and metals. An additional fourteen monitoring wells were installed (MW-1S / MW-1D to MW-7S / MW-7D). Groundwater was sampled and analyzed from; twelve of the newly installed wells (MW-1D, MW-2S/D, MW-3D, MW-4S/D, MW-5S/D, MW-6S/D, MW-7S/D) and three existing monitoring wells (OW-1, OW-2, and OW-3), that were installed in February 1991. The groundwater samples were analyzed for BNAs, VOCs, benzene, toluene, ethylbenzene, and

xylene (BTEX), and metals. Additionally, twelve test pits were dug with a backhoe. Six samples were submitted for laboratory analysis of BNAs and metals. Finally, five sediment samples were gathered from Clear Creek and analyzed for BNAs, VOCs, and metals.

The above collected data was combined with data that had been gathered in previous reports to generate a carcinogenic risk of approximately 1x10-4. This risk was cumulatively calculated for a child playing with soils, a child playing with sediments, a child playing with creek water, industrial workers, and excavation workers. The report took into account geologic, and hydrogeologic data, groundwater uses, stream sediments, constituents of concern, and exposure pathways to generate the above number. A complete copy of this report was issued to the IDEM VRP on May 7, 1998.

3.9 June 1995 – Additional Subsurface Investigation – Arcadis G&M

Between November 1994 and February 1995, Arcadis performed a combined subsurface and groundwater investigation at the Indiana Creosoting Company. A total of 35 hand auger and/or GeoProbe locations were advanced with 9 samples submitted for PAH analysis. The results indicated that the area of highest concentrations of PAH impact was near the railroad spur Number 3; with an additional area of concern located north of the previously existing lagoon. Groundwater samples were also collected from the existing monitoring wells. The results indicated that PAH concentrations were decreasing, with the possible exception of acenaphthene. Further delineation of groundwater was recommended near Clear Creek just south of Country Club Road. However, CSXT had not been granted property access at the time of the report. A complete copy of this report was issued to the IDEM VRP on May 7, 1998.

3.10 December 1995 – Supplemental Subsurface Investigation – Arcadis G&M

In October 1995, Arcadis installed a total of eight additional monitoring wells. Two wells (MW-8S and MW-8D) were nested in the southern parcel along the eastern property boundary; one screened at 2.5 to 6 feet bgs, and the other at 8 to 13 feet bgs. The remaining six wells (P-1 to P-6) were located on the northern parcel proximal to Clear Creek. Free product was noted in monitoring well MW-3S. Groundwater samples were collected from all of the newly installed monitoring wells and four of the previously existing monitoring wells. Samples were submitted for PAH analysis. During the sampling event, PAH concentrations were detected above the VRP Tier II Industrial standards only in monitoring well P-6.

3.11 September 1996 – Risk Assessment Former Indiana Creosoting Company – Arcadis G&M

September 1996, an extensive Risk Assessment was performed for the site. The risk characterization concluded that there are no complete exposure pathways for human receptors at the site. Potential exists for worker exposure via excavation and additional potential exists for exposure via wading in Clear Creek. For the worker scenario, the total calculated excess lifetime cancer risk was estimated at 7x10-6 with a hazard index of 0.1. For the wader scenario, the total calculated excess lifetime cancer risk was

estimated as high as 2x10-7 with a hazard index of 0.02. Additionally, an ecological risk assessment indicated constituent concentrations detected in the surface soil would not present a risk to herbivorous terrestrial species, surface water did not exceed the available comparison values for protection of aquatic species, and sediment concentrations were unlikely to present a risk to benthic organisms.

3.12 August 1999 – Phase II Investigation Work Plan – Arcadis G&M

In August 1999, Arcadis submitted an Investigation Work Plan to the IDEM VRP. This work plan contained the scope of work for the Phase II Investigation Report described in the next section. This report is available on the IDEM VFC.

3.13 January 2003 – Phase II Investigation Report – Arcadis G&M

In January 2003, Arcadis submitted a Phase II Investigation Report to the IDEM VRP Section. The investigation was performed, to further delineate surface and subsurface impacts to the Site. A total of 93 surface samples and 79 sub-surface samples were submitted for SVOC analysis. Additional groundwater sampling was submitted for SVOC analysis. This investigation indicated localized subsurface soil impacts and slightly more wide-spread surface soil impacts along the north south running gravel road, along the southern boundary of the northern parcel, and a localized area near well P-4. Groundwater impacts were noted at the southeast corner of the north parcel and at the northern tip of the north parcel. This report is available on the IDEM VFC.

3.14 September 2006 – Further Site Investigation Report – Arcadis

In September 2006, Arcadis submitted a Further Site Investigation Report to the IDEM VRP section, detailing the results of additional soil and groundwater investigation activities completed at the Site between 2003 and 2005. A total of eighteen monitoring wells were installed and a total of 233 surface soil samples and 72 subsurface soil samples were collected as part of these on-going investigation activities. The intent of these investigations was to better define the extents (both laterally and horizontally) of SVOCs, BTEX, Metals (arsenic and lead) within soil and groundwater media. A comparison of the surface and subsurface soil results to the IDEM Tier II Non-Residential Default Closure levels revealed that surface soil concentrations exceed screening criteria for several SVOCs near the former operations area (northern tract), along Country Club Road (southern tract), and near a former rail spur (southern tract), limited SVOC impacts (above Tier II Criteria) were identified in collected subsurface soil samples (SVOC exceedances identified in 9 of 72 collected subsurface samples), BTEX impacts above screening criteria were limited to one subsurface sample collected in the northern tract, lead exceeded at one surface soil location (southern tract), and arsenic exceeded at one surface soil location (northern tract). Groundwater data collected during these (and previous) investigations show concentrations of several SVOCs, benzene, arsenic, and lead exceed 1996 IDEM VRP Tier II Non-Residential Default Closure levels. DNAPL creosote was identified in six monitoring wells at various thicknesses. Additionally, several creosote like soil bleeds were identified and sampled in the northern tract. Based on the results of this sampling SVOCs concentrations were detected at levels above the Tier II Non-residential Cleanup Criteria. This report is available on the IDEM VFC.

3.15 December 2009 – Remediation Work Plan - Arcadis

In December 2009, CSXT and Arcadis submitted an RWP with IDEM's understanding the impacts have not been fully delineated and the remedial approach has not been finalized. With that said, the nature and extent of impacts at the Site continued to be investigated through the performance of multiple investigations that have included, over 200 soil sample points (i.e. soil borings, surface grab samples and sediment samples), installation of 71 permanent monitoring wells, 5 recovery wells, installation of a creek liner remediation system, and laboratory analysis of numerous soil, sediment, surface water and groundwater samples for Site COCs.

This original RWP (Arcadis 2009) was submitted to the IDEM VRP strictly for administrative purposes and to document the activities which had been completed at the Site up to that date. At that time, both IDEM and CSX agreed additional assessments and remedial activities would be required prior to approval of a final RWP. Upon delineation of the off-site impacts, a revised RWP will be submitted to the IDEM in the future. This *RRWP* fulfills the above-mentioned report. The report has also previously been submitted to the IDEM and can be found on the IDEM VFC.

3.16 October 2011 – Geology and Hydrogeology Report – Arcadis

In October 2011, Arcadis prepared a Geology and Hydrogeology report for the former Indiana Creosoting Company facility located at 240 Country Club Road, Bloomington, Monroe County, Indiana. The objective of this report was to document the additional subsurface characterization work that has been performed both on-Site and off-Site since 2008 to develop a Conceptual Site Model (CSM) for defining the extent of creosote impacts in the subsurface and how those impacts are migrating through the bedrock subsurface. A total of 59 additional monitoring wells and 7 recovery wells have been installed since 2008 to further define the impacts in the subsurface. Various detailed testing has been conducted on these wells and other previously installed wells to gain a better understanding of the subsurface and migration of water through the subsurface. These tests included packer testing, falling head testing, hydraulic conductivity testing, long-term hydraulic head testing, tracer testing, free product monitoring and recovery, free product rate of recovery, and groundwater sampling. The results of these tests, as well as their impact on the CSM, are described in detail throughout this report; the full report is provided in **Appendix A** of this *RRWP*. The report has also previously been submitted to the IDEM and can be found on the IDEM VFC.

3.17 November 2011 – Community Relations Plan – Arcadis

In November 2011, Arcadis prepared a Community Relations Plan to present to the public to share the latest efforts by CSX and IDEM to remediate the property and to keep the public informed of previous and planned remediation activities. A public open house meeting was held on December 7, 2011 at Batchelor Middle School, located in Bloomington, Indiana.

3.18 November 2011 – Screening Level Ecological Risk Assessment Report –Arcadis

In November 2011 Arcadis developed a definitive screening-level ecological risk assessment (SLERA) on CSX for the portions of Clear Creek (the Study Area) associated with the Site. The purpose of this

SLERA was to assist with closure activities under the Indiana Department of Environmental Management's (IDEM) Voluntary Remediation Program (VRP) at the Site. This report documents data collected for the SLERA from 1991 through 2011. The SLERA focused on the COCs at the Site which included DNAPL (creosote), selected SVOCs (phenols, phthalates, and priority pollutant and alkylated PAHs), and selected VOCs (BTEX), and metals (total, dissolved, and as simultaneously extracted metals/acid-volatile sulfide [SEM-AVS]).

The SLERA was conducted in two phases. A preliminary SLERA was conducted in 2004 based on sediment, surface water and porewater data collected in 1991 and 2003. The preliminary SLERA concluded that the only COCs that may cause potential risk to ecological receptors in Clear Creek are PAHs in sediment. Based in part on the results of the preliminary SLERA, and intermittent presence of DNAPL globules on the creek bottom, a creek liner was installed along an approximate 170-foot section of Clear Creek within the northern tract of the Site, immediately adjacent to the former operations area, in the Summer-Fall of 2007.

Sediment and surface water samples were obtained from Clear Creek in 2010 to evaluate the effectiveness of the mitigation efforts. The data from this 2010 Clear Creek investigation was used to conduct a definitive SLERA for the Study Area at Clear Creek. The results of this definitive SLERA indicate that ecologically significant adverse effects are unlikely at the Clear Creek Study Area due to Site related COCs. Therefore, further investigation of potential ecological risks and remediation to reduce potential ecological risks are not warranted for Clear Creek. The full report is provided in **Appendix B** of this *RRWP*. The report has also previously been submitted to the IDEM and can be found on the IDEM VFC.

3.19 May 2015 – Limited Risk Assessment Report – Arcadis

In May 2015, Arcadis prepared a limited human health risk assessment (HHRA) on behalf of CSX to assist with closure activities under the IDEM VRP at the former Indiana Creosoting Company facility. The risk assessment focused on the COCs at the Site which included DNAPL creosote, selected SVOCs (phenols, phthalates, and alkylated PAHs), selected VOCs (BTEX), and select metals (arsenic, lead). The exposure pathways and exposure routes for the current and future use of the Site evaluated in this limited risk assessment conclude there are no unacceptable risks at the former Indiana Creosoting Company facility. The full report is provided in **Appendix C** of this *RRWP*. The report has also previously been submitted to the IDEM and can be found on the IDEM VFC.

3.20 May 2015 – Vapor Intrusion Investigation Report – Arcadis

In November 2010, Arcadis collected information on the Walnut Station Commercial Plaza, installed permanent sub-slab vapor points, and collected paired sub-slab vapor and indoor air samples to determine if the vapor intrusion pathway was complete. A representative from the Center for Toxicology and Environmental Health accompanied Arcadis personnel throughout the sampling process. Concentrations within indoor air and sub-slab sampling indicate vapor intrusion is not an issue at the Walnut Station Commercial Plaza. The full report is provided as Appendix A of the Limited Risk Assessment Report (*LRA)*, which is provided as **Appendix C** of this *RRWP*.

3.21 May 2019 – Current Conditions Report – Arcadis

Arcadis, on behalf of CSX prepared a Current Conditions Report to document the investigative and remedial activities that have occurred at the former Indiana Creosoting Facility located at 240 Country Club Drive, Bloomington, Monroe County, Indiana, (Site). The objective of this report is to document the Site activities that have occurred since the previous *Geology and Hydrogeology Report* (Arcadis 2011a) was submitted to the Indiana Department of Environmental Management (IDEM) on October 27, 2011 (**Appendix A**). This report documents the site activities that occurred from October 2011 through December 7, 2018 and is presented as **Appendix D** of this report. The report has also previously been submitted to the IDEM and can be found on the IDEM VFC.

The following bullets summarize key findings and conclusions associated with the various investigations and remedial activities conducted at this site.

- An extensive free product recovery program was initiated in 2011 for the project and began gauging and/or recovering DNAPL creosote from 40 select recovery and monitoring wells on a weekly basis. Over 10,200 gallons of free product/water had been recovered from the site; with over 5,200 gallons of that total being free product only. The recovered volumes peaked in 2013 and continue to decline with only 400 gallons of free product/water (250 gallons of free product only) recovered in 2018.
- The *LRA* and *Screening-Level Ecological Risk Assessment* (*SLERA*) both were submitted in 2015, reviewed by the IDEM and indicate no significant risk associated with the site.
- As a proactive measure, a Vapor Intrusion Assessment was conducted on the commercial businesses (Walnut Station Commercial Plaza) on the eastern portion of the site in 2010. Sub-slab and Indoor Air samples were collected from the commercial plaza as part of the assessment. Concentrations were below the screening levels and indicate vapor intrusion is not an issue with this property.
- The recent groundwater sampling event (March 2018) requested by the IDEM from their review of the risk assessments, indicates the groundwater concentrations continue to be stable and/or declining. Furthermore, groundwater monitoring has occurred at the site for over 20 years through a network of 76 monitoring wells analyzing for the IDEM approved constituent of concern (COC) list of benzene, toluene, ethylbenzene, and xylenes (BTEX), semi volatile organic compounds (SVOCs), and total/dissolved metals.
- A total of eight (8) additional monitoring wells, twelve (12) additional recovery wells, and four (4) pilot study recovery wells have been installed since October 2011 to further define impacts in the subsurface and/or for increased DNAPL creosote recovery. The nature and extent of the residual creosote impacts has been delineated through site characterization and coordinated with the IDEM.
- Impacted surface soil, subsurface soil and sediments have been removed from the site to allow for Exposure Point Concentrations (EPCs) to be utilized for risk-based exposure assessment. All excavation activities were conducted with approval from the IDEM Voluntary Remediation Process (VRP) section and appropriate permits through the United States Army Corps of Engineers (USACE), IDEM Water Quality Section, and Indiana Department of Natural Resources (IDNR).
- Approximately 9,000 tons of impacted surface and subsurface soil, with elevated levels of benzo(a)pyrene, were excavated from twenty (20) areas of interest across the northern and southern tracts of the Site from late 2011 through 2013.

- Approximately 550 tons of sediment, from two (2) point bar areas within Clear Creek, immediately adjacent to the site, were excavated in 2012. The purpose of the work was to remove sediments with residual impacts within Clear Creek, south of Country Club Drive. The two sediment removal areas were dewatered with the assistance of a series of aqua dams and trash pumps; the aqua dams assisted in diverting the creek channel around the sediment removal areas, reducing the amount of water in the removal areas.
- Arcadis performs an annual walk-through of Clear Creek, which flows north-south through the center of the property, to observe any visible sheens that may be migrating from the site. During the creek walk, Arcadis monitors for the presence of sheens and/or creosote bleeds emanating from the bedrock fractures along the creek bottom. The creek is inspected for the entire distance it traverses through to the Site. No visible sheens have been observed during the walk-throughs.
- As part of the permits optioned for the excavation activities, a tree mitigation project was implemented by CSX at the site. A total of eighteen (18) trees at sizes greater than 10 inches diameter-at-breast-height (DBH) were removed as part of the soil excavation activities. In accordance with the IDNR Construction in a Floodway Permit No. FW-25726, these trees were to be replaced at a 5:1 ratio (90 trees). In October 2012, ninety-one (91) trees were planted within five (5) separate excavation areas (zones). Annual tree reports have been submitted to the IDNR, detailing the survival rates for years: 2013, 2014, 2015, and 2016. A letter from the IDNR granting the release from further annual tree monitoring was received on November 20, 2017.
- Two temporary remediation storage areas were constructed at the Site in 2014. A storage compound (eastern compound) was constructed on Lot #3, located south of Country Club Drive and east of Clear Creek consisting of a 40’ x 40’ x 8’ chain link fenced compound, containing a 20’ x 20’ x 4” concrete pad. A temporary storage building and compound (western compound) was constructed south of Country Club Drive, west of Clear Creek consisting of an 80’ x 50’ x 8’ chain link fenced compound, containing a 60’ x 40’ x 4” concrete pad, and a 36’ x 32’ post frame building. The purpose of the compounds is for the storage of remediation equipment (gator, trailers, transfer containers and equipment) necessary for DNAPL removal, and for the storage of fifty-five (55) gallon drums containing free product/water generated from the free product recovery program.
- To prepare for initiation of the free product recovery program, approximately 2,600 linear feet temporary access roads were constructed to improve site access and enable continued remediation cleanup at the Site from December 2011 through February 2012. Additionally, in February 2012, a 24’ long by 36” diameter concrete culvert was installed within a drainage ditch leading to Clear Creek, located south of County Club Drive and east of Clear Creek. The Culvert was placed to allow for temporary roadway access across the drainage ditch for free product recovery operations. The temporary access roads and culvert will be removed once remedial objectives for regulatory closures at the Site are met. The affected wetland area was planted with a marsh-appropriate seed mixture.
- In November 2011, the City of Bloomington replaced an existing 30” diameter storm water drainage culvert pipe which had fallen into disrepair, with a new 36” diameter x 246’ long reinforced concrete pipe along a similar alignment as the existing culvert. Once the culvert was fully installed, some culvert sections were approximately 1.0’ above ground surface as they crossed onto CSX property. The City of Bloomington was required to construct two 50’ x 12’ x 8” concrete pads over the culvert piping to allow continual access the northern tract of CSX property with heavy vehicular traffic.

- On December 7, 2011, CSX and Arcadis conducted a public open house meeting at Lora L. Batchelor Middle School. The purpose of the public open house was to update the public on site activities, inform the public of a large soil removal project in the near future at the Site, and allow the public to interface with the IDEM who is providing technical oversight on the project

4 REMEDIAL ACTION OBJECTIVES

The VRA was signed in 1997, therefore the Site is governed by the 1996 IDEM VRP guidance. Additionally, because the Site is zoned commercial/industrial, the 1996 IDEM non-residential closure goals were utilized for ongoing on-site evaluation purposes. If cleanup goals for specific COCs were not established in the 1996 manual (IDEM 1996a), then other appropriate cleanup goals were utilized. These other appropriate cleanup goals included the 1996 IDEM Non-Rule Lead Policy (IDEM 1996b) and 2006 RISC Default Industrial Goals (IDEM 2006). Please note, when appropriate, current 2020 IDEM guidance and screening levels were used for evaluation and assessment (i.e. off-site surface soils were compared to the 2020 IDEM Residential Screening Levels and the 2019 IDEM Recreational Soil Direct Contact Screening Levels).

The closure strategy for legacy impacts at the Site has included an extensive combination of nature and extent delineation, stability monitoring, remedial activities, and evaluating / qualifying appropriate risk to human health and the environment. Future potential risk will be mitigated through appropriate institutional controls or alternative measures. Proposed institutional controls will be a combination of an ERC (and ERO) to mitigate potential risk associated with residual on-site soil and groundwater impacts and either ERCs and/or an ERO or alternative measures to mitigate residual low-level groundwater impacts observed at off-site locations. The proposed areawide extent of the proposed institutional controls are depicted on **Figure 8.**

4.1 Proposed Remedial Action Objectives

Based on (1) remediation activities completed to-date, (2) groundwater monitoring and trend analysis, (3) current soil conditions based on comprehensive on- and off-site soil sampling activities completed, (4) risk assessments to include EPC development for surface soil, and (5) the proposed adoption of proposed institutional controls or alternative measures, potential risks associated with residual impacts at and in the vicinity of the Site have been and will be appropriately mitigated and addressed. As a result of these factors, the following cleanup criteria, which rely on exposure prevention and management, are proposed to replace the approved numeric cleanup criteria associated with 1996 IDEM Closure Goals:

- Remove requirement to achieve 1996 VRP Non-Residential Closure Goals for groundwater and soil within the boundaries of the Site and replace that requirement with the requirement to record an ERC for the Site in the Monroe County Recorder's Office.

- Remove requirement to achieve 1996 VRP Residential Closure Goals for groundwater within the boundaries depicted on **Figure 8**.

As depicted on Figure 8 a proposed institutional control area (either via ERC(s) and/or an ERO) has been outlined to show the governance of an areawide approach to mitigate potential future exposure from remaining residual impacts to groundwater (on- and off-site). In off-site areas, ERCs and/or an ERO will be recorded to prevent the use of the groundwater within the area covered by the covenant(s) or ordinance for potable use. The ERCs and/or ERO would not prevent any person or business from using groundwater for "non-potable purposes" like watering lawns, washing cars, or other commercial/industrial uses. If CSX is not able to obtain ERCs and/or and ERO, it will present alternative measures to ensure

there are no future unacceptable risks associated with the Site. For on-site areas, an ERC would be structured to restrict future land-use to commercial/industrial, require building construction to account for potential VI, prohibit groundwater use, and include provisions associated with appropriate soil management (for future construction or soil disturbance activities).

4.2 Soil

The nature and extent of impacts from former operations at the Site has been adequately characterized. Over 500 soil borings, 119 monitoring wells, 19 recovery wells and 4 pilot holes have been installed at the Site. Additionally, since 1987, over 1,000 soil samples have been collected and submitted for laboratory analysis. These data have allowed a thorough understanding of the residual remaining COC concentrations and what remedial actions would be required to reduce those concentrations to acceptable levels. Furthermore, the extensive soil and bedrock remediation activities (over 22,000 tons removed from the Site) has also allowed for a thorough understanding of residual impacts remaining at the Site.

4.2.1 Surface Soil

On-site surface soil impacts have been evaluated and addressed through the following actions:

- Collected and analyzed surface soil samples from soil borings to determine nature and extent.
- Evaluated and compared COC concentrations to 1996 IDEM Non-Residential Closure Goals.
- Excavated and disposed of soil and bedrock to allow for an Exposure Point Concentration (EPC) to be calculated for closure purposes.
- Calculated an EPC for on-site surface soils which facilitated meeting IDEM Non-Residential Closure Goals, and ensuring remedial actions achieved this objective.
- Recording an appropriate ERC on the deed to the Site will restrict potential future exposure from residual surface soil impacts remaining at the Site.

Off-site surface soil impacts have been evaluated and addressed through the following actions:

- Collected and analyzed surface soil samples from soil borings to determine nature and extent.
- Evaluated and compared COC concentrations to 1996 IDEM Residential Closure Goals and current 2020 IDEM Residential Screening Levels.

4.2.2 Subsurface Soil

On-site subsurface soil impacts have been evaluated and addressed through the following actions:

- Collected and analyzed subsurface soil samples from soil borings to determine nature and extent.
- Evaluated and compared COC concentrations to 1996 IDEM Non-Residential Closure Goals.
- Excavated and disposed soil and bedrock as required for removal of the creosote bleeds, installing a creek liner and assisting the City of Bloomington with the installation of the pedestrian bridge located at the Site.
- Recording an appropriate ERC on the deed to the Site will restrict potential future exposure to residual subsurface soil impacts remaining at the Site.

The off-site subsurface soil impacts have been evaluated and addressed through the following actions:

- Collected and analyzed subsurface soil samples from soil borings to determine nature and extent.
- Evaluated and compared COC concentrations to 1996 IDEM Residential Closure Goals.

4.3 Groundwater and DNAPL Creosote

Groundwater sampling of monitoring wells has been conducted periodically at the Site since 2000 to determine the nature and extent of groundwater impacts across the Site. In addition, routine groundwater sampling has been completed to evaluate plume stability. Groundwater sampling has occurred for over 20 years through a network of 119 historical and/or existing monitoring wells analyzing for the IDEM approved COC list. This COC list includes BTEX, SVOCs, and metals (**Table 1**). Additionally, DNAPL creosote has been monitored, gauged and recovered from approximately 40 recovery and monitoring wells at the Site since 2000. The direct connection between groundwater impacts and the DNAPL creosote is summarized in Section 5.3 and discussed in further detail in the *Geology and Hydrogeology Report* - Arcadis 2011a **(Appendix A).**

On-site groundwater and DNAPL creosote impacts have been addressed through the following actions:

- Collected and analyzed groundwater samples collected from monitoring wells to determine nature and extent.
- Evaluated and compared COC concentrations to 1996 IDEM Non-Residential Closure Goals.
- Monitored and recovered DNAPL creosote from recovery wells and monitoring wells to reduce pressure and saturation, reduce mobility; and reduce contaminate mass.
- Monitored and recovered DNAPL creosote from recovery wells and monitoring wells to determine the rate of diminishing recovery.
- Recordation of an appropriate ERC (and/or institution of an areawide ERO) on the deed to the Site will restrict potential future exposure to residual groundwater impacts associated with the Site.

The off-site groundwater and DNAPL creosote impacts have been addressed through the following actions:

- Collected and analyzed groundwater samples collected from monitoring wells to determine nature and extent.
- Evaluated and compared COC concentrations to 1996 IDEM Residential Closure Goals.
- Monitored and recovered DNAPL creosote from monitoring wells to reduce pressure and saturation, reduce mobility; and reduce contaminate mass.
- Monitor and recover DNAPL creosote from monitoring wells to determine when the rate of recovery decreases in those wells to a level that is supportive of the remedial closure strategy.
- Recording an appropriate areawide ERO (and/or ERCs) will restrict potential future exposure to residual groundwater impacts or provide alternative measures.

4.4 Sediment and Surface Water

Sediment and surface water samples have been collected in the past to evaluate potential impacts from former site operations. A thorough ecological risk assessment was conducted along Clear Creek

adjacent to the Site and documented in the *Screening-Level Ecological Risk Assessment* - Arcadis 2011c **(Appendix B)**.

4.4.1 Sediment

The sediment impacts will be addressed through the following actions:

- Collected and laboratory analyzed sediment samples from Clear Creek to determine nature and extent characterization.
- Evaluated and compared the COC concentrations to applicable ecological screening levels.
- Based on the data, no risk to the sediment in Clear Creek adjacent to the Site was identified.

4.4.2 Surface Water

The surface water impacts will be addressed through the following actions:

- Collected and laboratory analyzed surface water samples from Clear Creek to determine nature and extent characterization.
- Evaluated and compared the COC concentrations to applicable ecological screening levels.
- Based on the data, no risk to the surface water in Clear Creek adjacent to the Site was identified.

5 SITE SETTING AND CHARACTERIZATION

5.1 Geographic Information

The Site is located at 240 West Country Club Drive in Bloomington, Monroe County, Indiana. **Figure 1** shows the location of the Site and the surrounding topographic features. The property occupies approximately 40 acres and is bisected by Clear Creek (to the east and west) and Country Club Drive (to the north and south).

5.2 Regional Geology and Hydrogeology

The following discussion of regional geology was augmented using available literature from a number of cited sources. The regional geology and hydrogeology information is summarized below with a more detailed discussion in the *Geology and Hydrogeology Report* - Arcadis 2011a **(Appendix A).** Additionally, Arcadis collaborated with staff at the Indiana Geological Survey (IGS), located in Bloomington at Indiana University, as a reference to better understand various aspects of the regional geology. Arcadis met with the IGS several times to discuss regional stratigraphy and provided the IGS with cores from one of the drilling events for them to view and evaluate. The IGS supplied Arcadis with the latest bedrock geology maps of Bloomington and Monroe County for our reference as well as provided feedback and input regarding the structural trends observed regionally. The information discussed with the IGS was instrumental in understanding the geology from a regional perspective.

The Site lies in south-central Indiana, a region dominated by bedrock-controlled uplands, dissected by streams that drain generally south and westward to the White and Wabash Rivers. The strong relief in south-central Indiana reflects, in part, the absence of the Pleistocene glaciation which elsewhere in the state had the effect of leveling the topography. The physiography also reflects the variable weathering characteristics of the major bedrock units that outcrop across the region. The gently undulating upland topography in the immediate Bloomington area, for instance, reflects the strong erosional resistance of the Blue River and Sanders Groups limestones. Where these limestone units crop-out east of Bloomington, they expose the less resistant Borden Group siltstone, and the terrain is much more deeply eroded.

The bedrock in the Bloomington area is predominantly Mississippian-aged sedimentary rock. The bedrock in the region is very nearly flat lying, with a dip of less than 1 degree to southwest. (Hasenmueller, et al., 2008) Though slight, the dip of bedrock means that, looking across the region from west to east, the bedrock units outcrop in sequential north-south bands from youngest to oldest (otherwise stated, a unit that is at the surface where you’re standing will be progressively deeper, and covered by younger units to the west).

East of Bloomington, the rock is predominantly siltstone of the Borden Group (Hartke and Gray, 1989); west of Bloomington, it is a mixture of sandstone, shale, and limestone (West Baden and Stephensport Groups). Bloomington itself lies in a physiographic region called the Mitchell Plateau, a north-south-trending belt, about six miles wide, underlain by limestone assigned to the Mississippian aged Blue River and Sanders Groups (Hartke and Gray, 1989).

The limestone surface across of the Mitchell Plateau is typically covered by at least several feet of unconsolidated material, except in areas of steep slopes such as adjacent to deeply incised streams. Two classes of unconsolidated material are most common, i.e.:

- Residuum (also called terra rossa) is the predominant soil type, consisting chiefly of plastic red clay with stone fragments that develops in situ over limestone bedrock where slopes are not steep. Residuum is essentially the remnants of limestone that has mostly been dissolved away. This material can be a thick as 50 feet in some areas of the region (Thomas et al., 1981); though typically it is less than 20 feet and may be mostly absent or very thin in stream valleys due to erosion.
- Deposits of alluvium are common in current river valleys. Alluvium consists of sediments deposited by present-day streams, which typically include stratified silt and sand (i.e., over bank deposits) and localized deposits of sand and gravel related to the former channels of present-day meandering streams.

Monroe County has abundant rainfall (averaging about 44 inches per year), it does not have large, readily available groundwater resources (Hartke and Gray, 1989). The City of Bloomington draws its water supply from Lake Monroe, a surface water reservoir. Groundwater use in the region is typically limited to individual homeowners, farms or small rural communities. In the Bloomington area, three hydrostratigraphic systems of significant areal extent are recognized, although only one is considered a viable groundwater resource:

- The unconsolidated zone in the region is identified by Maier (2003a) as the Unglaciated Southern Hills and Lowlands Aquifer System. The clay-rich residuum that makes up the majority of this system is generally lower permeability, typically less than 20 ft thick and inconsistently saturated. The unconsolidated system is not used as a water resource.

- Blue River and Sanders Group Aquifer System is the only viable groundwater resource in the area, though it only yields supplies sufficient for domestic and small quantity users (Maier, 2003b). The aquifer system is typically less than 100 feet thick, though the full thickness of the Blue River and Sanders Groups may reach 400 ft where fully preserved to the west of Bloomington (Thompson et. al, 2007). The basal 30 to 35 ft section of this system is preserved at the Site, and is the primary horizon of interest for environmental investigation at the Site

- The Borden Group Aquifer System is composed primarily of siltstone and shale, with a thickness of up to 660 ft (Maier, 2003b). Infrequent and unpredictable fine-grained sandstone lenses exist within the Borden Group (Hartke and Gray, 1989); however, the system is generally regarded as an aquitard and is only used where no other aquifer type is available (Maier, 2003b). As noted by Hartke and Gray (1989), the rocks of the Borden Group are generally too fine grained, have too few joints, and are too well cemented to act as an aquifer.

The permeability of the Blue River and Sanders Group Aquifer System is chiefly governed by fractures and karst weathering. Hartke and Gray (1989) note that the rocks most prone to dissolution are the St. Louis and Ste. Genevieve Limestones, and areas of the plateau underlain by these rocks contain the greatest frequency of karst features such as sinkholes, caves, and underground drainage. “Karst” is a term that describes both the weathering processes and resultant landforms in soluble rocks. In terms of groundwater movement, karst aquifers are aquifers whose permeability has been enhanced by

dissolution. The Ramp Creek Formation, which is the most relevant bedrock formation in terms of groundwater movement at the site. The Ramp Creek Formation is not noted as a significant “karst-former”; however, the unit is predominantly limestone and, as will be discussed later in this report, its permeability has been enhanced by dissolution, which is an important factor concerning groundwater and contaminant movement.

The hydraulic characteristics of the bedrock aquifer systems are also directly influenced by their fractures. The orientations of bedding-plane fractures and joints in the region are relatively uniform and are similar for the rocks of both aquifer groups. The most prominent structural trends are as follows:

- Regional bedding: approximate strike 349º (north-northwest to south-southeast); 40-45 feet per mile (Walter Hasenmueller, Indiana Geological Survey, written communication).
- Primary joint set: strike 80° (east-northeast); vertical dip (Powell, 1976 and Ault, et al., 1985)

A secondary joint set has also identified orthogonal to the primary set; though less prominent and less frequent (Ault et al., 1985). Powell (1976) also found that primary joints were often vertically extensive, crossing multiple beds, whereas secondary joints were limited to individual beds. The orientations and relative frequency of joints was confirmed in bedrock exposures in Clear Creek at the Site, as noted in Appendix C of the *Geology and Hydrogeology Report* (Arcadis 2011a), which is provided as **Appendix A** of this report.

Faulting is not widespread in the region. The nearest mapped fault to the Site is the Mount Carmel Fault, which is a 50-mile long, high-angle normal fault that trends north-northwestward. This fault is located about 7 miles east of the Site and is not anticipated to be relevant regarding groundwater and contaminant movement in the Site bedrock.

5.3 Site Geology and Hydrogeology

The Site geology and hydrogeology information is summarized below with a more detailed discussion in the *Geology and Hydrogeology Report* - Arcadis 2011a **(Appendix A).** The site lies on the floor of a shallow north-south trending valley drained by Clear Creek. The creek runs southward through the Site dropping approximately 12 ft in elevation over the 3/4 mile between the north and south ends of the Site. Clear Creek is a gaining stream which flows on or very near bedrock but has not developed an entrenched bedrock channel. The banks of the creek are typically composed of 3 feet of fine-grained flood-plain alluvium, often with low natural levies. The majority of the Site is within the active flood plain and has been observed to flood several times a year. Moving outward (east and/or west) away from Clear Creek, the surface elevation increases dramatically as much as 15 ft at the Site and then substantially higher (up to 30 ft) as little as a block away from the Site.

The site geology consists of alluvium in the upper 5 to 15 ft, thickening away from Clear Creek. The alluvium is underlain by a thin (0 to 5 ft) Harrodsburg Limestone unit in some areas to the western portion of the Site. The Harrodsburg is underlain by the Ramp Creek Formation which is an interbedded siltstone and limestone unit as thick as 50 ft at the Site. The Ramp Creek Formation is underlain by the Borden Group which is a massive siltstone unit several hundred feet thick. The Borden Group, as detailed later, forms an aquitard which prevents the creosote from penetrating deeper than the depth of the Borden [approximately 40-50 ft below ground surface (bgs) on-site].

5.3.1 Water Use Evaluation

Groundwater has historically been used for industrial and/or residential purposes near the Site. Arcadis performed a water well survey, locating water wells within a 1-mile radius of the Site, and a 2-mile radius of the Site. Six (6) water wells were reported to be located within a 1-mile radius of the Site, and sixty-seven (67) water wells were reported to be located within a 2-mile radius of the Site (Indiana Department of Natural Resources (IDNR) (2020a) as provided in **Figure 3**. As part of the water well survey, in 2011, Arcadis verified a public water connection at properties surrounding the Site, and where possible, the locations of reported water wells. No wells were discovered as part of this survey. In March 2020, Arcadis re-verified a public water connection at properties (City of Bloomington Utilities Department 2020) within the area of proposed institutional controls, via email correspondence with the City of Bloomington Utilities Department. According to reports and public records, there are no known drinking water wells in the vicinity of the Site. CSX and Arcadis plan to submit an ERC and/or an ERO to place restrictions and/or institutional controls on future land usage. An ERC will restrict soil disturbance and the installation of new drinking water wells on the Site and/or adjacent properties, and an ERO will restrict drinking water wells in the vicinity of the Site. Currently, nearby businesses, industries, and residences obtain water supply from the City of Bloomington, which obtains its water from the Monroe Reservoir (Lake Monroe), located southwest of the Site.

5.3.2 Surface Water Drainage

The Site lies on the floor of a shallow north-south trending valley drained by Clear Creek. The creek runs southward through the Site dropping approximately 12 ft in elevation over the ¾ mile between the north and south ends of the Site (**Figure 2**). According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) and Floodplain Analysis / Regulatory Assessment (FARA) from the IDNR, portions of the site are located in the 100-year flood zone boundary (FEMA 2010 and IDNR 2020b). Clear Creek collects stormwater runoff from the south side of the City of Bloomington, and eventually merges with Salt Creek, which is the discharge from Monroe Lake, approximately 9.5 miles (~16.5 stream miles) southwest of the Site. Clear Creek is not used for recreational, industrial, and municipal water supply purposes. The nearest drinking water intake is located at Lake Monroe, downgradient of the Site, and is not hydrogeologically connected.

5.3.3 Groundwater Flow

Groundwater within the unconsolidated alluvium and shallow bedrock beneath the Site flows to Clear Creek, at the local base-level. Given the Site's location, stretched out along about ¾ mile of the creek, the southward descent of the creek channel is a principal determinant of groundwater in the subsurface, and thus the patterns of groundwater flow. While all groundwater in the unconsolidated alluvium zone discharges to Clear Creek, the Upper Cramp Creek (URC) and Lower Ramp Creek (LRC) does discharge to the creek[1], the paths groundwater takes to the creek and the speed with which it travels there can vary

[1] It is probable that groundwater in the upper Borden Group also discharges to Clear Creek, while at some greater depth in the Borden Group, regional flow patterns prevail.

significantly. This section explains the current understanding of how groundwater moves through the subsurface of the site.

5.3.3.1 Groundwater Flow Between Hydrostratigraphic Units

Of the four hydrostratigraphic units described for the Site – the unconsolidated alluvium zone, URC, LRC, and Borden Aquitard – only the URC is adequately thick and transmissive to be of significant interest with respect to groundwater flow and solute transport. The solution porosity in the URC is the most efficient hydraulic pathway for groundwater, evidenced by the much higher hydraulic conductivities estimated from URC wells relative to the other units. Groundwater does move through the other units; however, the amount of flow is very small in comparison to the URC. (While a Darcy's law calculation cannot be made directly, given the karstic nature of the URC, it is reasonable to interpret, for example, that the 4 order of magnitude average difference in hydraulic conductivities estimated between the URC and LRC wells indicates that *at least* a 4 order of magnitude difference in volumetric flux also exists.) Nevertheless, since a relatively small amount of flow occurs between hydrostratigraphic units, the balance of this subsection describes the nature of that flow.

While the anisotropy of the system means that the principal flow direction in each hydrostratigraphic unit should be horizontal; consistent head differences between the units indicate that a component of flow will also be vertical, fostering a modest exchange of groundwater from one unit to another. Table 9 presented in the *Geology and Hydrogeology Report* (Arcadis 2011a) (**Appendix A**) summarizes calculated vertical gradients for a number of well clusters. The dominant gradient relationships are shown in the inset table below.

Hydrostratigraphic Unit	**Dominant Vertical Gradient Direction**
Unconsolidated Zone	
	↓
URC	
	↓
LRC	
	↑
Borden Aquitard	

Vertical flow within bedrock, both upward and downward, is constrained to joints. The spacing of joints observed in bedrock exposed in Clear Creek average approximately every 2 ft for the north-south joint set, and every 4 ft for the east-west set. While less frequent, the east-west set is much more pronounced with wider, often solution enlarged apertures, whereas the north-south joints are commonly very tight or healed. The spacing of hydraulically active joints has not been quantified but is estimated to be significantly less than the spacing of all joints. Moreover, while some joints may cut through multiple beds, most joints will not completely crosscut the Ramp Creek Formation. Instead, joints typically truncate on bedding plane fractures (structural interfaces); such that flow rising through a joint may need to flow horizontally for some distance before intersecting another open joint cutting the bed above it. This mode of flow, or stair-stepping, will typically have longer horizontal steps than vertical steps, due the relative spacing of bedding planes versus joints.

Because the alluvium receives distributed recharge from above, the mode of transport in the unconsolidated zone is somewhat different. Downward flow from the unconsolidated zone into the bedrock can only occur at joints, thus the thin zone of saturation may be conceptualized as a shallow bowl with a cracked bottom. Near Clear Creek, it is likely that groundwater pathways will discharge directly to surface water, without entering the URC. Further from the creek, pathways will be highly

irregular, determined in large part by the geometry and transmissivity of the joints that crosscut the bedrock surface, into which water from the unconsolidated zone will drain.

Within the hydrostratigraphic profile, heads are consistently highest in the Borden Group. Water-levels in the Borden are strongly artesian, with levels that rise above the ground surface in places (commonly even higher than stickup well casings, so that the wells need to be sealed to prevent them from flowing). At Borden well MW-38C, for example, the head averages approximately 10 feet higher than the head in the adjacent URC wells (MW-38A and MW-38B) and also approximately 10 feet higher than the stage of Clear Creek in that vicinity. The high water-level elevations in the Borden Group indicate that the unit is not recharged locally. To support the high heads observed, recharge to the Borden must occur in upland areas, potentially a long distance away. The strength of the upward gradient (e.g., 0.9 ft/ft upward as measured between MW-38C and MW-38D, in Table 9 of the *Geology and Hydrogeology Report* (Arcadis 2011a) (**Appendix A**) also testifies to the inefficiency of vertical flow from the Borden Aquitard into the URC. While gradients are strongly upward, the flux of groundwater from the Borden to the LRC is trivial, due to the extremely low hydraulic conductivity of both of those units.

Heads in the LRC are typically the lowest observed within the hydrostratigraphic profile. This indicates that the LRC receives a small component of vertical flow upward from the Borden and downward from the URC. At first glance, the gradient relationship between the LRC and URC is counterintuitive, on the basis that:

- All evidence suggests that the LRC is vastly less transmissive than the URC, and
- Since the URC is shallower and in direct contact with Clear Creek, the normal expectation is that vertical flow from the LRC would be upward, that direction being the most energetically favorable pathway to discharge in Clear Creek.

A possible physical explanation for the downward gradient relationship between the URC and LRC relates to the strong anisotropy that favors horizontal flow, and the gradual descent of Clear Creek's elevation as it drains to the south. This argument may be stated as follows:

- As a highly stratified sedimentary bedrock unit, the Ramp Creek Formation, and the LRC in particular, is extremely anisotropic, favoring horizontal flow and strongly inhibiting vertical flow. Head differences exist but do not drive significant quantities of water between the URC and LRC. In the LRC, while the amount of flow in any direction is extremely small, the relative capacity for the unit to move water horizontally is greater than its capacity to receive water into the unit vertically.
- As Clear Creek descends in elevation to the south, it cuts deeper into the Ramp Creek Formation, allowing easier vertical communication from the LRC to creek level. Thus, heads in the LRC in a given well may be more directly influenced by the stage of Clear Creek some distance downstream than by the stage of the creek near the well. In contrast, the URC is better connected hydraulically to Clear Creek. Thus, levels in the URC are buffered by the higher stage of the creek nearby, rather than by points further downstream.

While a downward gradient does exist from the URC to the LRC, the component of flow in the URC that moves downward is expected to be extremely small relative to the component of flow that occurs horizontally within the solution-enlarged fracture network. By analogy, a roof gutter with a pinhole leak

will continuously drip a little water through the pinhole, but most of the water in the gutter will travel horizontally toward the downspout.

5.3.3.2 Potentiometric Surfaces

The potentiometric surface of the URC provides useful information to help understand the general patterns of groundwater flow but must be used with caution. Tracing work, discussed later, has clearly demonstrated that actual groundwater flow paths cannot be predicted solely on the basis of the potentiometric surface. Because of the extreme heterogeneity and anisotropy of the karst drainage system; the standard continuum-based approach of using a potentiometric surface to infer groundwater flow lines is inappropriate.

Potentiometric surface maps were created from the available groundwater elevation data (**Table 2**) to illustrate the general trends observed in the URC and are presented in the *Geology and Hydrogeology Report* (Arcadis 2011a) (**Appendix A**) and the *CCR* (Arcadis 2019a) (**Appendix D**). All potentiometric surfaces show similar trends:

- Heads in the URC decrease moving southward (parallel to the descent of Clear Creek) and inward from the east and west toward Clear Creek.
- Within the former operations and tie storage areas of the site (west of Clear Creek immediately north and south of Country Club Road), heads in the URC generally decrease more rapidly southward than toward the creek, suggesting that flow might trend downstream following Clear Creek rather than taking the shortest-distance pathway to the Creek.
- An area of steep gradients near Country Club Road suggests an increase in bulk transmissivity south of the road, or a region of restricted flow pathways (a flow bottleneck) near the road.
- The apparent convergence of heads toward Clear Creek indicates that the creek is the sole groundwater discharge. In addition, the increasing heads moving away from Clear Creek to the east or west suggest that it is unlikely groundwater flow paths would short-circuit to an adjacent valley.

Beyond these general observations derived from the potentiometric surface maps, the best understanding of groundwater flow patterns at the Site is obtained from tracing studies, which are discussed in the following section.

5.3.3.3 Patterns of Groundwater Flow Indicated by Tracing

Arcadis teamed with Dr. Ralph Ewers who is a renowned karst expert and Professor Emeritus at Eastern Kentucky University to conduct dye tracer testing of the karst system at the Site. The results of fluorescent dye tracer studies initiated at the Site in 2008 provide the best direct evidence of how groundwater moves through the URC. The tracing work is described in detail in Appendix C of the *Geology and Hydrogeology Report* (Arcadis 2011a) (**Appendix A**). Figure 20 of the *Geology and Hydrogeology Report* (Arcadis 2011a) (**Appendix A**) identifies the injection points and illustrates the dye detection locations. The inset table below summarizes the main findings from the three traces completed. A complete summary of all calculated apparent velocities is provided in Table 10 of the *Geology and Hydrogeology Report* (Arcadis 2011a) (**Appendix A**).

Injection Location & Date	Dye Used	Dye Detections	Apparent Velocities	Direction(s) of Flow Vector
MW-14D on 5/6/08	Eosine	Detected in 10 monitoring wells, in Clear Creek, but in no springs	2.5 to 30 ft/day	SSE SW
MW-35B on 5/11/10	Fluorescein	Detected immediately in 2 minor springs and Clear Creek, later in 4 monitoring wells	12 to 7123 ft/day	SSE ESE
MW-38A on 5/25/10	Rhodamine-WT	Never detected in wells, springs, or in the creek	No apparent flow	No apparent flow

Note: Apparent velocities are based on first detected arrival and the straight-line distance traveled, and as such are always less than true average velocity within the conduits themselves.

The principal observations about groundwater flow stemming from the tracer studies may be summarized as follows:

- The URC supports flow velocities of at least 7123 ft/day, a rate indicative of conduit flow. Excluding two documented flowrates of greater than 1000 ft/day (both observed at springs), the average of traced apparent velocities is two orders-of-magnitude less (11 ft/day with a maximum of 30 ft/day). It can also be assumed that slower pathways exist that were too slow to be observed within the trace timeframes. This apparent diversity of flow rates illustrates the heterogeneity of the aquifer flow system. Groundwater simultaneously travels through the URC on an extreme range of fast and slow advective flow paths. No single velocity can fully characterize the behavior of the system.
- The multiple detections for each trace (excluding the rhodamine-WT trace, which was detected nowhere), indicate divergent flow. This is consistent with the epikarst model of disorganized solution development, in which distributed recharge enters and enlarges all available fractures with limited bias. Also, the proximity of Clear Creek provides many opportunities for groundwater to discharge, discouraging the development of convergent hierarchical drainages, which occur when one point of discharge (such as a large spring) is the only efficient discharge.
- The predominant straight-line direction of flow is south-southeast. This trend is aligned with the regional strike of bedrock, and likely indicates a strike-parallel bias to conduit pathways within the URC. The alternate pathways directions, southwest and east-southeast, are less common, but maintain a southward aspect that is consistent with the general down-valley hydraulic gradient.
- During the eosine trace, dye was detected at two locations on the east side of Clear Creek, opposite of the injection point, demonstrating that groundwater can migrate beneath the creek, at least in places. The straight-line pathways to these detection locations (URC wells MW-27A and MW-28B) are both south-southeast, consistent with the regional strike. The most probable

explanation for this underflow is the high degree of anisotropy favoring lateral transport over vertical. Flow upward into the creek is limited by the availability of open joints; therefore, flow cannot discharge to the creek at all points along the creek. Given that flow may cross beneath the creek, there are instances wherein the most efficient route to down-stream discharge is by way of conduit pathways on the east side. Underflow in this case does not imply that Clear Creek is not the ultimate discharge; rather that some sections of the creek are less efficiently connected with the groundwater flow system than others.

- The failure of the rhodamine-WT trace to document any complete flow connections is unusual. As hypothesized by Dr. Ralph Ewers in Appendix C of the *Geology and Hydrogeology Report* (Arcadis 2011a) (**Appendix A**), the injection location MW-38A must be connected to a region of the karst drainage network with very little advective movement. Such a region may exist where progressive evolution of the karst system bypasses a section of the aquifer, creating what is conceptually a stranded by water, or where sediment infilling restricts flow within a section, having the same effect. This trace outcome suggests that some portions of the aquifer may function as zones of storage, with little mixing or interaction with the active flow-system.

In general, groundwater flow with the URC does follow the general expectations of any aquifer system on the flank of a gaining stream. Groundwater flow does trend toward and eventually discharge into Clear Creek, with a bias in the downstream direction. The karst elements of the flow system add significant irregularity to the manner in which groundwater travels to Clear Creek; however, the importance of those irregularities depends on the scale of concern. The principal uncertainties relate to specific flow paths, flow rates, and the mechanisms of mixing and storage that occur along a flow path. However, the bulk patterns of groundwater flow at the Site are understood adequately to constrain the risk that dissolved contaminant transport may pose to potential receptors. For a full report on the dye tracer studies performed at the Site, please refer to *Geology and Hydrogeology Report.* (**Appendix A**)

5.4 Site Characterization Summary

The following sections summarize the site characterizations, investigations and sampling that have been historically completed at the site through 2019. A complete and thorough discussion of site characterization and the conceptual site model (CSM) of the movement of creosote in the subsurface is contained in the *Geology and Hydrogeology Report* - Arcadis 2011a (**Appendix A**). Though additional investigation and assessment were conducted after the *Geology and Hydrogeology Report* - Arcadis 2011 was submitted to the IDEM, the CSM for the Site has not changed. Arcadis utilizes SGS North America, Inc. (SGS Labs) located in Orlando, Florida, to analyze soils, groundwater, and waste samples at the Site. Arcadis has provided a Quality Assurance Project Plan (QAPP) for SGS Labs in **Appendix F**.

5.4.1 Identified Constituents of Concern, Screening Levels, and Characteristics

The identified COCs detected in soil and groundwater at the Site are organic compounds associated with coal-tar creosote and are presented on **Table 1**. These COCs are screened against the 1996 IDEM VRP Tier II Default Closure Levels (IDEM 1996a) If cleanup goals for specific COCs were not established in the 1996 manual (IDEM 1996a), then other cleanup goals were utilized. These additional cleanup goals are included as part of the 1996 IDEM Non-Rule Lead Policy (IDEM 1996b) and 2006 RISC Default

Industrial Goals (IDEM 2006). Current 2020 IDEM guidance and screening levels were used for evaluation of off-site surface soils. These compounds include:

- The BTEX group of volatile organic compounds (benzene, toluene, ethylbenzene and xylenes), of which only benzene is commonly detected above IDEM closure goals. Analytical results for groundwater samples submitted for BTEX analysis are provided in **Table 3**.
- The group of 19 SVOCs known as polycyclic aromatic hydrocarbons (PAHs). The PAH compounds are the COCs most commonly detected above IDEM closure goals. The PAH compound naphthalene, which is among the most soluble and mobile in groundwater, is detected most often and at the highest concentrations of all COCs. Analytical results for groundwater samples submitted for SVOC analysis are provided in **Table 4**.
- A group of seven phenolic SVOCs. Of these, the compound pentachlorophenol is detected above IDEM closure goals most frequently. The highest concentrations of organic COCs occur where creosote is known to be present, evidence that the dissolve phase COCs are generated from dissolution of the creosote. Lower concentrations are detected at some wells where there is no indication that creosote has been physically present. At these locations, the suite of detected COCs is often smaller, yet the principal components (e.g., benzene, naphthalene, phenanthrene, 2-methylnaphthalene, fluoranthene) are the same as those detected in the presence of creosote, and thus are clear indicators of a creosote source.

Two other SVOCs, which belong to a class of chemicals known as “phthalates”, are occasionally detected in groundwater samples: butyl benzyl phthalate and bis(2-ethlyhexyl) phthalate. Of these two compounds, only bis(2-ethlyhexyl) phthalate has been detected periodically above the residential closure goals. These compounds are used as plasticizers in plastics, can be leached from plastics by water, and are also common laboratory contaminants. They are not noted as compounds contained in creosote or among those compounds found at wood-treating sites (USEPA, 1992). Furthermore, these chemicals are commonly detected in samples collected from wells that do not contain dissolved creosote compounds. Based on this information, phthalates are not considered to be COCs for the Site.

The metals, arsenic and lead, have also been identified as COCs; however, there is no apparent correlation of metals detections with creosote or other known site-related impacts. The analytical results for groundwater samples submitted for analysis of arsenic and lead concentrations are provided in **Table 3**. Arsenic and lead concentrations that exceed closure goals are distributed sporadically throughout the Site with no clear spatial pattern and have been detected in background locations such as MW-31C and MW-35C. Concentrations that exceed closure goals, moreover, are far more common in total (unfiltered) samples than dissolved (filtered samples) and are not consistently detected in consecutive sampling events. These observations suggest that the low levels of lead and arsenic detected in groundwater at the Site are naturally occurring, not derived from a Site-related source.

The identified COCs detected in soils at the Site are the same organic compounds associated with coal-tar creosote noted for groundwater above (**Table 1**) and follow the same screening criteria.

- Analytical results for surface soil samples submitted for BTEX analysis are provided in **Table 5**.
- Analytical results for sub-surface soil samples submitted for BTEX analysis are provided in **Table 6**.

- Analytical results for surface soil samples submitted for SVOCs analysis are provided in **Table 7**.
- Analytical results for sub-surface soil samples submitted for SVOCs analysis are provided in **Table 8**.
- The analytical results for surface soil samples submitted for analysis of metals (arsenic and lead) concentrations are provided in **Table 5**.
- The analytical results for sub-surface soil samples submitted for analysis of metals (arsenic and lead) concentrations are provided in **Table 6**.

Arsenic and lead concentrations that exceed 2006 (IDEM 2006) closure goals are distributed sporadically throughout the Site with no clear spatial pattern and have been detected in background locations such as MW-50A, and MW-53A. These observations suggest that the low levels of lead and arsenic detected in soil at the Site are naturally occurring, not derived from a Site-related source.

5.4.2 Sources of Environmental Impacts

The primary source of environmental impact at the Site was incidental leaks and spills of creosote within the former process area (**Figure 2**), where creosote was handled and stored. The overburden in this area is relatively thin and mostly unsaturated, and there are no uniform and continuous low-permeability layers that would act as capillary barriers to promote lateral spreading of the creosote; therefore, creosote moved primarily downward until it reached the bedrock.

Of the monitoring locations set within the overburden, only one piezometer and one well have historically been noted to contain creosote, P-1 and MW-3S; however, the accumulated thicknesses were either not measurable or were less than 0.5 feet. Both of these monitoring points were decommissioned in 2006 associated with construction of the pedestrian bridge by the City of Bloomington. The pedestrian bridge is located adjacent and parallel to Country Club Road and spans Clear Creek.

During warm periods, creosote present in shallow soils would seep out at the surface in small quantities from “bleed areas” located within or north of the former process area. The source of this shallow creosote may be related to the former drip tracks – rail lines where charges of freshly-treated ties were allowed to cool and shed excess creosote. The distribution of creosote in these soils is sporadic and limited to a depth of three feet, and the degree of creosote saturation appears slight. Based on these observations, this creosote is judged to be relatively immobile, and not to be an ongoing source of creosote to either Clear Creek or bedrock. These bleed areas were removed via excavations in 2011 and 2012 and are further discussed in the *CCR* (Arcadis 2019a) (**Appendix D**).

The majority of creosote in the subsurface resides in the bedrock and is limited to the Ramp Creek formation. The following two subsections describe how creosote is stored and distributed in the bedrock, and then provide a conceptual model explaining its movement.

5.4.2.1 Creosote Storage

Creosote in the bedrock is stored primarily in the secondary (fracture) and tertiary (solution) porosity. While the rock is expected to have appreciable primary porosity (several percent), the observations regarding the lack of creosote on rock core suggest that the pore spaces are too small for creosote to penetrate.

Creosote stored in the bedrock can be either residual (immobile) or pooled (potentially mobile). As noted earlier in this section, residual creosote can occupy up to approximately 20% of pore space in fractures. Reynolds and Kueper (2002) define fractures as rough, planar openings in rock having any orientation and mechanical apertures (openings) generally less than 2000 microns (0.2 cm). In solution enhanced features having opening sizes in excess of 2000 microns, the residual saturation may be close to zero because of the lack of opportunity for capillary trapping; therefore, the majority of the creosote stored in solution enhanced features would be pooled. The saturation within a DNAPL pool generally ranges from approximately 30% to 70% of pore space.

Values for the secondary and tertiary porosity for the Ramp Creek formation are not readily available; however, Worthington (1999) provides an estimate of the secondary porosity for Mississippian-aged carbonate rocks in the Mammoth Cave area of Kentucky of 0.03 percent. Because the tertiary porosity of the site bedrock is not well developed and appears limited to a small number of bedding planes containing anastomoses with apertures on the scale of a few inches or less, as well as occasional soil-filled grikes, it is estimated that the tertiary porosity is likely less than 1 percent.

Implications regarding the information presented above are:

- The solution porosity can store considerably more creosote than the secondary porosity, and it will be more likely to be pooled (potentially mobile) rather than residual.
- Since the secondary porosity is rather low (that is there are few fractures in this unit), a relatively small volume of creosote contained in this porosity could spread a long distance within the bedrock. In other words, just because creosote is encountered in a particular location, it doesn't necessarily mean there is a large volume.
- Wells containing creosote have been routinely monitored for a number of years. Accumulated creosote is periodically removed from wells, and efforts are made to maintain creosote levels to within the sumps of those wells so equipped. For further discussions on creosote removal operations, please refer to the 2019 *CCR* (Arcadis 2019a) (**Appendix D).** The collected data for creosote removal activities are contained in **Table 9**. Graphs depicting the volume of creosote removed from wells in the recovery program are contained in **Appendix G**. Note that for selected wells during selected monitoring events, only a portion of the creosote contained in the well was removed due to waste disposal issues or a lack of significant thickness; therefore, the cumulative amounts of creosote shown on the graphs for such wells may represent an underestimate of their true yield. Nevertheless, a total of approximately 5,420 gallons of creosote (approximately 10,560 gallons creosote and water mixture) has been removed from the bedrock through December 7, 2019. Nearly half (40%) of the total 5,420 gallons recovered has been removed from one location (approximately 2,165 gallons from RW-8). When factoring in two recovery wells adjacent to RW-8, over half (63%) of the recovered creosote has been produced from one portion of the site (RW-9 with approximately 760 gallons, and RW-14 with approximately 510 gallons recovered); located in the southwest corner (**Figures 2 and 4**).

In total, creosote has historically accumulated in 46 bedrock wells (**Table 9, Figures 2 and 4**), see table below. Of those, approximately twenty bedrock wells actively continue to produce measurable creosote,

with removal activities taking place at least once per year. An updated creosote removal table, with amounts recovered through the end of 2019 is presented in **Table 9**. Some of these wells are screened in the URC, some in the LRC, and those denoted with the prefix "RW" are screened across the entire Ramp Creek Formation.

Creosote Recovery	Wells Where DNAPL Observed
>1,000 gallons	RW-8
100-1,000 gallons	MW-51A, RW-4, RW-5, RW-9, RW-10, RW-14, RW-15, RW-17, RW-18
10-100 gallons	MW-21D, MW-24A, MW-27A, MW-39A, MW-48A, RW-1, RW-2, RW-3, RW-4, RW-5, RW-7, RW-13
1-10 gallons	MW-12D, MW-20D, MW-29B, MW-36B, MW-54A, RW-12, PH-1, PH-3, PH-7, PH-9, PH-11
<1 gallon	MW-3D, MW-14D, MW-15D, MW-16D, MW-19D, MW-22D, MW-23D, MW-25A, MW-26A, MW-36C, MW-37C, RW-6, RW-11, RW-16, RW-19

5.4.2.2 Creosote Extent

The observed horizontal limits of creosote in the bedrock are depicted on **Figure 4**. The creosote observations include wells where creosote has accumulated, as well as intervals where creosote globules or films were observed during drilling (in return water or on rock core) or during packer testing (in discharge water or on packer-test apparatus. As is evident from the **Figure 4**, creosote has migrated chiefly southeastward, southward, and southwestward from the former process area and is frequently pooled. Creosote has also migrated eastward from the former process area, and historically had been identified in Clear Creek in the form of occasional globules on the creek bottom. This occurrence prompted a remedial action designed to prevent creosote from discharging to the creek. The action consisted of installing a creek liner and associated creosote-collection system in the affected reach of creek in 2007. The location of the liner and collection system is shown on **Figure 2**. The collection system consists of three "interceptor trenches" installed into the shallow bedrock:

- One beneath the downstream end of the creek liner
- One along the stream bank adjacent to the liner, and

- One perpendicular to the creek trending west toward the access road

These trenches are routed to a common sump, the location of which is shown on **Figure 2**. Since the system was installed, no creosote has been observed in the creek or in the collection sump. More details regarding the liner system are contained in the *RWP* (Arcadis 2009). Neither free product creosote nor dissolved-phase concentrations have been observed at a cluster of three bedrock wells drilled on the opposite (east) side of the creek (MW-31A, B, and C).

Vertically, the shallowest observations of creosote generally occur beneath the former process area, whereas observations at more distal locations tend to occur at greater depths within the formation. This does not mean that creosote occurs only in the shallow bedrock at the former process area. At monitoring well MW-29B, which is screened in the LRC, from 10 to 20 feet above the contact with the Borden Group, DNAPL is present. The deepest observation of creosote occurs at well MW-48A. At this well, creosote was not observed during drilling; but a creosote thickness of 2.25 feet was observed within the well four days after it was installed. MW-48A has a ten-foot-long screen, with the screen bottom set at the contact between the LRC and the underlying Borden Group. Using the depth to bedrock at this location (approximately 20 feet) and the depth to the base of the screen (70 feet), the creosote containing interval is between approximately 40 to 50 feet below the top of bedrock. There is no evidence that the creosote is able to penetrate the Borden Group.

It is important to note that the limits of creosote are difficult to pinpoint for several reasons. First, the migration pathways are complexly distributed and occupy only a small percentage of the bedrock volume. Secondly, though evidence of creosote was observed during the drilling several of the wells, those observations were only in a small percentage of the rock core (< 1% of the rock core). A sheen was occasionally seen on the return water during drilling, and sheens or creosote droplets are occasionally seen on recovered rock core. Additionally, there was little evidence of creosote observed during drilling in the majority of the monitoring wells. This observation suggests that the creosote is non-wetting to the limestone and is often flushed from the secondary and tertiary porosity containing it during drilling. These observations also indicate that the creosote is limited to secondary and tertiary (solution) porosity and cannot invade the primary porosity of the rock.

5.4.2.3 Creosote Movement

Upon reaching the bedrock, moving creosote would spread out, following the slope of the bedrock surface, until it reached fractures that were sufficiently open for the creosote to enter. Given the persistent jointing of the rock, and the fact that a number of the joints have been widened by solution (forming grikes), it is expected that a creosote body would not have to travel a substantial distance along the bedrock surface before gaining entry. The fact that the bedrock bedding dips slightly means that open bedding planes periodically crop out at the bedrock surface as well. Such shallow bedding planes are also typically widened by solution in the shallow bedrock and would afford little resistance to creosote entry.

Once in the bedrock, the creosote would exploit the complex, interconnected pathways formed by the joints and open bedding planes. The vertical joints would allow creosote to move downward; however, several factors serve to limit the downward movement to within the Ramp Creek Formation:

- Most joints penetrate only one or several beds before they truncate on a bedding plane fracture.
- Joints tend to close with depth – even master joints that can penetrate multiple beds.
- Grikes also taper with depth, as the corrosivity of downward-moving groundwater diminishes rapidly as it contacts and dissolves the rock.
- The expected small aperture (width) of any joints in the Borden group and the very strong upward hydraulic gradient between the Borden Group and LRC combine to make the Borden Group an effective capillary barrier to the creosote.

As noted in Section 4.2, the predominant orientation of joints is east-west, with a secondary set of joints oriented north-south. Lateral movement of the creosote in the joints would be limited to these two orientations.

Although joints may be more likely to allow creosote to enter the bedrock, as creosote accumulates in joints, it will also move outward in the open bedding planes that intersect them. Conceptually, creosote in a bedding plane can move in any direction laterally. The actual direction of migration in a bedding plane will be affected by the bedding dip, the direction of the hydraulic gradient, the properties of the creosote body, and the orientations of interconnected, larger aperture regions in the bedding plane. In those bedding-plane fractures in the URC that have been widened by solution and contain anastomoses, creosote would be expected to migrate freely throughout the solution porosity where it is not clogged with sediment. The interplay between these myriad factors, coupled with the laterally discontinuous nature of the open bedding planes, results in a complex distribution of creosote in open bedding planes at the borehole and site scale.

In the solution porosity of the URC, another mechanism may influence creosote movement, namely turbulent flow. The frequent observed loss of drilling water, evidence of voids, and high groundwater velocities demonstrated by the dye traces conducted at the site indicate that turbulent flow of groundwater can occur. In a turbulent flow regime, droplets of creosote can be mobilized and transported with the moving groundwater. Such mobilized creosote could be ejected from springs or settle in low spots in the conduit network further downgradient, as turbulent-flow conditions subside. While turbulent flow could complicate creosote movement and distribution, the general absence of creosote in the creek and creek sediments suggests that this potential mode of transport is not significant in terms of delivering creosote to the land surface.

Integrating the above information with the observations of creosote made during drilling and at monitoring wells, reveals several modes of transport that appear to be at play. Creosote has moved predominantly southeastward, southward, and southwestward horizontally, as well as downward with distance from the former process area. This distribution is interpreted to result from the following:

- Southeastward and southward movement from the former process area: A combination of south-southeastward movement along solution-widened bedding planes (where the porosity appears to have formed along strike, which is aligned roughly N-S), and eastward movement along joints of the predominant (E-W oriented) joint set. The movement in these directions is likely aided by moving groundwater. As open bedding planes pinch out or become occluded with sediment, the

creosote would be expected to move laterally until encountering an open joint, at which point it would move downward until a deeper, open bedding plane were encountered and the process would repeat itself, leading to a downward “stair-stepping” effect. It is possible that, given a strong enough upward hydraulic gradient, the creosote could move upward. While such upward movement has been documented in the literature, the observed increasing depth of creosote with distance from the source, coupled with the absence of creosote in Clear Creek (beneath which upward hydraulic gradients would be greatest) suggests that there are few if any joints that would allow upward movement, and where such pathways exist, the upward hydraulic gradients are not great enough to offset the downward driving force due to the density of the creosote. On the east side of Clear Creek, three factors combine to limit eastward movement. First, the direction of hydraulic gradient would generally reverse, making it more difficult for the creosote to continue moving eastward. Second, for creosote moving along bedding planes, eastward movement would require that the creosote move up dip. Lastly, as creosote stair-steps downward, toward and beneath the valley wall and beneath the zone of karst weathering, joints and bedding planes will become tighter and opposing hydraulic gradients stronger. These factors will serve to limit the eastward movement of creosote on the east side of Clear Creek.

- Southwestward movement from the former process area: The southwestern component of creosote movement indicates that hydraulic gradients in the joints and bedding plane fractures are not great enough to completely arrest creosote movement in this direction, since this movement direction is generally against the hydraulic gradient (on the west side of the creek). Two processes are interpreted to be responsible for this direction of movement. The first is westward movement of creosote along the predominant joint orientation. While eastward movement of creosote in an E-W trending joint would be favored (on the west side of the creek) because groundwater would also be expected to be moving eastward toward the creek; westward movement could occur, particularly along solution-widened joints, where the strength of the hydraulic gradient needed to move water through the joint would be slight. The second process responsible for moving creosote westward is the local dip of the bedding. Again, in the solution-widened porosity, the strength of the hydraulic gradient would be slight and apparently is not great enough to arrest down-dip movement of creosote due to gravity. Similar to the case of eastward movement (above), with distance westward, bedding planes and joints would be expected to tighten with depth, serving to restrict further westward movement.

To date there is no clear evidence the creosote is continuing to migrate. Creosote has not been observed in Clear Creek in appreciable amounts since the creek liner system was installed, and there have been no monitoring wells that were creosote-free for a long period of time and then had creosote appear. Nevertheless, the relatively high viscosity of the creosote would tend to cause it to move relatively slowly and increase the time required for a significant release volume that occurred over a protracted timeframe to reach its final distribution. For this site, the timescale of creosote migration could be on the order of decades.

5.4.3 Extent and Concentration Levels of Environmental Impacts

The nature and extent delineation of the impacts from the former operations at the Site has been thoroughly assessed and investigated throughout the history of the site. Over 500 soil borings, 119 monitoring wells, 19 recovery wells and 4 pilot holes have been drilled at the site as part of these

investigations. Over 1,000 soil samples, 50 sediment samples and 1,000 groundwater samples have been collected and submitted for laboratory analysis from the Site since 1987. These data have allowed a detailed understanding of the concentration levels of the COCs and what remedial actions would be required to reduce those concentrations below the 1996 IDEM VRP Tier II Non-residential Cleanup Goals. Furthermore, extensive soil and bedrock remediation activities (over 22,000 tons removed from the Site), sediment removal activities (over 500 tons removed from the Site), and effective recovery of DNAPL creosote (over 10,500 gals of DNAPL/water – 5,420 being DNAPL only from the Site) has allowed for a comprehensive understanding of the residual impacts left at the site.

5.4.3.1 Onsite Soils

Over 22,000 tons of surface soil, subsurface soil and bedrock have been excavated and disposed off-site throughout the history of this project to include 11,500 tons during the removal of a 40,000 gallon process tank in 1991, 1,500 tons for the installation of the pedestrian bridge in 2006, 1,875 tons of soil and bedrock from the installation of the creek liner in 2007, and over 9,000 tons from the over-excavation efforts to achieve an acceptable EPC for the Site soil from 2011-13. Additionally, over 1,000 soil samples have been laboratory analyzed from over 500 soil borings completed at the Site. This extensive data set was evaluated to determine if the remedial objectives for the on-site soil cleanup goals were achieved. The locations of the soil borings and soil sample concentrations above the IDEM cleanup goals (as designated by the yellow triangles on the figures) are shown on **Figures 6 and 7**. The soil sample data is also contained in **Tables 5 through 8**.

The soil datasets were divided into two groups: surface soil, which includes samples collected from 0 to 2 ft bgs, and subsurface soil, which includes samples collected from 2 ft bgs to first encountered groundwater as defined by the 1996 IDEM VRP Guidance Manual. After the final soil excavation activities, the surface soil concentrations were re-evaluated and the revised EPC calculated for the Site, which were then below the IDEM cleanup goal. The Site subsurface soil will be addressed through future land use restrictions (ERC) as commercial/industrial, therefore no further action is warranted, though a significant amount of subsurface source material (contaminate mass) was removed during the over-excavation activities. The on-site soil concentrations and EPC development is discussed in greater detail in the *Limited Risk Assessment* - Arcadis 2015 **(Appendix C)**

5.4.3.2 Offsite Soils

Multiple soil borings (completed as monitoring wells) have been installed off-site as part of this project. Between 2009 and 2012, twenty (20) surface and sub-surface soil samples were collected from the off-site monitoring well installation locations and analyzed for the Site COCs. Off-Site soil sampling locations are illustrated on **Figures 6 and 7** and the off-site soils data is presented in **Tables 5 through 8**.

The off-site soils have been evaluated and compared to the 1996 IDEM VRP Tier II Residential Cleanup Goals. All COCs in the off-site surface and subsurface soils are below the 1996 IDEM VRP Tier II Residential Cleanup Goals. Additionally, all COCs are below the current 2020 IDEM Screening Levels (IDEM 2020), except for naturally occurring arsenic, though the highest arsenic concentration (21.4 mg/kg detected at MW-51A) is below the 2019 IDEM Recreational Soil Direct Contact Screening Levels. There is no unacceptable risk associated with the off-site soils and no further action is required.

5.4.3.3 Onsite Groundwater and DNAPL

Approximately 1,050 groundwater samples have been collected from approximately 100 on-site groundwater monitoring wells between 2000 and January 2020 to include select monitoring wells with DNAPL creosote. Based on the results of these groundwater samples (**Tables 3 and 4),** the nature and extent of the COCs in groundwater has been delineated. Furthermore, DNAPL thickness has been monitored in the recovery wells and monitoring wells continuously as part of the on-going free-product DNAPL creosote recovery program and the periodic monitoring well sampling events. The distribution of VOCs and DNAPL in the monitoring wells is shown on **Figure 4.** The distribution of benzene (main driver in groundwater concentrations) is above the 1996 IDEM VRP Tier II Non-residential Cleanup Goals (IDEM 1996a), is shown on **Figure 5**. For a more detailed discussion of the CSM of DNAPL creosote and groundwater COC concentrations please refer to the *Geology and Hydrogeology Report* - Arcadis 2011a (**Appendix A**).

The COCs detected in the groundwater concentrations above the IDEM Cleanup Goals have remained stable and/or decreasing. The concentrations are expected to continue to decline and an ERC will be placed on the Site to remove groundwater as a potential exposure pathway. The DNAPL creosote has been monitored and recovered since implementation of the DNAPL Creosote Recovery Program in 2001. The volume of DNAPL creosote has decreased significantly in both recovery wells and monitoring wells with the peak volume in 2013. The strategic removal of DNAPL creosote has reduced the mobility of the residual creosote, reduced the pressure and saturation of DNAPL creosote in the bedrock and reduced a significant portion of the contaminate mass in the bedrock. No further action is required associated with the DNAPL creosote as an ERC will be placed on the Site.

5.4.3.4 Offsite Groundwater and DNAPL

The nature and extent delineation of groundwater impacts off-site has been completed as shown on **Figures 4 and 5** with the groundwater datasets presented in **Tables 3 and 4**. Approximately 250 groundwater samples have been collected from 20 monitoring wells located off-site from 2009 through 2019. These groundwater samples were analyzed for Site identified COCs. Furthermore, DNAPL creosote has been detected in a few of the off-site monitoring wells close to the western portion of the Site but has not been detected in the “outer ring” of monitoring wells installed as part of the nature and extent delineation.

Similar to the on-site wells, the COCs detected in the groundwater concentrations above the IDEM Cleanup Goals have remained stable and/or are decreasing. The concentrations are expected to continue to decline and either an ERC or an ERO will be placed on the impacted off-site properties to remove groundwater as a potential exposure pathway, or alternative measures will be implemented. The off-site DNAPL creosote has also been monitored and recovered since implementation of the DNAPL Creosote Recovery Program in 2001. The volume of DNAPL creosote has decreased significantly in the monitoring wells with the peak volume in 2013. The strategic removal of DNAPL creosote has reduced the mobility of the residual creosote, reduced the pressure and saturation of DNAPL creosote in the bedrock and reduced a significant portion of the contaminate mass in the bedrock. No further action is required associated with the DNAPL

creosote as either an ERC or ERO will be placed on the impacted off-site properties, or alternative measures will be implemented.

5.4.3.5 Sediment and Surface Water

A baseline ecological assessment (BEA), as defined by IDEM (1996a), was conducted by Arcadis in 1999 for the Site and was detailed in the *Phase II Investigation Report* (Arcadis 2003). The BEA identified Clear Creek as an ecologically susceptible area, requiring evaluation of potential risks. Based in part on the results of the BEA and the intermittent presence of DNAPL globules on the creek bottom immediately adjacent to the former operations area, a creek liner was installed along an approximate 170 foot section of Clear Creek within the northern tract of the Site in 2007.

A Screening-Level Ecological Risk Assessment (SLERA) was conducted along Clear Creek after the installation of the creek liner. Sediment and surface water samples were obtained from Clear Creek in 2010 to evaluate the effectiveness of the creek liner mitigation efforts. The SLERA focused on the COCs at the Site which included DNAPL (creosote), selected SVOCs (phenols, phthalates, and priority pollutant and alkylated PAHs), and selected VOCs (BTEX), and metals (total, dissolved, and as simultaneously extracted metals [SEM]-acid-volatile sulfide [AVS]). The results of the SLERA are presented in the *Screening-Level Ecological Risk Assessment for Clear Creek* - Arcadis 2011c (**Appendix B**).

The results of the definitive SLERA indicate that ecologically significant adverse effects are unlikely at the Clear Creek Study Area due to Site related COCs. Therefore, further investigation of potential ecological risks and remediation to reduce potential ecological risks are not warranted for Clear Creek. As a proactive measure, over 500 tons of sediment were removed from two sand bars immediately south of Country Club Road because an intermittent sheen was observed when those sediments were disturbed. There were no other areas in Clear creek observed to show a sheen and no areas show sheens during the annual creek walk inspection. For more in depth discussions on ecological assessments performed at the Site, please refer to the *Phase II Investigation Report* (Arcadis 2003) and *Screening-Level Ecological Risk Assessment for Clear Creek* - Arcadis 2011c (**Appendix B**).

5.4.3.6 Vapor Intrusion

The potential for vapor intrusion (VI) related to COCs was evaluated through a proactive VI Assessment conducted on the eastern commercial plaza and also an evaluation of the VI lines of evidence for the residential homes off-site to the west of the Site. The VI evaluation of the Walnut Station Commercial Plaza building on the eastern portion of the Site is documented in the *Limited Risk Assessment Report* - Arcadis 2015 (**Appendix C**). The full Level IV Quality Assurance/Quality Control (QA/QC) results of the VI evaluation are presented in **Appendix H**, which were requested by the IDEM in the July 25, 2019, *Current Conditions Report Comment Letter* (IDEM 2019) which is provided within **Appendix E**.

In November 2010, Arcadis completed a VI assessment at the Walnut Station Commercial Plaza building which is on the eastern portion of the Site. Based on investigation and assessment data, the groundwater impacts and DNAPL creosote appear to be closer to the Walnut Station Commercial Plaza than any other structure near the Site. Indoor air, ambient air and sub-slab samples were collected using USEPA Methods TO-15 and TO-17. Indoor air, ambient air and sub-slab samples were analyzed for benzene, toluene, ethylbenzene, m,p-xylene, o-xylene (BTEX) and naphthalene by USEPA Method TO-

15 and analyzed for naphthalene, 2-methylnaphthalene, acenaphthylene and phenanthrene by USEPA Method TO-17. The concentrations detected in the indoor air and sub-slab vapor were compared to the 2010 IDEM Commercial Indoor Air Action Levels and Sub-Slab Action Levels to identify COCs.

All indoor air, ambient air and sub-slab sample results were below IDEM residential and commercial screening levels as shown in Table 1 through Table 4 of the May 2015, *Vapor Intrusion Investigation Report* (Arcadis 2011b), which was presented as Appendix A in the *Limited Risk Assessment Report* - Arcadis 2015 (**Appendix C**). Based on the data, vapor intrusion does not appear to be a significant risk at the Walnut Station Commercial Plaza. Thus, an extrapolation of these results to other off-site structures further away from groundwater impacts and DNAPL creosote also would conclude vapor intrusion is not significant risk.

Arcadis also conducted an VI evaluation of impacts present in groundwater off-site to the west of the Site **(Figure 5).** The groundwater impacts are in the deeper geologic zones (Upper and Lower Ramp Creek), not in the shallow groundwater system. Vapor Intrusion (VI) concerns are based on shallow groundwater attenuating through the vadose zone into homes and buildings. There are several monitoring wells, on the western portion of the site, screened across the alluvium and upper bedrock zones (i.e. MW-45C, MW-36A, MW-6S, MW-6D and MW-37A) in which the groundwater concentrations are non-detect. The VI assessment to the west identifies the LOEs using the IDEM Remediation Closure Guide (RCG), United States Environmental Protection Agency (USEPA), and Interstate Technology & Regulatory Council (IRTC) guidance. Based on the evaluation and utilizing the IDEM's screening process in the RCG, VI is not considered an issue based on the following LOEs.

- There have not been any emergency conditions (petroleum vapors) detected nor reported in the neighborhood.
- No significant preferential pathways have been identified.
- There is no free product within 30 ft of the foundations of the homes.
- Benzene concentrations in groundwater, both currently and historically, have been well below 1,000 µg/L and the groundwater is at a depth of greater than 25 ft below ground surface (bgs); including monitoring wells containing free product creosote. The benzene concentrations in the groundwater in the monitoring wells along the western property boundary, and within monitoring wells residing in the neighborhood west of the Site have been stable since implementation of sampling activities.
- As stated earlier, the depth to groundwater is greater than 25 ft bgs and not in contact with the residential homes.
- The clean, unconsolidated soil is approximately 15-20 feet thick bgs beneath the neighborhood; with shallow groundwater encountered approximately 25-30 feet below ground surface.
- Additionally, the VI Assessment conducted in the commercial buildings on the east side of Clear Creek demonstrated even in the worst-case scenario, VI was not an issue.
- Furthermore, none of the residential homes to the west of the site have basements, except for two homes, which have only partial basements. The LOE still apply to those two homes with partial basements. As part of this evaluation, Arcadis reviewed the current property cards in the Monroe County Geographic Information System (GIS) for the neighborhood to the west of the Site.

6 SUMMARY OF RISKS ASSOCIATED WITH THE SITE

Arcadis prepared a limited risk assessment on behalf of CSX to assess potential human health risks associated with the Site. Please refer to the *LRA* - Arcadis 2015 (**Appendix C**) for a detailed discussion of the risks associated with the Site.

The risk assessment evaluated the COCs at the Site. These COCs included DNAPL (creosote), select SVOCs (phenols, phthalates, and alkylated PAHs), select VOCs (BTEX), and select metals (arsenic and lead). The *LRA* evaluated the potential current and hypothetical future risks and hazards to human health associated with the creosote-related COCs detected in the surface and subsurface soil, groundwater, sediment, surface water, indoor air, ambient air and sub-slab vapors samples. Arcadis evaluated the potential exposure routes including ingestion, dermal and inhalation from the creosote related COCs. Results of the *LRA* determined that the only complete exposure pathways are related to contact with surface soil by a site worker and the inhalation of vapors in indoor air by an off-Site worker. Based on these results, the *LRA* focused on the potential human health risks to the exposure of on-site surface soil and the potential for off-site vapor intrusion.

Based on the soil and groundwater data for on-site and off-site and the results of the vapor intrusion study conducted in a building located adjacent to the Site, vapor intrusion potential is not a significant risk. Additionally, based on the proactive remedial activities for the Site soil, evaluation of Site soil data, and development of the Site surface soil EPC; surface soil does not present any unacceptable risk.

The exposure pathways and exposure routes for the current and future use of the Site evaluated in this limited risk assessment conclude there are no unacceptable risks at the former Indiana Creosoting Company facility based on the supporting lines of evidence summarized below and detailed in the *LRA* - Arcadis 2015 (**Appendix C**)

6.1 Surface Soil

The majority of the more heavily impacted areas of surface soil at the Site have been over-excavated. After excavating, EPCs were then calculated for the various COCs remaining at the Site. The calculated EPCs for the Site COCs were below their respective 1996 IDEM VRP Tier II Non-residential Closure Goals. There are no occupied buildings on the Site and an on-site ERC will restrict future building at the Site to accommodate for potential VI. In the unlikely event a building is constructed on site, a focused soil gas investigation will be required in the area of the planned building and/or engineering controls must be implemented prior to occupation. Based on these lines of evidence, the potential exposure for risk to human health from exposure to surface soil via ingestion, dermal contact or inhalation of dust and VI is not complete. The off-site surface soils have been evaluated and compared to 1996 IDEM VRP Tier II Residential Cleanup Goals. All COCs in the off-site surface and subsurface soils are below the 1996 IDEM VRP Residential Cleanup Goals.

6.2 Subsurface Soil

The Site is currently vacant and CSX intends to place an ERC on the Site. Redistribution of soil will be restricted under the terms of a proposed ERC, therefore, contact with subsurface soil is not expected to

occur. In the unlikely event on-site construction does occur, a soil gas investigation and/or engineering controls are recommended as outline above. In addition. a Construction/Soil Management Plan should be developed to address potential exposure to COCs via incidental ingestion, dermal contact and the inhalation of dust and vapors in outdoor air. Based on these future mitigation factors, potential risk to human health from exposure to subsurface soil via ingestion, dermal contact, the inhalation of dust and vapors in the outdoor air, or the inhalation of indoor air vapor will be eliminated.

6.3 Groundwater

Though there are residual groundwater impacts both on-site and off-site, there are no known drinking water wells in the vicinity of the Site. In addition, the Site is located within an area of municipally supplied water. Furthermore, a combination of an ERC and/or ERO will restrict the installation of new drinking water wells on and downgradient from the Site, or alternative measures will be implemented. Based on these future mitigation factors, the risk to human health from exposure to groundwater via ingestion presents no unacceptable risks and will appropriately managed.

6.4 Sediment and Surface Water

To evaluate the effectiveness of completed mitigation efforts in Clear Creek, a SLERA was completed in 2010 using sediment and surface water samples collected from Clear Creek. The results of the SLERA indicate that ecologically significant adverse effects are unlikely at the Clear Creek Study Area due to Site related COCs. For further detailed discussions of risks associated with the sediments and surface water, please refer to the previously submitted Screening-Level Ecological Risk Assessment Report - Arcadis 2011 **(Appendix B)**.

6.5 Vapor Intrusion

A proactive VI Investigation was conducted on the commercial plaza located to the east of the Site and an evaluation of the potential VI impact from groundwater was conducted on residential off-site properties located to the west of the Site. Based on the data, there is no significant risk from VI to the commercial plaza on the eastern portion of the Site. In addition, there is no significant risk from vapor intrusion from the off-site groundwater impacts to the residential homes located west of the Site.

6.6 Baseline Ecological Risk Assessment

A baseline ecological assessment (BEA), as defined by IDEM (1996a), was conducted by Arcadis in 1999 for the Site and was detailed in the *Phase II Investigation Report* (Arcadis 2003). The BEA identified Clear Creek as an ecologically susceptible area, requiring evaluation of potential risks. Based in part on the results of the BEA and the intermittent presence of DNAPL globules on the creek bottom immediately adjacent to the former operations area, a creek liner was installed along an approximate 170-foot section of Clear Creek (within the northern tract of the Site) in 2007. A SLERA was completed along Clear Creek after the installation of the creek liner.

As previously noted, the results of the SLERA indicate that ecologically significant adverse effects are unlikely at the Clear Creek Study Area due to Site related COCs. Therefore, further investigation of

potential ecological risks and remediation to reduce potential ecological risks are not warranted. For more details on ecological assessments performed at the Site, please refer to the *Phase II Investigation Report* (Arcadis 2003) and *Screening-Level Ecological Risk Assessment for Clear Creek* - Arcadis 2011c (**Appendix B**).

7 REMEDIAL STRATEGY

Because of the past known impacts from the Former Indiana Creosoting Company operations to the soil, groundwater, sediment and surface water; proactive remedial activities have been conducted at the Site. CSX has performed extensive over-excavation of impacted soil and sediment, implemented an effective DNAPL creosote reduction program, and conducted numerous groundwater and surface water sampling events to prepare the Site for closure. The thorough nature and extent assessments and investigations have allowed for CSX to develop a detailed CSM and understand the characterization of the impacts to the various media on-site and off-site.

Based on the detailed work activities conducted in the past, the most appropriate approach for managing the site is a combination of nature and extent characterization, proactive remedial action, conducting a risk assessment of the residual impacts and use of institutional controls or alternative measures to mitigate the residual impacts. The following sections summarize the remedial strategy for each of the media with detailed discussions in the *Geology and Hydrogeology Report* - Arcadis 2011a **(Appendix A),** *Screening-Level Ecological Risk Assessment* - Arcadis 2011c **(Appendix B),** *Limited Risk Assessment* - Arcadis 2015 **(Appendix C),** and the *Current Conditions Report* - Arcadis 2019a **(Appendix D).**

7.1 Soil Excavation and Removal

Over 22,000 tons of surface soil, subsurface soil, bedrock and sediment have been excavated and disposed off-site throughout the history of this project to include 11,500 tons during the removal of a 40,000 gallon process tank in 1991, 1,500 tons for the installation of the pedestrian bridge in 2006, 1,875 tons of soil and bedrock from the installation of the creek liner in 2007, over 9,000 tons from the over-excavation efforts from 2011-13, and 550 tons from the sediment removal in 2012. Additionally, over 1,000 soil samples have been laboratory analyzed from over 500 soil borings completed at the Site. This extensive data set was evaluated to determine the remedial objectives for the on-site soil cleanup goals. The locations of the soil borings are shown on **Figures 6 and 7** and the soil sample data is contained in **Tables 5 through 8**.

CSX and Arcadis conducted voluntary excavations of onsite creosote bleeds, impacted soils, and areas with elevated benzo(a)pyrene levels at the Site, from December 2011 through October 2013, which is further discussed in the *CCR* (Arcadis 2019a) (**Appendix D**). The creosote bleed soils and impacted soils at the Site were a result of past operations of the former Indiana Creosoting Company which operated from the early 1900s to 1976. Elevated benzo(a)pyrene areas were identified following a limited risk assessment (section 4.4.3.1) on behalf of CSX. Excavations were conducted at twenty (20) different areas across the Northern and Southern tracts of the Site.

Prior to implementation of excavation and/or construction activities, Arcadis conducted waste characterization investigations in 2007 and 2013 on the surface and subsurface soils within the twenty (20) areas of interest. The samples were analyzed for toxicity characteristic leaching procedure (TCLP) VOCs, SVOCs and metals and the results classified the soil as non-hazardous.

A total of 9,051.69 tons of creosote bleed soils and impacted soils with elevated levels of benzo(a)pyrene were excavated from areas of interest across the northern and southern tracts and disposed off-site at

Twin Bridges RDF Waste Management Subtitle D facility located in Danville, Indiana. Excavation depths ranged from 2 feet below ground surface (bgs) to 5 feet bgs, depending on the area of interest (**Figures 6 and 7**). All soil boring locations and excavated areas are shown on **Figures 6 and 7**. Soil COC concentrations above the 1996 IDEM VRP Tier II Non-residential Cleanup Goals remaining in place are also shown on **Figures 6 and 7** as well as on **Tables 7 and 8**.

No additional soil excavations are warranted at this time.

7.1.1 Confirmation Sampling of Soil Excavation

2011-12 Excavation Activities

A total of 36 subsurface soil confirmation samples were collected across the eight (8) areas of interest from late 2011 to early 2012, prior to the backfilling of each excavation area (**Figures 6 and 7**). There were no surface soil samples collected because the excavated areas not only removed the surface soil, but also the excavations were completed spatial outward to surface soil locations with known concentrations. The subsurface soil confirmation samples were analyzed for Metals (Arsenic and Lead) US EPA SW-846 Method 6010; BTEX SW-846 Method 8260; and SVOCs US EPA SW-846 Method 8270. Confirmation samples were collected across the bottom extents of each excavation area; the depths of which ranged from 2 feet to 5 feet below pre-excavation ground surface.

No BTEX or Metals concentrations were detected above 1996 IDEM VRP Tier II Non-residential Cleanup Goals in the subsurface soil confirmation samples submitted for laboratory analysis (**Tables 5 and 6**). SVOC concentrations were detected in 2 of the 36 subsurface soil samples above the Tier II Industrial IDEM VRP cleanup goals (Area-J-CS-3 and Area-J-CS-4). These subsurface soil confirmation samples were collected in excavation Area J, along the unpaved road, and former rail bed, which runs north to south through the northern tract of the Site. Confirmation sampling results for SVOCs in soils is presented in (**Tables 7 and 8**). Because an ERC will be placed on the Site restricting the excavation of soils, no further action is warranted for the subsurface soils.

2013 Excavation Activities

Due to the changes to the risk assessment guidance, specifically changes to the ProUCL portion of the calculator; additional surface soil was excavated to meet the new guidance. There were an additional 11 areas excavated to meet the required EPC goals for surface soil. One confirmation sample was collected from each of the eleven (11), prior to the backfilling of each excavation area. As benzo(a)pyrene is the only COC which required additional characterization, the soil confirmation samples were analyzed for SVOCs US EPA SW-846 Method 8270 for benzo(a)pyrene only. No benzo(a)pyrene concentrations were detected above 1996 IDEM VRP Tier II Cleanup Goals in the surface soil confirmation samples submitted for laboratory analysis. Refer to the *LRA* (Arcadis 2015) (**Appendix C**) for the rationale on the additional excavations of the eleven (11) benzo(a)pyrene areas.

As noted in the above section and EPC discussions in Section 4.4.3.1, no additional soil excavations are warranted at this time.

7.2 Groundwater and DNAPL Creosote Monitoring

Approximately 1,050 groundwater samples have been collected from over 100 on-site groundwater monitoring wells between 2000 and January 2020 to include select monitoring wells with DNAPL creosote. According to the results of these groundwater samples (**Tables 3 and 4**), the distribution of Site COCs correlates directly to the distribution of creosote as the source of the dissolved COCs. Furthermore, DNAPL thickness has been monitored in the recovery wells and monitoring wells continuously as part of the on-going free-product DNAPL creosote recovery program and the periodic monitoring well sampling events. The distribution of VOCs and DNAPL in the monitoring wells is shown on Figure 4. The distribution of benzene, which is the main driver in groundwater concentrations, above the non-residential IDEM Screening Levels (IDEM 1996a), is shown on **Figure 5**. For a more detailed discussion of the CSM of DNAPL creosote and groundwater COC concentrations please refer to the *Geology and Hydrogeology Report* - Arcadis 2011a **(Appendix A**). Per the July 25, 2019 *Current Conditions Report Comment Letter* (IDEM 2019) (**Appendix E**), IDEM made note that:

Quarterly groundwater sampling activities have been conducted at the Site on a majority of the monitoring wells between 2008 and 2012. The data shows groundwater analytical concentrations have been stable over the last 10+ years. Since 2012, CSX has been conducting free product (creosote) removal activities, and groundwater sampling events were scheduled on a periodic basis until significant reduction in free product removal was evident at the Site. As part of Arcadis' groundwater monitoring protocol at the Site, monitoring wells exhibiting measurable creosote and/or historically measurable creosote are generally not sampled; with the exception of off-site monitoring wells exhibiting measurable creosote. Though some on-site monitoring wells with free product have also been sampled periodically to determine the dissolved concentrations in the groundwater in those wells for risk analysis. Free product thicknesses will continue to be documented during the free product removal events and the upcoming quarterly groundwater sampling events for final documentation in the Remediation Completion Report.

As discussed in the September 4, 2019 meeting with the IDEM, CSX has agreed to sample a subset of the of monitoring well network (over 100 wells in the network of this project) on a quarterly basis. Arcadis has reviewed historical groundwater analytical data, historical groundwater elevation data, hydrogeologic zones within the subsurface, geologic interval/monitoring well screen setting data, historical DNAPL presence within monitoring wells, and spatial distribution of monitoring wells to determine the subset of monitoring wells at the Site for the requested quarterly groundwater sampling. This network focuses on those wells with higher conductivities as well as wells in which tracer was detected in during the various tracer studies in the past. Furthermore, certain wells were eliminated from consideration, as they have been shown to have poor connectivity to the karst flow system (i.e. all the wells completed in the Borden Formation, most of the wells in the Lower Ramp Creek Formation and several of the wells in the Upper Ramp Creek Formation).

A subset of 24 monitoring wells has been selected as a representative set to determine water quality for this project **(Table 10, Figure 9).** These monitoring wells will be sampled on a quarterly basis for a period of two years (eight quarters), or until quarterly sampling is deemed no longer necessary as agreed upon by the IDEM and CSXT/Arcadis. This subset of monitoring wells will be sampled via low flow and/or bailer sampling methodologies, as described in Section 3.3.2 of the *CCR* (Arcadis 2019a) (**Appendix D**). This proposed list of monitoring wells to be sampled is presented in **Table 10** and on **Figure 9**. Please note,

all monitoring wells in the network will be sampled for the final groundwater sampling event, in preparation for Site closure.

Additionally, the IDEM requested one of the eight quarterly sampling events be a stormwater groundwater sampling event. To determine which monitoring wells will be sampled during the stormwater event, Arcadis will deploy a series of transducers in nine (9) monitoring wells within three different geologic units (unconsolidated alluvium, Upper Ramp Creek, and Lower Ramp Creek) at the Site. The transducers will assist in determining how the karst flow system responses to rain events, including what minimal size of rain event effects the flow system and which wells and geologic units will be affected the most. Upon evaluation of the hydrogeologic data (focusing on the rainfall events), a smaller subset of monitoring wells will be sampled for the stormwater event from the list of the proposed monitoring wells.

A smaller subset is proposed because sampling of the current proposed 24 wells is expected to take 2 days and any substantial stormwater event may be over within hours. Therefore, monitoring well sampling during the stormwater event is expected to be limited to a smaller subset that can be sampled within the response time of the stormwater event. The IDEM will be notified of the results of the transducer (water elevation) testing and Arcadis will propose a subset of wells to conduct the stormwater event. The event will not be conducted until the subset of wells has been agreed upon between the IDEM and CSXT/Arcadis.

The transducer evaluation is expected to take place in the spring of 2020 starting around the mid-March timeframe and extending for 3 months until mid-May. Once the subset of wells has been agreed upon, Arcadis will begin monitoring the weather for the minimal rainfall event for sampling purposes. Arcadis will utilize a real time monitoring system to alert Arcadis personnel of a rainfall event of more than 0.25 inches of precipitation within a 24-hour period. Arcadis will mobilize to the Site as soon as possible and collect groundwater samples from this predetermined subset of monitoring wells. Arcadis proposes to sample this subset of monitoring wells via bailer sampling methodology, which allows Arcadis to have the proper equipment ready and available to sample post storm flow event as soon as possible.

Arcadis began quarterly groundwater sampling of the proposed subset of monitoring wells during the 4th Quarter of 2019 and will continue to sample quarterly until 8 consecutive quarters has been achieved (3rd Quarter of 2021). Groundwater sampling analytical data from the 4th Quarter 2019 sampling event are provided in **Appendix I**.

7.3 DNAPL Creosote Recovery

The objective of DNAPL Creosote Recovery program at the Site is to reduce pressure and saturation, reduce mobility and reduce contaminate mass, as well as to reduce impacts within the dissolved phase groundwater at the Site.

Arcadis designed, constructed, tested, and implemented a portable DNAPL remedial system that drastically minimized free phase creosote and creosote vapors; this enhanced DNAPL recovery system began initial operations in May 2012. The remedial system developed is an enclosed process known as the Enhanced DNAPL Recovery System. For a full overview of the Enhanced DNAPL Recovery System, refer to the Section 3.3.2 in the *CCR* - Arcadis 2019a (**Appendix D**).

Active recovery utilizing the Enhanced DNAPL Recovery System began in May 2012, starting with recovery well RW-8 and monitoring well MW-21D. Since May 2012, sixteen (16) additional recovery

and/or monitoring wells containing DNAPL were equipped to support the DNAPL recovery system. Wells currently equipped for DNAPL recovery include: MW-21D, MW-24A, MW-51A, MW-54A, RW-2, RW-3, RW-4, RW-5, RW-7, RW-8, RW-9, RW-10, RW-12, RW-13, RW-14, RW-15, RW-17, AND RW-18 (**Figures 2 and 4**). See **Table 9** for all historical DNAPL recovery data since 2000. DNAPL recovery graphs are also presented in **Appendix G**.

A detailed DNAPL creosote monitoring and recovery program has been implemented at the site, utilizing the enhanced DNAPL recovery system. The program monitors 40 wells on a quarterly basis with some wells more or less often depending on the measured thickness. To date, DNAPL creosote has been detected in 32 monitoring or recovery wells both on-site and off-site. Of those 32 wells, 18 have been retrofitted for product removal, using the DNAPL recovery system. Over 7,800 gallons of DNAPL/water mixture have been recovered since the inception of the enhanced DNAPL recovery system in April 2012, through December 7, 2019; with almost 2,700 gallons recovered from one location (RW-8). See **Table 9** for all historical DNAPL recovery values. Over 10,500 gallons of DNAPL/water mixture have been recovered since August 2000. DNAPL recovery graphs are also presented in **Appendix G**.

The Site was considered a large quantity generator (LQG) in accordance with RCRA from July 23, 2013 through August 25, 2017; therefore, all fifty-five (55) gallon drums containing DNAPL was removed prior to their 90-day storage limit. Due to the success of the DNAPL Recovery program and the reduction of recoverable volumes of DNAPL creosote at the Site, Arcadis and CSX petitioned the IDEM to change the Site's generator status from LQG to small quantity generator (SQG) on February 20, 2017. IDEM approved the change in generator status to SQG on August 25, 2017.

7.4 Institutional Controls for CSX Owned Property

Institutional controls are administrative measures, such as ERCs and/or an ERO, that establish legally binding measures to eliminate any future potential exposure risk. Use of institutional controls does not remediate a Site, however, institutional controls are an effective tool for eliminating short-term and long-term exposure risk. CSX will propose specific deed restrictions to be included in the ERC for the Site. Once the ERC has been approved by the IDEM, it will be recorded with the Monroe County Recorder's Office, and the land use restrictions will eliminate potential exposure to residual impacts remaining at the Site.

The ERC will be placed on the property deed restricting the Site property to non-residential use and restrict the installation of drinking water wells on the Site. In addition, provisions in the ERC would include development of a Soil and Groundwater Management Plan (SGMP) to outline appropriate management of soil and groundwater during future potential construction activities in areas of the Site containing residual impacts with soils and/or groundwater. The SGMP would describe appropriate procedures for the handling, onsite reuse, transport, storage, and/or offsite disposal of excavated soils and/or groundwater generated during construction activities. With exposure pathways removed by these appropriately implemented institutional controls, any potential risk from remaining residual impacts would be eliminated. The 40-acre CSX property is represented by several parcels (**Figure 8**).

7.5 Risk Management Options for Off-Site Properties

CSX will use either individual ERCs or an ERO on the impacted off-site properties to eliminate any future potential exposure risk. Similar to residual impacts to onsite groundwater, an ERO and/or individual ERCs would be implemented as a component of the remedial strategy to mitigate potential risks associated with remaining residual impacts in the off-site groundwater to the west of the Site (**Figure 8, Table 11**). Regardless of whether individual ERCs or an ERO is used as the institutional control off-site, coordination and informational meetings will need to occur with the impacted off-site property owners. If the ERO is agreed to as the path forward, meetings will need to occur with the Monroe County staff and eventually the Monroe County Board members. These public out-reach meetings are expected to take considerable time to coordinate and schedule. If CSX is unable to secure these types of institutional controls, then it will provide alternative measures to IDEM for consideration and implementation to ensure there are no unacceptable future risks associated with the Site.

8 PROJECTED WORK SCHEDULE

Nature and extent characterization has been completed at the Site based on extensive comprehensive investigations, assessments and proactive remedial activities that have been completed. Based on activities completed to-date, there are only a few activities remaining before closure of the project can occur, with some of these activities being directly requested by the IDEM.

The IDEM has requested eight (8) additional quarters of groundwater sampling be completed. These sampling activities are to include sampling during (or soon thereafter) one stormwater event. The quarterly groundwater sampling events were initiated in December 2019 and will be completed in September 2021. Additionally, water level data is currently being collected from March to May 2020 to provide data and guidance on when to conduct the requested stormwater sampling event. Based on the data collected, that stormwater event will replace one of the eight scheduled quarterly monitoring well sampling events. CSX and Arcadis expect to meet with the IDEM to discuss the water elevation data and agree upon what size rain-event and when the stormwater sampling will occur.

Following IDEM review and approval of this *RRWP*, along with the subsequent public comment period, draft ERC(s) specific to the Site and/or neighboring properties will be submitted for IDEM's review. After review and approval from IDEM, the ERC(s) will be presented to the property owners. Upon approval from IDEM and the property owners, the ERC(s) will be recorded on the property deeds located at the Monroe County Recorder's Office. If an ERO is utilized as a portion of the institutional controls used to mitigate future potential risk, appropriate Monroe County parliamentary procedures will be followed in pursuit and recordation of the ordinance. If CSX is unable to secure these types of institutional controls, then it will provide alternative measures to IDEM for consideration and implementation to ensure there are no unacceptable future risks associated with the Site.

Following eight quarters of groundwater sampling and approval of the ERC(s), ERO (if appropriate) , and/or other alternative measures specific to the Site and/or neighboring properties, CSX and Arcadis will request closure of the Site from IDEM.

9 HEALTH AND SAFETY PLAN

A Health and Safety Plan (HASP) was prepared for the Site for all onsite project activities and is provided in **Appendix J**. The HASP was prepared to describe the known hazards and evaluate the risks associated with each potential activity at the Site.

A description of the levels of protection to be worn by personnel in the work areas, including the decontamination procedures for personnel and equipment, has been included. The HASP also includes a list of key personnel responsible for general safety procedures, emergency site procedures, and emergency medical care of various injuries and/or toxicological problems. The HASP will be adhered to during all monitoring and remedial activities.

10 COMMUNITY RELATIONS PLAN

As required by Section 8.0 under the Remediation Work Plan section of the IDEM VRP Resource Guide, the following is a proposed Community Relations Plan for the Site.

10.1 Affected Property Owners and Occupants

Based on review of all available data, the subject property is known to have remaining residual impacts within soil and groundwater associated with historical Site activities. CSX currently owns the property located at 240 West Country Club Drive in Bloomington, Indiana. Adjacent properties are also affected by residual impacts within groundwater associated with hydraulic migration from the Site. As discussed previously in this report, institutional controls, whether it be an areawide ERO or individual ERCs (or a combination thereof) or other alternative measures are being considered to mitigate future potential risk associated with the Site. A list of the proposed addresses and parcels that are affected is provided in **Table 11**, **Figure 8.**

10.2 Known Registered Neighborhood Organizations

The Site is situated within commercially zoned boundaries and there is no indication of a known registered neighborhood organization. No information regarding a registered neighborhood organization or similar was identified in an internet search of publicly available records.

At this time, there is no proposed outreach intended for any specific organization in the area.

10.3 Known or Reasonably Apparent Sensitive Community Institutions

As previously noted, the Site is located in a commercial, residential, and recreational area of Bloomington, Indiana. It is bordered by residential properties to the south and west, commercial properties to the east, and recreational properties to the north and west. There are no known sensitive community institutions within the immediate vicinity of the Site. At this time, there are no impacts related to the COCs identified in this *RRWP* that would contribute risk to sensitive institutions as noted in the summary of risk assessment portion of this *RRWP*, Section 5.

10.4 Written Notice

If additional findings indicate a potential risk to other surrounding properties, those property owners will be contacted immediately by CSX representatives.

10.5 Affected Local Government Units

The Site is located in Perry Township, Monroe County, Bloomington, Indiana. The names and mailing addresses of potentially affected local governmental units with jurisdiction near the Site and the City of Bloomington are as follows:

Monroe County Commissioners
District 1: Lee Jones
District 2: Julie Thomas
District 3: Penny Githens
Monroe County Courthouse
100 West Kirkwood Avenue
Bloomington, Indiana 47404
Phone: (812) 349-2550

Monroe County Health Department
119 West 7th Street
Bloomington, Indiana 47404
Phone: (812) 349-2543

Mayor of Bloomington
John Hamilton
401 North Morton Street
Bloomington, Indiana 47404
Phone: (812) 349-3406

Monroe County Building Department
501 North Morton Street
Bloomington, Indiana 47404
Phone: (812) 349-2580

Indiana Regulating Agencies
Indiana Department of Environmental Management – Office of Land Quality
Voluntary Remediation Program: William Holland
Project Manager: Michael McCann
100 North Senate Avenue
IGCN 1101
Indianapolis, Indiana 46204
Phone: (317) 234-0972

10.6 Notice of Public Comment Period

10.6.1 Newspaper

The following is the name, address, and telephone number of the newspaper in which the IDEM may publish a notice of the public comment period:

Herald Times
1900 South Walnut Street
Bloomington, Indiana 47401
Phone: (833) 213-7008

10.6.2 Public Library and/or Other Public Repositories

The name, address, and telephone number of the public library nearest to the Site, at which a copy of this *RRWP* should be placed for public review, is provided below:

Monroe County Public Library
303 East Kirkwood Avenue
Bloomington, Indiana 47408
Phone: (812) 349-3050

10.7 Environmental Restrictive Covenant Implementation

As appropriate, negotiations for individual ERCs to be recorded on off-site properties will incorporate the following plan of action:

1) Notification of potentially affected parcel ownership via certified mail. The mailing will contain brief background on the project (in general terms), provide contact information to inquire about additional information, and will also contain a Draft ERC for consideration.

2) Telephone outreach will be completed to confirm receipt of the mailings described above and also request an in-person meeting on location to further discuss.

3) Complete in-person meetings to review terms and conditions of the Draft ERC(s) with individual property owners.

4) Execution of final ERC with individual property owners.

5) Recordation of final ERC at the Monroe County Recorder's office

10.8 Environmental Restrictive Ordinance Implementation

As appropriate, an ERO will be negotiated and executed with Monroe County for areas of the project location (including the Site) located primarily to the west. The intent of the ERO will be to install a county endorsed ordinance for a specific delineated area that restricts future groundwater use for potable purposes. As installing an ERO requires public and county jurisdictional involvement and approvals, the following activities and public outreach are planned:

1) County jurisdictional outreach will involve teleconference communications and in-person meetings to educate County council members on the methods, means and purpose of a proposed ERO. Preliminary approval of the ERO (in concept) will be sought prior to public solicitation.

2) An initial mailing will be sent to all potentially affected owners located within the proposed footprint of the ERO. The initial mailing will contain the following information (at a minimum):

a. A cover letter summarizing the background of the Site, the VRP process, the nature and purpose of the proposed ERO, the process that would be followed by the County Council if it decides to take up the potential adoption of an ERO, and how owners and residents could learn more about the Site and the ERO and participate in the ERO adoption process.

b. A Fact Sheet providing further details about the background of the Site, a summary of completed remedial activities, the rationale for and details of the proposed ERO restrictions, and contact information for CSX representatives (including a dedicated, toll-free phone number) and for the IDEM project manager who could be contacted to get answers to questions and obtain further information.

c. A link to an Internet Website created solely for the Site and the potential ERO. The ERO will include detailed information about the Site, the VRP process, various VRP submissions, the ERO adoption process, and links to various project documents.

d. A postcard, with pre-paid postage, for recipients to fill out and return that provided information on the homeowner's/resident's property including whether they had / have a private groundwater well at their property.

3) A Public Notice will be made in the Herald Times alerting the public to an informational Open House (that will likely be held in the local public library). The primary intent of the Open House will be to provide additional information to the public about the Site and the proposed ERO. The forum will be informal in nature with an interactive question and answer session included.

4) Prior to holding the Open House, an additional informational postcard will be mailed to the same owners who received the information postcards described in 2.d. above. The postcards will contain duplicative information contained within the planned Public Notice described in 3. above.

5) An informative Open House (as described in 3. above) will be held.

6) Following the above-described public outreach efforts, the ERO concept will be presented to the County Council and formal ERO adoption processes will be initiated.

11 REFERENCES

Arcadis. 2003. *Phase II Investigation Report*. Former Indiana Creosoting Company (ICC), Bloomington, Indiana. Prepared for CSX Transportation, January 2003.

Arcadis. 2009. *Remediation Work Plan*. CSX Transportation, Bloomington, Indiana. December 2009

Arcadis. 2011a. *Geology & Hydrogeology Report*, Former Indiana Creosoting Company (ICC), Bloomington, Indiana. Prepared for CSX Transportation, October 2011.

Arcadis. 2011b. *Vapor Intrusion Investigation Report*, Former Indiana Creosoting Company (ICC), Bloomington, Indiana. Prepared for CSX Transportation, November 2011.

Arcadis. 2011c. *Screening-Level Ecological Risk Assessment for Clear Creek*, Former Indiana Creosoting Company (ICC), Bloomington, Indiana. Prepared for CSX Transportation, June 2011.

Arcadis. 2015. *Limited Risk Assessment Report (Human Health Risk Assessment)*, Former Indiana Creosoting Company (ICC), Bloomington, Indiana. Prepared for CSX Transportation, May 2015.

Arcadis. 2019a. *Current Conditions Report*. Former Indiana Creosoting Company (ICC), Bloomington, Indiana. Prepared for CSX Transportation, May 2019.

Arcadis. 2019b. *Response to Comments – Current Conditions Report*. December 18, 2019.

Ault, C. H., D. Harper, C. R. Smith, and M. A. Wright. 1985. *Faulting and jointing in near surface mines of southwestern Indiana*. Prepared by the Indiana Geological Survey for the U.S. Nuclear Regulatory Commission, Washington, D.C. NUREG/CR-4117 RA.

City of Bloomington Utilities Department. 2020. *March 11, 2020 Email Correspondence with Nancy Axsom*.

FEMA. 2010. *Flood Insurance Rate Map*. Web page. Located At: https://www.fema.gov/flood-insurance-rate-map-firm

Geraghty & Miller, Inc. 1996. *Risk Assessment*. Former Indiana Creosoting Company Site, County Club Drive, Bloomington, Indiana. Prepared for CSX Transportation. September 1996.

Hartke, E.J., and H. H. Gray, 1989. *Geology for Environmental Planning in Monroe County, Indiana*. Geological Survey Special Report 47. Indiana Dept. of Natural Resources.

Hasenmueller, W. A., Estell, C. M., Keith, B. D., and Thompson, T. A., 2008, *Bedrock geologic map of Monroe County, Indiana*: Indiana Geological Survey Miscellaneous Map 73.

IDEM. 1996a. *Voluntary Remediation Program Resource Guide*. Indianapolis, Indiana: Indiana Department of Environmental Management, July 1996. Web page. Located at: http://www.in.gov/idem/files/vrpresourceguide2.pdf

IDEM. 1996b. *Nonrule Policy Document, VRP Lead Policy*, Identification Number W-0048. January 26, 1996.

IDEM. 2006. *RISC Technical Guide*. Indianapolis, Indiana: Indiana Department of Environmental Management (Chapter 8), June 2006.

IDEM. 2012. *Remediation Closure Guide*. Web page. Located at: http://www.in.gov/idem/files/remediation_closure_guide.pdf

IDEM. 2019. *Comment Letter – Current Conditions Report*. July 25, 2019.

IDEM. 2020. *Comment Letter, Response to Comments - Current Conditions Report.* January 24, 2020.

IDNR. 2020a. Water *Well Record Database*, Division of Water. Web page. Located at: https://secure.in.gov/apps/dnr/dowos/main.aspx.

IDNR. 2020b. *Floodplain Analysis / Regulatory Assessment (FARA)*, Division of Water. Web page. Located at: https://dnrmaps.dnr.in.gov/appsphp/fdms/

Indiana University. 2010a. *Indiana Spatial Data Portal*. Web page. Located at: https://gis.iu.edu/

Indiana University. 2010a. *Indiana Spatial Data Portal*: 2010 Monroe County Orthophotography, LiDAR, Contours, and Elevation. Web page. Located at: https://gis.iu.edu/dataset/elevation/2010monroe.html

Maier, Randal D., 2003a. *Unconsolidated aquifer systems of Monroe County, Indiana*. Indiana Dept. of Natural Resources, Div. of Water. Map with text. July 2003.

Maier, Randal D., 2003b. *Bedrock Aquifer Systems of Brown County, Indiana*. Indiana Dept. of Natural Resources, Div. of Water. Map with text. May 2003.

Monroe County Indiana. 2020. *Monroe County GIS*. Web page. Located at: https://www.co.monroe.in.us/department/division.php?structureid=150

Powell, R.L., 1976. *Some Geomorphic and Hydrologic Implications of Jointing in Carbonate Strata of Mississippian Age in South-Central Indiana*. Ph.D. thesis, Purdue University.

Reynolds, D.A. and Kueper, B.H., 2002. *Numerical examination of the factors controlling DNAPL migration through a single fracture*. Journal of Ground Water, Vol. 40, No. 4, pp. 368-377.

USEPA. 1992. *Framework for Ecological Risk Assessment. U.S. Environmental Protection Agency*, Risk Assessment Forum, Washington, DC. EPA/630/R-92/001. February 1992.

USEPA. 2013a. *ProUCL Version 5.0.00*. Online: www.epa.gov/osp/hstl/tsc/software.htm

USEPA. 2013b. *ProUCL Version 5.1.00 Technical Guide*. Online: www.epa.gov/osp/hstl/tsc/ProUCL_v5.0_tech.pdf

USGS. 1977/1981a. *Bloomington Quadrangle 7.5 Minute Series Topographic Map*.

USGS. 1977/1981b. *Clear Creek Quadrangle 7.5 Minute Series Topographic Map*.

USGS. 1992a. *Bloomington Quadrangle 7.5 Minute Series Topographic Map.*

USGS. 1992b. *Clear Creek Quadrangle 7.5 Minute Series Topographic Map*.

Worthington S.R.H., 1999 - *A comprehensive strategy for understanding flow in carbonate aquifers*. In: Palmer, A.N., Palmer, M.V. & Sasowsky, I.D. (Eds.), *Karst Modeling*, The Karst Waters Institute Special Publication 5, Charles Town, West Virginia (USA): 30-37.

Tables

ARCADIS Design & Consultancy for natural and built assets

Table 1.
Constituents of Concern
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Constituents of Concern								
			1996 IDEM VRP Tier II Default Closure Goals					
Type:	Media/Type of Closure	Specific Analytes	**Non-Residential (Industrial) Surface Soils (mg/kg)**	Residential Surface Soils (mg/kg)	**Non-Residential (Industrial) Subsurface Soils (mg/kg)**	Residential Subsurface Soils (mg/kg)	**Non-Residential (Industrial) Groundwater (ug/L)**	Residential Groundwater (ug/L)
BTEX	Surface Soil - NR	Benzene	**16.63**	22.07	**4.77**	0.059	**98.6**	5
	Subsurface Soil - NR	Toluene	**1,000**	1,000	**1,000**	278.93	**20,440**	1,000
	Groundwater - NR	Ethylbenzene	**1,000**	1,000	**1,000**	834.37	**10,220**	700
		Xylenes	**1,000**	1,000	**1,000**	1,000.00	**204,400**	10,000
PAHs	Surface Soil - NR	Acenaphthene	**10,000**	10,000	**10,000**	10,000	**6,132**	1,824
	Subsurface Soil - NR	Acenaphthylene	**2,800 (1)**	10,000 (1)	**180 (1)**	10,000 (1)	**6,132 (1)**	1,824 (1)
	Groundwater - NR	Anthracene	**10,000**	10,000	**10,000**	10,000	**30,660**	9,120
		Benzo (a) anthracene	**79.45**	0.88	**103.88**	103.881	**10**	0.10
		Benzo (a) pyrene	**7.94**	0.66	**69.85**	69.849	**10**	0.20
		Benzo (b) fluoranthene	**79.45**	0.88	**354.98**	354.977	**10**	0.20
		Benzo(g,h,i) perylene	**10,000 (2)**	8,100 (2)	**10,000 (2)**	10,000 (2)	**3,066 (2)**	912 (2)
		Benzo (k) fluoranthene	**794.52**	8.77	**3,759.12**	501.638	**39.2**	0.20
		Carbazole	**690 (1)**	210 (1)	**20 (1)**	5.9 (1)	**140**	43.00
		Chrysene	**7,945.21**	87.67	**10,000**	379.273	**391.8**	0.20
		Dibenzo (a,h) anthracene	**7.95**	0.66	**69.86**	69.863	**10**	0.30
		Dibenzofuran	**980 (1)**	370 (1)	**65 (1)**	4.9 (1)	**200**	15.00
		Fluoranthene	**10,000**	2,160	**10,000**	2,305.04	**817.6**	243.2
		Fluorene	**10,000**	10,000	**10,000**	8,838.64	**4,088**	1,216
		Indeno (1,2,3-cd) pyrene	**79.45**	0.88	**629.17**	629.166	**10**	0.40
		2-Methylnaphthalene	**1,600 (1)**	10,000 (3)	**42 (1)**	1,761.79 (3)	**4,088 (3)**	1,216 (3)
		Naphthalene	**10,000**	10,000	**10,000**	1761.785	**4,088**	1,216
		Phenanthrene	**1,200 (1)**	9,400 (4)	**170 (1)**	9,400 (4)	**2,600 (4)**	2,600 (4)
		Pyrene	**10,000**	8,100	**10,000**	10,000	**3,066**	912
Phenolic Compounds		2,4-Dimethylphenol	**9,800 (1)**	3,700 (1)	**25 (1)**	9 (1)	**2,000**	730
		2-Methylphenol (o-cresol)	**10,000**	10,000	**376**	62.8	**5,110**	1520
		3&4 -Methylphenol (m, p-cresol)	**10,000**	10,000	**427.24**	71.452	**5,110**	1520
		Pentachlorophenol	**483**	5	**24.947**	25	**50**	1
		2,4-Dichlorophenol	**6,120**	540	**15.12**	3	**310**	110
		Phenol	**10,000**	10,000	**659**	110	**12,000**	3650
		2,4,6-Trichlorophenol	**1,922.89**	58	**31**	1	**260**	10
Phthalates		Butylbenzylphthalate	**10,000**	10,000	**10,000**	10,000	**20,000**	100
		Bis(2-ethlyhexyl)phthalate	**4,142.86**	46	**1,406.25**	16	**204**	6
Metals		Arsenic	**612**	81	**438**	438	**50**	50
		Lead	**1000 (3)**	81	**1,000 (3)**	81	**15**	15

NOTES:
NR - Denotes Closure under Non-Residential (Industrial) Land Use Designation
An Environmental Restrictive Covenant (ERC) will be completed for the Site, not allowing for residential development or use of groundwater below the Site.
(1): Closure Level was taken from the January 31, 2006 IDEM RISC technical Guide Appendix 1, due to the 1996 VRP did not have an established clean-up goal.
(2): No VRP or RISC Closure Levels were established, therefore Pyrene is used as a surrogate.
(3): Lead Closure level is from the January 26, 1996 IDEm Non-rule Policy (ID# W-0048), Guidance for Lead Clean-up levels for VRP Tier II sites.

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-1S	11/17/1994	700.84	8.03	12.65	692.81
	11/14/1995	700.84	7.84	12.65	693.00
	4/30/1996	700.84	4.71	12.65	696.13
	5/18/2000	700.84	9.37	12.65	691.47
	8/4/2000	700.84	9.12	12.65	691.72
	11/13/2000	700.84	7.44	12.65	693.40
	2/1/2001	700.84	6.77	12.65	694.07
	6/21/2001	700.84	9.45	12.65	691.39
	12/11/2001	700.84	7.98	12.65	692.86
	8/11/2003	700.84	9.62	12.65	691.22
	10/29/2003	700.84	8.66	12.65	692.18
	2/18/2004	700.84	7.44	12.65	693.40
	9/9/2004	700.84	9.29	12.65	691.55
	7/31/2006	700.84	9.46	12.65	691.38
	7/24/2007	700.84	9.30	12.67	691.54
	11/30/2007	700.84	8.78	NM	692.06
	6/8/2008	700.84	5.69	NM	695.15
	9/9/2008	700.84	8.28	NM	692.56
	11/17/2008	700.84	7.91	NM	692.93
	2/5/2009	700.84	9.46	NM	691.38
	12/9/2009	700.84	4.96	NM	695.88
	6/15/2010	700.84	4.41	NM	696.43
	9/20/2010	700.84	10.76	NM	690.08
	12/13/2010	700.84	7.00	NM	693.84
	3/7/2011	700.84	4.45	NM	696.39
	6/21/2011	700.84	7.71	NM	693.13
	9/26/2011	700.84	6.62	NM	694.22
	11/1/2011	700.84	8.66	12.53	692.18
	12/9/2011	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-1D	11/17/1994	700.07	7.76	20.20	692.31
	11/14/1995	700.07	7.87	20.20	692.20
	4/30/1996	700.07	4.71	20.20	695.36
	5/18/2000	700.07	8.72	20.20	691.35
	8/4/2000	700.07	8.52	20.20	691.55
	11/13/2000	700.07	7.33	20.20	692.74
	2/1/2001	700.07	6.68	20.20	693.39
	6/21/2001	700.07	8.85	20.20	691.22
	12/11/2001	700.07	8.00	20.20	692.07
	8/11/2003	700.07	9.14	20.20	690.93
	10/29/2003	700.07	8.54	20.20	691.53
	2/18/2004	700.07	7.68	20.20	692.39
	9/9/2004	700.07	9.55	20.20	690.52
	7/31/2006	700.07	9.83	20.20	690.24
	7/24/2007	700.07	9.37	20.20	690.70
	11/30/2007	700.07	8.94	NM	691.13
	6/8/2008	700.07	6.19	NM	693.88
	9/9/2008	700.07	9.93	NM	690.14
	11/17/2008	700.07	8.57	NM	691.50
	2/5/2009	700.07	9.07	NM	691.00
	12/9/2009	700.07	8.18	NM	691.89
	1/14/2010	700.07	8.81	NM	691.26
	6/15/2010	700.07	6.45	NM	693.62
	9/20/2010	700.07	10.36	NM	689.71
	12/13/2010	700.07	8.46	NM	691.61
	3/7/2011	700.07	5.55	NM	694.52
	6/21/2011	700.07	8.39	NM	691.68
	9/26/2011	700.07	8.71	NM	691.36
	11/1/2011	700.07	8.91	20.09	691.16
	12/12/2011	700.07	8.39	NM	691.68
	4/2/2012	700.07	8.57	NM	691.50
	7/9/2012	700.07	10.00	NM	690.07
	10/1/2012	700.07	8.93	NM	691.14
	7/13/2015	700.07	6.72	NM	693.35
	3/12/2018	700.07	6.22	NM	693.85
	12/16/2019	700.07	6.92	NM	693.15

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-2S	11/17/1994	696.04	7.50	9.16	688.54
	11/14/1995	696.04	7.67	9.16	688.37
	4/30/1996	696.04	6.21	9.16	689.83
	5/1/2000	696.04	8.41	9.16	687.63
	8/14/2000	696.04	7.78	9.16	688.26
	11/13/2000	696.04	7.63	9.16	688.41
	2/1/2002	696.04	7.08	9.16	688.96
	6/21/2001	696.04	8.82	9.16	687.22
	12/11/2001	696.04	7.95	9.16	688.09
	8/11/2003	696.04	8.94	9.16	687.10
	10/29/2003	696.04	7.67	9.16	688.37
	2/18/2004	696.04	7.57	9.16	688.47
	9/9/2004	696.04	8.90	9.16	687.14
	7/31/2006	696.04	9.02	9.16	687.02
	7/24/2007	696.04	8.73	9.18	687.31
	11/30/2007	696.04	8.03	NM	688.01
	6/8/2008	696.04	7.41	NM	688.63
	9/9/2008	696.04	9.20	NM	686.84
	11/17/2008	696.04	8.10	NM	687.94
	2/5/2009	696.04	7.98	NM	688.06
	2/25/2009	696.04	7.73	NM	688.31
	3/3/2009	696.04	7.72	NM	688.32
	3/11/2009	696.04	7.84	NM	688.20
	3/17/2009	696.04	6.52	NM	689.52
	3/25/2009	696.04	7.36	NM	688.68
	3/31/2009	696.04	7.51	NM	688.53
	4/20/2009	696.04	7.67	NM	688.37
	4/29/2009	696.04	7.93	NM	688.11
	5/6/2009	696.04	8.07	NM	687.97
	5/11/2009	696.04	7.98	NM	688.06
	5/20/2009	696.04	7.74	NM	688.30
	5/27/2009	696.04	8.32	NM	687.72
	6/8/2009	696.04	8.75	NM	687.29
	6/15/2009	696.04	7.84	NM	688.20
	6/25/2009	696.04	7.37	NM	688.67
	6/30/2009	696.04	7.86	NM	688.18
	7/31/2009	696.04	8.48	NM	687.56
	8/13/2009	696.04	8.55	NM	687.49
	8/26/2009	696.04	9.15	NM	686.89
	10/2/2009	696.04	7.59	NM	688.45
	10/6/2009	696.04	8.30	NM	687.74
	12/9/2009	696.04	6.86	NM	689.18
	12/18/2009	696.04	7.14	NM	688.90
	1/26/2010	696.04	6.67	NM	689.37
	2/3/2010	696.04	7.70	NM	688.34
	3/1/2010	696.04	7.43	NM	688.61
	6/15/2010	696.04	6.17	NM	689.87
	9/20/2010	696.04	9.25	9.25	686.79
	12/13/2010	696.04	7.33	NM	688.71
	2/18/2011	696.04	7.61	NM	688.43
	3/7/2011	696.04	6.09	NM	689.95
	6/21/2011	696.04	7.39	NM	688.65
	9/26/2011	696.04	8.54	NM	687.50
	11/29/2011	696.04	5.48	NM	690.56

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
	12/9/2011	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-2D	11/17/1994	694.34	5.82	14.34	688.52
	11/14/1995	694.34	5.80	14.34	688.54
	4/30/1996	694.34	4.95	14.34	689.39
	5/1/2000	694.34	6.79	14.34	687.55
	8/14/2000	694.34	6.53	14.34	687.81
	11/13/2000	694.34	5.77	14.34	688.57
	2/1/2001	694.34	5.71	14.34	688.63
	6/21/2001	694.34	7.05	14.34	687.29
	12/11/2001	694.34	6.20	14.34	688.14
	8/11/2003	694.34	7.19	14.34	687.15
	10/29/2003	694.34	6.17	14.34	688.17
	2/18/2004	694.34	6.26	14.34	688.08
	9/9/2004	694.34	7.19	14.34	687.15
	7/31/2006	694.34	7.10	14.34	687.24
	7/24/2007	694.34	7.00	17.45	687.34
	11/30/2007	694.34	6.37	NM	687.97
	6/8/2008	694.34	5.70	NM	688.64
	9/9/2008	694.34	7.63	NM	686.71
	11/17/2008	694.34	6.81	NM	687.53
	2/5/2009	694.34	6.76	NM	687.58
	2/25/2009	694.34	6.23	NM	688.11
	3/3/2009	694.34	6.71	NM	687.63
	3/11/2009	694.34	6.30	NM	688.04
	3/17/2009	694.34	8.07	NM	686.27
	3/25/2009	694.34	5.87	NM	688.47
	3/31/2009	694.34	6.02	NM	688.32
	4/20/2009	694.34	6.04	NM	688.30
	4/29/2009	694.34	6.35	NM	687.99
	5/6/2009	694.34	6.48	NM	687.86
	5/11/2009	694.34	6.48	NM	687.86
	5/20/2009	694.34	6.19	NM	688.15
	5/27/2009	694.34	6.74	NM	687.60
	6/8/2009	694.34	7.10	NM	687.24
	6/15/2009	694.34	5.49	NM	688.85
	6/25/2009	694.34	5.99	NM	688.35
	6/30/2009	694.34	6.95	NM	687.39
	7/31/2009	694.34	6.66	NM	687.68
	8/13/2009	694.34	6.73	NM	687.61
	8/26/2009	694.34	7.38	NM	686.96
	10/2/2009	694.34	6.42	NM	687.92
	10/6/2009	694.34	6.53	NM	687.81
	12/9/2009	694.34	5.71	NM	688.63
	12/18/2009	694.34	5.92	NM	688.42
	1/14/2010	694.34	6.70	NM	687.64
	1/26/2010	694.34	5.52	NM	688.82
	2/3/2010	694.34	6.45	NM	687.89
	3/2/2010	694.34	6.25	NM	688.09
	6/15/2010	694.34	5.13	NM	689.21
	8/30/2010	694.34	7.74	NM	686.60
	9/20/2010	694.34	7.38	NM	686.96
	12/13/2010	694.34	6.14	NM	688.20
	2/18/2011	694.34	6.58	NM	687.76
	3/7/2011	694.34	4.78	NM	689.56
	6/21/2011	694.34	6.13	NM	688.21

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
	9/26/2011	694.34	6.48	NM	687.86
	11/29/2011	694.34	4.52	NM	689.82
	12/9/2011		Well Decommissioned		

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-3S	11/17/1994	692.89	5.94	10.15	686.95
	11/14/1995	692.89	4.25	10.15	688.64
	4/30/1996	692.89	3.56	10.15	689.33
	5/18/2000	692.89	4.16	10.15	688.73
	8/14/2000	692.89	4.11	10.15	688.78
	11/13/2000	692.89	3.45	10.15	689.44
	2/1/2001	692.89	3.52	10.15	689.37
	6/21/2001	692.89	4.84	10.15	688.05
	12/11/2001	692.89	4.01	10.15	688.88
	8/11/2003	692.89	5.43	10.15	687.46
	10/29/2003	692.89	4.04	10.15	688.85
	2/18/2004	692.89	3.56	10.15	689.33
	9/9/2004	692.89	5.73	10.15	687.16
	7/31/2006	692.89	5.51	10.15	687.38
	8/15/2006	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-3D	11/17/1994	691.65	4.15	17.00	687.50
	11/14/1995	691.65	4.30	17.00	687.35
	4/30/1996	691.65	3.07	17.00	688.58
	5/18/2000	691.65	3.75	17.00	687.90
	8/14/2000	691.65	3.89	17.00	687.76
	11/13/2000	691.65	3.54	17.00	688.11
	2/1/2001	691.65	3.33	17.00	688.32
	6/21/2001	691.65	3.95	17.00	687.70
	12/11/2001	691.65	3.90	17.00	687.75
	8/11/2003	691.65	4.55	17.00	687.10
	10/29/2003	691.65	3.63	17.00	688.02
	2/18/2004	691.65	3.66	17.00	687.99
	9/9/2004	691.65	5.60	17.00	686.05
	7/31/2006	691.65	4.34	17.00	687.31
	8/15/2006	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-4S	11/17/1994	690.8	7.81	10.35	682.99
	11/14/1995	690.8	8.24	10.35	682.56
	4/30/1996	690.8	5.03	10.35	685.77
	8/11/2003	690.8	8.54	10.35	682.26
	10/29/2003	690.8	7.73	10.35	683.07
	2/18/2004	690.8	7.63	10.35	683.17
	9/9/2004	690.8	8.75	10.35	682.05
	7/31/2006	690.8	8.79	10.35	682.01
	7/24/2007	690.8	Obstruction	NM	NM
	11/30/2007	690.8	NM	NM	NM
	6/8/2008	690.8	NM	NM	NM
	9/9/2008	690.8	NM	NM	NM
	11/17/2008	690.8	NM	NM	NM
	2/5/2009	690.8	NM	NM	NM
	3/3/2009	690.8	NM	NM	NM
	12/9/2009	690.8	NM	NM	NM
	6/15/2010	690.8	NM	NM	NM
	9/20/2010	690.8	NM	NM	NM
	12/13/2010	690.8	NM	NM	NM
	3/7/2011	690.8	NM	NM	NM
	6/21/2011	690.8	NM	NM	NM
	9/26/2011	690.8	NM	NM	NM
	12/9/2011	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-4D	11/17/1994	690.3	6.61	19.10	683.69
	11/14/1995	690.3	7.16	19.10	683.14
	4/30/1996	690.3	4.65	19.10	685.65
	8/11/2003	690.3	7.25	19.10	683.05
	10/29/2003	690.3	6.64	19.10	683.66
	2/18/2004	690.3	6.43	19.10	683.87
	9/9/2004	690.3	7.45	19.10	682.85
	7/31/2006	690.3	7.43	19.10	682.87
	7/24/2007	690.3	7.68	19.10	682.62
	11/30/2007	690.3	7.67	NM	682.63
	6/8/2008	690.3	5.83	NM	684.47
	9/9/2008	690.3	NM	NM	NM
	11/17/2008	690.3	7.65	NM	682.65
	2/5/2009	690.3	7.78	NM	682.52
	2/25/2009	690.3	6.79	NM	683.51
	3/3/2009	690.3	6.90	NM	683.40
	3/11/2009	690.3	7.35	NM	682.95
	3/17/2009	690.3	7.54	NM	682.76
	3/25/2009	690.3	7.52	NM	682.78
	3/31/2009	690.3	6.74	NM	683.56
	4/20/2009	690.3	6.44	NM	683.86
	4/29/2009	690.3	6.93	NM	683.37
	5/6/2009	690.3	6.50	NM	683.80
	5/11/2009	690.3	6.72	NM	683.58
	5/20/2009	690.3	6.16	NM	684.14
	5/27/2009	690.3	6.93	NM	683.37
	6/8/2009	690.3	7.29	NM	683.01
	6/15/2009	690.3	6.53	NM	683.77
	6/25/2009	690.3	5.87	NM	684.43
	6/30/2009	690.3	7.05	NM	683.25
	7/31/2009	690.3	7.12	NM	683.18
	8/13/2009	690.3	7.37	NM	682.93
	10/2/2009	690.3	7.76	NM	682.54
	10/6/2009	690.3	7.72	NM	682.58
	12/9/2009	690.3	7.00	NM	683.30
	12/18/2009	690.3	6.79	NM	683.51
	1/26/2010	690.3	6.63	NM	683.67
	2/3/2010	690.3	7.28	NM	683.02
	3/1/2010	690.3	7.11	NM	683.19
	6/15/2010	690.3	5.69	NM	684.61
	9/20/2010	690.3	9.12	NM	681.18
	12/13/2010	690.3	7.45	NM	682.85
	3/7/2011	690.3	Obstruction	NM	NM
	6/21/2011	690.3	NM	NM	NM
	9/26/2011	690.3	NM	NM	NM
	12/9/2011	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-5S	11/17/1994	690.67	9.01	12.25	681.66
	11/14/1995	690.67	8.97	12.25	681.70
	4/30/1996	690.67	6.40	12.25	684.27
	8/11/2003	690.67	8.95	12.25	681.72
	10/29/2003	690.67	8.84	12.25	681.83
	2/18/2004	690.67	8.62	12.25	682.05
	9/9/2004	690.67	9.13	12.25	681.54
	7/31/2006	690.67	9.39	12.25	681.28
	7/24/2007	690.67	9.31	12.23	681.36
	11/30/2007	690.67	9.20	12.23	681.47
	6/8/2008	690.67	8.35	12.23	682.32
	9/9/2008	690.67	NM	NM	NA
	11/17/2008	690.67	8.88	12.23	681.79
	2/5/2009	690.67	9.12	NM	681.55
	12/9/2009	690.67	8.10	NM	682.57
	1/15/2010	690.67	8.86	NM	681.81
	6/15/2010	690.67	8.16	NM	682.51
	9/20/2010	690.67	9.25	NM	681.42
	12/13/2010	690.67	8.81	NM	681.86
	3/7/2011	690.67	8.10	NM	682.57
	6/21/2011	690.67	8.79	NM	681.88
	9/26/2011	690.67	8.49	NM	682.18
	12/12/2011	690.67	8.78	NM	681.89
	4/2/2012	690.67	8.95	NM	681.72
	7/9/2012	690.67	9.21	NM	681.46
	10/1/2012	690.67	9.07	NM	681.60
	7/13/2015	690.67	7.87	NM	682.80
	3/12/2018	690.67	9.13	NM	681.54

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-5D	11/17/1994	690.35	8.51	22.75	681.84
	11/14/1995	690.35	8.50	22.75	681.85
	4/30/1996	690.35	5.66	22.75	684.69
	8/11/2003	690.35	8.62	22.75	681.73
	10/29/2003	690.35	8.40	22.75	681.95
	2/18/2004	690.35	8.18	22.75	682.17
	9/9/2004	690.35	8.75	22.75	681.60
	7/31/2006	690.35	9.04	22.75	681.31
	7/24/2007	690.35	8.91	22.74	681.44
	11/30/2007	690.35	8.88	NM	681.47
	6/8/2008	690.35	7.86	NM	682.49
	9/9/2008	690.35	NM	NM	NA
	11/17/2008	690.35	8.45	NM	681.90
	2/5/2009	690.35	8.80	NM	681.55
	12/9/2009	690.35	7.78	NM	682.57
	1/13/2010	690.35	8.68	NM	681.67
	6/15/2010	690.35	7.73	NM	682.62
	9/20/2010	690.35	8.93	NM	681.42
	12/13/2010	690.35	8.41	NM	681.94
	3/7/2011	690.35	7.56	NM	682.79
	6/21/2011	690.35	8.39	NM	681.96
	9/26/2011	690.35	8.13	NM	682.22
	12/12/2011	690.35	8.39	NM	681.96
	4/2/2012	690.35	8.55	NM	681.80
	7/9/2012	690.35	8.97	NM	681.38
	10/1/2012	690.35	8.72	NM	681.63
	7/13/2015	690.35	7.38	NM	682.97
	3/12/2018	690.35	8.90	NM	681.45
	12/17/2019	690.35	12.00	NM	678.35

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-6S	11/17/1994	691.37	9.80	9.80	681.57
	11/14/1995	691.37	9.54	9.80	681.83
	4/30/1996	691.37	3.99	9.80	687.38
	8/11/2003	691.37	9.65	9.80	681.72
	10/29/2003	691.37	9.50	9.80	681.87
	2/18/2004	691.37	9.06	9.80	682.31
	9/9/2004	691.37	9.65	9.80	681.72
	7/31/2006	691.37	9.58	9.80	681.79
	7/24/2007	691.37	9.59	9.86	681.78
	11/30/2007	691.37	9.66	NM	681.71
	6/8/2008	691.37	8.03	NM	683.34
	9/9/2008	691.37	NM	NM	NM
	11/17/2008	691.37	9.59	NM	681.78
	2/5/2009	691.37	9.68	NM	681.69
	12/9/2009	691.37	8.15	NM	683.22
	6/15/2010	691.37	7.39	NM	683.98
	9/20/2010	691.37	9.70	NM	681.67
	12/13/2010	691.37	9.57	NM	681.80
	3/7/2011	691.37	7.20	NM	684.17
	6/21/2011	691.37	9.43	NM	681.94
	9/26/2011	691.37	9.02	NM	682.35
	12/12/2011	691.37	9.26	NM	682.11
	4/2/2012	691.37	9.65	NM	681.72
	7/9/2012	691.37	Dry	9.86	NA
	10/1/2012	691.37	9.64	NM	681.73
	7/13/2015	691.37	6.08	NM	685.29
	3/12/2018	691.37	9.65	NM	681.72

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-6D	11/17/1994	690.54	9.03	17.89	681.51
	11/14/1995	690.54	8.91	17.89	681.63
	4/30/1996	690.54	3.02	17.89	687.52
	8/11/2003	690.54	9.19	17.89	681.35
	10/29/2003	690.54	8.81	17.89	681.73
	2/18/2004	690.54	8.26	17.89	682.28
	9/9/2004	690.54	9.55	17.89	680.99
	7/31/2006	690.54	9.61	17.89	680.93
	7/24/2007	690.54	9.59	18.88	680.95
	11/30/2007	690.54	9.51	18.88	681.03
	6/8/2008	690.54	7.25	18.88	683.29
	9/9/2008	690.54	NM	NM	NA
	11/17/2008	690.54	8.95	18.88	681.59
	2/5/2009	690.54	9.34	NM	681.20
	12/9/2009	690.54	7.35	NM	683.19
	6/15/2010	690.54	6.65	NM	683.89
	9/20/2010	690.54	9.76	NM	680.78
	12/13/2010	690.54	8.80	NM	681.74
	3/7/2011	690.54	6.40	NM	684.14
	6/21/2011	690.54	8.60	NM	681.94
	9/26/2011	690.54	8.17	NM	682.37
	12/12/2011	690.54	8.44	NM	682.10
	4/2/2012	690.54	8.89	NM	681.65
	7/9/2012	690.54	9.63	NM	680.91
	10/1/2012	690.54	9.23	NM	681.31
	7/13/2015	690.54	5.25	NM	685.29
	3/12/2018	690.54	10.20	NM	680.34

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-7S	11/17/1994	696.93	6.05	13.34	690.88
	11/14/1995	696.93	4.38	13.34	692.55
	4/30/1996	696.93	2.85	13.34	694.08
	5/18/2000	696.93	8.07	13.34	688.86
	8/14/2000	696.93	7.39	13.34	689.54
	11/13/2000	696.93	4.66	13.34	692.27
	2/1/2001	696.93	3.34	13.34	693.59
	6/21/2001	696.93	7.45	13.34	689.48
	12/11/2001	696.93	6.18	13.34	690.75
	8/11/2003	696.93	8.70	13.34	688.23
	10/29/2003	696.93	7.43	13.34	689.50
	2/18/2004	696.93	4.58	13.34	692.35
	9/9/2004	696.93	9.07	13.34	687.86
	7/31/2006	696.93	9.56	13.34	687.37
	8/15/2006	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-7D	11/17/1994	696.71	5.64	23.05	691.07
	11/14/1995	696.71	4.66	23.05	692.05
	4/30/1996	696.71	2.86	23.05	693.85
	5/18/2000	696.71	7.56	23.05	689.15
	8/14/2000	696.71	7.21	23.05	689.50
	11/13/2000	696.71	4.42	23.05	692.29
	2/1/2001	696.71	3.40	23.05	693.31
	6/21/2001	696.71	7.35	23.05	689.36
	12/11/2001	696.71	5.75	23.05	690.96
	8/11/2003	696.71	8.08	23.05	688.63
	10/29/2003	696.71	7.14	23.05	689.57
	2/18/2004	696.71	4.05	23.05	692.66
	9/9/2004	696.71	8.65	23.05	688.06
	7/31/2006	696.71	9.17	23.05	687.54
	8/15/2006	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-8S	11/14/1995	691.66	6.76	8.85	684.90
	4/30/1996	691.66	4.66	8.85	687.00
	6/21/2001	691.66	7.24	8.85	684.42
	12/11/2001	691.66	6.82	8.85	684.84
	8/11/2003	691.66	7.45	8.85	684.21
	10/29/2003	691.66	6.78	8.85	684.88
	2/18/2004	691.66	6.22	8.85	685.44
	9/9/2004	691.66	7.47	8.85	684.19
	7/31/2006	691.66	7.54	8.85	684.12
	7/24/2007	691.66	7.54	8.88	684.12
	11/30/2007	691.66	7.62	NM	684.04
	6/8/2008	691.66	5.82	NM	685.84
	9/9/2008	691.66	NM	NM	NM
	11/17/2008	691.66	7.26	NM	684.40
	2/5/2009	691.66	7.39	NM	684.27
	12/9/2009	691.66	6.62	NM	685.04
	6/15/2010	691.66	5.10	NM	686.56
	9/20/2010	691.66	8.70	NM	682.96
	12/13/2010	691.66	6.99	NM	684.67
	3/7/2011	691.66	4.81	NM	686.85
	6/21/2011	691.66	6.76	NM	684.90
	9/26/2011	691.66	6.14	NM	685.52
	12/12/2011	691.66	6.29	NM	685.37
	4/2/2012	691.66	7.33	NM	684.33
	7/9/2012	691.66	8.60	NM	683.06
	10/1/2012	691.66	7.34	NM	684.32
	7/13/2015	691.66	4.83	NM	686.83
	3/12/2018	691.66	7.02	NM	684.64
	12/16/2019	691.66	NM	NM	NM

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-8D	11/14/1995	690.63	6.80	15.30	683.83
	4/30/1996	690.63	3.69	15.30	686.94
	6/21/2001	690.63	6.62	15.30	684.01
	12/11/2001	690.63	11.00	15.30	679.63
	8/11/2003	690.63	6.30	15.30	684.33
	10/29/2003	690.63	6.11	15.30	684.52
	2/18/2004	690.63	5.48	15.30	685.15
	9/9/2004	690.63	6.80	15.30	683.83
	7/31/2006	690.63	10.32	15.30	680.31
	7/24/2007	690.63	6.86	15.30	683.77
	11/30/2007	690.63	6.34	NM	684.29
	6/8/2008	690.63	4.50	NM	686.13
	9/9/2008	690.63	NM	NM	NA
	11/17/2008	690.63	6.67	NM	683.96
	2/5/2009	690.63	6.73	NM	683.90
	12/9/2009	690.63	6.33	NM	684.30
	6/15/2010	690.63	5.23	NM	685.40
	9/20/2010	690.63	8.04	NM	682.59
	12/13/2010	690.63	6.63	NM	684.00
	3/7/2011	690.63	4.26	NM	686.37
	6/21/2011	690.63	5.98	NM	684.65
	9/26/2011	690.63	7.38	NM	683.25
	12/12/2011	690.63	5.49	NM	685.14
	4/2/2012	690.63	6.65	NM	683.98
	7/9/2012	690.63	7.96	NM	682.67
	10/1/2012	690.63	6.67	NM	683.96
	7/13/2015	690.63	4.46	NM	686.17
	3/12/2018	690.63	6.82	NM	683.81

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-9	11/13/2000	701.33	8.60	11.25	692.73
	2/1/2001	701.33	7.07	11.25	694.26
	6/21/2001	701.33	10.20	11.25	691.13
	12/11/2001	701.33	9.23	11.25	692.10
	8/11/2003	701.33	10.39	11.25	690.94
	10/29/2003	701.33	9.29	11.25	692.04
	2/18/2004	701.33	9.10	11.25	692.23
	9/9/2004	701.33	10.52	11.25	690.81
	7/31/2006	701.33	10.62	11.25	690.71
	7/24/2007	701.33	10.29	11.26	691.04
	11/30/2007	701.33	9.98	NM	691.35
	6/8/2008	701.33	6.38	NM	694.95
	9/9/2008	701.33	11.00	NM	690.33
	11/17/2008	701.33	9.39	NM	691.94
	2/5/2009	701.33	10.41	NM	690.92
	12/9/2009	701.33	9.56	NM	691.77
	6/15/2010	701.33	6.21	NM	695.12
	9/20/2010	701.33	10.99	NM	690.34
	12/13/2010	701.33	9.60	NM	691.73
	3/7/2011	701.33	6.10	NM	695.23
	6/21/2011	701.33	9.74	NM	691.59
	9/26/2011	701.33	9.30	NM	692.03
	11/1/2011	701.33	10.36	11.11	690.97
	12/12/2011	701.33	9.41	11.11	691.92
	4/2/2012	701.33	10.07	11.11	691.26
	7/9/2012	701.33	11.02	11.11	690.31
	10/1/2012	701.33	10.34	NM	690.99
	7/13/2015	701.33	7.96	NM	693.37
	3/12/2018	701.33	8.95	NM	692.38
	12/16/2019	701.33	NM	NM	NM

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-10	11/13/2000	699.66	5.55	10.88	694.11
	2/1/2001	699.66	6.00	10.88	693.66
	6/21/2001	699.66	8.54	10.88	691.12
	12/11/2001	699.66	5.65	10.88	694.01
	8/11/2003	699.66	8.88	10.88	690.78
	10/29/2003	699.66	7.00	10.88	692.66
	2/18/2004	699.66	5.83	10.88	693.83
	9/9/2004	699.66	9.14	10.88	690.52
	7/31/2006	699.66	9.64	10.88	690.02
	7/24/2007	699.66	9.38	10.87	690.28
	11/30/2007	699.66	7.72	10.87	691.94
	6/8/2008	699.66	5.51	10.87	694.15
	9/9/2008	699.66	9.85	10.87	689.81
	11/17/2008	699.66	7.62	10.87	692.04
	2/5/2009	699.66	8.34	NM	691.32
	12/9/2009	699.66	6.34	NM	693.32
	6/15/2010	699.66	5.55	NM	694.11
	9/20/2010	699.66	10.06	NM	689.60
	12/13/2010	699.66	7.00	NM	692.66
	3/7/2011	699.66	5.21	NM	694.45
	6/21/2011	699.66	6.99	NM	692.67
	9/26/2011	699.66	9.60	NM	690.06
	11/1/2011	699.66	7.78	10.73	691.88
	12/12/2011	699.66	6.24	10.73	693.42
	4/2/2012	699.66	6.76	10.73	692.90
	7/9/2012	699.66	9.74	10.73	689.92
	10/1/2012	699.66	7.95	NM	691.71
	7/13/2015	699.66	5.83	NM	693.83
	3/12/2018	699.66	6.06	NM	693.60

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-11S	2/5/2009	700.06	Dry	NM	NA
	12/9/2009	700.06	Dry	NM	NA
	6/15/2010	700.06	Dry	NM	NA
	6/21/2011	700.06	Dry	NM	NA
	9/26/2011	700.06	Dry	NM	NA
	12/9/2011	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-11D	6/21/2001	699.75	9.61	22.03	690.14
	12/11/2001	699.75	9.11	22.03	690.64
	8/11/2003	699.75	10.23	22.03	689.52
	10/29/2003	699.75	9.41	22.03	690.34
	2/18/2004	699.75	9.27	22.03	690.48
	9/9/2004	699.75	10.27	22.03	689.48
	7/31/2006	699.75	10.29	22.03	689.46
	7/24/2007	699.75	10.32	21.92	689.43
	11/30/2007	699.75	9.85	NM	689.90
	6/8/2008	699.75	8.63	NM	691.12
	9/9/2008	699.75	10.12	NM	689.63
	11/17/2008	699.75	9.69	NM	690.06
	2/5/2009	699.75	9.78	NM	689.97
	12/9/2009	699.75	9.01	NM	690.74
	6/15/2010	699.75	8.27	NM	691.48
	9/20/2010	699.75	10.05	NM	689.70
	12/13/2010	699.75	9.55	NM	690.20
	3/7/2011	699.75	7.96	NM	691.79
	6/21/2011	699.75	9.34	NM	690.41
	9/26/2011	699.75	9.21	NM	690.54
	12/12/2011	699.75	9.12	NM	690.63
	4/2/2012	699.75	9.45	NM	690.30
	7/9/2012	699.75	9.85	NM	689.90
	10/1/2012	699.75	9.62	NM	690.13
	7/13/2015	699.75	8.69	NM	691.06
	3/12/2018	699.75	9.37	NM	690.38

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-12S	11/13/2000	692.76	4.33	8.40	688.43
	2/1/2001	692.76	4.13	8.40	688.63
	6/21/2001	692.76	5.04	8.40	687.72
	12/11/2001	692.76	4.28	8.40	688.48
	8/11/2003	692.76	5.83	8.40	686.93
	10/29/2003	692.76	4.15	8.40	688.61
	2/18/2004	692.76	3.47	8.40	689.29
	9/9/2004	692.76	5.58	8.40	687.18
	7/31/2006	692.76	6.18	8.40	686.58
	7/24/2007	692.76	4.89	9.38	687.87
	11/30/2007	692.76	4.74	9.38	688.02
	6/8/2008	692.76	4.94	9.38	687.82
	9/9/2008	692.76	7.23	9.38	685.53
	11/17/2008	692.76	4.46	9.38	688.30
	2/5/2009	692.76	4.94	NM	687.82
	3/3/2009	692.76	4.31	NM	688.45
	12/9/2009	692.76	3.76	NM	689.00
	6/15/2010	692.76	3.51	NM	689.25
	9/20/2010	692.76	8.10	NM	684.66
	12/13/2010	692.76	4.04	NM	688.72
	3/7/2011	692.76	3.40	NM	689.36
	6/21/2011	692.76	4.27	NM	688.49
	9/26/2011	692.76	4.58	NM	688.18
	12/12/2011	692.76	3.99	NM	688.77
	4/2/2012	692.76	4.20	NM	688.56
	7/9/2012	692.76	8.06	NM	684.70
	10/1/2012	692.76	3.86	NM	688.90
	7/13/2015	692.76	4.16	NM	688.60
	3/12/2018	692.76	3.75	NM	689.01

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-12D	6/21/2001	692.91	5.70	20.12	687.21
	12/11/2001	692.91	5.52	20.12	687.39
	8/11/2003	692.91	6.12	20.12	686.79
	10/29/2003	692.91	5.40	20.12	687.51
	2/18/2004	692.91	5.51	20.12	687.40
	9/9/2004	692.91	6.19	20.12	686.72
	7/31/2006	692.91	5.77	20.12	687.14
	7/24/2007	692.91	6.57	20.15	686.34
	11/30/2007	692.91	6.04	NM	686.87
	6/8/2008	692.91	3.57	NM	689.34
	9/9/2008	692.91	NM	NM	NM
	11/17/2008	692.91	5.85	NM	687.06
	2/5/2009	692.91	NM	NM	NM
	3/3/2009	692.91	5.43	NM	687.48
	3/11/2009	692.91	5.58	NM	687.33
	3/17/2009	692.91	5.96	NM	686.95
	3/25/2009	692.91	4.81	NM	688.10
	3/31/2009	692.91	5.18	NM	687.73
	4/20/2009	692.91	5.13	NM	687.78
	4/29/2009	692.91	5.46	NM	687.45
	5/6/2009	692.91	5.59	NM	687.32
	5/11/2009	692.91	5.53	NM	687.38
	5/20/2009	692.91	5.40	NM	687.51
	5/27/2009	692.91	5.81	NM	687.10
	6/8/2009	692.91	6.26	NM	686.65
	6/15/2009	692.91	5.47	NM	687.44
	6/25/2009	692.91	5.26	NM	687.65
	6/30/2009	692.91	5.93	NM	686.98
	7/31/2009	692.91	5.80	NM	687.11
	8/13/2009	692.91	6.12	NM	686.79
	8/26/2009	692.91	6.68	NM	686.23
	10/2/2009	692.91	5.49	NM	687.42
	10/6/2009	692.91	6.03	NM	686.88
	12/9/2009	692.91	5.22	NM	687.69
	12/18/2009	692.91	5.62	NM	687.29
	1/15/2010	692.91	5.28	NM	687.63
	1/19/2010	692.91	6.00	NM	686.91
	1/26/2010	692.91	5.33	NM	687.58
	2/3/2010	692.91	6.20	NM	686.71
	2/22/2010	692.91	5.38	NM	687.53
	3/1/2010	692.91	5.93	NM	686.98
	3/8/2010	692.91	6.10	NM	686.81
	4/16/2010	692.91	6.03	NM	686.88
	6/1/2010	692.91	6.08	NM	686.83
	6/15/2010	692.91	4.59	NM	688.32
	7/6/2010	692.91	6.56	NM	686.35
	8/3/2010	692.91	6.86	NM	686.05
	8/10/2010	692.91	7.06	NM	685.85
	8/30/2010	692.91	7.21	NM	685.70
	9/20/2010	692.91	7.00	NM	685.91
	12/13/2010	692.91	5.98	NM	686.93
	2/18/2011	692.91	6.20	NM	686.71
	2/22/2011	692.91	4.73	NM	688.18
	3/4/2011	692.91	5.28	NM	687.63

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
	3/7/2011	692.91	4.93	NM	687.98
	6/21/2011	692.91	5.67	NM	687.24
	9/26/2011	692.91	5.49	NM	687.42
	7/13/2015	692.91	5.02	NM	687.89
	3/12/2018	692.91	5.18	NM	687.73
MW-13	11/13/2000	692.47	4.55	9.10	687.92
	2/1/2001	692.47	4.53	9.10	687.94
	6/21/2001	692.47	8.74	9.10	683.73
	12/11/2001	692.47	4.78	9.10	687.69
	8/11/2003	692.47	5.80	9.10	686.67
	10/29/2003	692.47	4.78	9.10	687.69
	2/18/2004	692.47	4.48	9.10	687.99
	9/9/2004	692.47	5.82	9.10	686.65
	7/31/2006	692.47	5.91	9.10	686.56
	7/24/2007	692.47	5.87	9.10	686.60
	11/30/2007	692.47	5.25	NM	687.22
	6/8/2008	692.47	4.27	NM	688.20
	9/9/2008	692.47	NM	NM	NM
	11/17/2008	692.47	4.91	NM	687.56
	2/5/2009	692.47	5.19	NM	687.28
	12/9/2009	692.47	4.32	NM	688.15
	6/15/2010	692.47	4.43	NM	688.04
	9/20/2010	692.47	7.13	NM	685.34
	12/13/2010	692.47	4.87	NM	687.60
	3/7/2011	692.47	4.50	NM	687.97
	6/21/2011	692.47	4.89	NM	687.58
	9/26/2011	692.47	4.59	NM	687.88
	11/29/2011	692.47	3.50	NM	688.97
	12/9/2011	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-14S	8/11/2003	694.15	5.00	8.40	689.15
	10/29/2003	694.15	3.29	8.40	690.86
	2/18/2004	694.15	3.48	8.40	690.67
	9/9/2004	694.15	4.52	8.40	689.63
	7/31/2006	694.15	5.74	8.40	688.41
	7/24/2007	694.15	5.78	8.37	688.37
	11/30/2007	694.15	5.13	NM	689.02
	6/8/2008	694.15	4.02	NM	690.13
	9/9/2008	694.15	7.55	NM	686.60
	11/17/2008	694.15	5.63	NM	688.52
	2/5/2009	694.15	5.05	NM	689.10
	3/3/2009	694.15	4.68	NM	689.47
	12/9/2009	694.15	3.68	NM	690.47
	6/15/2010	694.15	3.69	NM	690.46
	9/20/2010	694.15	8.45	NM	685.70
	3/7/2011	694.15	3.79	NM	690.36
	6/21/2011	694.15	4.49	NM	689.66
	9/26/2011	694.15	6.67	NM	687.48
	11/29/2011	694.15	3.31	NM	690.84
	12/9/2011	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-14D	8/11/2003	693.8	7.00	20.00	686.80
	10/29/2003	693.8	6.20	20.00	687.60
	2/18/2004	693.8	6.21	20.00	687.59
	9/9/2004	693.8	6.99	20.00	686.81
	7/31/2006	693.8	8.63	20.00	685.17
	7/24/2007	693.8	5.73	20.00	688.07
	11/30/2007	693.8	6.81	NM	686.99
	6/8/2008	693.8	5.51	NM	688.29
	9/9/2008	693.8	NM	NM	NM
	11/17/2008	693.8	6.48	NM	687.32
	2/5/2009	693.8	NM	NM	NM
	3/3/2009	693.8	6.15	NM	687.65
	3/11/2009	693.8	6.02	NM	687.78
	3/17/2009	693.8	6.91	NM	686.89
	3/25/2009	693.8	5.49	NM	688.31
	3/31/2009	693.8	5.75	NM	688.05
	4/20/2009	693.8	5.75	NM	688.05
	4/29/2009	693.8	6.04	NM	687.76
	5/6/2009	693.8	NM	NM	NM
	5/11/2009	693.8	6.11	NM	687.69
	5/20/2009	693.8	5.99	NM	687.81
	5/27/2009	693.8	7.76	NM	686.04
	6/8/2009	693.8	6.75	NM	687.05
	6/15/2009	693.8	6.01	NM	687.79
	6/25/2009	693.8	5.74	NM	688.06
	6/30/2009	693.8	6.11	NM	687.69
	7/31/2009	693.8	6.10	NM	687.70
	8/13/2009	693.8	6.32	NM	687.48
	8/26/2009	693.8	7.31	NM	686.49
	10/2/2009	693.8	5.89	NM	687.91
	10/6/2009	693.8	6.22	NM	687.58
	12/9/2009	693.8	5.10	NM	688.70
	12/18/2009	693.8	6.11	NM	687.69
	1/26/2010	693.8	5.50	NM	688.30
	2/3/2010	693.8	6.33	NM	687.47
	3/1/2010	693.8	6.07	NM	687.73
	4/16/2010	693.8	6.01	NM	687.79
	6/15/2010	693.8	4.29	NM	689.51
	8/3/2010	693.8	7.40	NM	686.40
	8/10/2010	693.8	7.72	NM	686.08
	8/30/2010	693.8	8.09	NM	685.71
	9/20/2010	693.8	8.19	NM	685.61
	12/13/2010	693.8	5.24	NM	688.56
	2/18/2011	693.8	6.55	NM	687.25
	2/22/2011	693.8	5.37	NM	688.43
	3/4/2011	693.8	5.94	NM	687.86
	3/7/2011	693.8	5.55	NM	688.25
	3/28/2011	693.8	6.79	NM	687.01
	6/21/2011	693.8	6.25	NM	687.55
	9/26/2011	693.8	6.05	NM	687.75
	11/29/2011	693.8	4.91	NM	688.89
	12/9/2011	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
*MW-15S	8/11/2003	695.06	5.15	9.12	689.91
	10/29/2003	695.06	4.45	9.12	690.61
	2/18/2004	695.06	3.28	9.12	691.78
	9/9/2004	695.06	5.67	9.12	689.39
	7/31/2006	695.06	6.61	9.12	688.45
	10/16/2006	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-15D	8/11/2003	694.81	6.46	19.95	688.35
	10/29/2003	694.81	5.04	19.95	689.77
	2/18/2004	694.81	4.45	19.95	690.36
	9/9/2004	694.81	6.32	19.95	688.49
	7/31/2006	694.81	7.10	19.95	687.71
	7/24/2007	694.81	6.56	19.95	688.25
	11/30/2007	694.81	6.21	19.95	688.60
	6/8/2008	694.81	4.43	19.95	690.38
	9/9/2008	694.81	8.20	19.95	686.61
	11/17/2008	694.81	6.03	19.95	688.78
	2/5/2009	694.81	NM	19.95	NM
	3/3/2009	694.81	5.12	NM	689.69
	3/11/2009	694.81	5.26	NM	689.55
	3/17/2009	694.81	5.95	NM	688.86
	3/25/2009	694.81	5.02	NM	689.79
	3/31/2009	694.81	4.87	NM	689.94
	4/20/2009	694.81	4.70	NM	690.11
	4/29/2009	694.81	4.96	NM	689.85
	5/6/2009	694.81	5.05	NM	689.76
	5/11/2009	694.81	5.02	NM	689.79
	5/20/2009	694.81	4.81	NM	690.00
	5/27/2009	694.81	5.14	NM	689.67
	6/8/2009	694.81	5.83	NM	688.98
	6/15/2009	694.81	5.16	NM	689.65
	6/25/2009	694.81	4.96	NM	689.85
	6/30/2009	694.81	5.60	NM	689.21
	7/31/2009	694.81	5.47	NM	689.34
	8/13/2009	694.81	5.85	NM	688.96
	8/26/2009	694.81	7.41	NM	687.40
	10/2/2009	694.81	5.85	NM	688.96
	10/6/2009	694.81	5.97	NM	688.84
	12/9/2009	694.81	5.07	NM	689.74
	12/18/2009	694.81	7.01	NM	687.80
	1/26/2010	694.81	5.54	NM	689.27
	2/3/2010	694.81	5.56	NM	689.25
	3/1/2010	694.81	5.21	NM	689.60
	4/16/2010	694.81	5.35	NM	689.46
	6/15/2010	694.81	4.88	NM	689.93
	8/3/2010	694.81	7.85	NM	686.96
	8/10/2010	694.81	8.43	NM	686.38
	8/30/2010	694.81	8.86	NM	685.95
	9/20/2010	694.81	9.32	NM	685.49
	12/13/2010	694.81	5.27	NM	689.54
	2/18/2011	694.81	5.30	NM	689.51
	2/22/2011	694.81	4.47	NM	690.34
	3/4/2011	694.81	4.60	NM	690.21
	3/7/2011	694.81	4.12	NM	690.69
	3/28/2011	694.81	5.29	NM	689.52
	6/21/2011	694.81	5.50	NM	689.31
	9/26/2011	694.81	6.03	NM	688.78
	7/13/2015	694.81	4.39	NM	690.42
	3/12/2018	694.81	4.82	NM	689.99

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-16S	8/11/2003	695.12	4.35	10.38	690.77
	10/29/2003	695.12	3.03	10.38	692.09
	2/18/2004	695.12	2.81	10.38	692.31
	9/9/2004	695.12	4.24	10.38	690.88
	7/31/2006	695.12	5.75	10.38	689.37
	7/24/2007	695.12	4.59	10.57	690.53
	11/30/2007	695.12	3.84	NM	691.28
	6/8/2008	695.12	2.80	NM	692.32
	9/9/2008	695.12	6.75	NM	688.37
	11/17/2008	695.12	5.12	NM	690.00
	2/5/2009	695.12	4.05	NM	691.07
	3/3/2009	695.12	3.57	NM	691.55
	3/11/2009	695.12	3.56	NM	691.56
	3/17/2009	695.12	4.13	NM	690.99
	3/25/2009	695.12	3.35	NM	691.77
	3/31/2009	695.12	3.16	NM	691.96
	4/20/2009	695.12	2.96	NM	692.16
	4/29/2009	695.12	3.34	NM	691.78
	5/6/2009	695.12	3.20	NM	691.92
	5/11/2009	695.12	3.08	NM	692.04
	5/20/2009	695.12	2.97	NM	692.15
	5/27/2009	695.12	3.12	NM	692.00
	6/8/2009	695.12	3.75	NM	691.37
	6/15/2009	695.12	2.97	NM	692.15
	6/25/2009	695.12	2.92	NM	692.20
	6/30/2009	695.12	3.48	NM	691.64
	7/31/2009	695.12	3.15	NM	691.97
	8/13/2009	695.12	3.48	NM	691.64
	8/26/2009	695.12	5.08	NM	690.04
	10/2/2009	695.12	4.27	NM	690.85
	10/6/2009	695.12	3.97	NM	691.15
	12/9/2009	695.12	2.99	NM	692.13
	6/15/2010	695.12	2.59	NM	692.53
	9/20/2010	695.12	8.25	NM	686.87
	12/13/2010	695.12	3.54	NM	691.58
	3/7/2011	695.12	3.14	NM	691.98
	6/21/2011	695.12	3.00	NM	692.12
	9/26/2011	695.12	5.78	NM	689.34
	12/12/2011	695.12	3.25	NM	691.87
	4/2/2012	695.12	3.59	NM	691.53
	7/9/2012	695.12	7.70	NM	687.42
	10/1/2012	695.12	4.04	NM	691.08
	7/13/2015	695.12	2.81	NM	692.31
	3/12/2018	695.12	2.86	NM	692.26
	12/16/2019	695.12	NM	NM	NM

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-16D	8/11/2003	694.91	5.33	18.93	689.58
	10/29/2003	694.91	4.30	18.93	690.61
	2/18/2004	694.91	3.87	18.93	691.04
	9/9/2004	694.91	5.71	18.93	689.20
	7/31/2006	694.91	6.34	18.93	688.57
	7/24/2007	694.91	5.83	18.92	689.08
	11/30/2007	694.91	5.31	NM	689.60
	6/8/2008	694.91	3.66	NM	691.25
	9/9/2008	694.91	7.55	NM	687.36
	11/17/2008	694.91	7.31	NM	687.60
	2/5/2009	694.91	NM	NM	NM
	3/3/2009	694.91	4.19	NM	690.72
	3/11/2009	694.91	4.30	NM	690.61
	3/17/2009	694.91	4.52	NM	690.39
	3/25/2009	694.91	4.02	NM	690.89
	3/31/2009	694.91	3.88	NM	691.03
	4/20/2009	694.91	3.74	NM	691.17
	4/29/2009	694.91	3.93	NM	690.98
	5/6/2009	694.91	4.06	NM	690.85
	5/11/2009	694.91	4.00	NM	690.91
	5/20/2009	694.91	3.89	NM	691.02
	5/27/2009	694.91	4.05	NM	690.86
	6/8/2009	694.91	4.79	NM	690.12
	6/15/2009	694.91	4.04	NM	690.87
	6/25/2009	694.91	3.94	NM	690.97
	6/30/2009	694.91	4.59	NM	690.32
	7/31/2009	694.91	4.42	NM	690.49
	8/13/2009	694.91	4.69	NM	690.22
	8/26/2009	694.91	6.42	NM	688.49
	10/2/2009	694.91	4.87	NM	690.04
	10/6/2009	694.91	4.98	NM	689.93
	12/9/2009	694.91	4.16	NM	690.75
	12/18/2009	694.91	4.25	NM	690.66
	1/26/2010	694.91	4.15	NM	690.76
	2/3/2010	694.91	4.31	NM	690.60
	3/1/2010	694.91	4.07	NM	690.84
	4/16/2010	694.91	4.00	NM	690.91
	6/15/2010	694.91	3.53	NM	691.38
	8/3/2010	694.91	6.99	NM	687.92
	8/10/2010	694.91	7.40	NM	687.51
	8/30/2010	694.91	8.28	NM	686.63
	9/20/2010	694.91	8.80	NM	686.11
	12/13/2010	694.91	4.17	NM	690.74
	2/18/2011	694.91	4.39	NM	690.52
	2/22/2011	694.91	3.64	NM	691.27
	3/4/2011	694.91	3.67	NM	691.24
	3/7/2011	694.91	3.52	NM	691.39
	3/28/2011	694.91	4.06	NM	690.85
	6/21/2011	694.91	4.90	NM	690.01
	9/26/2011	694.91	5.95	NM	688.96
	7/13/2015	694.91	3.54	NM	691.37
	3/12/2018	694.91	4.20	NM	690.71

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-17S	8/11/2003	694.42	7.83	10.83	686.59
	10/29/2003	694.42	6.01	10.83	688.41
	2/18/2004	694.42	4.70	10.83	689.72
	9/9/2004	694.42	8.11	10.83	686.31
	7/31/2006	694.42	8.37	10.83	686.05
	7/24/2007	694.42	8.20	10.87	686.22
	11/30/2007	694.42	7.08	NM	687.34
	6/8/2008	694.42	4.24	NM	690.18
	9/9/2008	694.42	NM	NM	NM
	11/17/2008	694.42	7.11	NM	687.31
	2/5/2009	694.42	6.29	NM	688.13
	12/9/2009	694.42	4.87	NM	689.55
	1/14/2010	694.42	7.78	NM	686.64
	6/15/2010	694.42	4.73	NM	689.69
	9/20/2010	694.42	9.10	NM	685.32
	12/13/2010	694.42	6.04	NM	688.38
	3/7/2011	694.42	3.67	NM	690.75
	6/21/2011	694.42	6.35	NM	688.07
	9/26/2011	694.42	5.55	NM	688.87
	12/12/2011	694.42	5.20	NM	689.22
	4/2/2012	694.42	6.85	NM	687.57
	7/9/2012	694.42	8.90	NM	685.52
	10/1/2012	694.42	7.46	NM	686.96
	7/13/2015	694.42	3.67	NM	690.75
	3/12/2018	694.42	7.30	NM	687.12

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-17D	8/11/2003	694.41	10.90	19.00	683.51
	10/29/2003	694.41	6.38	19.00	688.03
	2/18/2004	694.41	4.93	19.00	689.48
	9/9/2004	694.41	7.50	19.00	686.91
	7/31/2006	694.41	8.23	19.00	686.18
	7/24/2007	694.41	8.30	19.00	686.11
	11/30/2007	694.41	7.96	NM	686.45
	6/8/2008	694.41	4.14	NM	690.27
	9/9/2008	694.41	NM	NM	NM
	11/17/2008	694.41	7.55	NM	686.86
	2/5/2009	694.41	7.13	NM	687.28
	12/9/2009	694.41	6.65	NM	687.76
	1/14/2010	694.41	7.62	NM	686.79
	1/15/2010	694.41	13.77	NM	680.64
	1/18/2010	694.41	11.51	NM	682.90
	1/19/2010	694.41	10.97	NM	683.44
	1/20/2010	694.41	10.48	NM	683.93
	1/21/2010	694.41	10.08	NM	684.33
	6/15/2010	694.41	6.40	NM	688.01
	9/20/2010	694.41	8.70	NM	685.71
	12/13/2010	694.41	6.81	NM	687.60
	3/7/2011	694.41	4.13	NM	690.28
	6/21/2011	694.41	6.97	NM	687.44
	9/26/2011	694.11	7.98	NM	686.13
	12/12/2011	694.11	4.61	NM	689.50
	4/2/2012	694.11	7.32	NM	686.79
	7/9/2012	694.11	8.93	NM	685.18
	10/1/2012	694.11	7.09	NM	687.02
	7/13/2015	694.11	4.82	MN	689.29
	3/12/2018	694.11	5.43	NM	688.68

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-18S	8/11/2003	692.02	7.57	10.15	684.45
	10/29/2003	692.02	6.03	10.15	685.99
	2/18/2004	692.02	5.49	10.15	686.53
	9/9/2004	692.02	7.56	10.15	684.46
	7/31/2006	692.02	8.85	10.15	683.17
	7/24/2007	692.02	7.94	10.15	684.08
	11/30/2007	692.02	7.41	NM	684.61
	6/8/2008	692.02	5.34	NM	686.68
	9/9/2008	692.02	8.20	NM	683.82
	11/17/2008	692.02	7.55	NM	684.47
	2/5/2009	692.02	7.27	NM	684.75
	12/9/2009	692.02	4.54	NM	687.48
	1/15/2010	692.02	7.50	NM	684.52
	6/15/2010	692.02	4.40	NM	687.62
	9/20/2010	692.02	9.37	NM	682.65
	12/13/2010	692.02	6.82	NM	685.20
	3/7/2011	692.02	4.07	NM	687.95
	6/21/2011	692.02	6.51	NM	685.51
	9/26/2011	692.02	9.85	NM	682.17
	12/12/2011	692.02	5.38	NM	686.64
	4/2/2012	692.02	7.19	NM	684.83
	7/9/2012	692.02	9.57	NM	682.45
	10/1/2012	692.02	7.91	NM	684.11
	7/13/2015	692.02	4.23	NM	687.79
	3/12/2018	692.02	7.67	NM	684.35

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-18D	8/11/2003	691.55	10.09	19.49	681.46
	10/29/2003	691.55	6.91	19.49	684.64
	2/18/2004	691.55	6.24	19.49	685.31
	9/9/2004	691.55	7.57	19.49	683.98
	7/31/2006	691.55	7.58	19.49	683.97
	7/24/2007	691.55	7.68	19.48	683.87
	11/30/2007	691.55	7.65	NM	683.90
	6/8/2008	691.55	5.50	NM	686.05
	9/9/2008	691.55	NM	NM	NM
	11/17/2008	691.55	7.76	NM	683.79
	2/5/2009	691.55	7.38	NM	684.17
	12/9/2009	691.55	7.01	NM	684.54
	6/15/2010	691.55	6.85	NM	684.70
	9/20/2010	691.55	8.72	NM	682.83
	12/13/2010	691.55	8.76	NM	682.79
	3/7/2011	691.55	5.70	NM	685.85
	6/21/2011	691.55	7.11	NM	684.44
	9/26/2011	691.55	8.64	NM	682.91
	12/12/2011	691.55	5.87	NM	685.68
	4/2/2012	691.55	7.33	NM	684.22
	7/9/2012	691.55	8.58	NM	682.97
	10/1/2012	691.55	7.76	NM	683.79
	7/13/2015	691.55	5.96	NM	685.59
	3/12/2018	691.55	7.18	NM	684.37

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-19S	8/11/2003	691.06	7.97	8.00	683.09
	10/29/2003	691.06	7.15	8.00	683.91
	2/18/2004	691.06	6.78	8.00	684.28
	9/9/2004	691.06	8.00	8.00	683.06
	7/31/2006	691.06	8.05	8.00	683.01
	7/24/2007	691.06	8.03	8.00	683.03
	11/30/2007	691.06	8.00	NM	683.06
	6/8/2008	691.06	6.20	NM	684.86
	11/17/2008	691.06	8.00	NM	683.06
	2/5/2009	691.06	8.00	NM	683.06
	12/9/2009	691.06	7.22	NM	683.84
	6/15/2010	691.06	5.59	NM	685.47
	9/20/2010	691.06	8.00	NM	683.06
	12/13/2010	691.06	7.68	NM	683.38
	3/7/2011	691.06	5.41	NM	685.65
	6/21/2011	691.06	7.16	NM	683.90
	9/26/2011	691.06	8.00	NM	683.06
	12/12/2011	691.06	6.71	NM	684.35
	4/2/2012	691.06	7.81	NM	683.25
	7/9/2012	691.06	8.00	8.00	683.06
	10/1/2012	691.06	8.00	7.88	683.06
	7/13/2015	691.06	5.44	NM	685.62
	3/12/2018	691.06	7.94	NM	683.12

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-19D	8/11/2003	691.29	18.00	19.45	673.29
	10/29/2003	691.29	13.30	19.45	677.99
	2/18/2004	691.29	10.99	19.45	680.30
	9/9/2004	691.29	8.41	19.45	682.88
	7/31/2006	691.29	12.52	19.45	678.77
	7/24/2007	691.29	7.11	20.46	684.18
	11/30/2007	691.29	15.88	NM	675.41
	6/8/2008	691.29	9.71	NM	681.58
	9/9/2008	691.29	NM	NM	NM
	11/17/2008	691.29	16.89	NM	674.40
	2/5/2009	691.29	NM	NM	NM
	3/3/2009	691.29	16.31	NM	674.98
	3/11/2009	691.29	16.76	NM	674.53
	3/17/2009	691.29	17.23	NM	674.06
	3/25/2009	691.29	16.80	NM	674.49
	3/31/2009	691.29	17.62	NM	673.67
	4/20/2009	691.29	16.74	NM	674.55
	4/29/2009	691.29	16.29	NM	675.00
	5/6/2009	691.29	16.56	NM	674.73
	5/11/2009	691.29	16.87	NM	674.42
	5/20/2009	691.29	16.32	NM	674.97
	5/27/2009	691.29	16.83	NM	674.46
	6/8/2009	691.29	17.02	NM	674.27
	6/15/2009	691.29	16.72	NM	674.57
	6/25/2009	691.29	16.89	NM	674.40
	6/30/2009	691.29	16.58	NM	674.71
	7/31/2009	691.29	14.88	NM	676.41
	8/13/2009	691.29	14.93	NM	676.36
	8/26/2009	691.29	15.22	NM	676.07
	10/2/2009	691.29	14.05	NM	677.24
	10/6/2009	691.29	14.93	NM	676.36
	12/9/2009	691.29	10.71	NM	680.58
	12/18/2009	691.29	14.94	NM	676.35
	1/26/2010	691.29	14.22	NM	677.07
	2/3/2010	691.29	14.86	NM	676.43
	3/1/2010	691.29	14.72	NM	676.57
	6/15/2010	691.29	10.29	NM	681.00
	8/3/2010	691.29	9.54	NM	681.75
	8/10/2010	691.29	10.84	NM	680.45
	8/30/2010	691.29	11.67	NM	679.62
	9/20/2010	691.29	11.23	NM	680.06
	12/13/2010	691.29	10.18	NM	681.11
	2/18/2011	691.29	12.62	NM	678.67
	2/22/2011	691.29	12.44	NM	678.85
	3/7/2011	691.29	11.40	NM	679.89
	6/21/2011	691.29	8.34	NM	682.95
	9/26/2011	691.29	6.07	NM	685.22
	7/13/2015	691.29	5.98	NM	685.31
	3/12/2018	691.29	7.79	NM	683.50

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-20S	10/29/2003	691.16	6.85	7.60	684.31
	2/18/2004	691.16	5.61	7.60	685.55
	9/9/2004	691.16	7.51	7.60	683.65
	7/31/2006	691.16	7.32	7.60	683.84
	7/24/2007	691.16	7.39	7.79	683.77
	11/30/2007	691.16	6.59	NM	684.57
	6/8/2008	691.16	5.47	NM	685.69
	9/9/2008	691.16	7.60	NM	683.56
	11/17/2008	691.16	6.83	NM	684.33
	2/5/2009	691.16	6.60	NM	684.56
	2/25/2009	691.16	5.84	NM	685.32
	3/3/2009	691.16	6.24	NM	684.92
	12/9/2009	691.16	5.97	NM	685.19
	6/15/2010	691.16	5.32	NM	685.84
	9/20/2010	691.16	7.62	NM	683.54
	12/13/2010	691.16	6.20	NM	684.96
	3/7/2011	691.16	5.34	NM	685.82
	6/21/2011	691.16	6.16	NM	685.00
	9/26/2011	691.16	7.07	NM	684.09
	12/12/2011	691.16	5.79	NM	685.37
	4/2/2012	691.16	6.20	NM	684.96
	7/9/2012	691.16	7.79	7.79	683.37
	10/1/2012	691.16	6.62	NM	684.54
	7/13/2015	691.16	5.35	NM	685.81
	3/12/2018	691.16	6.24	NM	684.92
	12/16/2019	691.16	NM	NM	NM

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-20D	10/29/2003	691.54	6.37	26.00	685.17
	2/18/2004	691.54	6.12	26.00	685.42
	9/9/2004	691.54	7.31	26.00	684.23
	7/31/2006	691.54	7.19	26.00	684.35
	7/24/2007	691.54	7.20	26.00	684.34
	11/30/2007	691.54	7.12	NM	684.42
	6/8/2008	691.54	6.38	NM	685.16
	9/9/2008	691.54	NM	NM	NM
	11/17/2008	691.54	6.75	NM	684.79
	2/5/2009	691.54	NM	NM	NM
	2/25/2009	691.54	6.32	NM	685.22
	3/3/2009	691.54	5.88	NM	685.66
	3/11/2009	691.54	6.45	NM	685.09
	3/17/2009	691.54	6.67	NM	684.87
	3/25/2009	691.54	6.05	NM	685.49
	3/31/2009	691.54	5.96	NM	685.58
	4/20/2009	691.54	5.80	NM	685.74
	4/29/2009	691.54	6.20	NM	685.34
	5/6/2009	691.54	6.18	NM	685.36
	5/11/2009	691.54	6.18	NM	685.36
	5/20/2009	691.54	5.94	NM	685.60
	5/27/2009	691.54	7.26	NM	684.28
	6/8/2009	691.54	7.08	NM	684.46
	6/15/2009	691.54	6.23	NM	685.31
	6/24/2009	691.54	5.76	NM	685.78
	6/30/2009	691.54	6.84	NM	684.70
	7/31/2009	691.54	6.43	NM	685.11
	8/13/2009	691.54	6.97	NM	684.57
	8/26/2009	691.54	7.59	NM	683.95
	10/2/2009	691.54	7.05	NM	684.49
	10/6/2009	691.54	7.11	NM	684.43
	12/9/2009	691.54	6.17	NM	685.37
	12/18/2009	691.54	6.21	NM	685.33
	1/20/2010	691.54	6.83	NM	684.71
	1/26/2010	691.54	5.96	NM	685.58
	2/3/2010	691.54	7.60	NM	683.94
	3/1/2010	691.54	6.26	NM	685.28
	4/16/2010	691.54	6.33	NM	685.21
	6/15/2010	691.54	5.55	NM	685.99
	8/3/2010	691.54	7.60	NM	683.94
	8/10/2010	691.54	7.62	NM	683.92
	8/30/2010	691.54	7.65	NM	683.89
	9/20/2010	691.54	7.62	NM	683.92
	12/13/2010	691.54	6.40	NM	685.14
	2/18/2011	691.54	6.71	NM	684.83
	2/22/2011	691.54	5.47	NM	686.07
	3/4/2011	691.54	5.76	NM	685.78
	3/7/2011	691.54	5.63	NM	685.91
	3/28/2011	691.54	6.58	NM	684.96
	6/21/2011	691.54	6.19	NM	685.35
	9/26/2011	691.54	7.02	NM	684.52
	7/13/2015	691.54	5.58	NM	685.96
	3/12/2018	691.54	6.55	NM	684.99

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-21S	10/29/2003	688.99	4.41	6.90	684.58
	2/18/2004	688.99	4.43	6.90	684.56
	9/9/2004	688.99	4.91	6.90	684.08
	7/31/2006	688.99	4.78	6.90	684.21
	7/24/2007	688.99	5.00	7.08	683.99
	11/30/2007	688.99	4.66	NM	684.33
	6/8/2008	688.99	3.51	NM	685.48
	9/9/2008	688.99	5.05	NM	683.94
	11/17/2008	688.99	4.46	NM	684.53
	2/5/2009	688.99	4.75	NM	684.24
	2/25/2009	688.99	4.32	NM	684.67
	3/3/2009	688.99	4.33	NM	684.66
	12/9/2009	688.99	4.70	NM	684.29
	6/15/2010	688.99	3.67	NM	685.32
	9/20/2010	688.99	5.20	NM	683.79
	12/13/2010	688.99	4.22	NM	684.77
	6/21/2011	688.99	4.29	NM	684.70
	9/26/2011	688.99	4.17	NM	684.82
	12/12/2011	688.99	4.30	NM	684.69
	4/2/2012	688.99	4.49	NM	684.50
	7/9/2012	688.99	4.73	NM	684.26
	10/1/2012	688.99	4.77	NM	684.22
	7/13/2015	688.99	3.77	NM	685.22
	3/12/2018	688.99	4.76	NM	684.23
	12/16/2019	688.99	NM	NM	NM

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-21D	10/29/2003	688.4	3.71	25.09	684.69
	2/18/2004	688.4	3.70	25.09	684.70
	9/9/2004	688.4	5.70	25.09	682.70
	7/31/2006	688.4	4.55	25.09	683.85
	7/24/2007	688.4	4.55	25.27	683.85
	11/30/2007	688.4	4.20	NM	684.20
	6/8/2008	688.4	3.09	NM	685.31
	9/9/2008	688.4	NM	NM	NM
	11/17/2008	688.4	3.95	NM	684.45
	2/5/2009	NM	NM	NM	NM
	2/25/2009	688.4	4.60	NM	683.80
	3/3/2009	688.4	4.46	NM	683.94
	3/11/2009	688.4	4.52	NM	683.88
	3/17/2009	688.4	4.86	NM	683.54
	3/25/2009	688.4	3.95	NM	684.45
	3/31/2009	688.4	4.01	NM	684.39
	4/20/2009	688.4	3.87	NM	684.53
	4/29/2009	688.4	4.15	NM	684.25
	5/6/2009	688.4	4.10	NM	684.30
	5/11/2009	688.4	4.06	NM	684.34
	5/20/2009	688.4	3.77	NM	684.63
	5/27/2009	688.4	4.39	NM	684.01
	6/8/2009	688.4	4.93	NM	683.47
	6/15/2009	688.4	3.94	NM	684.46
	6/25/2009	688.4	3.62	NM	684.78
	6/30/2009	688.4	4.68	NM	683.72
	7/31/2009	688.4	4.58	NM	683.82
	8/13/2009	688.4	4.73	NM	683.67
	8/26/2009	688.4	5.29	NM	683.11
	10/2/2009	688.4	4.12	NM	684.28
	10/6/2009	688.4	4.49	NM	683.91
	12/9/2009	688.4	4.41	NM	683.99
	12/18/2009	688.4	4.69	NM	683.71
	1/20/2010	688.4	5.16	NM	683.24
	1/26/2010	688.4	4.54	NM	683.86
	2/3/2010	688.4	5.07	NM	683.33
	3/1/2010	688.4	4.94	NM	683.46
	4/16/2010	688.4	5.00	NM	683.40
	6/15/2010	688.4	4.32	NM	684.08
	8/3/2010	688.4	5.52	NM	682.88
	8/10/2010	688.4	5.57	NM	682.83
	8/30/2010	688.4	5.60	NM	682.80
	9/20/2010	688.4	5.66	NM	682.74
	12/13/2010	688.4	4.83	NM	683.57
	2/18/2011	688.4	5.05	NM	683.35
	2/22/2011	688.4	4.06	NM	684.34
	3/4/2011	688.4	4.33	NM	684.07
	3/7/2011	688.4	4.14	NM	684.26
	3/28/2011	688.4	5.00	NM	683.40
	6/21/2011	688.4	4.53	NM	683.87
	9/26/2011	688.4	4.55	NM	683.85
	7/13/2015	688.4	3.69	NM	684.71
	3/12/2018	688.4	5.10	NM	683.30

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-22D	10/29/2003	688.35	3.61	25.06	684.74
	2/18/2004	688.35	3.64	25.06	684.71
	9/9/2004	688.35	4.65	25.06	683.70
	7/31/2006	688.35	4.48	25.06	683.87
	7/24/2007	688.35	4.20	21.69	684.15
	11/30/2007	688.35	4.15	NM	684.20
	6/8/2008	688.35	3.08	NM	685.27
	9/9/2008	688.35	NM	NM	NM
	11/17/2008	688.35	3.95	NM	684.40
	2/5/2009	688.35	NM	NM	NM
	3/3/2009	688.35	4.12	NM	684.23
	3/11/2009	688.35	4.14	NM	684.21
	3/17/2009	688.35	4.52	NM	683.83
	3/25/2009	688.35	3.63	NM	684.72
	3/31/2009	688.35	3.70	NM	684.65
	4/20/2009	688.35	3.54	NM	684.81
	4/29/2009	688.35	3.83	NM	684.52
	5/6/2009	688.35	3.81	NM	684.54
	5/11/2009	688.35	3.76	NM	684.59
	5/20/2009	688.35	3.43	NM	684.92
	5/27/2009	688.35	4.06	NM	684.29
	6/8/2009	688.35	4.59	NM	683.76
	6/15/2009	688.35	3.58	NM	684.77
	6/25/2009	688.35	3.28	NM	685.07
	6/30/2009	688.35	4.35	NM	684.00
	7/31/2009	688.35	4.32	NM	684.03
	8/13/2009	688.35	4.42	NM	683.93
	8/26/2009	688.35	4.97	NM	683.38
	10/2/2009	688.35	3.78	NM	684.57
	10/6/2009	688.35	4.17	NM	684.18
	12/9/2009	688.35	4.12	NM	684.23
	12/18/2009	688.35	4.34	NM	684.01
	1/20/2010	688.35	4.83	NM	683.52
	1/26/2010	688.35	4.23	NM	684.12
	2/3/2010	688.35	4.74	NM	683.61
	3/1/2010	688.35	4.62	NM	683.73
	4/16/2010	688.35	4.68	NM	683.67
	6/15/2010	688.35	3.99	NM	684.36
	8/3/2010	688.35	5.18	NM	683.17
	8/10/2010	688.35	5.24	NM	683.11
	8/30/2010	688.35	5.27	NM	683.08
	9/20/2010	688.35	5.34	NM	683.01
	12/13/2010	688.35	4.50	NM	683.85
	2/18/2011	688.35	4.74	NM	683.61
	2/22/2011	688.35	3.73	NM	684.62
	3/4/2011	688.35	4.02	NM	684.33
	3/7/2011	688.35	3.82	NM	684.53
	3/28/2011	688.35	4.62	NM	683.73
	6/21/2011	688.35	4.17	NM	684.18
	9/26/2011	688.35	4.24	NM	684.11
	7/13/2015	688.35	3.02	NM	685.33
	3/12/2018	688.35	4.78	NM	683.57

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-23D	10/29/2003	687.96	3.23	24.05	684.73
	2/18/2004	687.96	2.55	24.05	685.41
	9/9/2004	687.96	4.30	24.05	683.66
	7/31/2006	687.96	4.09	24.05	683.87
	7/24/2007	687.96	4.08	24.25	683.88
	11/30/2007	687.96	7.57	NM	680.39
	6/8/2008	687.96	2.61	NM	685.35
	9/9/2008	687.96	NM	NM	NM
	11/17/2008	687.96	3.50	NM	684.46
	2/5/2009	687.96	NM	NM	NM
	3/3/2009	687.96	3.79	NM	684.17
	3/11/2009	687.96	3.80	NM	684.16
	3/17/2009	687.96	4.10	NM	683.86
	3/25/2009	687.96	3.28	NM	684.68
	3/31/2009	687.96	3.27	NM	684.69
	4/20/2009	687.96	3.13	NM	684.83
	4/29/2009	687.96	3.42	NM	684.54
	5/6/2009	687.96	3.50	NM	684.46
	5/11/2009	687.96	3.29	NM	684.67
	5/20/2009	687.96	3.08	NM	684.88
	5/27/2009	687.96	3.68	NM	684.28
	6/8/2009	687.96	4.15	NM	683.81
	6/15/2009	687.96	3.22	NM	684.74
	6/25/2009	687.96	2.86	NM	685.10
	6/30/2009	687.96	3.87	NM	684.09
	7/31/2009	687.96	3.92	NM	684.04
	8/13/2009	687.96	4.01	NM	683.95
	8/26/2009	687.96	4.60	NM	683.36
	10/2/2009	687.96	3.42	NM	684.54
	10/6/2009	687.96	3.77	NM	684.19
	12/9/2010	687.96	3.72	NM	684.24
	12/18/2009	687.96	3.93	NM	684.03
	1/15/2010	687.96	4.51	NM	683.45
	1/26/2010	687.96	3.83	NM	684.13
	2/3/2010	687.96	4.40	NM	683.56
	3/1/2010	687.96	4.35	NM	683.61
	6/15/2010	687.96	3.53	NM	684.43
	8/30/2010	687.96	4.88	NM	683.08
	9/20/2010	687.96	6.95	NM	681.01
	12/13/2010	687.96	4.20	NM	683.76
	2/18/2011	687.96	4.39	NM	683.57
	2/22/2011	687.96	3.32	NM	684.64
	3/7/2011	687.96	3.35	NM	684.61
	6/21/2011	687.96	3.76	NM	684.20
	9/26/2011	687.96	3.75	NM	684.21
	7/13/2015	687.96	2.70	NM	685.26
	3/12/2018	687.96	5.62	NM	682.34
	1/7/2020	687.96	3.75	NM	684.21

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-24A	11/17/2008	687.89	3.90	27.68	683.99
	2/25/2009	687.89	3.78	NM	684.11
	3/3/2009	687.89	4.31	NM	683.58
	3/11/2009	687.89	3.80	NM	684.09
	3/17/2009	687.89	4.52	NM	683.37
	3/25/2009	687.89	3.45	NM	684.44
	3/31/2009	687.89	3.26	NM	684.63
	4/20/2009	687.89	3.08	NM	684.81
	4/29/2009	687.89	3.41	NM	684.48
	5/6/2009	687.89	3.45	NM	684.44
	5/11/2009	687.89	3.31	NM	684.58
	5/20/2009	687.89	2.98	NM	684.91
	5/27/2009	687.89	3.61	NM	684.28
	6/8/2009	687.89	4.09	NM	683.80
	6/15/2009	687.89	3.12	NM	684.77
	6/25/2009	687.89	2.74	NM	685.15
	6/30/2009	687.89	3.64	NM	684.25
	7/31/2009	687.89	4.18	NM	683.71
	8/13/2009	687.89	3.90	NM	683.99
	8/26/2009	687.89	4.53	NM	683.36
	10/2/2009	687.89	3.48	NM	684.41
	10/6/2009	687.89	3.83	NM	684.06
	12/9/2009	687.89	3.59	NM	684.30
	12/18/2009	687.89	3.88	NM	684.01
	1/4/2010	687.89	4.33	NM	683.56
	1/6/2010	687.89	4.47	NM	683.42
	1/11/2010	687.89	4.58	NM	683.31
	1/18/2010	687.89	4.13	NM	683.76
	1/20/2010	687.89	4.33	NM	683.56
	1/25/2010	687.89	3.63	NM	684.26
	2/2/2010	687.89	4.30	NM	683.59
	2/4/2010	687.89	4.40	NM	683.49
	2/5/2010	687.89	4.31	NM	683.58
	2/22/2010	687.89	3.90	NM	683.99
	3/2/2010	687.89	4.19	NM	683.70
	3/4/2010	687.89	4.29	NM	683.60
	3/8/2010	687.89	4.19	NM	683.70
	3/11/2010	687.89	4.42	NM	683.47
	4/16/2010	687.89	4.21	NM	683.68
	4/26/2010	687.89	3.26	NM	684.63

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-24A	5/5/2010	687.89	3.88	NM	684.01
	6/1/2010	687.89	4.21	NM	683.68
	6/9/2010	687.89	4.03	NM	683.86
	6/15/2010	687.89	3.50	NM	684.39
	6/24/2010	687.89	4.14	NM	683.75
	8/3/2010	687.89	4.75	NM	683.14
	8/10/2010	687.89	4.74	NM	683.15
	8/17/2010	687.89	5.12	NM	682.77
	8/23/2010	687.89	4.64	NM	683.25
	8/30/2010	687.89	4.76	NM	683.13
	9/20/2010	687.89	4.84	NM	683.05
	9/24/2010	687.89	4.89	NM	683.00
	10/1/2010	687.89	5.04	NM	682.85
	10/5/2010	687.89	4.94	NM	682.95
	10/12/2010	687.89	5.07	NM	682.82
	10/18/2010	687.89	5.01	NM	682.88
	12/10/2010	687.89	4.30	NM	683.59
	12/13/2010	687.89	3.98	NM	683.91
	12/28/2010	687.89	4.21	NM	683.68
	1/3/2011	687.89	3.97	NM	683.92
	1/10/2011	687.89	4.70	NM	683.19
	1/17/2011	687.89	4.39	NM	683.50
	2/18/2011	687.89	4.32	NM	683.57
	2/22/2011	687.89	3.29	NM	684.60
	3/4/2011	687.89	3.52	NM	684.37
	3/7/2011	687.89	3.34	NM	684.55
	3/18/2011	687.89	3.91	NM	683.98
	3/28/2011	687.89	4.42	NM	683.47
	6/21/2011	687.89	3.72	NM	684.17
	9/26/2011	687.89	4.91	NM	682.98
	7/13/2015	687.89	2.35	NM	685.54
	3/12/2018	687.89	3.70	NM	684.19

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-25A	11/17/2008	692.65	5.20	22.18	687.45
	3/3/2009	692.65	4.78	NM	687.87
	3/11/2009	692.65	5.20	NM	687.45
	3/17/2009	692.65	5.95	NM	686.70
	3/25/2009	692.65	4.81	NM	687.84
	3/31/2009	692.65	4.58	NM	688.07
	4/20/2009	692.65	4.35	NM	688.30
	4/29/2009	692.65	4.70	NM	687.95
	5/6/2009	692.65	4.85	NM	687.80
	5/11/2009	692.65	4.78	NM	687.87
	5/20/2009	692.65	4.42	NM	688.23
	5/27/2009	692.65	4.95	NM	687.70
	6/8/2009	692.65	5.66	NM	686.99
	6/15/2009	692.65	4.79	NM	687.86
	6/25/2009	692.65	4.64	NM	688.01
	6/30/2009	692.65	5.49	NM	687.16
	7/31/2009	692.65	5.21	NM	687.44
	8/13/2009	692.65	5.56	NM	687.09
	8/26/2009	692.65	6.74	NM	685.91
	10/2/2009	692.65	4.98	NM	687.67
	10/6/2009	692.65	5.61	NM	687.04
	12/9/2009	692.65	4.61	NM	688.04
	12/18/2009	692.65	4.58	NM	688.07
	1/26/2010	692.65	4.35	NM	688.30
	2/3/2010	692.65	5.10	NM	687.55
	3/1/2010	692.65	4.88	NM	687.77
	6/15/2010	692.65	4.10	NM	688.55
	8/3/2010	692.65	6.99	NM	685.66
	8/10/2010	692.65	7.20	NM	685.45
	9/20/2010	692.65	7.63	NM	685.02
	12/13/2010	692.65	5.25	NM	687.40
	3/7/2011	692.65	4.32	NM	688.33
	6/21/2011	692.65	5.22	NM	687.43
	9/26/2011	692.65	5.01	NM	687.64
	12/12/2011	692.65	5.06	NM	687.59
	4/2/2012	692.65	4.61	NM	688.04
	7/9/2012	692.65	7.47	NM	685.18
	10/1/2012	692.65	4.90	NM	687.75
	7/13/2015	692.65	4.01	NM	688.64
	3/12/2018	692.65	5.32	NM	687.33

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-26A	11/17/2008	692.00	36.60	40.68	655.40
	3/3/2009	692.00	33.08	NM	658.92
	3/11/2009	692.00	33.00	NM	659.00
	3/17/2009	692.00	33.28	NM	658.72
	3/25/2009	692.00	31.97	NM	660.03
	3/31/2009	692.00	33.49	NM	658.51
	4/20/2009	692.00	37.51	NM	654.49
	4/29/2009	692.00	36.79	NM	655.21
	5/6/2009	692.00	36.78	NM	655.22
	5/11/2009	692.00	35.54	NM	656.46
	5/20/2009	692.00	36.39	NM	655.61
	5/27/2009	692.00	36.45	NM	655.55
	6/8/2009	692.00	36.23	NM	655.77
	6/15/2009	692.00	35.90	NM	656.10
	6/25/2009	692.00	35.81	NM	656.19
	6/30/2009	692.00	35.56	NM	656.44
	7/31/2009	692.00	33.23	NM	658.77
	8/13/2009	692.00	33.14	NM	658.86
	8/26/2009	692.00	33.14	NM	658.86
	10/2/2009	692.00	30.76	NM	661.24
	10/6/2009	692.00	31.61	NM	660.39
	12/9/2009	692.00	25.93	NM	666.07
	12/18/2009	692.00	29.98	NM	662.02
	1/13/2010	692.00	28.94	NM	663.06
	1/14/2010	692.00	35.88	NM	656.12
	1/15/2010	692.00	35.79	NM	656.21
	1/18/2010	692.00	35.67	NM	656.33
	1/19/2010	692.00	35.64	NM	656.36
	1/20/2010	692.00	35.58	NM	656.42
	1/26/2010	692.00	35.36	NM	656.64
	2/3/2010	692.00	35.01	NM	656.99
	3/1/2010	692.00	34.85	NM	657.15
	6/15/2010	692.00	25.05	NM	666.95
	8/3/2010	692.00	22.39	NM	669.61
	8/10/2010	692.00	23.38	NM	668.62
	9/20/2010	692.00	22.38	NM	669.62
	12/13/2010	692.00	18.20	NM	673.80
	3/7/2011	692.00	22.07	NM	669.93
	6/21/2011	692.00	23.38	NM	668.62
	9/26/2011	692.00	25.03	NM	666.97
	12/12/2011	692.00	26.43	NM	665.57
	4/2/2012	692.00	26.79	NM	665.21
	7/9/2012	692.00	27.08	NM	664.92
	10/1/2012	692.00	30.45	NM	661.55
	7/13/2015	692.00	8.86	NM	683.14
	3/12/2018	692.00	5.63	NM	686.37

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-27A	11/17/2008	691.55	7.74	34.00	683.81
	2/25/2009	691.55	7.42	NM	684.13
	3/3/2009	691.55	7.34	NM	684.21
	3/11/2009	691.55	6.34	NM	685.21
	3/17/2009	691.55	7.77	NM	683.78
	3/25/2009	691.55	6.83	NM	684.72
	3/31/2009	691.55	6.39	NM	685.16
	4/20/2009	691.55	6.73	NM	684.82
	4/29/2009	691.55	7.05	NM	684.50
	5/6/2009	691.55	7.00	NM	684.55
	5/11/2009	691.55	6.95	NM	684.60
	5/20/2009	691.55	6.64	NM	684.91
	5/27/2009	691.55	7.26	NM	684.29
	6/8/2009	691.55	7.83	NM	683.72
	6/15/2009	691.55	6.82	NM	684.73
	6/24/2009	691.55	6.48	NM	685.07
	6/30/2009	691.55	6.71	NM	684.84
	7/31/2009	691.55	7.73	NM	683.82
	8/13/2009	691.55	7.67	NM	683.88
	8/26/2009	691.55	8.24	NM	683.31
	10/2/2009	691.55	7.02	NM	684.53
	10/6/2009	691.55	7.39	NM	684.16
	12/9/2009	691.55	7.28	NM	684.27
	12/18/2009	691.55	7.53	NM	684.02
	1/4/2010	691.55	8.01	NM	683.54
	1/6/2010	691.55	8.12	NM	683.43
	1/11/2010	691.55	8.20	NM	683.35
	1/18/2010	691.55	8.02	NM	683.53
	1/21/2010	691.55	7.92	NM	683.63
	1/25/2010	691.55	7.23	NM	684.32
	2/2/2010	691.55	7.94	NM	683.61

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-27A	2/4/2010	691.55	7.76	NM	683.79
	2/5/2010	691.55	7.81	NM	683.74
	2/22/2010	691.55	7.12	NM	684.43
	3/2/2010	691.55	7.88	NM	683.67
	3/4/2010	691.55	7.91	NM	683.64
	3/8/2010	691.55	7.98	NM	683.57
	3/11/2010	691.55	7.96	NM	683.59
	3/24/2010	691.55	7.29	NM	684.26
	4/15/2010	691.55	7.75	NM	683.80
	4/19/2010	691.55	7.97	NM	683.58
	4/26/2010	691.55	7.11	NM	684.44
	5/5/2010	691.55	7.46	NM	684.09
	6/1/2010	691.55	7.93	NM	683.62
	6/9/2010	691.55	7.78	NM	683.77
	6/15/2010	691.55	7.11	NM	684.44
	6/24/2010	691.55	7.22	NM	684.33
	7/22/2010	691.55	7.98	NM	683.57
	8/3/2010	691.55	8.39	NM	683.16
	8/10/2010	691.55	8.43	NM	683.12
	8/17/2010	691.55	8.62	NM	682.93
	8/23/2010	691.55	8.37	NM	683.18
	8/30/2010	691.55	8.49	NM	683.06
	9/20/2010	691.55	8.55	NM	683.00
	12/13/2010	691.55	7.64	NM	683.91
	2/18/2011	691.55	7.92	NM	683.63
	2/22/2011	691.55	6.90	NM	684.65
	3/7/2011	691.55	6.95	NM	684.60
	6/21/2011	691.55	7.34	NM	684.21
	9/26/2011	691.55	7.40	NM	684.15
		Well Decommissioned / Converted to RW-17			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-28A	2/9/2009	692.54	51.19	66.40	641.35
	2/25/2009	692.54	34.09	NM	658.45
	3/3/2009	692.54	26.00	NM	666.54
	3/11/2009	692.54	17.57	NM	674.97
	3/17/2009	692.54	12.96	NM	679.58
	3/25/2009	692.54	8.40	NM	684.14
	3/31/2009	692.54	5.83	NM	686.71
	4/20/2009	692.54	0.71	NM	691.83
	4/29/2009	692.54	0.08	NM	692.46
	5/6/2009	692.54	0.06	NM	692.48
	5/11/2009	692.54	0.04	NM	692.50
	5/20/2009	692.54	0.09	NM	692.45
	5/27/2009	692.54	0.07	NM	692.47
	6/8/2009	692.54	0.08	NM	692.46
	6/15/2009	692.54	0.07	NM	692.47
	6/24/2009	692.54	0.15	NM	692.39
	6/30/2009	692.54	0.11	NM	692.43
	7/31/2009	692.54	0.00	NM	692.54
	8/5/2009	692.54	0.00	NM	692.54
	8/13/2009	692.54	11.68	NM	680.86
	8/26/2009	692.54	4.89	NM	687.65
	10/2/2009	692.54	0.80	NM	691.74
	10/6/2009	692.54	0.00	NM	692.54
	12/9/2009	692.54	0.00	NM	692.54
	12/28/2009	692.54	0.00	NM	692.54
	1/18/2010	692.54	0.01	NM	692.53
	1/19/2010	692.54	49.81	NM	642.73
	1/20/2010	692.54	46.95	NM	645.59
	1/21/2010	692.54	44.48	NM	648.06
	1/22/2010	692.54	42.12	NM	650.42
	1/25/2010	692.54	35.82	NM	656.72
	4/29/2010	692.54	0.00	NM	692.54
	5/17/2010	692.54	0.68	NM	691.86
	6/15/2010	692.54	0.11	NM	692.43
	8/30/2010	692.54	0.00	NM	692.54
	9/20/2010	692.54	0.08	NM	692.46
	12/13/2010	692.54	0.00	NM	692.54
	3/7/2011	692.54	0.00	NM	692.54
	6/21/2011	692.54	0.00	NM	692.54
	9/26/2011	692.54	0.00	NM	692.54
	12/12/2011	692.54	0.00	NM	692.54
	4/2/2012	692.54	0.00	NM	692.54
	7/9/2012	692.54	0.00	NM	692.54
	10/1/2012	692.54	0.00	NM	692.54
	7/13/2015	692.54	0.00	NM	692.54
	3/12/2018	692.54	0.00	NM	692.54

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-28B	2/9/2009	692.28	6.97	23.62	685.31
	2/25/2009	692.28	8.55	NM	683.73
	3/3/2009	692.28	8.35	NM	683.93
	3/11/2009	692.28	8.45	NM	683.83
	3/17/2009	692.28	9.02	NM	683.26
	3/25/2009	692.28	7.99	NM	684.29
	3/31/2009	692.28	7.82	NM	684.46
	4/20/2009	692.28	7.62	NM	684.66
	4/29/2009	692.28	7.99	NM	684.29
	5/6/2009	692.28	8.14	NM	684.14
	5/11/2009	692.28	7.95	NM	684.33
	5/20/2009	692.28	7.55	NM	684.73
	5/27/2009	692.28	8.37	NM	683.91
	6/8/2009	692.28	9.19	NM	683.09
	6/15/2009	692.28	7.77	NM	684.51
	6/24/2009	692.28	7.42	NM	684.86
	6/30/2009	692.28	8.79	NM	683.49
	7/31/2009	692.28	8.85	NM	683.43
	8/5/2009	692.28	7.53	NM	684.75
	8/13/2009	692.28	8.94	NM	683.34
	8/26/2009	692.28	9.74	NM	682.54
	10/2/2009	692.28	8.09	NM	684.19
	10/6/2009	692.28	6.96	NM	685.32
	12/9/2009	692.28	7.99	NM	684.29
	12/28/2009	692.28	9.78	NM	682.50
	1/21/2010	692.28	8.67	NM	683.61
	4/29/2010	692.28	8.01	NM	684.27
	5/17/2010	692.28	7.91	NM	684.37
	6/15/2010	692.28	7.33	NM	684.95
	8/30/2010	692.28	10.39	NM	681.89
	9/20/2010	692.28	10.48	NM	681.80
	12/13/2010	692.28	8.44	NM	683.84
	2/18/2011	692.28	9.08	NM	683.20
	3/7/2011	692.28	7.23	NM	685.05
	6/21/2011	692.28	8.10	NM	684.18
	9/26/2011	692.28	8.11	NM	684.17
	12/12/2011	692.28	8.25	NM	684.03
	4/2/2012	692.28	8.69	NM	683.59
	7/9/2012	692.28	9.91	NM	682.37
	10/1/2012	692.28	8.98	NM	683.30
	7/13/2015	692.28	7.08	NM	685.20
	3/12/2018	692.28	9.84	NM	682.44
	1/7/2020	692.28	8.60	NM	683.68

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-28C	2/9/2009	692.71	27.30	38.60	665.41
	2/25/2009	692.71	28.45	NM	664.26
	3/3/2009	692.71	24.44	NM	668.27
	3/11/2009	692.71	20.35	NM	672.36
	3/17/2009	692.71	19.15	NM	673.56
	3/25/2009	692.71	16.48	NM	676.23
	3/31/2009	692.71	14.84	NM	677.87
	4/20/2009	692.71	11.12	NM	681.59
	4/29/2009	692.71	10.54	NM	682.17
	5/6/2009	692.71	10.05	NM	682.66
	5/11/2009	692.71	9.87	NM	682.84
	5/20/2009	692.71	9.31	NM	683.40
	5/27/2009	692.71	9.19	NM	683.52
	6/8/2009	692.71	9.28	NM	683.43
	6/15/2009	692.71	9.19	NM	683.52
	6/25/2009	692.71	9.05	NM	683.66
	6/30/2009	692.71	8.92	NM	683.79
	7/31/2009	692.71	8.81	NM	683.90
	8/5/2009	692.71	8.94	NM	683.77
	8/13/2009	692.71	20.47	NM	672.24
	8/26/2009	692.71	15.96	NM	676.75
	10/2/2009	692.71	10.99	NM	681.72
	10/6/2009	692.71	10.87	NM	681.84
	12/9/2009	692.71	8.82	NM	683.89
	12/28/2009	692.71	14.43	NM	678.28
	1/14/2010	692.71	11.70	NM	681.01
	1/15/2010	692.71	24.96	NM	667.75
	1/18/2010	692.71	23.05	NM	669.66
	1/19/2010	692.71	22.49	NM	670.22
	1/20/2010	692.71	21.91	NM	670.80
	1/21/2010	692.71	21.38	NM	671.33
	4/29/2010	692.71	9.32	NM	683.39
	5/17/2010	692.71	8.67	NM	684.04
	6/15/2010	692.71	9.24	NM	683.47
	8/30/2010	692.71	10.51	NM	682.20
	9/20/2010	692.71	10.46	NM	682.25
	12/13/2010	692.71	9.77	NM	682.94
	2/18/2011	692.71	9.77	NM	682.94
	3/7/2011	692.71	8.85	NM	683.86
	6/21/2011	692.71	9.14	NM	683.57
	9/26/2011	692.71	10.22	NM	682.49
	12/12/2011	692.71	8.44	NM	684.27
	4/2/2012	692.71	9.77	NM	682.94
	7/9/2012	692.71	11.27	NM	681.44
	10/1/2012	692.71	10.42	NM	682.29
	7/13/2015	692.71	8.81	NM	683.90
	3/12/2018	692.71	10.01	NM	682.70
	1/7/2020	692.71	9.10	NM	683.61

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-29A	2/9/2009	696.28	49.15	79.65	647.13
	2/25/2009	696.28	55.32	NM	640.96
	3/3/2009	696.28	16.36	NM	679.92
	3/11/2009	696.28	7.22	NM	689.06
	3/17/2009	696.28	2.81	NM	693.47
	3/25/2009	696.28	1.23	NM	695.05
	3/31/2009	696.28	1.06	NM	695.22
	4/20/2009	696.28	0.13	NM	696.15
	4/29/2009	696.28	0.17	NM	696.11
	5/6/2009	696.28	0.09	NM	696.19
	5/11/2009	696.28	0.06	NM	696.22
	5/20/2009	696.28	0.08	NM	696.20
	5/27/2009	696.28	0.00	NM	696.28
	6/8/2009	696.28	0.13	NM	696.15
	6/15/2009	696.28	0.08	NM	696.20
	6/25/2009	696.28	0.04	NM	696.24
	8/5/2009	696.28	0.00	NM	696.28
	8/13/2009	696.28	9.78	NM	686.50
	8/26/2009	696.28	1.84	NM	694.44
	10/2/2009	696.28	0.09	NM	696.19
	10/6/2009	696.28	0.16	NM	696.12
	12/9/2009	696.28	0.00	NM	696.28
	12/18/2009	696.28	4.04	NM	692.24
	1/18/2010	696.28	0.24	NM	696.04
	1/19/2010	696.28	36.72	NM	659.56
	1/20/2010	696.28	31.36	NM	664.92
	1/21/2010	696.28	28.49	NM	667.79
	1/22/2010	696.28	26.28	NM	670.00
	1/25/2010	696.28	20.14	NM	676.14
	1/26/2010	696.28	18.52	NM	677.76
	4/29/2010	696.28	0.20	NM	696.08
	5/17/2010	696.28	0.35	NM	695.93
	6/15/2010	696.28	0.38	NM	695.90
	8/30/2010	696.28	0.07	NM	696.21
	9/20/2010	696.28	0.00	NM	696.28
	12/13/2010	696.28	0.00	NM	696.28
	2/18/2011	696.28	0.69	NM	695.59
	3/7/2011	696.28	0.13	NM	696.15
	6/21/2011	696.28	0.20	NM	696.08
	9/26/2011	696.28	0.00	NM	696.28
	12/12/2011	696.28	0.00	NM	696.28
	4/2/2012	696.28	0.00	NM	696.28
	7/9/2012	696.28	0.00	NM	696.28
	10/1/2012	696.28	0.00	NM	696.28
	7/13/2015	696.28	0.12	NM	696.16
	3/12/2018	696.28	0.00	NM	696.28

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-29B	2/9/2009	696.23	15.63	40.70	680.60
	2/25/2009	696.23	11.63	NM	684.60
	3/3/2009	696.23	14.22	NM	682.01
	3/11/2009	696.23	10.86	NM	685.37
	3/17/2009	696.23	10.10	NM	686.13
	3/25/2009	696.23	10.79	NM	685.44
	3/31/2009	696.23	10.83	NM	685.40
	4/20/2009	696.23	6.44	NM	689.79
	4/29/2009	696.23	10.08	NM	686.15
	5/6/2009	696.23	11.08	NM	685.15
	5/11/2009	696.23	11.53	NM	684.70
	5/20/2009	696.23	10.48	NM	685.75
	5/27/2009	696.23	10.96	NM	685.27
	6/8/2009	696.23	11.15	NM	685.08
	6/15/2009	696.23	10.84	NM	685.39
	6/25/2009	696.23	10.43	NM	685.80
	6/30/2009	696.23	10.49	NM	685.74
	7/31/2009	696.23	8.84	NM	687.39
	8/5/2009	696.23	9.11	NM	687.12
	8/13/2009	696.23	10.89	NM	685.34
	8/26/2009	696.23	9.67	NM	686.56
	10/2/2009	696.23	7.93	NM	688.30
	10/6/2009	696.23	8.08	NM	688.15
	12/9/2009	696.23	6.94	NM	689.29
	12/18/2009	696.23	18.30	NM	677.93
	1/18/2010	696.23	7.96	NM	688.27
	1/19/2010	696.23	27.30	NM	668.93
	1/20/2010	696.23	22.34	NM	673.89
	1/21/2010	696.23	19.19	NM	677.04
	1/22/2010	696.23	16.66	NM	679.57
	1/25/2010	696.23	12.03	NM	684.20
	1/26/2010	696.23	11.31	NM	684.92
	2/3/2010	696.23	10.45	NM	685.78
	2/22/2010	696.23	8.22	NM	688.01
	3/1/2010	696.23	10.00	NM	686.23
	3/8/2010	696.23	9.18	NM	687.05
	4/16/2010	696.23	10.56	NM	685.67
	6/1/2010	696.23	11.58	NM	684.65
	6/15/2010	696.23	11.16	NM	685.07
	7/6/2010	696.23	10.83	NM	685.40
	8/3/2010	696.23	10.09	NM	686.14
	8/10/2010	696.23	9.82	NM	686.41
	8/30/2010	696.23	9.45	NM	686.78
	9/20/2010	696.23	8.67	NM	687.56
	12/13/2010	696.23	7.96	NM	688.27
	2/22/2011	696.23	8.32	NM	687.91
	3/4/2011	696.23	7.85	NM	688.38
	3/7/2011	696.23	8.56	NM	687.67
	3/28/2011	696.23	9.95	NM	686.28
	6/21/2011	696.23	11.34	NM	684.89
	9/26/2011	696.23	8.70	NM	687.53
	7/13/2015	696.23	8.08	NM	688.15
	3/12/2018	696.23	6.60	NM	689.63

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-30A	11/4/2009	691.39	6.98	33.30	684.41
	12/9/2009	691.39	7.39	NM	684.00
	1/19/2010	691.39	8.32	NM	683.07
	6/15/2010	691.39	6.78	NM	684.61
	8/30/2010	691.39	8.84	NM	682.55
	9/20/2010	691.39	8.83	NM	682.56
	12/13/2010	691.39	7.90	NM	683.49
	3/7/2011	691.39	6.52	NM	684.87
	6/21/2011	691.39	7.63	NM	683.76
	9/26/2011	691.39	7.51	NM	683.88
	12/12/2011	691.39	7.61	NM	683.78
	4/2/2012	691.39	8.03	NM	683.36
	7/9/2012	691.39	8.74	NM	682.65
	10/1/2012	691.39	8.19	NM	683.20
	7/13/2015	691.39	5.43	NM	685.96
	3/12/2018	691.39	9.01	NM	682.38

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-30B	11/4/2009	691.58	33.90	48.80	657.68
	12/9/2009	691.58	23.32	NM	668.26
	6/15/2010	691.58	9.98	NM	681.60
	8/30/2010	691.58	12.62	NM	678.96
	9/20/2010	691.58	11.75	NM	679.83
	12/13/2010	691.58	11.31	NM	680.27
	3/7/2011	691.58	9.91	NM	681.67
	6/21/2011	691.58	8.60	NM	682.98
	9/26/2011	691.58	10.95	NM	680.63
	12/12/2011	691.58	9.73	NM	681.85
	4/2/2012	691.58	7.84	NM	683.74
	7/9/2012	691.58	10.41	NM	681.17
	10/1/2012	691.58	11.52	NM	680.06
	7/13/2015	691.58	8.40	NM	683.18
	3/12/2018	691.58	6.74	NM	684.84

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-31A	11/4/2009	692.88	4.87	26.29	688.01
	12/9/2009	692.88	4.13	NM	688.75
	1/19/2010	692.88	4.96	NM	687.92
	6/15/2010	692.88	3.75	NM	689.13
	8/30/2010	692.88	6.33	NM	686.55
	9/20/2010	692.88	6.38	NM	686.50
	12/13/2010	692.88	4.84	NM	688.04
	2/18/2011	692.88	5.07	NM	687.81
	3/7/2011	692.88	3.74	NM	689.14
	6/21/2011	692.88	4.81	NM	688.07
	9/26/2011	692.88	4.14	NM	688.74
	12/12/2011	692.88	4.66	NM	688.22
	4/2/2012	692.88	4.55	NM	688.33
	7/9/2012	692.88	5.60	NM	687.28
	10/1/2012	692.88	4.90	NM	687.98
	7/13/2015	692.88	4.90	NM	687.98
	3/12/2018	692.88	4.65	NM	688.23
	12/17/2019	692.88	4.55	NM	688.33

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-31B	11/4/2009	692.55	19.25	63.18	673.30
	12/9/2009	692.55	0.08	NM	692.47
	1/18/2010	692.55	0.12	NM	692.43
	1/19/2010	692.55	40.95	NM	651.60
	1/20/2010	692.55	35.22	NM	657.33
	1/21/2010	692.55	30.61	NM	661.94
	1/22/2010	692.55	26.36	NM	666.19
	1/25/2010	692.55	16.36	NM	676.19
	4/29/2010	692.55	0.00	NM	692.55
	5/17/2010	692.55	0.16	NM	692.39
	6/15/2010	692.55	0.22	NM	692.33
	9/20/2010	692.55	2.31	NM	690.24
	12/13/2010	692.55	0.00	NM	692.55
	2/18/2011	692.55	0.00	NM	692.55
	3/7/2011	692.55	0.00	NM	692.55
	6/21/2011	692.55	0.00	NM	692.55
	9/26/2011	692.55	0.00	NM	692.55
	12/12/2011	692.55	0.00	NM	692.55
	4/2/2012	692.55	0.00	NM	692.55
	7/9/2012	692.55	0.00	NM	692.55
	10/1/2012	692.55	0.00	NM	692.55
	7/13/2015	692.55	0.00	NM	692.55
	3/12/2018	692.55	0.00	NM	692.55

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-31C	11/4/2009	692.80	32.97	35.67	659.83
	12/9/2009	692.80	28.03	NM	664.77
	1/19/2010	692.80	18.10	NM	674.70
	1/20/2010	692.80	32.37	NM	660.43
	1/21/2010	692.80	32.15	NM	660.65
	1/22/2010	692.80	31.92	NM	660.88
	1/25/2010	692.80	31.25	NM	661.55
	1/26/2010	692.80	30.71	NM	662.09
	6/15/2010	692.80	8.85	NM	683.95
	8/30/2010	692.80	9.40	NM	683.40
	9/20/2010	692.80	8.82	NM	683.98
	12/13/2010	692.80	9.03	NM	683.77
	2/18/2011	692.80	10.02	NM	682.78
	3/7/2011	692.80	9.12	NM	683.68
	6/21/2011	692.80	9.01	NM	683.79
	9/26/2011	692.80	9.35	NM	683.45
	12/12/2011	692.80	8.76	NM	684.04
	4/2/2012	692.80	8.67	NM	684.13
	7/9/2012	692.80	9.90	NM	682.90
	10/1/2012	692.80	12.86	NM	679.94
	7/13/2015	692.80	6.98	NM	685.82
	3/12/2018	692.80	6.72	NM	686.08

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-32A	11/4/2009	690.51	6.33	27.17	684.18
	12/9/2009	690.51	6.26	NM	684.25
	12/28/2009	690.51	7.56	NM	682.95
	1/14/2010	690.51	7.64	NM	682.87
	1/21/2010	690.51	7.20	NM	683.31
	6/15/2010	690.51	5.51	NM	685.00
	9/20/2010	690.51	8.88	NM	681.63
	12/13/2010	690.51	6.70	NM	683.81
	3/7/2011	690.51	5.48	NM	685.03
	6/21/2011	690.51	6.32	NM	684.19
	9/26/2011	690.51	6.27	NM	684.24
	12/12/2011	690.51	6.55	NM	683.96
	4/2/2012	690.51	6.96	NM	683.55
	7/9/2012	690.51	8.28	NM	682.23
	10/1/2012	690.51	7.28	NM	683.23
	7/13/2015	690.51	5.31	NM	685.20
	3/12/2018	690.51	8.40	NM	682.11
	1/7/2020	690.51	7.15	NM	683.36

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-32B	5/2/2012	690.19	5.96	49.30	684.23
	7/9/2012	690.19	8.15	NM	682.04
	10/1/2012	690.19	6.96	NM	683.23
	7/13/2015	690.19	5.00	NM	685.19
	3/12/2018	690.19	8.10	NM	682.09

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-32C	5/2/2012	690.18	5.96	33.62	684.22
	7/9/2012	690.18	7.94	NM	682.24
	10/1/2012	690.18	6.95	NM	683.23
	7/13/2015	690.18	5.08	NM	685.10
	3/12/2018	690.18	8.12	NM	682.06

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-33A	11/23/2009	703.07	31.53	49.84	671.54
	12/9/2009	703.07	38.56	NM	664.51
	3/14/2010	703.07	18.74	47.70	684.33
	6/15/2010	703.07	20.81	47.70	682.26
	9/20/2010	703.07	26.42	47.70	676.65
	12/13/2010	703.07	21.09	47.70	681.98
	3/7/2011	703.07	19.00	NM	684.07
	6/21/2011	703.07	19.52	NM	683.55
	9/26/2011	703.07	23.88	NM	679.19
	3/1/2012	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-33B	11/23/2009	704.53	22.80	69.75	681.73
	12/9/2009	704.53	24.26	NM	680.27
	3/14/2010	704.53	13.60	69.28	690.93
	6/15/2010	704.53	18.34	69.28	686.19
	9/20/2010	704.53	12.98	69.28	691.55
	12/13/2010	704.53	12.72	69.28	691.81
	3/7/2011	704.53	11.72	NM	692.81
	6/21/2011	704.53	11.64	NM	692.89
	9/26/2011	704.53	12.51	NM	692.02
	3/1/2012	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-33C	11/23/2009	704.68	19.86	34.63	684.82
	12/9/2009	704.68	19.23	NM	685.45
	3/14/2010	704.68	19.22	31.12	685.46
	6/15/2010	704.68	18.26	31.12	686.42
	9/20/2010	704.68	19.50	31.12	685.18
	12/13/2010	704.68	18.25	31.12	686.43
	3/7/2011	704.68	16.72	NM	687.96
	6/21/2011	704.68	17.78	NM	686.90
	9/26/2011	704.68	18.21	NM	686.47
	3/1/2012	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-34A	11/23/2009	688.01	6.01	29.83	682.00
	12/9/2009	688.01	5.26	NM	682.75
	1/13/2010	688.01	5.98	NM	682.03
	1/14/2010	688.01	6.06	NM	681.95
	6/15/2010	688.01	5.01	NM	683.00
	8/30/2010	688.01	7.15	NM	680.86
	9/20/2010	688.01	7.11	NM	680.90
	12/13/2010	688.01	5.93	NM	682.08
	2/18/2011	688.01	6.27	NM	681.74
	3/7/2011	688.01	4.49	NM	683.52
	6/21/2011	688.01	5.41	NM	682.60
	9/26/2011	688.01	6.15	NM	681.86
	12/12/2011	688.01	5.45	NM	682.56
	4/2/2012	688.01	6.12	NM	681.89
	7/9/2012	688.01	6.82	NM	681.19
	10/1/2012	688.01	6.04	NM	681.97
	7/13/2015	688.01	4.46	NM	683.55
	3/12/2018	688.01	6.91	NM	681.10
	12/17/2019	688.01	6.50	NM	681.51

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-35A	2/24/2010	706.06	10.02	29.24	696.04
	2/25/2010	706.06	10.02	29.00	696.04
	4/22/2010	706.06	16.08	NM	689.98
	6/15/2010	706.06	8.96	NM	697.10
	9/20/2010	706.06	17.74	NM	688.32
	12/13/2010	706.06	14.50	NM	691.56
	3/7/2011	706.06	8.76	NM	697.30
	6/21/2011	706.06	11.06	NM	695.00
	9/26/2011	706.06	10.49	NM	695.57
	12/12/2011	706.06	11.61	NM	694.45
	4/2/2012	706.06	13.27	NM	692.79
	7/9/2012	706.06	17.78	NM	688.28
	10/1/2012	706.06	17.33	NM	688.73
	7/13/2015	706.06	9.70	NM	696.36
	3/12/2018	706.06	16.71	NM	689.35

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-35B	2/24/2010	706.37	10.34	29.65	696.03
	2/25/2010	706.37	10.50	29.65	695.87
	4/22/2010	706.37	16.40	NM	689.97
	6/15/2010	706.37	9.30	NM	697.07
	9/20/2010	706.37	18.06	NM	688.31
	12/13/2010	706.37	15.25	NM	691.12
	3/7/2011	706.37	9.08	NM	697.29
	6/21/2011	706.37	11.39	NM	694.98
	9/26/2011	706.37	10.81	NM	695.56
	12/12/2011	706.37	10.93	NM	695.44
	4/2/2012	706.37	13.58	NM	692.79
	7/9/2012	706.37	18.09	NM	688.28
	10/1/2012	706.37	17.65	NM	688.72
	7/13/2015	706.37	10.03	NM	696.34
	3/12/2018	706.37	17.04	NM	689.33
	12/16/2019	706.37	NM	NM	NM

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-35C	2/24/2010	706.38	43.64	48.24	662.74
	2/25/2010	706.38	42.46	47.60	663.92
	4/22/2010	706.38	33.99	NM	672.39
	4/23/2010	706.38	42.45	NM	663.93
	4/26/2010	706.38	41.87	NM	664.51
	4/27/2010	706.38	41.61	NM	664.77
	6/15/2010	706.38	29.44	NM	676.94
	9/20/2010	706.38	18.89	NM	687.49
	12/13/2010	706.38	16.96	NM	689.42
	3/7/2011	706.38	16.60	NM	689.78
	6/21/2011	706.38	17.06	NM	689.32
	9/26/2011	706.38	18.25	NM	688.13
	12/12/2011	706.38	15.19	NM	691.19
	4/2/2012	706.38	17.06	NM	689.32
	7/9/2012	706.38	19.37	NM	687.01
	10/1/2012	706.38	17.14	NM	689.24
	7/13/2015	706.38	16.55	NM	689.83
	3/12/2018	706.38	15.21	NM	691.17
	12/17/2019	706.38	15.16	NM	691.22

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-36A	2/24/2010	700.44	17.54	27.21	682.90
	2/25/2010	700.44	17.86	27.21	682.58
	4/22/2010	700.44	18.73	NM	681.71
	6/15/2010	700.44	16.68	NM	683.76
	9/20/2010	700.44	19.33	NM	681.11
	12/13/2010	700.44	18.56	NM	681.88
	3/7/2011	700.44	16.31	NM	684.13
	6/21/2011	700.44	18.45	NM	681.99
	9/26/2011	700.44	17.95	NM	682.49
	12/12/2011	700.44	18.34	NM	682.10
	4/2/2012	700.44	18.62	NM	681.82
	7/9/2012	700.44	19.19	NM	681.25
	10/1/2012	700.44	18.92	NM	681.52
	7/13/2015	700.44	10.70	NM	689.74
	3/12/2018	700.44	19.79	NM	680.65
	12/17/2019	700.44	16.95	NM	683.49

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-36B	2/24/2010	700.45	17.53	37.36	682.92
	2/25/2010	700.45	17.81	37.70	682.64
	4/22/2010	700.45	18.72	NM	681.73
	6/15/2010	700.45	16.67	NM	683.78
	9/20/2010	700.45	19.33	NM	681.12
	9/24/2010	700.45	19.31	NM	681.14
	10/1/2010	700.45	19.28	NM	681.17
	10/5/2010	700.45	19.28	NM	681.17
	10/12/2010	700.45	19.29	NM	681.16
	10/18/2010	700.45	19.24	NM	681.21
	10/29/2010	700.45	18.26	NM	682.19
	12/10/2010	700.45	18.98	NM	681.47
	12/13/2010	700.45	18.56	NM	681.89
	12/28/2010	700.45	19.00	NM	681.45
	1/3/2011	700.45	18.07	NM	682.38
	1/10/2011	700.45	18.95	NM	681.50
	1/17/2011	700.45	19.01	NM	681.44
	2/18/2011	700.45	18.89	NM	681.56
	2/22/2011	700.45	15.74	NM	684.71
	3/4/2011	700.45	17.64	NM	682.81
	3/7/2011	700.45	16.40	NM	684.05
	3/18/2011	700.45	18.23	NM	682.22
	3/28/2011	700.45	18.75	NM	681.70
	6/21/2011	700.45	18.31	NM	682.14
	9/26/2011	700.45	17.12	NM	683.33
	7/13/2015	700.45	14.30	NM	686.15
	3/12/2018	700.45	20.81	NM	679.64

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-36C	2/24/2010	700.85	53.26	63.30	647.59
	2/25/2010	700.85	53.94	64.00	646.91
	4/22/2010	700.85	42.61	NM	658.24
	4/23/2010	700.85	51.09	NM	649.76
	4/26/2010	700.85	50.22	NM	650.63
	4/27/2010	700.85	49.93	NM	650.92
	4/29/2010	700.85	49.48	NM	651.37
	5/11/2010	700.85	48.22	NM	652.63
	6/1/2010	700.85	44.88	NM	655.97
	6/9/2010	700.85	43.44	NM	657.41
	6/15/2010	700.85	43.98	NM	656.87
	6/24/2010	700.85	43.66	NM	657.19
	7/6/2010	700.85	39.65	NM	661.20
	7/13/2010	700.85	39.13	NM	661.72
	7/20/2010	700.85	38.62	NM	662.23
	8/3/2010	700.85	34.97	NM	665.88
	8/10/2010	700.85	35.45	NM	665.40
	8/17/2010	700.85	35.21	NM	665.64
	8/23/2010	700.85	33.53	NM	667.32
	8/30/2010	700.85	32.09	NM	668.76
	9/20/2010	700.85	31.05	NM	669.80
	9/24/2010	700.85	38.68	NM	662.17
	10/1/2010	700.85	37.66	NM	663.19
	10/5/2010	700.85	37.69	NM	663.16
	10/12/2010	700.85	36.74	NM	664.11
	10/18/2010	700.85	36.31	NM	664.54
	10/29/2010	700.85	34.40	NM	666.45
	12/10/2010	700.85	25.85	NM	675.00
	12/13/2010	700.85	28.03	NM	672.82
	12/28/2010	700.85	32.97	NM	667.88
	1/3/2011	700.85	32.72	NM	668.13
	1/10/2011	700.85	32.24	NM	668.61
	1/17/2011	700.85	31.77	NM	669.08
	2/18/2011	700.85	25.95	NM	674.90
	2/22/2011	700.85	25.33	NM	675.52
	3/4/2011	700.85	24.73	NM	676.12
	3/7/2011	700.85	25.49	NM	675.36
	3/18/2011	700.85	31.42	NM	669.43
	3/28/2011	700.85	32.35	NM	668.50
	6/21/2011	700.85	23.89	NM	676.96
	9/26/2011	700.85	23.21	NM	677.64
	7/13/2015	700.85	16.38	NM	684.47
	3/12/2018	700.85	16.58	NM	684.27

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-37A	2/24/2010	687.29	6.12	19.41	681.17
	2/25/2010	687.29	6.20	19.41	681.09
	4/22/2010	687.29	7.06	NM	680.23
	6/15/2010	687.29	5.81	NM	681.48
	9/20/2010	687.29	7.74	NM	679.55
	12/13/2010	687.29	7.00	NM	680.29
	3/7/2011	687.29	5.59	NM	681.70
	6/21/2011	687.29	6.69	NM	680.60
	9/26/2011	687.29	7.06	NM	680.23
	12/12/2011	687.29	6.50	NM	680.79
	4/2/2012	687.29	6.99	NM	680.30
	7/9/2012	687.29	7.61	NM	679.68
	10/1/2012	687.29	7.36	NM	679.93
	7/13/2015	687.29	5.46	NM	681.83
	3/12/2018	687.29	7.57	NM	679.72

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-37B	2/24/2010	687.23	2.96	34.84	684.27
	2/25/2010	687.23	3.09	34.71	684.14
	4/22/2010	687.23	4.25	NM	682.98
	6/15/2010	687.23	2.46	NM	684.77
	9/20/2010	687.23	5.59	NM	681.64
	12/13/2010	687.23	3.56	NM	683.67
	3/7/2011	687.23	2.39	NM	684.84
	6/21/2011	687.23	3.23	NM	684.00
	9/26/2011	687.23	3.16	NM	684.07
	12/12/2011	687.23	3.39	NM	683.84
	4/2/2012	687.23	3.81	NM	683.42
	7/9/2012	687.23	5.05	NM	682.18
	10/1/2012	687.23	4.09	NM	683.14
	7/13/2015	687.23	2.29	NM	684.94
	3/12/2018	687.23	5.38	NM	681.85

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-37C	9/12/2011	686.88	43.65	48.47	643.23
	9/26/2011	686.88	40.05	NM	646.83
	12/12/2011	686.88	8.91	NM	677.97
	4/2/2012	686.88	2.75	NM	684.13
	7/9/2012	686.88	4.54	NM	682.34
	10/1/2012	686.88	4.96	NM	681.92
	7/13/2015	686.88	3.68	NM	683.20
	3/12/2018	686.88	3.16	NM	683.72

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-38A	4/14/2010	700.99	17.20	34.80	683.79
	4/21/2010	700.99	17.52	NM	683.47
	4/29/2010	700.99	17.08	NM	683.91
	5/17/2010	700.99	16.91	NM	684.08
	6/15/2010	700.99	16.59	NM	684.40
	9/20/2010	700.99	18.18	NM	682.81
	12/13/2010	700.99	17.24	NM	683.75
	3/7/2011	700.99	16.47	NM	684.52
	6/21/2011	700.99	17.02	NM	683.97
	9/26/2011	700.99	16.93	NM	684.06
	12/12/2011	700.99	17.06	NM	683.93
	4/2/2012	700.99	17.29	NM	683.70
	7/9/2012	700.99	17.91	NM	683.08
	10/1/2012	700.99	17.45	NM	683.54
	7/13/2015	700.99	15.63	NM	685.36
	3/12/2018	700.99	17.56	NM	683.43
	12/17/2019	700.99	16.68	NM	684.31

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-38B	4/14/2010	700.55	16.78	34.83	683.77
	4/21/2010	700.55	17.10	NM	683.45
	4/29/2010	700.55	16.60	NM	683.95
	5/17/2010	700.55	16.48	NM	684.07
	6/15/2010	700.55	16.17	NM	684.38
	8/30/2010	700.55	17.65	NM	682.90
	9/20/2010	700.55	17.72	NM	682.83
	12/13/2010	700.55	16.80	NM	683.75
	2/18/2011	700.55	17.08	NM	683.47
	3/7/2011	700.55	16.04	NM	684.51
	6/21/2011	700.55	16.56	NM	683.99
	9/26/2011	700.55	16.48	NM	684.07
	12/12/2011	700.55	16.60	NM	683.95
	4/2/2012	700.55	16.84	NM	683.71
	7/9/2012	700.55	17.49	NM	683.06
	10/1/2012	700.55	17.01	NM	683.54
	7/13/2015	700.55	15.13	NM	685.42
	3/12/2018	700.55	17.12	NM	683.43

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-38C	4/14/2010	700.20	29.70	67.77	670.50
	4/21/2010	700.20	25.29	NM	674.91
	4/22/2010	700.20	49.28	NM	650.92
	4/23/2010	700.20	46.09	NM	654.11
	4/26/2010	700.20	38.02	NM	662.18
	4/27/2010	700.20	35.37	NM	664.83
	4/29/2010	700.20	31.46	NM	668.74
	5/17/2010	700.20	16.44	NM	683.76
	6/15/2010	700.20	6.16	NM	694.04
	9/20/2010	700.20	6.63	NM	693.57
	12/13/2010	700.20	6.94	NM	693.26
	3/7/2011	700.20	4.01	NM	696.19
	6/21/2011	700.20	2.63	NM	697.57
	9/26/2011	700.20	15.75	NM	684.45
	12/12/2011	700.20	6.28	NM	693.92
	4/2/2012	700.20	2.91	NM	697.29
	7/9/2012	700.20	3.23	NM	696.97
	10/1/2012	700.20	5.31	NM	694.89
	7/13/2015	700.20	2.51	NM	697.69
	3/12/2018	700.20	2.83	NM	697.37

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-38D	4/14/2010	700.37	43.77	50.16	656.60
	4/21/2010	700.37	45.38	NM	654.99
	4/22/2010	700.37	48.15	NM	652.22
	4/23/2010	700.37	47.64	NM	652.73
	4/26/2010	700.37	47.04	NM	653.33
	4/27/2010	700.37	46.75	NM	653.62
	4/29/2010	700.37	46.31	NM	654.06
	5/17/2010	700.37	42.34	NM	658.03
	6/15/2010	700.37	34.84	NM	665.53
	9/20/2010	700.37	20.02	NM	680.35
	12/13/2010	700.37	18.04	NM	682.33
	3/7/2011	700.37	17.17	NM	683.20
	6/21/2011	700.37	17.50	NM	682.87
	9/26/2011	700.37	18.00	NM	682.37
	12/12/2011	700.37	17.96	NM	682.41
	4/2/2012	700.37	16.95	NM	683.42
	7/9/2012	700.37	18.11	NM	682.26
	10/1/2012	700.37	18.41	NM	681.96
	7/13/2015	700.37	16.40	NM	683.97
	3/12/2018	700.37	15.71	NM	684.66

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-39A	4/14/2010	694.06	31.75	37.68	662.31
	4/19/2010	694.06	35.03	NM	659.03
	4/21/2010	694.06	35.03	NM	659.03
	4/22/2010	694.06	37.18	NM	656.88
	4/23/2010	694.06	36.73	NM	657.33
	4/26/2010	694.06	35.33	NM	658.73
	4/27/2010	694.06	34.69	NM	659.37
	5/11/2010	694.06	30.59	NM	663.47
	6/1/2010	694.06	28.78	NM	665.28
	6/9/2010	694.06	29.19	NM	664.87
	6/15/2010	694.06	30.47	NM	663.59
	6/24/2010	694.06	30.35	NM	663.71
	7/6/2010	694.06	28.22	NM	665.84
	7/13/2010	694.06	27.29	NM	666.77
	7/20/2010	694.06	25.73	NM	668.33
	8/3/2010	694.06	25.69	NM	668.37
	8/10/2010	694.06	24.07	NM	669.99
	8/17/2010	694.06	26.81	NM	667.25
	8/23/2010	694.06	23.25	NM	670.81
	9/20/2010	694.06	21.30	NM	672.76
	10/1/2010	694.06	23.13	NM	670.93
	10/5/2010	694.06	25.35	NM	668.71
	10/12/2010	694.06	27.95	NM	666.11
	10/18/2010	694.06	28.04	NM	666.02
	10/29/2010	694.06	27.95	NM	666.11
	12/13/2010	694.06	15.27	NM	678.79
	12/28/2010	694.06	15.95	NM	678.11
	1/17/2011	694.06	9.50	NM	684.56
	3/7/2011	694.06	9.30	NM	684.76
	3/18/2011	694.06	13.75	NM	680.31
	6/21/2011	694.06	10.90	NM	683.16
	9/26/2011	694.06	19.17	NM	674.89
	7/13/2015	694.06	5.94	NM	688.12
	3/12/2018	694.06	6.18	NM	687.88

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-39B	4/14/2010	693.96	10.14	28.77	683.82
	4/21/2010	693.96	10.46	NM	683.50
	6/15/2010	693.96	9.62	NM	684.34
	9/20/2010	693.96	11.00	NM	682.96
	12/13/2010	693.96	10.21	NM	683.75
	3/7/2011	693.96	9.50	NM	684.46
	6/21/2011	693.96	9.98	NM	683.98
	9/26/2011	693.96	9.90	NM	684.06
	12/12/2011	693.96	9.97	NM	683.99
	4/2/2012	693.96	10.21	NM	683.75
	7/9/2012	693.96	10.77	NM	683.19
	10/1/2012	693.96	10.32	NM	683.64
	7/13/2015	696.96	9.07	NM	687.89
	3/14/2018	696.96	10.53	NM	686.43

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-40A	4/14/2010	694.36	3.78	48.30	690.58
	4/21/2010	694.36	4.12	NM	690.24
	6/15/2010	694.36	3.75	NM	690.61
	9/20/2010	694.36	1.36	NM	693.00
	12/13/2010	694.36	0.00	NM	694.36
	2/18/2011	694.36	2.02	NM	692.34
	3/7/2011	694.36	2.09	NM	692.27
	6/21/2011	694.36	3.32	NM	691.04
	9/26/2011	694.36	0.03	NM	694.33
	12/12/2011	694.36	0.00	NM	694.36
	4/2/2012	694.36	3.20	NM	691.16
	7/9/2012	694.36	3.49	NM	690.87
	10/1/2012	694.36	0.00	NM	694.36
	7/13/2015	694.36	2.41	NM	691.95
	3/12/2018	694.36	0.00	NM	694.36
	12/16/2019	694.36	1.09	NM	693.27

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-40B	4/14/2010	694.77	4.00	29.12	690.77
	4/21/2010	694.77	4.93	NM	689.84
	6/15/2010	694.77	3.70	NM	691.07
	9/20/2010	694.77	7.63	NM	687.14
	12/13/2010	694.77	4.75	NM	690.02
	2/18/2011	694.77	4.95	NM	689.82
	3/7/2011	694.77	3.55	NM	691.22
	6/21/2011	694.77	4.33	NM	690.44
	9/26/2011	694.77	5.64	NM	689.13
	12/12/2011	694.77	4.36	NM	690.41
	4/2/2012	694.77	4.18	NM	690.59
	7/9/2012	694.77	7.05	NM	687.72
	10/1/2012	694.77	4.78	NM	689.99
	7/13/2015	694.77	3.50	NM	691.27
	3/12/2018	694.77	3.84	NM	690.93

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-40C	4/14/2010	694.78	3.53	16.11	691.25
	4/22/2010	694.78	4.34	NM	690.44
	6/15/2010	694.78	3.02	NM	691.76
	8/30/2010	694.78	7.14	NM	687.64
	9/20/2010	694.78	7.40	NM	687.38
	12/13/2010	694.78	4.15	NM	690.63
	12/18/2011	694.78	4.36	NM	690.42
	3/7/2011	694.78	3.05	NM	691.73
	6/21/2011	694.78	3.76	NM	691.02
	9/26/2011	694.78	5.59	NM	689.19
	12/12/2011	694.78	4.06	NM	690.72
	4/2/2012	694.78	3.46	NM	691.32
	7/9/2012	694.78	7.27	NM	687.51
	10/1/2012	694.78	3.26	NM	691.52
	7/13/2015	694.78	2.92	NM	691.86
	3/12/2018	694.78	3.40	NM	691.38
	12/16/2019	694.78	3.88	NM	690.90

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-41A	12/13/2010	702.57	18.57	36.04	684.00
	3/7/2011	702.57	17.83	NM	684.74
	6/21/2011	702.57	18.51	NM	684.06
	9/26/2011	702.57	18.25	NM	684.32
	12/12/2011	702.57	18.44	NM	684.13
	4/2/2012	702.57	18.77	NM	683.80
	7/9/2012	702.57	19.32	NM	683.25
	10/1/2012	702.57	18.85	NM	683.72
	7/13/2015	702.57	14.70	NM	687.87
	3/16/2018	702.57	19.21	NM	683.36

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-42A	12/13/2010	696.11	26.68	35.44	669.43
	3/7/2011	696.11	12.66	NM	683.45
	6/21/2011	696.11	13.61	NM	682.50
	9/26/2011	696.11	10.80	NM	685.31
	12/12/2011	696.11	10.20	NM	685.91
	4/2/2012	696.11	11.05	NM	685.06
	7/9/2012	696.11	11.35	NM	684.76
	10/1/2012	696.11	6.51	NM	689.60
	7/13/2015	696.11	17.80	NM	678.31
	3/12/2018	696.11	10.15	NM	685.96

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-42B	12/13/2010	696.06	36.76	45.41	659.30
	3/7/2011	696.06	22.21	NM	673.85
	6/21/2011	696.06	14.92	NM	681.14
	9/26/2011	696.06	16.16	NM	679.90
	12/12/2011	696.06	15.86	NM	680.20
	4/2/2012	696.06	12.97	NM	683.09
	7/9/2012	696.06	14.74	NM	681.32
	10/1/2012	696.06	1.73	NM	694.33
	7/13/2015	696.06	14.28	NM	681.78
	3/12/2018	696.06	7.33	NM	688.73

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-43A	12/13/2010	690.93	7.13	28.87	683.80
	3/7/2011	690.93	5.89	NM	685.04
	6/21/2011	690.93	6.78	NM	684.15
	9/26/2011	690.93	6.75	NM	684.18
	12/12/2011	690.93	6.93	NM	684.00
	4/2/2012	690.93	7.35	NM	683.58
	7/9/2012	690.93	8.65	NM	682.28
	10/1/2012	690.93	7.64	NM	683.29
	7/13/2015	690.93	5.57	NM	685.36
	3/12/2018	690.93	8.52	NM	682.41

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-44A	12/13/2010	704.46	10.16	27.92	694.30
	3/7/2011	704.46	5.77	NM	698.69
	6/21/2011	704.46	7.58	NM	696.88
	9/26/2011	704.46	9.29	NM	695.17
	12/12/2011	704.46	7.27	NM	697.19
	4/2/2012	704.46	10.70	NM	693.76
	7/9/2012	704.46	12.56	NM	691.90
	10/1/2012	704.46	11.06	NM	693.40
	7/13/2015	704.46	6.84	NM	697.62
	3/12/2018	704.46	12.04	NM	692.42

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-45A	12/13/2010	700.80	50.24	58.70	650.56
	3/7/2011	700.80	30.34	NM	670.46
	6/21/2011	700.80	20.83	NM	679.97
	9/26/2011	700.80	19.60	NM	681.20
	12/12/2011	700.80	18.23	NM	682.57
	4/2/2012	700.80	17.69	NM	683.11
	7/9/2012	700.80	18.82	NM	681.98
	10/1/2012	700.80	24.56	NM	676.24
	7/13/2015	700.80	14.70	NM	686.10
	3/12/2018	700.80	12.89	NM	687.91

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-45B	12/13/2010	700.76	33.58	42.66	667.18
	3/7/2011	700.76	27.19	NM	673.57
	6/21/2011	700.76	24.35	NM	676.41
	9/26/2011	700.76	22.26	NM	678.50
	12/12/2011	700.76	20.83	NM	679.93
	4/2/2012	700.76	22.11	NM	678.65
	7/9/2012	700.76	23.05	NM	677.71
	10/1/2012	700.76	22.42	NM	678.34
	7/13/2015	700.76	17.80	NM	682.96
	3/12/2018	700.76	17.85	NM	682.91

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-45C	12/13/2010	700.59	18.10	24.17	682.49
	3/7/2011	700.59	15.15	NM	685.44
	6/21/2011	700.59	17.95	NM	682.64
	9/26/2011	700.59	17.64	NM	682.95
	12/12/2011	700.59	17.85	NM	682.74
	4/2/2012	700.59	18.32	NM	682.27
	7/9/2012	700.59	19.05	NM	681.54
	10/1/2012	700.59	18.71	NM	681.88
	7/13/2015	700.59	14.28	NM	686.31
	3/12/2018	700.59	19.48	NM	681.11
	12/17/2019	700.59	16.89	NM	683.70

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-46A	12/13/2010	688.81	5.25	38.06	683.56
	3/7/2011	688.81	4.83	NM	683.98
	6/21/2011	688.81	4.90	NM	683.91
	9/26/2011	688.81	4.85	NM	683.96
	12/12/2011	688.81	5.04	NM	683.77
	4/2/2012	688.81	5.48	NM	683.33
	7/9/2012	688.81	6.72	NM	682.09
	10/1/2012	688.81	5.75	NM	683.06
	7/13/2015	688.81	3.88	NM	684.93
	3/12/2018	688.81	7.11	NM	681.70
	1/7/2020	688.81	6.00	NM	682.81

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-47A	12/13/2010	683.38	4.60	32.60	678.78
	3/7/2011	683.38	4.32	NM	679.06
	6/21/2011	683.38	4.59	NM	678.79
	9/26/2011	683.38	4.57	NM	678.81
	12/12/2011	683.38	4.24	NM	679.14
	4/2/2012	683.38	4.64	NM	678.74
	7/9/2012	683.38	6.00	NM	677.38
	10/1/2012	683.38	4.76	NM	678.62
	7/13/2015	683.38	4.01	NM	679.37
	3/28/2018	683.38	4.95	NM	678.43
	12/17/2019	683.38	5.90	NM	677.48

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-48A	1/11/2011	708.53	47.75	71.38	660.78
	6/21/2011	708.53	40.28	NM	668.25
	9/26/2011	708.53	32.06	NM	676.47
	7/13/2015	708.53	22.26	NM	686.27
	3/12/2018	708.53	24.36	NM	684.17

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-48B	1/11/2011	708.52	28.50	52.37	680.02
	6/21/2011	708.52	25.36	NM	683.16
	9/26/2011	708.52	25.13	NM	683.39
	12/12/2011	708.52	25.53	NM	682.99
	4/2/2012	708.52	25.44	NM	683.08
	7/9/2012	708.52	26.17	NM	682.35
	10/1/2012	708.52	26.48	NM	682.04
	7/13/2015	708.52	22.15	NM	686.37
	3/12/2018	708.52	26.82	NM	681.70

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-49A	8/16/2011	707.93	52.60	64.34	655.33
	9/26/2011	707.93	32.45	NM	675.48
	12/12/2011	707.93	12.69	NM	695.24
	4/2/2012	707.93	11.18	NM	696.75
	7/9/2012	707.93	12.74	NM	695.19
	10/1/2012	707.93	12.07	NM	695.86
	7/13/2015	707.93	12.68	NM	695.25
	6/13/2017	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-49B	8/16/2011	707.90	13.53	37.47	694.37
	9/26/2011	707.90	11.86	NM	696.04
	12/12/2011	707.90	9.30	NM	698.60
	4/2/2012	707.90	10.60	NM	697.30
	7/9/2012	707.90	12.96	NM	694.94
	10/1/2012	707.90	11.45	NM	696.45
	7/13/2015	707.90	9.20	NM	698.70
	6/13/2017	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-49C	8/16/2011	708.01	18.37	24.59	689.64
	9/26/2011	708.01	15.35	NM	692.66
	12/12/2011	708.01	9.71	NM	698.30
	4/2/2012	708.01	10.82	NM	697.19
	7/9/2012	708.01	13.10	NM	694.91
	10/1/2012	708.01	12.13	NM	695.88
	9/13/2013	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-50A	8/17/2011	697.53	63.90	71.45	633.63
	9/26/2011	697.53	47.55	NM	649.98
	12/12/2011	697.53	22.31	NM	675.22
	4/2/2012	697.53	5.09	NM	692.44
	7/9/2012	697.53	16.49	NM	681.04
	10/1/2012	697.53	18.89	NM	678.64
	7/13/2015	697.53	11.91	NM	685.62
	3/12/2018	697.53	12.47	NM	685.06

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-50B	8/17/2011	697.54	13.96	NM	683.58
	9/26/2011	697.54	13.07	NM	684.47
	12/12/2011	697.54	12.95	NM	684.59
	4/2/2012	697.54	13.37	NM	684.17
	7/9/2012	697.54	14.03	NM	683.51
	10/1/2012	697.54	13.45	NM	684.09
	7/13/2015	697.54	10.84	NM	686.70
	3/12/2018	697.54	14.22	NM	683.32
	12/17/2019	697.54	13.49	NM	684.05

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-51A	8/17/2011	694.59	14.94	NM	679.65
	9/26/2011	694.59	9.56	NM	685.03
	7/13/2015	694.59	8.28	NM	686.31
	3/12/2018	694.59	11.70	NM	682.89

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-51B	8/17/2011	694.66	13.86	31.30	680.80
	9/26/2011	694.66	12.93	NM	681.73
	12/12/2011	694.66	12.17	NM	682.49
	4/2/2012	694.66	12.85	NM	681.81
	7/9/2012	694.66	13.53	NM	681.13
	10/1/2012	694.66	12.75	NM	681.91
	7/13/2015	694.66	10.98	NM	683.68
	3/12/2018	694.66	13.66	NM	681.00

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-52A	8/17/2011	709.63	27.34	47.27	682.29
	9/26/2011	709.63	NM	NM	NA
	12/12/2011	709.63	25.65	NM	683.98
	4/2/2012	709.63	26.03	NM	683.60
	7/9/2012	709.63	27.39	NM	682.24
	10/1/2012	709.63	26.37	NM	683.26
	7/13/2015	709.63	24.56	NM	685.07
	3/12/2018	709.63	27.46	NM	682.17

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-53A	9/12/2011	725.77	79.49	98.64	646.28
	9/26/2011	725.77	80.33	NM	645.44
	12/12/2011	725.77	53.91	NM	671.86
	4/2/2012	725.77	42.80	NM	682.97
	7/9/2012	725.77	40.75	NM	685.02
	10/1/2012	725.77	45.60	NM	680.17
	7/13/2015	725.77	31.35	NM	694.42
	3/15/2018	725.77	34.14	NM	691.63

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-53B	9/12/2011	725.76	61.52	76.63	664.24
	9/26/2011	725.76	61.81	NM	663.95
	12/12/2011	725.76	55.06	NM	670.70
	4/2/2012	725.76	60.81	NM	664.95
	7/9/2012	725.76	59.91	NM	665.85
	10/1/2012	725.76	61.63	NM	664.13
	7/13/2015	725.76	51.33	NM	674.43
	3/15/2018	725.76	39.45	NM	686.31

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-54A	5/2/2012	687.77	35.83	45.06	651.94
	7/13/2015	687.77	2.63	NM	685.14
	3/12/2018	687.77	4.39	NM	683.38

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-54B	5/2/2012	687.78	3.58	27.36	684.20
	7/9/2012	687.78	5.42	NM	682.36
	10/1/2012	687.78	4.50	NM	683.28
	7/13/2015	687.78	2.48	NM	685.30
	3/12/2018	687.78	5.35	NM	682.43

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-55A	5/2/2012	689.69	31.52	41.00	658.17
	7/9/2012	689.69	7.98	NM	681.71
	10/1/2012	689.69	5.44	NM	684.25
	7/13/2015	689.69	3.60	NM	686.09
	3/12/2018	689.69	5.17	NM	684.52

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-55B	5/2/2012	689.66	5.96	25.25	683.70
	7/9/2012	689.66	9.47	NM	680.19
	10/1/2012	689.66	6.41	NM	683.25
	7/13/2015	689.66	6.72	NM	682.94
	3/12/2018	689.66	7.24	NM	682.42

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-56A	5/2/2012	686.53	26.14	52.20	660.39
	7/9/2012	686.53	5.90	NM	680.63
	10/1/2012	686.53	5.01	NM	681.52
	7/13/2015	686.53	3.75	NM	682.78
	3/12/2018	686.53	4.33	NM	682.20

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-56B	5/2/2012	686.58	3.10	36.36	683.48
	7/9/2012	686.58	5.94	NM	680.64
	10/1/2012	686.58	3.69	NM	682.89
	7/13/2015	686.58	1.76	NM	684.82
	3/12/2018	686.58	5.25	NM	681.33

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
OW-1	11/17/1994	695.39	2.90	9.81	692.49
	11/14/1995	695.39	2.84	9.81	692.55
	4/30/1996	695.39	NM	9.81	NM
	5/18/2000	695.39	3.34	9.81	692.05
	8/14/2000	695.39	2.80	9.81	692.59
	11/13/2000	695.39	2.85	9.81	692.54
	2/1/2001	695.39	2.81	9.81	692.58
	6/21/2001	695.39	4.30	9.81	691.09
	12/11/2001	695.39	2.98	9.81	692.41
	8/11/2003	695.39	4.92	9.81	690.47
	10/29/2003	695.39	3.21	9.81	692.18
	2/18/2004	695.39	2.86	9.81	692.53
	9/9/2004	695.39	4.75	9.81	690.64
	7/31/2006	695.39	6.13	9.81	689.26
	7/24/2007	695.39	5.42	9.81	689.97
	11/30/2007	695.39	4.33	NM	691.06
	6/8/2008	695.39	2.61	NM	692.78
	9/9/2008	695.39	7.58	NM	687.81
	11/17/2008	695.39	5.51	NM	689.88
	2/5/2009	695.39	3.72	NM	691.67
	12/9/2009	695.39	3.04	NM	692.35
	6/15/2010	695.39	2.53	NM	692.86
	9/20/2010	695.39	9.07	NM	686.32
	3/7/2011	695.39	2.69	NM	692.70
	6/21/2011	695.39	2.72	NM	692.67
	9/26/2011	695.39	5.55	NM	689.84
	11/1/2011	695.39	3.55	9.68	691.84
	12/12/2011	695.39	2.90	NM	692.49
	4/2/2012	695.39	3.26	NM	692.13
	7/9/2012	695.39	8.56	NM	686.83
	10/1/2012	695.39	4.48	NM	690.91
	7/13/2015	695.39	2.52	NM	692.87
	3/22/2018	695.39	3.40	NM	691.99

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
OW-2	11/17/1994	695.03	3.12	7.20	691.91
	11/14/1995	695.03	3.23	7.20	691.80
	4/30/1996	695.03	NM	7.20	NM
	5/18/2000	695.03	3.27	7.20	691.76
	8/14/2000	695.03	3.10	7.20	691.93
	11/13/2000	695.03	3.02	7.20	692.01
	2/1/2001	695.03	3.13	7.20	691.90
	6/21/2001	695.03	3.49	7.20	691.54
	12/11/2001	695.03	3.10	7.20	691.93
	8/11/2003	695.03	4.02	7.20	691.01
	10/29/2003	695.03	3.16	7.20	691.87
	2/18/2004	695.03	3.18	7.20	691.85
	9/9/2004	695.03	4.00	7.20	691.03
	7/31/2006	695.03	5.65	7.20	689.38
	7/24/2007	695.03	4.65	10.20	690.38
	11/30/2007	695.03	3.87	NM	691.16
	6/8/2008	695.03	3.07	NM	691.96
	9/9/2008	695.03	7.28	NM	687.75
	11/17/2008	695.03	3.68	NM	691.35
	2/5/2009	695.03	10.20	NM	684.83
	12/9/2009	695.03	3.13	NM	691.90
	6/15/2010	695.03	3.04	NM	691.99
	9/20/2010	695.03	8.35	NM	686.68
	3/7/2011	695.03	3.14	NM	691.89
	6/21/2011	695.03	3.14	NM	691.89
	9/26/2011	695.03	3.73	NM	691.30
	11/1/2011	695.03	3.48	10.15	691.55
	12/12/2011	695.03	3.19	NM	691.84
	4/2/2012	695.03	3.23	NM	691.80
	7/9/2012	695.03	7.97	NM	687.06
	10/1/2012	695.03	3.43	NM	691.60
	7/13/2015	695.03	3.06	NM	691.97
	3/12/2018	695.03	3.23	NM	691.80

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
OW-3	11/17/1994	694.72	2.75	8.90	691.97
	11/14/1995	694.72	2.83	8.90	691.89
	4/30/1996	694.72	NM	8.90	NM
	5/18/2000	694.72	2.84	8.90	691.88
	8/14/2000	694.72	2.93	8.90	691.79
	11/13/2000	694.72	2.83	8.90	691.89
	2/1/2001	694.72	2.72	8.90	692.00
	6/21/2001	694.72	3.25	8.90	691.47
	12/11/2001	694.72	2.74	8.90	691.98
	8/11/2003	694.72	3.60	8.90	691.12
	10/29/2003	694.72	2.75	8.90	691.97
	2/18/2004	694.72	3.60	8.90	691.12
	9/9/2004	694.72	3.57	8.90	691.15
	7/31/2006	694.72	5.24	8.90	689.48
	7/24/2007	694.72	4.16	9.95	690.56
	11/30/2007	694.72	3.32	9.95	691.40
	6/8/2008	694.72	2.73	9.95	691.99
	9/9/2008	694.72	6.85	9.95	687.87
	11/17/2008	694.72	3.07	9.95	691.65
	2/5/2009	694.72	9.95	NM	684.77
	12/9/2009	694.72	2.73	NM	691.99
	6/15/2010	694.72	2.68	NM	692.04
	9/20/2010	694.72	7.85	NM	686.87
	3/7/2011	694.72	2.76	NM	691.96
	6/21/2011	694.72	2.75	NM	691.97
	9/26/2011	694.72	4.06	NM	690.66
	11/1/2011	694.72	3.22	8.80	691.50
	12/12/2011	694.72	2.92	NM	691.80
	4/2/2012	694.72	2.87	NM	691.85
	7/9/2012	694.72	7.55	NM	687.17
	10/1/2012	694.72	3.08	NM	691.64
	7/13/2015	694.72	2.67	NM	692.05
	3/12/2018	694.72	3.23	NM	691.49

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW- P-1	11/14/1995	692.35	5.09	9.16	687.26
	4/30/1996	692.35	4.64	9.16	687.71
	5/18/2000	692.35	9.23	9.16	683.12
	8/14/2000	692.35	5.82	9.16	686.53
	11/13/2000	692.35	4.89	9.16	687.46
	2/1/2001	692.35	4.92	9.16	687.43
	6/21/2001	692.35	6.89	9.16	685.46
	12/11/2001	692.35	5.23	9.16	687.12
	8/11/2003	692.35	6.93	9.16	685.42
	10/29/2003	692.35	5.85	9.16	686.50
	2/18/2004	692.35	5.98	9.16	686.37
	9/9/2004	692.35	6.96	9.16	685.39
	7/31/2006	692.35	7.02	9.16	685.33
	8/15/2006	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW- P-2	11/14/1995	692.98	5.50	8.50	687.48
	4/30/1996	692.98	4.87	8.50	688.11
	5/18/2000	692.98	6.18	8.50	686.80
	8/14/2000	692.98	6.13	8.50	686.85
	11/13/2000	692.98	5.10	8.50	687.88
	2/1/2001	692.98	4.92	8.50	688.06
	6/21/2001	692.98	6.44	8.50	686.54
	12/11/2001	692.98	5.45	8.50	687.53
	8/11/2003	692.98	6.50	8.50	686.48
	10/29/2003	692.98	5.70	8.50	687.28
	2/18/2004	692.98	5.51	8.50	687.47
	9/9/2004	692.98	6.57	8.50	686.41
	7/31/2006	692.98	6.43	8.50	686.55
	7/24/2007	692.98	6.39	8.40	686.59
	11/30/2007	692.98	5.99	NM	686.99
	6/8/2008	692.98	4.88	NM	688.10
	9/9/2008	692.98	6.73	NM	686.25
	11/17/2008	692.98	6.05	NM	686.93
	2/5/2009	692.98	6.16	NM	686.82
	3/3/2009	692.98	5.66	NM	687.32
	3/11/2009	692.98	5.78	NM	687.20
	3/17/2009	692.98	5.96	NM	687.02
	3/25/2009	692.98	5.10	NM	687.88
	3/31/2009	692.98	5.34	NM	687.64
	4/20/2009	692.98	5.36	NM	687.62
	4/29/2009	692.98	5.71	NM	687.27
	5/6/2009	692.98	5.73	NM	687.25
	5/11/2009	692.98	5.56	NM	687.42
	5/20/2009	692.98	5.33	NM	687.65
	5/27/2009	692.98	5.99	NM	686.99
	6/8/2009	692.98	6.35	NM	686.63
	6/15/2009	692.98	5.46	NM	687.52
	6/25/2009	692.98	4.88	NM	688.10
	6/30/2009	692.98	6.03	NM	686.95
	7/31/2009	692.98	6.81	NM	686.17
	8/13/2009	692.98	6.24	NM	686.74
	8/26/2009	692.98	6.60	NM	686.38
	10/2/2009	692.98	5.91	NM	687.07
	10/6/2009	692.98	6.12	NM	686.86
	12/9/2009	692.98	5.20	NM	687.78
	12/18/2009	692.98	5.25	NM	687.73
	1/26/2010	692.98	4.98	NM	688.00
	2/2/2010	692.98	5.85	NM	687.13
	3/1/2010	692.98	5.52	NM	687.46
	6/15/2010	692.98	3.42	NM	689.56
	9/20/2010	692.98	6.66	NM	686.32
	3/7/2011	692.98	3.83	NM	689.15
	6/21/2011	692.98	5.35	NM	687.63
	9/26/2011	692.98	5.89	NM	687.09
	11/1/2011	692.98	5.89	8.40	687.09
	12/12/2011	692.98	5.30	NM	687.68
	4/2/2012	692.98	5.86	NM	687.12
	7/9/2012	692.98	6.71	NM	686.27
	10/1/2012	692.98	6.13	NM	686.85

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
	7/13/2015	692.98	4.69	NM	688.29
	3/12/2018	692.98	3.75	NM	689.23

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW- P-3	11/14/1995	694.04	6.30	8.65	687.74
	4/30/1996	694.04	4.22	8.65	689.82
	5/18/2000	694.04	6.69	8.65	687.35
	8/14/2000	694.04	6.64	8.65	687.40
	11/13/2000	694.04	6.19	8.65	687.85
	2/1/2001	694.04	5.66	8.65	688.38
	6/21/2001	694.04	7.04	8.65	687.00
	12/11/2001	694.04	6.32	8.65	687.72
	8/11/2003	694.04	7.25	8.65	686.79
	10/29/2003	694.04	6.24	8.65	687.80
	2/18/2004	694.04	6.12	8.65	687.92
	9/9/2004	694.04	7.33	8.65	686.71
	7/31/2006	694.04	7.32	8.65	686.72
	7/24/2007	694.04	7.28	8.65	686.76
	11/30/2007	694.04	6.31	NM	687.73
	6/8/2008	694.04	5.92	NM	688.12
	9/9/2008	694.04	7.78	NM	686.26
	11/17/2008	694.04	7.74	NM	686.30
	2/5/2009	694.04	6.44	NM	687.60
	2/25/2009	694.04	6.13	NM	687.91
	3/3/2009	694.04	6.06	NM	687.98
	3/11/2009	694.04	6.19	NM	687.85
	3/17/2009	694.04	6.34	NM	687.70
	3/25/2009	694.04	5.89	NM	688.15
	3/31/2009	694.04	5.94	NM	688.10
	4/20/2009	694.04	5.91	NM	688.13
	4/29/2009	694.04	6.18	NM	687.86
	5/6/2009	694.04	6.26	NM	687.78
	5/11/2009	694.04	6.48	NM	687.56
	5/20/2009	694.04	6.09	NM	687.95
	5/27/2009	694.04	6.46	NM	687.58
	6/8/2009	694.04	6.83	NM	687.21
	6/15/2009	694.04	6.29	NM	687.75
	6/25/2009	694.04	5.92	NM	688.12
	6/30/2009	694.04	6.82	NM	687.22
	7/31/2009	694.04	6.71	NM	687.33
	8/13/2009	694.04	6.74	NM	687.30
	8/26/2009	694.04	7.43	NM	686.61
	10/2/2009	694.04	6.07	NM	687.97
	10/6/2009	694.04	6.55	NM	687.49
	12/9/2009	694.04	5.75	NM	688.29
	12/18/2009	694.04	5.78	NM	688.26
	1/26/2010	694.04	5.44	NM	688.60
	2/3/2010	694.04	6.14	NM	687.90
	3/1/2010	694.04	5.99	NM	688.05
	6/15/2010	694.04	4.82	NM	689.22
	9/20/2010	694.04	8.00	NM	686.04
	3/7/2011	694.04	4.48	NM	689.56
	6/21/2011	694.04	6.08	NM	687.96
	9/26/2011	694.04	7.09	NM	686.95
	11/1/2011	694.04	6.18	8.50	687.86
	12/9/2011	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW- P-4	11/14/1995	695.06	6.54	8.65	688.52
	4/30/1996	695.06	3.75	8.65	691.31
	5/18/2000	695.06	7.12	8.65	687.94
	8/4/2000	695.06	7.35	8.65	687.71
	11/13/2000	695.06	6.05	8.65	689.01
	2/1/2001	695.06	5.59	8.65	689.47
	6/21/2001	695.06	7.31	8.65	687.75
	12/11/2001	695.06	6.55	8.65	688.51
	8/11/2003	695.06	7.80	8.65	687.26
	10/29/2003	695.06	6.11	8.65	688.95
	2/18/2004	695.06	6.85	8.65	688.21
	9/9/2004	695.06	6.69	8.65	688.37
	7/31/2006	695.06	7.76	8.65	687.30
	7/24/2007	695.06	8.32	6.00	686.74
	11/30/2007	695.06	6.00	NM	689.06
	6/8/2008	695.06	5.67	NM	689.39
	9/9/2008	695.06	7.40	NM	687.66
	11/17/2008	695.06	6.85	NM	688.21
	2/5/2009	695.06	7.11	NM	687.95
	12/9/2009	695.06	6.29	NM	688.77
	6/15/2010	695.06	5.43	NM	689.63
	8/30/2010	695.06	7.34	NM	687.72
	9/20/2010	695.06	6.98	NM	688.08
	2/18/2011	695.06	6.74	NM	688.32
	3/7/2011	695.06	4.96	NM	690.10
	6/21/2011	695.06	6.55	NM	688.51
	9/26/2011	695.06	7.77	NM	687.29
	11/1/2011	695.06	5.96	8.51	689.10
	12/12/2011	695.06	6.07	NM	688.99
	4/2/2012	695.06	6.60	NM	688.46
	7/9/2012	695.06	7.23	NM	687.83
	10/1/2012	695.06	6.48	NM	688.58
	7/13/2015	695.06	4.04	NM	691.02
	3/12/2018	695.06	6.71	NM	688.35
	12/16/2019	695.06	NM	NM	NM

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW- P-5	11/14/1995	696.81	7.25	8.90	689.56
	4/30/1996	696.81	5.53	8.90	691.28
	5/18/2000	696.81	7.52	8.90	689.29
	8/4/2000	696.81	7.62	8.90	689.19
	11/13/2000	696.81	6.46	8.90	690.35
	2/1/2001	696.81	6.04	8.90	690.77
	6/21/2001	696.81	7.78	8.90	689.03
	12/11/2001	696.81	6.95	8.90	689.86
	8/11/2003	696.81	8.05	8.90	688.76
	10/29/2003	696.81	6.97	8.90	689.84
	2/18/2004	696.81	7.08	8.90	689.73
	9/9/2004	696.81	8.07	8.90	688.74
	7/31/2006	696.81	8.25	8.90	688.56
	7/24/2007	696.81	8.29	9.80	688.52
	11/30/2007	696.81	7.11	NM	689.70
	6/8/2008	696.81	5.38	NM	691.43
	9/9/2008	696.81	8.35	NM	688.46
	11/17/2008	696.81	7.81	NM	689.00
	2/5/2009	696.81	7.56	NM	689.25
	12/9/2009	696.81	7.12	NM	689.69
	6/15/2010	696.81	6.67	NM	690.14
	3/7/2011	696.81	6.05	NM	690.76
	6/21/2011	696.81	7.23	NM	689.58
	9/26/2011	696.81	7.62	NM	689.19
	11/1/2011	696.81	7.23	9.49	689.58
	12/12/2011	696.81	6.94	NM	689.87
	4/2/2012	696.81	7.27	NM	689.54
	7/9/2012	696.81	Dry	9.49	NA
	10/1/2012	696.81	7.35	NM	689.46
	7/13/2015	696.81	5.18	NM	691.63
	3/12/2018	696.81	6.89	NM	689.92

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW- P-6	11/14/1995	693.33	7.58	9.80	685.75
	4/30/1996	693.33	6.92	9.80	686.41
	5/18/2000	693.33	7.58	9.80	685.75
	8/14/2000	693.33	7.63	9.80	685.70
	11/13/2000	693.33	7.05	9.80	686.28
	2/1/2001	693.33	5.56	9.80	687.77
	6/21/2001	693.33	7.64	9.80	685.69
	12/11/2001	693.33	7.45	9.80	685.88
	8/11/2003	693.33	7.61	9.80	685.72
	10/29/2003	693.33	7.05	9.80	686.28
	2/18/2004	693.33	7.22	9.80	686.11
	9/9/2004	693.33	6.96	9.80	686.37
	7/31/2006	693.33	7.02	9.16	686.31
	8/15/2006	Well Decommissioned			

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-1	12/28/2009	692.10	4.61	47.09	687.49
	1/6/2010	692.10	5.39	NM	686.71
	1/11/2010	692.10	5.48	NM	686.62
	1/18/2010	692.10	5.41	NM	686.69
	1/20/2010	692.10	5.23	NM	686.87
	1/25/2010	692.10	4.07	NM	688.03
	2/1/2010	692.10	5.33	NM	686.77
	2/22/2010	692.10	4.40	NM	687.70
	3/8/2010	692.10	5.24	NM	686.86
	3/11/2010	692.10	5.24	NM	686.86
	4/16/2010	692.10	5.23	NM	686.87
	4/26/2010	692.10	3.62	NM	688.48
	5/5/2010	692.10	4.56	NM	687.54
	5/11/2010	692.10	4.18	NM	687.92
	6/1/2010	692.10	5.12	NM	686.98
	6/9/2010	692.10	4.98	NM	687.12
	6/15/2010	692.10	3.77	NM	688.33
	6/24/2010	692.10	5.13	NM	686.97
	7/6/2010	692.10	5.74	NM	686.36
	7/13/2010	692.10	5.89	NM	686.21
	7/20/2010	692.10	5.34	NM	686.76
	8/3/2010	692.10	6.02	NM	686.08
	8/10/2010	692.10	6.17	NM	685.93
	8/17/2010	692.10	7.31	NM	684.79
	8/23/2010	692.10	6.08	NM	686.02
	8/30/2010	692.10	6.39	NM	685.71
	9/20/2010	692.10	6.44	NM	685.66
	9/24/2010	692.10	6.57	NM	685.53
	10/1/2010	692.10	6.80	NM	685.30
	10/5/2010	692.10	6.62	NM	685.48
	10/12/2010	692.10	6.87	NM	685.23
	10/18/2010	692.10	6.78	NM	685.32
	12/10/2010	692.10	5.55	NM	686.55
	12/13/2010	692.10	5.16	NM	686.94
	12/28/2010	692.10	5.50	NM	686.60
	1/3/2011	692.10	4.98	NM	687.12
	1/10/2011	692.10	5.52	NM	686.58
	1/17/2011	692.10	5.58	NM	686.52
	2/18/2011	692.10	5.38	NM	686.72
	2/22/2011	692.10	3.93	NM	688.17
	3/4/2011	692.10	4.41	NM	687.69
	3/7/2011	692.10	4.11	NM	687.99
	3/18/2011	692.10	4.97	NM	687.13
	3/28/2011	692.10	5.32	NM	686.78
	6/21/2011	692.10	4.84	NM	687.26
	9/26/2011	692.10	4.66	NM	687.44
	7/13/2015	692.10	4.20	NM	687.90
	3/12/2018	692.10	4.36	NM	687.74

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-2	12/28/2009	688.19	4.39	45.48	683.80
	1/6/2010	688.19	4.59	NM	683.60
	1/11/2010	688.19	4.68	NM	683.51
	1/18/2010	688.19	4.90	NM	683.29
	1/20/2010	688.19	4.55	NM	683.64
	1/25/2010	688.19	3.83	NM	684.36
	2/1/2010	688.19	4.46	NM	683.73
	2/2/2010	688.19	4.51	NM	683.68
	2/3/2010	688.19	4.50	NM	683.69
	2/4/2010	688.19	4.57	NM	683.62
	2/5/2010	688.19	4.43	NM	683.76
	2/22/2010	688.19	3.71	NM	684.48
	3/2/2010	688.19	4.10	NM	684.09
	3/4/2010	688.19	4.21	NM	683.98
	3/8/2010	688.19	5.02	NM	683.17
	3/11/2010	688.19	4.60	NM	683.59
	4/16/2010	688.19	4.45	NM	683.74
	4/26/2010	688.19	3.80	NM	684.39
	5/5/2010	688.19	4.15	NM	684.04
	6/1/2010	688.19	4.53	NM	683.66
	6/9/2010	688.19	4.31	NM	683.88
	6/15/2010	688.19	3.81	NM	684.38
	6/24/2010	688.19	4.44	NM	683.75
	7/6/2010	688.19	4.82	NM	683.37
	7/13/2010	688.19	4.97	NM	683.22
	7/20/2010	688.19	4.41	NM	683.78
	8/3/2010	688.19	5.02	NM	683.17
	8/10/2010	688.19	5.03	NM	683.16
	8/17/2010	688.19	5.27	NM	682.92
	8/23/2010	688.19	4.96	NM	683.23
	8/30/2010	688.19	5.09	NM	683.10
	9/20/2010	688.19	5.13	NM	683.06
	9/24/2010	688.19	5.20	NM	682.99
	10/1/2010	688.19	5.35	NM	682.84
	10/5/2010	688.19	5.28	NM	682.91
	10/12/2010	688.19	5.36	NM	682.83
	10/18/2010	688.19	5.36	NM	682.83
	12/10/2010	688.19	4.65	NM	683.54
	12/13/2010	688.19	4.34	NM	683.85
	12/28/2010	688.19	4.50	NM	683.69
	1/3/2011	688.19	4.05	NM	684.14
	1/10/2011	688.19	4.60	NM	683.59
	1/17/2011	688.19	4.69	NM	683.50
	2/18/2011	688.19	3.89	NM	684.30
	2/22/2011	688.19	3.55	NM	684.64
	3/4/2011	688.19	3.86	NM	684.33
	3/7/2011	688.19	3.64	NM	684.55
	3/18/2011	688.19	4.18	NM	684.01
	3/28/2011	688.19	3.85	NM	684.34
	6/21/2011	688.19	4.01	NM	684.18
	9/26/2011	688.19	4.04	NM	684.15
	7/13/2015	688.19	2.45	NM	685.74
	3/12/2018	688.19	3.79	NM	684.40

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-3	12/28/2009	688.83	4.79	44.82	684.04
	1/6/2010	688.83	4.99	NM	683.84
	1/11/2010	688.83	5.09	NM	683.74
	1/18/2010	688.83	4.78	NM	684.05
	1/20/2010	688.83	4.94	NM	683.89
	1/25/2010	688.83	4.22	NM	684.61
	2/1/2010	688.83	4.85	NM	683.98
	2/2/2010	688.83	4.91	NM	683.92
	2/3/2010	688.83	4.95	NM	683.88
	2/4/2010	688.83	4.97	NM	683.86
	2/5/2010	688.83	4.85	NM	683.98
	2/22/2010	688.83	4.45	NM	684.38
	3/2/2010	688.83	4.78	NM	684.05
	3/4/2010	688.83	5.01	NM	683.82
	3/8/2010	688.83	5.31	NM	683.52
	3/11/2010	688.83	4.98	NM	683.85
	4/16/2010	688.83	4.87	NM	683.96
	4/26/2010	688.83	4.16	NM	684.67
	5/5/2010	688.83	4.52	NM	684.31
	6/1/2010	688.83	4.88	NM	683.95
	6/9/2010	688.83	4.69	NM	684.14
	6/15/2010	688.83	4.17	NM	684.66
	6/24/2010	688.83	4.83	NM	684.00
	7/6/2010	688.83	5.22	NM	683.61
	7/13/2010	688.83	5.34	NM	683.49
	7/20/2010	688.83	4.87	NM	683.96
	8/3/2010	688.83	5.39	NM	683.44
	8/10/2010	688.83	5.42	NM	683.41
	8/17/2010	688.83	5.63	NM	683.20
	8/23/2010	688.83	5.35	NM	683.48
	8/30/2010	688.83	5.48	NM	683.35
	9/20/2010	688.83	5.52	NM	683.31
	9/24/2010	688.83	5.58	NM	683.25
	10/1/2010	688.83	5.77	NM	683.06
	10/5/2010	688.83	5.65	NM	683.18
	10/12/2010	688.83	5.74	NM	683.09
	10/18/2010	688.83	5.74	NM	683.09
	12/10/2010	688.83	4.95	NM	683.88
	12/13/2010	688.83	4.70	NM	684.13
	12/28/2010	688.83	4.88	NM	683.95
	1/3/2011	688.83	4.36	NM	684.47
	1/10/2011	688.83	4.83	NM	684.00
	1/17/2011	688.83	4.94	NM	683.89
	2/18/2011	688.83	4.84	NM	683.99
	2/22/2011	688.83	3.80	NM	685.03
	3/4/2011	688.83	4.08	NM	684.75
	3/7/2011	688.83	3.90	NM	684.93
	3/18/2011	688.83	4.50	NM	684.33
	3/28/2011	688.83	4.80	NM	684.03
	6/21/2011	688.83	4.39	NM	684.44
	9/26/2011	688.83	4.44	NM	684.39
	7/13/2015	688.83	3.70	NM	685.13
	3/12/2018	688.83	4.96	NM	683.87

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-4	12/4/2009	691.04	8.00	45.86	683.04
	12/7/2009	691.04	8.00	NM	683.04
	12/8/2009	691.04	8.00	NM	683.04
	12/9/2009	691.04	8.00	NM	683.04
	12/10/2009	691.04	8.00	NM	683.04
	12/11/2009	691.04	8.00	NM	683.04
	12/28/2009	691.04	7.28	NM	683.76
	12/29/2009	691.04	7.32	NM	683.72
	1/4/2010	691.04	7.54	NM	683.50
	1/5/2010	691.04	7.36	NM	683.68
	1/6/2010	691.04	7.48	NM	683.56
	1/7/2010	691.04	7.49	NM	683.55
	1/11/2010	691.04	7.56	NM	683.48
	1/18/2010	691.04	7.77	NM	683.27
	1/25/2010	691.04	6.64	NM	684.40
	2/1/2010	691.04	7.32	NM	683.72
	2/2/2010	691.04	7.47	NM	683.57
	2/4/2010	691.04	7.98	NM	683.06
	2/5/2010	691.04	7.36	NM	683.68
	2/22/2010	691.04	5.98	NM	685.06
	3/2/2010	691.04	7.33	NM	683.71
	3/4/2010	691.04	7.42	NM	683.62
	3/8/2010	691.04	7.51	NM	683.53
	3/11/2010	691.04	8.12	NM	682.92
	3/24/2010	691.04	7.09	NM	683.95
	4/15/2010	691.04	7.20	NM	683.84
	4/19/2010	691.04	7.51	NM	683.53
	4/26/2010	691.04	7.11	NM	683.93
	5/5/2010	691.04	6.96	NM	684.08
	6/1/2010	691.04	7.41	NM	683.63
	6/9/2010	691.04	7.26	NM	683.78
	6/15/2010	691.04	6.60	NM	684.44
	6/24/2010	691.04	7.30	NM	683.74
	7/6/2010	691.04	7.72	NM	683.32
	7/13/2010	691.04	7.86	NM	683.18

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-4	7/20/2010	691.04	7.35	NM	683.69
	7/22/2010	691.04	7.50	NM	683.54
	8/3/2010	691.04	7.92	NM	683.12
	8/10/2010	691.04	7.90	NM	683.14
	8/17/2010	691.04	8.24	NM	682.80
	8/23/2010	691.04	7.88	NM	683.16
	8/30/2010	691.04	8.01	NM	683.03
	9/20/2010	691.04	8.06	NM	682.98
	9/24/2010	691.04	8.13	NM	682.91
	10/1/2010	691.04	8.31	NM	682.73
	10/5/2010	691.04	8.20	NM	682.84
	10/12/2010	691.04	8.29	NM	682.75
	10/18/2010	691.04	8.28	NM	682.76
	10/29/2010	691.04	7.97	NM	683.07
	12/10/2010	691.04	7.60	NM	683.44
	12/13/2010	691.04	7.14	NM	683.90
	12/28/2010	691.04	7.35	NM	683.69
	1/3/2011	691.04	6.86	NM	684.18
	1/10/2011	691.04	7.46	NM	683.58
	1/17/2011	691.04	7.57	NM	683.47
	2/18/2011	691.04	7.40	NM	683.64
	2/22/2011	691.04	6.35	NM	684.69
	3/4/2011	691.04	6.65	NM	684.39
	3/7/2011	691.04	6.45	NM	684.59
	3/18/2011	691.04	6.97	NM	684.07
	3/28/2011	691.04	7.35	NM	683.69
	6/21/2011	691.04	6.82	NM	684.22
	9/26/2011	691.04	6.90	NM	684.14
	7/13/2015	691.04	5.45	NM	685.59
	3/12/2018	691.04	6.81	NM	684.23

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-5	12/28/2009	692.19	8.08	47.04	684.11
	1/6/2010	692.19	8.38	NM	683.81
	1/11/2010	692.19	8.45	NM	683.74
	1/18/2010	692.19	8.55	NM	683.64
	1/20/2010	692.19	8.42	NM	683.77
	1/25/2010	692.19	7.75	NM	684.44
	2/1/2010	692.19	8.17	NM	684.02
	2/22/2010	692.19	8.12	NM	684.07
	3/8/2010	692.19	8.14	NM	684.05
	3/11/2010	692.19	8.62	NM	683.57
	4/15/2010	692.19	8.10	NM	684.09
	4/16/2010	692.19	9.36	NM	682.83
	4/26/2010	692.19	7.80	NM	684.39
	5/5/2010	692.19	7.81	NM	684.38
	6/1/2010	692.19	8.08	NM	684.11
	6/9/2010	692.19	8.03	NM	684.16
	6/15/2010	692.19	7.30	NM	684.89
	6/24/2010	692.19	8.14	NM	684.05
	7/6/2010	692.19	8.62	NM	683.57
	7/13/2010	692.19	8.64	NM	683.55
	7/20/2010	692.19	8.62	NM	683.57
	7/22/2010	692.19	10.22	NM	681.97
	8/3/2010	692.19	8.75	NM	683.44
	8/10/2010	692.19	9.13	NM	683.06
	8/17/2010	692.19	9.31	NM	682.88
	8/23/2010	692.19	8.81	NM	683.38
	8/30/2010	692.19	8.86	NM	683.33
	9/20/2010	692.19	10.70	NM	681.49
	9/24/2010	692.19	9.26	NM	682.93
	10/1/2010	692.19	9.42	NM	682.77
	10/5/2010	692.19	10.00	NM	682.19
	10/12/2010	692.19	9.42	NM	682.77
	10/18/2010	692.19	9.50	NM	682.69
	10/29/2010	692.19	8.91	NM	683.28
	12/10/2010	692.19	9.45	NM	682.74
	12/13/2010	692.19	8.17	NM	684.02
	12/28/2010	692.19	8.21	NM	683.98
	1/3/2011	692.19	7.70	NM	684.49
	1/10/2011	692.19	8.31	NM	683.88
	1/17/2011	692.19	8.43	NM	683.76
	2/18/2011	692.19	8.29	NM	683.90
	2/22/2011	692.19	7.19	NM	685.00
	3/4/2011	692.19	7.64	NM	684.55
	3/7/2011	692.19	7.35	NM	684.84
	3/18/2011	692.19	7.92	NM	684.27
	3/28/2011	692.19	8.29	NM	683.90
	6/21/2011	692.19	7.93	NM	684.26
	9/26/2011	692.19	7.70	NM	684.49
	7/13/2015	692.19	6.49	NM	685.70
	3/12/2018	692.19	7.78	NM	684.41

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-6	4/15/2010	689.70	5.95	42.65	683.75
	4/16/2010	689.70	6.06	NM	683.64
	4/22/2010	689.70	6.20	NM	683.50
	4/26/2010	689.70	5.25	NM	684.45
	5/5/2010	689.70	5.64	NM	684.06
	6/1/2010	689.70	6.11	NM	683.59
	6/9/2010	689.70	5.98	NM	683.72
	6/15/2010	689.70	5.32	NM	684.38
	6/24/2010	689.70	5.99	NM	683.71
	7/6/2010	689.70	6.87	NM	682.83
	7/13/2010	689.70	7.01	NM	682.69
	7/20/2010	689.70	6.08	NM	683.62
	7/22/2010	689.70	6.21	NM	683.49
	8/3/2010	689.70	6.62	NM	683.08
	8/10/2010	689.70	6.67	NM	683.03
	8/17/2010	689.70	6.84	NM	682.86
	8/23/2010	689.70	6.58	NM	683.12
	8/30/2010	689.70	6.70	NM	683.00
	9/20/2010	689.70	6.78	NM	682.92
	9/24/2010	689.70	6.85	NM	682.85
	10/1/2010	689.70	7.05	NM	682.65
	10/5/2010	689.70	6.92	NM	682.78
	10/12/2010	689.70	7.05	NM	682.65
	10/18/2010	689.70	7.02	NM	682.68
	10/29/2010	689.70	6.68	NM	683.02
	12/10/2010	689.70	6.65	NM	683.05
	12/13/2010	689.70	5.87	NM	683.83
	12/28/2010	689.70	6.05	NM	683.65
	1/3/2011	689.70	5.58	NM	684.12
	1/10/2011	689.70	6.18	NM	683.52
	1/17/2011	689.70	6.24	NM	683.46
	2/18/2011	689.70	6.12	NM	683.58
	2/22/2011	689.70	5.07	NM	684.63
	3/4/2011	689.70	5.40	NM	684.30
	3/7/2011	689.70	5.14	NM	684.56
	3/18/2011	689.70	5.74	NM	683.96
	6/21/2011	689.70	5.48	NM	684.22
	9/26/2011	689.70	5.58	NM	684.12
	7/13/2015	689.70	4.78	NM	684.92
	3/12/2018	689.70	6.23	NM	683.47

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-7	12/10/2010	691.70	8.55	NM	683.15
	12/13/2010	691.70	9.19	NM	682.51
	12/28/2010	691.70	8.31	NM	683.39
	1/3/2011	691.70	7.84	NM	683.86
	1/10/2011	691.70	8.38	NM	683.32
	1/17/2011	691.70	8.60	NM	683.10
	3/4/2011	691.70	7.15	NM	684.55
	3/7/2011	691.70	6.75	NM	684.95
	3/18/2011	691.70	7.38	NM	684.32
	3/28/2011	691.70	7.39	NM	684.31
	6/21/2011	691.70	8.26	NM	683.44
	9/26/2011	691.70	8.85	NM	682.85
	7/13/2015	691.70	5.83	NM	685.87
	3/12/2018	691.70	8.28	NM	683.42

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-8	7/13/2015	687.98	4.25	NM	683.73
	3/12/2018	687.98	6.82	NM	681.16

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-9	7/13/2015	688.59	5.05	NM	683.54
	3/12/2018	688.59	7.70	NM	680.89

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-10	7/13/2015	689.86	4.82	NM	685.04
	3/12/2018	689.86	7.91	NM	681.95

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-11	7/13/2015	690.67	6.92	NM	683.75
	3/12/2018	690.67	9.41	NM	681.26

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-12	7/13/2015	688.92	4.08	NM	684.84
	3/12/2018	688.92	8.42	NM	680.50

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-13	7/13/2015	688.57	5.15	NM	683.42
	3/12/2018	688.57	7.74	NM	680.83

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-14	7/13/2015	688.29	5.82	NM	682.47
	3/12/2018	688.29	8.24	NM	680.05

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-15	7/13/2015	690.74	4.62	NM	686.12
	3/12/2018	690.74	8.45	NM	682.29

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-16	7/13/2015	689.42	4.45	NM	684.97
	3/12/2018	689.42	5.80	NM	683.62

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-17	7/13/2015	690.37	5.73	NM	684.64
	3/12/2018	690.37	7.20	NM	683.17

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-18	7/13/2015	687.23	2.07	NM	685.16
	3/12/2018	687.23	4.32	NM	682.91

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-19	3/12/2018	NS	7.93	NM	NS

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
Sump	3/3/2009	693.15	4.44	NM	688.71
	3/11/2009	693.15	4.30	NM	688.85
	3/17/2009	693.15	4.94	NM	688.21
	3/25/2009	693.15	3.14	NM	690.01
	3/31/2009	693.15	3.82	NM	689.33
	4/20/2009	693.15	4.07	NM	689.08
	4/29/2009	693.15	4.76	NM	688.39
	5/6/2009	693.15	4.42	NM	688.73
	5/11/2009	693.15	4.64	NM	688.51
	5/20/2009	693.15	4.62	NM	688.53
	5/27/2009	693.15	5.36	NM	687.79
	6/8/2009	693.15	5.92	NM	687.23
	6/15/2009	693.15	4.51	NM	688.64
	6/25/2009	693.15	3.95	NM	689.20
	6/30/2009	693.15	5.16	NM	687.99
	7/31/2009	693.15	4.68	NM	688.47
	8/13/2009	693.15	5.62	NM	687.53
	8/26/2009	693.15	6.40	NM	686.75
	10/2/2009	693.15	5.10	NM	688.05
	10/6/2009	693.15	5.63	NM	687.52
	12/18/2009	693.15	4.68	NM	688.47
	1/26/2010	693.15	4.30	NM	688.85
	2/3/2010	693.15	5.91	NM	687.24
	3/1/2010	693.15	5.29	NM	687.86
	6/15/2010	693.15	2.34	NM	690.81
	8/30/2010	693.15	6.49	NM	686.66
	9/20/2010	693.15	6.49	NM	686.66
	2/18/2011	693.15	5.55	NM	687.60
	3/7/2011	693.15	3.48	NM	689.67
	6/21/2011	693.15	4.98	NM	688.17
	9/26/2011	693.15	4.67	NM	688.48
	12/12/2011	693.15	4.65	NM	688.50
	4/2/2012	693.15	4.95	NM	688.20
	7/9/2012	693.15	6.23	NM	686.92
	10/1/2012	693.15	6.10	NM	687.05
	3/12/2018	693.15	4.20	NM	688.95

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
Bridge (trail)	2/25/2009	702.51	17.74	NA	684.77
	3/3/2009	702.51	17.75	NA	684.76
	3/11/2009	702.51	17.92	NA	684.59
	3/17/2009	702.51	18.10	NA	684.41
	3/25/2009	702.51	17.25	NA	685.26
	3/31/2009	702.51	17.68	NA	684.83
	4/20/2009	702.51	17.79	NA	684.72
	4/29/2009	702.51	17.87	NA	684.64
	5/6/2009	702.51	17.90	NA	684.61
	5/11/2009	702.51	17.89	NA	684.62
	5/20/2009	702.51	17.85	NA	684.66
	5/27/2009	702.51	17.99	NA	684.52
	6/8/2009	702.51	18.10	NA	684.41
	6/15/2009	702.51	17.95	NA	684.56
	6/25/2009	702.51	17.68	NA	684.83
	6/30/2009	702.51	18.07	NA	684.44
	8/13/2009	702.51	17.81	NA	684.70
	8/26/2009	702.51	18.18	NA	684.33
	10/2/2009	702.51	17.80	NA	684.71
	10/6/2009	702.51	17.54	NA	684.97
	12/18/2009	702.51	17.77	NA	684.74
	1/26/2010	702.51	17.58	NA	684.93
	2/3/2010	702.51	17.73	NA	684.78
	3/1/2010	702.51	17.69	NA	684.82
	6/9/2010	702.51	17.87	NA	684.64
	6/15/2010	702.51	17.77	NA	684.74
	8/30/2010	702.51	18.25	NA	684.26
	9/20/2010	702.51	18.20	NA	684.31
	12/13/2010	702.51	18.02	NA	684.49
	2/18/2011	702.51	18.07	NA	684.44
	3/7/2011	702.51	17.65	NA	684.86
	6/21/2011	702.51	18.01	NA	684.50
	9/26/2011	702.51	17.76	NA	684.75
	12/12/2011	702.51	17.85	NA	684.66
	4/2/2012	702.51	17.86	NA	684.65
	7/9/2012	702.51	18.25	NA	684.26
	10/1/2012	702.51	17.80	NA	684.71
	3/12/2018	702.51	17.79	NA	684.72

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
Bridge (road)	6/15/2010	693.04	8.32	NA	684.72

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
SG-1	6/9/2010	679.60	1.10	NA	678.50
	6/15/2010	679.60	1.25	NA	678.35
	8/30/2010	679.60	0.66	NA	678.94
	9/20/2010	679.60	0.65	NA	678.95
	2/18/2011	679.60	0.89	NA	678.71
	3/7/2011	679.60	1.38	NA	678.22
	6/21/2011	679.60	1.00	NA	678.60
	9/26/2011	679.60	1.20	NA	678.40
	12/12/2011	679.60	0.99	NA	678.61
	4/2/2012	679.60	1.00	NA	678.60
	7/9/2012	679.60	0.70	NA	678.90
	10/1/2012	697.60	0.91	NA	696.69

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
SG-2	6/9/2010	680.38	1.22	NA	679.16
	6/15/2010	680.38	1.42	NA	678.96
	8/30/2010	680.38	0.96	NA	679.42
	9/20/2010	680.38	0.92	NA	679.46
	2/18/2011	680.38	1.06	NA	679.32
	3/7/2011	680.38	1.28	NA	679.10
	6/21/2011	680.38	1.12	NA	679.26
	9/26/2011	680.38	1.41	NA	678.97
	12/12/2011	680.38	1.12	NA	679.26
	4/2/2012	680.38	NM	NA	NM
	7/9/2012	680.38	0.82	NA	679.56
	10/1/2012	680.38	0.98	NA	679.40

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
SG-3	6/9/2010	683.03	0.88	NA	682.15
	6/15/2010	683.03	0.98	NA	682.05
	8/30/2010	683.03	0.56	NA	682.47
	9/20/2010	683.03	0.54	NA	682.49
	12/13/2010	683.03	0.76	NA	682.27
	2/18/2011	683.03	0.69	NA	682.34
	3/7/2011	683.03	1.14	NA	681.89
	6/21/2011	683.03	0.82	NA	682.21
	9/26/2011	683.03	0.97	NA	682.06
	12/12/2011	683.03	0.79	NA	682.24
	4/2/2012	683.03	0.79	NA	682.24
	7/9/2012	683.03	0.51	NA	682.52
	10/1/2012	683.03	0.58	NA	682.45

Table 2.
Groundwater Elevation Data
CSX Transportation
Former Indiana Creosote Company
Bloomington, indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
SG-4	6/9/2010	690.02	1.55	NA	688.47
	6/15/2010	690.02	1.90	NA	688.12
	8/30/2010	690.02	2.66	NA	687.36
	9/20/2010	690.02	2.93	NA	687.09
	12/13/2010	690.02	1.40	NA	688.62
	2/18/2011	690.02	1.77	NA	688.25
	3/7/2011	690.02	1.97	NA	688.05
	6/21/2011	690.02	1.74	NA	688.28
	9/26/2011	690.02	1.90	NA	688.12
	12/12/2011	690.02	1.80	NA	688.22
	4/2/2012	690.02	1.84	NA	688.18
	7/9/2012	690.02	1.54	NA	688.48
	10/1/2012	690.02	1.54	NA	688.48

Abbreviations:

AMSL = Above mean sea level.
MP = Measuring point (top of casing for wells).
NA = Not applicable.
NM = Not measured.

Notes:

1. Elevations are referenced to the North American Vertical Datum of 1988 (NAVD88).
2. Historical elevation data was recalculated based on the 2008 survey.

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	1996 VRP Tier II Residential	--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
	1996 VRP Tier II Non-Residential	--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-1S	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	8/4/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	8/11/2003	--	0.001	0.006	0.008	0.008	NA	NA	NA	NA
MW-1S	10/29/2003	--	<0.001	<0.002	0.001	<0.006	NA	NA	NA	NA
MW-1S	2/17/2004	--	<0.001	<0.002	0.0016 J	0.003 J	0.011	<0.0050	<0.0050	<0.0050
MW-1S	9/9/2004	--	0.00086 J	<0.002	0.003	0.0022 J	<0.0050	NA	<0.0050	NA
MW-1S	8/1/2006	--	<0.001	0.00056 J	0.003	0.003	NA	NA	NA	NA
MW-1S	11/19/2008	7.0	<0.0010	<0.0010	<0.0010	<0.003	<0.010	NA	<0.010	NA
MW-1S	12/10/2009	97.2	<0.0050	<0.0050	<0.0050	<0.015	<0.01	NA	<0.0050	NA
MW-1S	12/9/2011	--	Well damaged beyond repair during City Utility Upgrade and was abandoned 12/9/2011							
MW-1D	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	8/4/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	8/11/2003	--	0.004	0.007	0.030	0.031	NA	NA	NA	NA
MW-1D	10/1/2003	--	NA	NA	NA	NA	0.009	<0.0050	0.014	<0.0050
MW-1D	10/29/2003	--	< 0.01	0.010	0.034	0.046	NA	NA	NA	NA
MW-1D	2/17/2004	--	**0.005**	0.007	0.031	0.043	<0.0050	<0.0050	<0.0050	<0.0050
MW-1D	9/9/2004	--	0.0031 J	0.005 J	0.024	0.0233 J	<0.0050	NA	< 0.01	NA
MW-1D	8/2/2006	--	<0.001	<0.001	0.00069 J	<0.003	NA	NA	NA	NA
MW-1D	7/24/2007	--	0.0016 J	0.003	0.019	0.017	NA	NA	NA	NA
MW-1D	11/19/2008	2.6	<0.0050	0.0027 J	0.0201	0.0149 J	<0.010	NA	<0.010	NA
MW-1D	12/9/2009	0.0	<0.025	<0.025	<0.025	<0.075	<0.010	NA	<0.010	NA
MW-1D	12/14/2010	20.9	<0.0050	<0.0050	0.0181	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-1D	12/14/2011	13.3	<0.0050	<0.0050	0.0238	0.0212	<0.010	NA	<0.0050	NA
MW-1D	7/16/2015	8.2	<0.0050	<0.0050	0.0141	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-1D	3/15/2018	218	<0.0050	<0.0050	0.0083	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-1D	12/16/2019	49.8	<0.0050	<0.0050	0.0083	<0.015	<0.010	<0.010	0.0057	<0.0050
MW-2S	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2S	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2S	2/26/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2S	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2S	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2S	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-2S	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-2S	11/1/2008	--	Insufficient water supply to fill all containers							
MW-2S	12/9/2009	214.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-2S	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-2S	11/29/2011	86.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-2S	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation							
MW-2D	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-2D	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-2D	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-2D	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-2D	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-2D	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-2D	11/19/2008	28.1	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-2D	12/10/2009	9.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-2D	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-2D	11/29/2011	2.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-2D	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation							
MW-3S	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-3S	8/11/2003	--	**0.107**	0.130	0.151	0.397	NA	NA	NA	NA
MW-3S	10/30/2003	--	**0.059**	0.098	0.094	0.238	NA	NA	NA	NA
MW-3S	2/18/2004	--	**0.025**	0.039	0.048	0.116	**0.050**	<0.0050	**0.033**	<0.0050
MW-3S	8/1/2006	--	**0.027**	0.035	0.032	0.081	NA	NA	NA	NA
MW-3S	7/24/2008	--	Well Abandoned August 2006 for installation of City walk path							
MW-3D	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	8/11/2003	--	**0.398**	0.345	0.179	0.445	NA	NA	NA	NA
MW-3D	10/30/2003	--	**0.316**	0.354	0.173	0.431	NA	NA	NA	NA
MW-3D	2/18/2004	--	**0.229**	0.229	0.176	0.446	0.013	<0.0050	<0.0050	<0.0050
MW-3D	9/10/2004	--	**0.493**	0.423	0.228	0.530	<0.0050	NA	<0.0050	NA
MW-3D	8/2/2006	--	**0.354**	0.350	0.157	0.408	NA	NA	NA	NA
MW-3D	7/24/2008	--	Well Abandoned August 2006 for installation of City walk path							
MW-4S	8/12/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-4S	10/1/2003	--	NA	NA	NA	NA	**0.067**	<0.0050	**0.029**	<0.0050
MW-4S	10/31/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-4S	2/19/2004	--	<0.001	<0.002	<0.002	<0.006	0.020	<0.0050	0.006	<0.0050
MW-4S	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation							
MW-4D	8/12/2003	--	**0.114**	0.053	0.042	0.099	NA	NA	NA	NA
MW-4D	10/31/2003	--	**0.117**	0.049	0.054	0.155	NA	NA	NA	NA
MW-4D	2/19/2004	--	**0.172**	0.057	0.037	0.184	0.043	<0.0050	**0.086**	<0.0050
MW-4D	9/9/2004	--	**0.368**	0.214	0.184	0.477	<0.0050	NA	< 0.01	NA
MW-4D	8/2/2006	--	**0.153**	0.111	0.085	0.214	NA	NA	NA	NA
MW-4D	7/24/2007	--	**0.142**	0.085	0.077	0.183	NA	NA	NA	NA
MW-4D	11/17/2008	18.5	**0.0814**	0.0852	0.0451	0.117	<0.010	NA	<0.0050	NA
MW-4D	12/16/2009	--	**0.0721**	0.0078	0.0413	0.0844	<0.010	NA	<0.0050	NA
MW-4D	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation							
MW-5S	8/12/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-5S	10/1/2003	--	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
MW-5S	10/31/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-5S	2/19/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-5S	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-5S	8/2/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-5S	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-5S	11/17/2008	--	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.0050	NA
MW-5S	12/16/2009	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-5S	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.10	<0.10	0.0065	<0.0050
MW-5S	7/12/2012	56.0	<0.0050	<0.0050	<0.0050	<0.015	0.0119	<0.010	<0.0050	<0.0050

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-5S	7/15/2015	>1000	<0.0050	<0.0050	<0.0050	<0.015	0.033	<0.010	**0.0395**	<0.0050
MW-5S	3/13/2018	163.0	<0.0050	<0.0050	<0.0050	<0.015	0.033	NA	**0.161**	NA
MW-5D	8/12/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-5D	10/31/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-5D	2/19/2004	--	<0.001	<0.002	0.00096 J	<0.006	<0.0050	<0.0050	0.007	<0.0050
MW-5D	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-5D	8/2/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-5D	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-5D	11/17/2008	--	<0.001	<0.001	<0.001	<0.003	0.0153	NA	0.0054	NA
MW-5D	12/16/2009	90.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-5D	12/16/2010	390.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-5D	12/16/2011	59.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-5D	7/16/2015	241.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-5D	3/12/2018	87	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-5D	12/17/2019	58.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0062	0.0053
MW-6S	2/19/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	**0.066**	<0.0050
MW-6S	11/17/2008	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-6S	12/16/2009	62.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	0.0073	NA
MW-6S	7/16/2015	521.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-6S	4/9/2018	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-6D	8/12/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-6D	8/14/2003	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-6D	10/31/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-6D	2/19/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.008	<0.0050
MW-6D	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	0.006	NA
MW-6D	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-6D	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-6D	11/17/2008	--	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.0050	NA
MW-6D	12/16/2009	335.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-6D	6/24/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-6D	7/12/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-6D	7/16/2015	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-6D	3/14/2018	212.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-7S	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-7S	10/1/2003	--	NA	NA	NA	NA	**0.096**	<0.0050	**0.042**	<0.0050
MW-7S	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-7S	2/18/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-7S	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-7S	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-7S	7/24/2008	--	Well Abandoned August 2006 for installation of City walk path							
MW-7D	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-7D	8/11/2003	--	0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-7D	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-7D	2/18/2004	--	<0.001	<0.002	<0.002	<0.006	0.006	<0.0050	**0.024**	<0.0050
MW-7D	9/9/2004	--	0.00088 J	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-7D	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-7D	7/24/2008	--	Well Abandoned August 2006 for installation of City walk path							
MW-8S	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-8S	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-8S	8/12/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-8S	10/1/2003	--	NA	NA	NA	NA	<0.0050	<0.0050	0.010	<0.0050
MW-8S	10/31/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-8S	2/19/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.013	<0.0050
MW-8S	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-8S	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-8S	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-8S	11/18/2008	--	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-8S	12/15/2009	327.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-8S	12/14/2010	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-8S	12/16/2011	292.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-8S	7/15/2015	334.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0073	<0.0050
MW-8S	4/9/2018	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-8S	12/17/2019	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0116	0.006
MW-8D	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-8D	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-8D	8/12/2003	--	**0.100**	0.020	0.036	0.074	NA	NA	NA	NA
MW-8D	10/31/2003	--	**0.074**	0.037	0.025	0.141	NA	NA	NA	NA
MW-8D	2/19/2004	--	**0.098**	0.019	0.020	0.095	<0.0050	<0.0050	0.011	<0.0050
MW-8D	9/9/2004	--	**0.192**	0.046	0.045	0.173	<0.0050	NA	< 0.01	NA
MW-8D	8/1/2006	--	**0.109**	0.026	0.042	0.079	NA	NA	NA	NA
MW-8D	7/24/2007	--	**0.095**	0.025	0.026	0.080	NA	NA	NA	NA
MW-8D	11/18/2008	26.7	**0.0847**	0.0304	0.0242	0.089	<0.010	NA	<0.010	NA
MW-8D	12/15/2009	2061.0	**0.0801**	0.0472	0.0323	0.123	<0.010	<0.010	<0.0050	<0.0050
MW-8D	6/24/2011	--	**0.092**	0.0492	0.044	0.147	<0.010	<0.010	<0.0050	<0.0050
MW-8D	7/10/2012	0.0	**0.0791**	0.0532	0.0339	0.174	0.0106	NA	**0.0174**	NA
MW-8D	7/15/2015	23.4	**0.0428**	0.0275	0.0264	0.14	<0.010	NA	<0.0050	NA
MW-8D	3/13/2018	176	**0.0358**	0.034	0.022	0.158	<0.010	NA	0.006	NA
MW-9	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-9	10/29/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-9	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	0.005	<0.0050	0.010	<0.0050
MW-9	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-9	7/31/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-9	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-9	11/19/2008	--	<0.001	<0.001	<0.001	<0.003	<0.020	NA	**0.0279**	NA
MW-9	12/9/2009	439.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	**0.027**	NA
MW-9	12/13/2010	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	0.0113	NA
MW-9	12/14/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0070	<0.0050
MW-9	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0052	<0.0050
MW-9	4/9/2018	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0124	<0.0050
MW-9	12/16/2019	--	<0.0050	<0.0050	<0.0050	<0.015	0.0234	<0.010	**0.0470**	<0.0050

Table 3.
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Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-10	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-10	10/29/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-10	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.008	<0.0050
MW-10	9/9/2004	--	0.005	0.011	0.007	0.010	<0.0050	NA	<0.0050	NA
MW-10	7/31/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-10	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-10	11/19/2008	12.7	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-10	12/9/2009	7.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-10	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0084	<0.0050
MW-10	7/13/2012	--	--	--	--	--	--	--	--	--
MW-10	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0061	<0.0050
MW-10	3/22/2018	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-11S	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation							
MW-11D	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-11D	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-11D	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-11D	10/1/2003	--	NA	NA	NA	NA	0.019	<0.0050	**0.068**	<0.0050
MW-11D	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-11D	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.014	<0.0050
MW-11D	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-11D	7/31/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-11D	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-11D	11/19/2008	2.0	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-11D	12/9/2009	167.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-11D	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050
MW-11D	7/12/2012	250.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-11D	7/16/2015	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0098	<0.0050
MW-11D	3/16/2018	62.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-12S	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-12S	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-12S	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-12S	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-12S	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-12S	10/30/2003	--	<0.001	<0.002	0.075	<0.006	NA	NA	NA	NA
MW-12S	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	0.022	<0.0050	**0.039**	<0.0050
MW-12S	9/10/2004	--	<0.0010	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-12S	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-12S	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-12S	11/20/2008	5.0	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-12S	12/11/2009	164.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-12S	12/14/2010	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-12S	12/14/2011	134.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-12S	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.015	0.0147	<0.010	**0.0188**	<0.0050
MW-12S	3/26/2018		<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-12D	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-12D	8/11/2003	--	**0.369**	0.408	0.205	0.580	NA	NA	NA	NA
MW-12D	10/30/2003	--	**0.778**	0.525	0.151	0.494	NA	NA	NA	NA
MW-12D	2/18/2004	--	**0.237**	0.310	0.194	0.523	<0.0050	<0.0050	<0.0050	<0.0050
MW-12D	9/10/2004	--	**0.305**	0.340	0.190	0.503	<0.0050	NA	<0.0050	NA

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Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-12D	8/2/2006	--	**0.464**	0.424	0.145	0.474	NA	NA	NA	NA
MW-12D	7/24/2007	--	**0.278**	0.314	0.161	0.423	NA	NA	NA	NA
MW-12D	11/20/2008	13.4	**0.308**	0.360	0.140	0.343	<0.020	NA	<0.010	NA
MW-12D	12/17/2009	0.0	**0.372**	0.399	0.171	0.436	<0.010	NA	<0.0050	NA
MW-12D	12/21/2010	24.3	**0.372**	0.415	0.176	0.448	<0.010	NA	<0.0050	NA
MW-12D	7/15/2015	0.0	**0.394**	0.493	0.175	0.449	<0.010	<0.010	<0.0050	<0.0050
MW-13	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-13	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-13	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-13	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-13	8/12/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-13	10/31/2003	--	**0.012**	0.015	0.043	0.073	NA	NA	NA	NA
MW-13	2/18/2004	--	0.004	0.004	0.010	0.018	0.021	<0.0050	**0.044**	<0.0050
MW-13	9/9/2004	--	**0.013**	0.014 J	0.039	0.0484 J	<0.0050	NA	< 0.01	NA
MW-13	8/1/2006	--	<0.001	<0.001	<0.00091	<0.003	NA	NA	NA	NA
MW-13	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-13	11/18/2008	39.1	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-13	12/15/2009	51.3	<0.0050	0.0052	0.0172	0.0253	<0.010	NA	<0.0050	NA
MW-13	6/22/2011	--	<0.0050	<0.0050	0.0087	<0.0015	0.0123	<0.010	<0.0050	<0.0050
MW-13	11/29/2011	149.0	<0.0050	0.0056	0.0222	0.0284	0.0226	<0.010	<0.0050	<0.0050
MW-13	12/9/2011	--	Well Abandoned December 2011 in Preparation of Site Excavation							
MW-14S	8/11/2003	--	0.003	0.005	0.014	0.034	NA	NA	NA	NA
MW-14S	10/31/2003	--	0.001	0.001	0.011	0.027	NA	NA	NA	NA
MW-14S	2/17/2004	--	< 0.02	< 0.04	0.0222 J	0.0492 J	0.016	<0.0050	**0.030**	<0.0050
MW-14S	9/9/2004	--	<0.001	< 0.02	0.0183 J	0.0263 J	<0.0050	NA	<0.0050	NA
MW-14S	8/1/2006	--	0.001	0.001	0.014	0.028	NA	NA	NA	NA
MW-14S	7/24/2007	--	<0.001	<0.001	0.003	0.004	NA	NA	NA	NA
MW-14S	11/20/2008	--	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-14S	12/11/2009	76.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-14S	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-14S	11/29/2011	72.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-14S	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation							
MW-14D	8/11/2003	--	**0.155**	0.211	0.159	0.419	NA	NA	NA	NA
MW-14D	10/31/2003	--	**0.245**	0.288	0.211	0.552	NA	NA	NA	NA
MW-14D	2/17/2004	--	**0.227**	0.286	0.153	0.373	<0.0050	<0.0050	<0.0050	<0.0050
MW-14D	9/9/2004	--	**0.314**	0.329	0.190	0.487	<0.0050	NA	<0.0050	NA
MW-14D	8/2/2006	--	**0.084**	0.062	0.045	0.129	NA	NA	NA	NA
MW-14D	7/24/2007	--	**0.207**	0.242	0.138	0.363	NA	NA	NA	NA
MW-14D	11/20/2008	16.8	**0.078**	0.115	0.0888	0.203	<0.020	NA	<0.010	NA
MW-14D	12/17/2009	13.5	**0.0915**	0.124	0.0861	0.217	<0.010	NA	<0.0050	NA
MW-14D	12/21/2010	30.9	**0.0225**	0.0635	0.0682	0.171	<0.010	NA	<0.0050	NA
MW-14D	11/29/2011	33.1	*<0.10*	0.138	0.103	<0.30	<0.010	<0.010	<0.0050	<0.0050
MW-14D	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation							
MW-15S	8/11/2003	--	**0.189**	0.156	0.112	0.300	NA	NA	NA	NA
MW-15S	10/30/2003	--	**0.103**	0.099	0.084	0.216	NA	NA	NA	NA
MW-15S	2/17/2004	--	**0.348**	0.285	0.144	0.345	0.026	NA	**0.034**	NA
MW-15S	2/17/2004	--	NA	NA	NA	NA	NA	<0.0050	NA	<0.0050
MW-15S	9/9/2004	--	**0.025**	0.016	0.016	0.035	<0.0050	NA	< 0.01	NA
MW-15S	8/1/2006	--	**0.109**	0.110	0.106	0.294	NA	NA	NA	NA
MW-15S	7/24/2007	--	Well destroyed during walk path construction in October 2006							
MW-15D	8/11/2003	--	**0.045**	0.043	0.017	0.046	NA	NA	NA	NA

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Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-15D	10/30/2003	--	**0.427**	0.500	0.233	0.623	NA	NA	NA	NA
MW-15D	2/18/2004	--	**0.423**	0.516	0.252	0.728	0.045	<0.0050	**0.0782**	<0.0050
MW-15D	9/9/2004	--	**0.565**	0.519	0.240	0.678	<0.0050	NA	< 0.01	NA
MW-15D	8/1/2006	--	**0.217**	0.235	0.129	0.373	NA	NA	NA	NA
MW-15D	7/24/2007	--	**0.234**	0.291	0.137	0.377	NA	NA	NA	NA
MW-15D	11/20/2008	32.9	**0.260**	0.269	0.141	0.337	<0.020	NA	<0.010	NA
MW-15D	12/17/2009	15.9	**0.143**	0.215	0.127	0.342	<0.010	NA	<0.0050	NA
MW-15D	12/21/2010	118.0	**0.283**	0.31	0.184	0.443	<0.010	<0.010	<0.0050	<0.0050
MW-15D	7/15/2015	0.0	**0.121**	0.178	0.154	0.382	<0.010	<0.010	<0.0050	<0.0050
MW-16S	8/11/2003	--	< 0.01	<0.02	0.027	0.053	NA	NA	NA	NA
MW-16S	10/30/2003	--	<0.0025	0.004	0.016	0.037	NA	NA	NA	NA
MW-16S	2/18/2004	--	0.00094 J	0.006	0.016	0.039	0.033	<0.0050	**0.0622**	<0.0050
MW-16S	9/9/2004	--	<0.001	0.008 J	0.0171 J	0.0389 J	0.007	NA	<0.0050	NA
MW-16S	8/1/2006	--	<0.001	0.0064 J	0.013	0.032	NA	NA	NA	NA
MW-16S	7/25/2007	--	<0.001	0.002	0.004	0.008	NA	NA	NA	NA
MW-16S	11/20/2008	23.1	<0.0010	0.0017	0.0054	0.0117	<0.020	NA	<0.010	NA
MW-16S	12/11/2009	58.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-16S	12/14/2010	--	<0.0050	<0.0050	<0.0050	<0.015	0.0132	<0.010	<0.0050	<0.0050
MW-16S	12/14/2011	76.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.10	<0.0050	<0.0050
MW-16S	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.015	0.0175	<0.10	0.0099	<0.0050
MW-16S	3/26/2018	25.0	<0.0050	<0.0050	0.0143	0.0264	<0.010	<0.10	<0.0050	<0.0050
MW-16S	12/16/2019	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.10	0.0079	<0.0050
MW-16D	8/11/2003	--	**0.050**	0.098	0.082	0.177	NA	NA	NA	NA
MW-16D	10/30/2003	--	**0.095**	0.174	0.132	0.344	NA	NA	NA	NA
MW-16D	2/18/2004	--	**0.083**	0.197	0.193	0.559	<0.0050	<0.0050	<0.0050	<0.0050
MW-16D	9/9/2004	--	**0.0836 J**	0.209	0.167 J	0.434 J	<0.0050	NA	<0.0050	NA
MW-16D	8/2/2006	--	**0.029**	0.057	0.055	0.142	NA	NA	NA	NA
MW-16D	7/25/2007	--	**0.040**	0.092	0.098	0.239	NA	NA	NA	NA
MW-16D	11/19/2008	2.4	**0.0298**	0.0579	0.0676	0.139	<0.010	NA	<0.010	NA
MW-16D	12/17/2009	1.5	<0.050	0.0879	0.0871	0.201	<0.010	NA	<0.0050	NA
MW-16D	12/21/2010	62.3	**0.0285**	0.0742	0.0998	0.235	<0.010	<0.010	<0.0050	<0.0050
MW-16D	7/15/2015	298.0	**0.0255**	0.0539	0.0861	0.213	<0.010	<0.010	<0.0050	<0.0050
MW-17S	8/12/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-17S	10/31/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-17S	2/18/2004	--	<0.001	<0.002	<0.002	<0.006	0.026	<0.0050	**0.094**	<0.0050
MW-17S	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-17S	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-17S	7/26/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-17S	11/18/2008	23.6	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-17S	12/15/2009	161.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-17S	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0206	<0.0050
MW-17S	7/10/2012	187.0	<0.0050	<0.0050	<0.0050	<0.015	0.0441	<0.010	**0.534**	<0.0050
MW-17S	7/14/2015	589.0	<0.0050	<0.0050	<0.0050	<0.015	0.0133	<0.010	**0.0242**	<0.0050
MW-17S	4/9/2018	--	<0.0050	<0.0050	<0.0050	<0.015	<0.015	<0.010	**0.0245**	<0.0050
MW-17D	8/12/2003	--	**0.292**	0.250	0.070	0.205	NA	NA	NA	NA
MW-17D	10/31/2003	--	**0.290**	0.262	0.084	0.267	NA	NA	NA	NA
MW-17D	2/18/2004	--	**0.268**	0.219	0.075	0.225	**0.055**	<0.0050	**0.047**	<0.0050
MW-17D	9/9/2004	--	**0.322**	0.270	0.101	0.302	<0.0050	NA	< 0.01	NA
MW-17D	8/1/2006	--	**0.123**	0.099	0.037	0.105	NA	NA	NA	NA
MW-17D	7/26/2007	--	**0.091**	0.083	0.033	0.104	NA	NA	NA	NA
MW-17D	11/18/2008	31.1	**0.0098**	0.0033	0.00091 J	<0.0030	<0.010	NA	<0.010	NA
MW-17D	12/15/2009	5.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA

Table 3.
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Bloomington, Indiana

Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-17D	6/24/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-17D	7/13/2012	108.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-17D	7/14/2015	17.2	**0.0072**	0.0056	<0.0050	<0.015	<0.010	NA	0.0121	NA
MW-17D	3/14/2018	35	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-18S	8/12/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-18S	10/31/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-18S	2/18/2004	--	<0.001	<0.002	<0.002	<0.006	0.034	<0.0050	**0.133**	<0.0050
MW-18S	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-18S	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-18S	7/25/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-18S	11/18/2008	--	<0.001	<0.001	<0.001	<0.003	0.0102	NA	<0.010	NA
MW-18S	12/15/2009	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.050	NA
MW-18S	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.015	0.0114	<0.010	0.008	<0.0050
MW-18S	7/15/2015	61.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-18S	3/13/2018	10.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-18D	8/12/2003	--	**0.005**	0.011	0.010	0.027	NA	NA	NA	NA
MW-18D	10/31/2003	--	0.011	0.024	0.017	0.049	NA	NA	NA	NA
MW-18D	2/18/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-18D	8/1/2006	--	0.001	0.001	<0.001	0.0021 J	NA	NA	NA	NA
MW-18D	7/25/2007	--	0.001	0.001	<0.001	<0.003	NA	NA	NA	NA
MW-18D	11/18/2008	0.0	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-18D	12/15/2009	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-18D	6/24/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-18D	7/10/2012	84.5	<0.0050	<0.0050	<0.0050	<0.015	0.049	NA	**0.0253**	NA
MW-18D	7/15/2015	3.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-18D	3/13/2018	3.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-19S	10/1/2003	--	NA	NA	NA	NA	**0.062**	<0.0050	**0.077**	<0.0050
MW-19S	10/31/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-19S	2/18/2004	--	<0.001	<0.002	<0.002	<0.006	0.006	<0.0050	**0.017**	<0.0050
MW-19S	2/18/2004	--	<0.001	<0.002	<0.002	<0.006	0.0064	<0.0050	**0.0172**	<0.0050
MW-19S	12/15/2009	87.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	**0.0154**	NA
MW-19S	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.0015	**0.246**	<0.010	**0.0245**	<0.0050
MW-19S	7/15/2015	742.0	<0.0050	<0.0050	<0.0050	<0.0015	0.0388	<0.010	**0.042**	<0.0050
MW-19S	3/13/2018	--	Insufficient water to collect sample							
MW-19D	8/12/2003	--	**0.014**	0.018	0.008	0.018	NA	NA	NA	NA
MW-19D	10/31/2003	--	**0.061**	0.059	0.012	0.094	NA	NA	NA	NA
MW-19D	2/18/2004	--	**0.061**	0.041	0.003	0.066	0.047	<0.0050	**87.2**	<0.0050
MW-19D	9/9/2004	--	**0.243**	0.252	0.060	0.327	<0.0050	NA	< 0.01	NA
MW-19D	8/1/2006	--	**0.076**	0.106	0.029	0.151	NA	NA	NA	NA
MW-19D	7/25/2007	--	**0.140**	0.165	0.053	0.177	NA	NA	NA	NA
MW-19D	11/18/2008	29.5	**0.0624**	0.0408	0.005	0.0388	<0.010	NA	<0.0050	NA
MW-19D	12/17/2009	308.0	**0.151**	0.247	0.0577	0.373	<0.010	NA	<0.0050	NA
MW-19D	12/16/2010	825.0	**0.0998**	0.191	0.0567	0.291	<0.010	<0.010	<0.0050	<0.0050
MW-19D	7/15/2015	8.4	**0.0196**	0.0406	0.0168	0.0672	<0.010	NA	<0.0050	NA
MW-19D	3/13/2018	28.3	**0.108**	0.228	0.092	0.389	<0.010	<0.010	<0.0050	<0.0050
MW-20S	11/13/2003	--	**0.018**	0.007	0.013	0.022	NA	NA	NA	NA
MW-20S	2/19/2004	--	0.003	0.00053 J	0.002	0.0019 J	<0.0050	<0.0050	**0.094**	<0.0050
MW-20S	11/18/2008	--	**0.0098**	0.0014	0.0058	0.0053	0.0143	NA	**0.177**	NA
MW-20S	12/16/2009	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	**0.0494**	NA
MW-20S	12/14/2010	--	**0.0172**	<0.0050	0.005	<0.015	<0.010	<0.010	**0.045**	<0.0050
MW-20S	12/16/2011	853.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	**0.0195**	<0.0050

Table 3.
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Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-20S	7/14/2015	469.0	<0.0050	<0.0050	<0.0050	<0.015	0.011	<0.010	**0.0633**	<0.0050
MW-20S	3/15/2018	212.0	<0.0081	<0.0050	0.0064	<0.015	<0.010	<0.010	**0.0257**	<0.0050
MW-20S	12/17/2019	--	<0.0050	<0.0050	<0.0050	<0.015	0.0171	<0.010	**0.0959**	0.0067
MW-20D	11/13/2003	--	**0.158**	0.164	0.146	0.343	NA	NA	NA	NA
MW-20D	2/18/2004	--	**0.346**	0.631	0.384	1.070	0.008	0.005	<0.0050	<0.0050
MW-20D	9/10/2004	--	**0.155**	0.343	0.198	0.525	<0.0050	NA	<0.0050	NA
MW-20D	8/1/2006	--	**0.123**	0.164	0.134	0.322	NA	NA	NA	NA
MW-20D	7/26/2007	--	**0.085**	0.076	0.135	0.299	NA	NA	NA	NA
MW-20D	11/18/2008	2.2	**0.0426**	0.0289	0.0613	0.115	<0.010	NA	<0.010	NA
MW-20D	12/17/2009	0.0	**0.0957**	0.0661	0.0988	0.213	<0.010	NA	<0.0050	NA
MW-20D	12/21/2010	40.3	**0.0257**	0.0205	0.0758	0.15	<0.010	NA	<0.0050	NA
MW-21S	11/13/2003	--	0.001	0.002	0.002	0.004	NA	NA	NA	NA
MW-21S	2/18/2004	--	<0.001	<0.002	<0.002	<0.006	0.022	<0.0050	**0.076**	<0.0050
MW-21S	9/10/2004	--	<.001	<.002	<.002	<.006	<0.0050	NA	<0.0050	NA
MW-21S	8/2/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-21S	7/26/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-21S	11/18/2008	--	<0.0010	<0.0010	<0.0010	<0.003	0.0113	NA	<0.010	NA
MW-21S	12/16/2009	--	<0.0050	<0.0050	<0.0050	<0.015	**0.0683**	NA	0.0108	NA
MW-21S	12/14/2010	--	<0.0050	<0.0050	<0.0050	<0.015	0.041	NA	0.0062	NA
MW-21S	7/14/2015	125.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0097	<0.0050
MW-21S	4/9/2018	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-21S	12/17/2019	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.007	0.008
MW-21D	11/13/2003	--	**0.037**	0.079	0.181	0.461	NA	NA	NA	NA
MW-21D	2/18/2004	--	**0.058**	0.071	0.178	0.460	<0.0050	<0.0050	<0.0050	<0.0050
MW-21D	8/2/2006	--	**0.029**	0.019	0.087	0.200	NA	NA	NA	NA
MW-21D	7/26/2007	--	**0.030**	0.013	0.088	0.185	NA	NA	NA	NA
MW-21D	11/18/2008	2.1	**0.0217**	0.0124	0.0785	0.16	<0.010	NA	<0.010	NA
MW-21D	12/17/2009	167.0	**0.0192**	0.0191	0.0779	0.176	<0.010	<0.010	<0.0050	<0.0050
MW-21D	12/21/2010	305.0	**0.0286**	0.0289	0.0846	0.186	<0.010	<0.010	0.007	<0.0050
MW-22D	11/13/2003	--	**0.036**	0.031	0.018	0.043	NA	NA	NA	NA
MW-22D	2/18/2004	--	**0.007**	0.007	0.003	0.008	<0.0050	<0.0050	<0.0050	<0.0050
MW-22D	9/10/2004	--	**0.024**	0.020	0.011	0.035	<0.0050	NA	<0.0050	NA
MW-22D	8/2/2006	--	**0.189**	0.279	0.107	0.318	NA	NA	NA	NA
MW-22D	7/26/2007	--	0.001	0.004	0.004	0.010	NA	NA	NA	NA
MW-22D	11/18/2008	3.7	**0.01**	0.0229	0.0156	0.0405	<0.010	NA	<0.0050	NA
MW-22D	12/17/2009	>1000	**0.0186**	0.0229	0.0184	0.0643	**0.0702**	<0.010	**0.0532**	<0.0050
MW-22D	12/21/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-22D	7/15/2015	34.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-22D	3/15/2018	3.6	<0.0050	0.0105	0.0122	0.0226	<0.010	NA	<0.0050	NA
MW-23D	11/13/2003	--	**0.377**	0.360	0.177	0.394	NA	NA	NA	NA
MW-23D	2/18/2004	--	**0.376**	0.373	0.174	0.404	0.011	<0.0050	**0.086**	<0.0050
MW-23D	9/10/2004	--	**0.467**	0.463	0.203	0.474	0.005	NA	<0.0050	NA
MW-23D	8/2/2006	--	**0.147**	0.178	0.075	0.157	NA	NA	NA	NA
MW-23D	7/26/2007	--	**0.228**	0.249	0.099	0.223	NA	NA	NA	NA
MW-23D	11/18/2008	12.2	**0.08**	0.104	0.0399	0.107	<0.010	NA	<0.0050	NA
MW-23D	12/16/2009	3.6	**0.0669**	0.0911	0.0785	0.116	<0.010	NA	<0.0050	NA
MW-23D	12/17/2010	35.3	**0.0258**	0.268	0.0163	0.0401	<0.010	NA	<0.0050	NA
MW-23D	12/16/2011	76.5	**0.0509**	0.0605	0.0554	0.117	<0.010	<0.010	<0.0050	<0.0050
MW-23D	7/16/2015	--	**0.0452**	0.0168	0.0545	0.105	<0.010	<0.010	<0.0050	<0.0050
MW-23D	3/15/2018	32	**0.626**	0.056	0.114	0.231	<0.010	<0.010	<0.0050	<0.0050
MW-23D	1/7/2020	122	**0.037**	0.028	0.0907	0.170	<0.010	<0.010	0.005	<0.0050

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
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Bloomington, Indiana

Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-24A	11/17/2008	--	Not Sampled do the presence of Free-product							
MW-24A	3/3/2009	--	**0.353**	0.476	0.195	0.544	<0.010	<0.010	<0.010	<0.010
MW-24A	12/17/2009	16.4	**0.275**	0.431	0.169	0.468	<0.010	NA	<0.0050	NA
MW-24A	12/21/2010	12.6	**0.341**	0.483	0.186	0.517	<0.010	NA	<0.0050	NA
MW-24A	3/11/2011	48.8	**0.431**	0.643	0.228	0.639	<0.010	<0.010	<0.0050	<0.0050
MW-24A	6/24/2011	--	**0.287**	0.432	0.168	0.471	<0.010	<0.010	<0.0050	<0.0050
MW-24A	9/28/2011	26.7	**0.386**	0.608	0.189	0.533	<0.010	<0.010	<0.0050	<0.0050
MW-25A	11/18/2008	70.9	0.0047 J	0.0037 J	0.0067	0.0087 J	<0.010	NA	<0.010	NA
MW-25A	12/15/2009	97.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-25A	12/17/2010	>1000	**0.0641**	0.0404	0.0176	0.0315	<0.010	<0.010	0.0062	<0.0050
MW-25A	3/7/2011	89.1	**0.736**	0.0407	0.0224	0.0428	<0.010	<0.010	<0.0050	<0.0050
MW-25A	6/23/2011	--	**0.177**	0.0707	0.0263	<0.075	<0.010	<0.010	<0.0050	<0.0050
MW-25A	9/28/2011	>1000	**0.175**	0.0963	0.0433	0.0938	<0.010	<0.010	<0.0050	<0.0050
MW-25A	12/16/2011	55.8	**0.0666**	0.0432	0.0267	0.0511	<0.010	<0.010	<0.0050	<0.0050
MW-25A	4/4/2012	68.5	**0.0057**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-25A	7/10/2012	31.6	**0.0691**	0.0151	0.0201	0.0198	<0.010	<0.010	<0.0050	<0.0050
MW-25A	10/3/2012	18.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-25A	7/14/2015	105.0	**0.0118**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-25A	3/13/2018	13.8	**0.072**	0.0351	0.0202	0.0437	<0.010	<0.010	<0.0050	<0.0050
MW-26A	11/18/2008	--	0.002	0.0029	0.0019 J	0.0038 J	0.0118	NA	0.0085	NA
MW-26A	12/16/2009	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-26A	12/16/2010	6.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-26A	3/7/2011	10.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-26A	6/24/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-26A	9/28/2011	26.6	**0.0074**	0.0188	<0.0050	0.0171	<0.010	<0.010	<0.0050	<0.0050
MW-26A	12/14/2011	50.0	**0.0131**	0.0275	0.0085	0.0287	<0.010	<0.010	<0.0050	<0.0050
MW-26A	4/4/2012	151.0	**0.0222**	0.074	0.0306	0.101	<0.010	<0.010	<0.0050	<0.0050
MW-26A	7/13/2012	18.2	**0.0259**	0.0986	0.0504	0.155	0.0145	<0.010	0.0121	<0.0050
MW-26A	10/2/2012	175.0	**0.0286**	0.106	0.0599	0.222	0.0109	<0.010	<0.0050	<0.0050
MW-27A	11/17/2008	--	Not Sampled do the presence of Free-product							
MW-27A	3/3/2009	--	**0.167**	0.308	0.167	0.478	<0.010	<0.010	<0.010	<0.010
MW-27A	12/17/2009	14.9	**0.25**	0.443	<0.25	<0.75	<0.010	NA	<0.0050	NA
MW-27A	4/15/2010	101.0	**0.208**	0.436	0.204	0.57	<0.010	<0.010	<0.010	<0.010
MW-27A	7/15/2015	--	Converted to RW-17							
MW-28A	2/12/2009	--	**0.0089**	0.0058	0.0055	0.005	<0.010	NA	<0.010	NA
MW-28A	8/5/2009	5.2	0.0028	0.0016	0.0011	<0.0030	<0.010	NA	<0.0050	NA
MW-28A	6/16/2010	9.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28A	9/21/2010	0.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28A	3/8/2011	43.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28A	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28A	9/27/2011	10.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28A	12/15/2011	12.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28A	4/5/2012	0.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28A	7/11/2012	52.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28A	10/2/2012	2.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28A	7/16/2015	19.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28A	3/14/2018	10.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28B	2/12/2009	--	**0.069**	0.0015	0.0476	0.0344	0.0258	NA	**0.0367**	NA
MW-28B	8/5/2009	1.1	**0.0951**	0.0017	0.0743	0.0533	<0.010	NA	<0.0050	NA
MW-28B	12/16/2009	0.0	**0.0923**	<0.0050	0.0633	0.0428	<0.010	NA	<0.0050	NA

Table 3.
Groundwater BTEX & Metals Results
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Former Indiana Creosoting Company
Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-28B	6/16/2010	14.9	**0.0849**	<0.0050	0.0133	0.015	<0.010	NA	<0.0050	NA
MW-28B	9/21/2001	0.1	**0.0917**	<0.0050	0.0499	0.0428	<0.010	NA	<0.0050	NA
MW-28B	12/15/2010	36.4	**0.0842**	<0.010	0.0512	0.0406	<0.010	<0.010	<0.0050	<0.0050
MW-28B	3/8/2011	53.2	**0.0787**	<0.0050	0.019	0.0283	<0.010	<0.010	<0.0050	<0.0050
MW-28B	6/22/2011	--	**0.0757**	<0.0050	0.0071	0.0155	<0.010	<0.010	<0.0050	<0.0050
MW-28B	9/27/2011	4.1	**0.0889**	<0.0050	0.037	0.0387	<0.010	NA	<0.0050	NA
MW-28B	12/13/2011	15.7	**0.0847**	<0.0050	<0.0050	<0.0015	<0.010	NA	<0.0050	NA
MW-28B	4/5/2012	16.0	**0.0749**	<0.0050	0.0132	0.017	<0.010	NA	<0.0050	NA
MW-28B	7/11/2012	4.6	**0.0923**	<0.0050	0.0404	0.0415	<0.010	<0.010	<0.0050	<0.0050
MW-28B	10/2/2012	7.5	**0.0913**	<0.0050	0.0176	0.0314	<0.010	NA	<0.0050	NA
MW-28B	7/16/2015	0.0	**0.0428**	<0.0050	<0.0050	<0.0015	<0.010	<0.010	<0.0050	<0.0050
MW-28B	3/14/2018	1.2	**0.0647**	<0.0050	0.0485	0.0483	<0.010	<0.010	<0.0050	<0.0050
MW-28B	1/7/2020	31.4	**0.0295**	<0.0050	<0.0050	<0.0015	<0.010	<0.010	0.0055	<0.0050
MW-28C	2/12/2009	--	<0.0010	<0.0010	<0.0010	<0.003	<0.010	NA	<0.010	NA
MW-28C	8/5/2009	4.7	<0.0010	<0.0010	<0.0010	<0.003	<0.010	NA	<0.0050	NA
MW-28C	12/16/2009	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28C	6/16/2010	8.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28C	9/21/2010	0.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28C	12/15/2010	21.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28C	3/8/2011	14.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28C	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28C	9/27/2011	7.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28C	12/13/2011	9.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28C	4/5/2012	120.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28C	7/10/2012	2.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28C	10/2/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28C	7/16/2015	6.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28C	3/14/2018	14.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28C	1/7/2020	8.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-29A	2/12/2009	107.8	0.0019	0.0022	0.0019	0.0059	0.0278	NA	**0.0172**	NA
MW-29A	8/5/2009	5.7	0.0018	0.0012	0.00098 J	0.003	<0.010	NA	<0.0050	NA
MW-29A	12/15/2009	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-29A	6/17/2010	104.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-29A	9/21/2010	0.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-29A	3/11/2011	39.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-29A	6/24/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-29A	9/30/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-29A	12/14/2011	22.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-29A	7/13/2012	25.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-29A	10/4/2012	53.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-29A	7/17/2015	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-29A	3/26/2018		<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-29B	3/3/2009	--	**0.371**	0.423	0.203	0.558	**0.0702**	**0.0613**	<0.010	<0.010
MW-29B	8/5/2009	31.4	**0.158**	0.264	0.163	0.430	0.0399	NA	<0.0050	NA
MW-29B	12/17/2009	27.8	**0.0932**	0.17	0.119	0.315	0.0358	NA	<0.0050	NA
MW-29B	6/17/2010	--	**0.1**	0.193	0.16	0.410	0.0129	0.0364	0.0171	<0.0050
MW-29B	9/21/2010	0.2	**0.0860**	0.146	0.125	0.350	0.0437	0.0401	<0.0050	<0.0050
MW-29B	12/21/2010	30.8	**0.1370**	0.193	0.155	0.378	0.0445	NA	<0.0050	NA
MW-29B	3/11/2011	64.7	**0.1040**	0.191	0.146	0.394	0.0435	0.0403	<0.0050	<0.0050
MW-29B	6/24/2011	--	**0.1200**	0.221	0.176	0.443	**0.0521**	0.042	<0.0050	<0.0050
MW-29B	9/28/2011	82.3	**0.1340**	0.231	0.192	0.457	**0.05**	0.0498	<0.0050	<0.0050
MW-29B	7/15/2015	316.0	**0.1130**	0.239	0.171	0.501	**0.0785**	**0.0731**	<0.0050	<0.0050
MW-30A	11/4/2009	70.4	**0.315**	0.253	0.171	0.359	<0.010	<0.010	<0.010	<0.010

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	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-30A	12/16/2009	263.0	**0.273**	0.204	0.149	0.322	<0.010	NA	<0.0050	NA
MW-30A	6/16/2010	74.8	**0.149**	0.1	0.0824	0.189	<0.010	NA	<0.0050	NA
MW-30A	9/23/2010	104.0	**0.307**	<0.25	<0.25	<0.75	<0.010	<0.010	<0.0050	<0.0050
MW-30A	12/16/2010	>1000	**0.244**	0.12	0.159	0.34	<0.010	<0.010	<0.0050	<0.0050
MW-30A	3/8/2011	24.0	**0.265**	0.0759	0.144	0.3	<0.010	<0.010	<0.0050	<0.0050
MW-30A	6/24/2011	--	**0.208**	0.0349	0.113	0.252	<0.010	NA	<0.0050	NA
MW-30A	9/30/2011	8.7	**0.169**	0.0343	0.076	0.17	<0.010	<0.010	<0.0050	<0.0050
MW-30A	12/16/2011	84.3	**0.262**	<0.050	0.178	0.39	<0.010	<0.010	<0.0050	<0.0050
MW-30A	4/4/2012	25.0	**0.192**	<0.025	0.116	0.256	<0.010	<0.010	<0.0050	<0.0050
MW-30A	7/12/2012	15.2	**0.226**	0.0658	0.161	0.349	<0.010	<0.010	<0.0050	<0.0050
MW-30A	10/3/2012	256.0	**0.241**	0.0428	0.161	0.327	<0.010	<0.010	<0.0050	<0.0050
MW-30A	7/16/2015	0.0	**0.122**	0.0424	0.0599	0.126	<0.010	<0.010	<0.0050	<0.0050
MW-30A	3/12/2018	1.2	**0.137**	0.0529	0.128	0.284	<0.010	<0.010	<0.0050	<0.0050
MW-30B	11/4/2009	13.0	0.00088 J	0.0009 J	0.00054 J	<0.0030	<0.020	<0.020	<0.010	<0.010
MW-30B	12/16/2009	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-30B	6/16/2010	5.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-30B	9/23/2010	118.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-30B	12/16/2010	29.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-30B	3/8/2011	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-30B	6/24/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-30B	9/30/2011	16.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-30B	12/16/2011	0.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-30B	4/4/2012	26.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-30B	7/12/2012	9.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-30B	10/3/2012	12.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-30B	7/16/2015	18.5	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050	<0.0050
MW-30B	3/12/2018	33.2	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050	<0.0050
MW-31A	11/4/2009	>1000	<0.00100	<0.00100	<0.00100	<0.0030	**0.0527**	<0.010	**0.061**	<0.010
MW-31A	12/15/2009	1025.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31A	6/18/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	9/21/2010	0.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31A	12/17/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	0.0148	<0.010	**0.0205**	<0.0050
MW-31A	3/8/2011	27.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	6/24/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	9/30/2011	57.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	12/16/2011	542.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	4/4/2012	144.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	7/13/2012	60.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	10/3/2012	151.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	7/16/2015	332.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	**0.0157**	<0.0050
MW-31A	3/14/2018	1.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	12/17/2019	40.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0062	0.0056
MW-31B	11/4/2009	755.0	0.00047 J	0.00042 J	<0.00100	<0.0030	0.011	<0.010	<0.010	<0.010
MW-31B	12/15/2009	93.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31B	6/18/2010	9.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31B	9/21/2010	0.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31B	3/8/2011	58.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31B	6/24/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31B	9/30/2011	481.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31B	12/16/2011	35.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31B	4/4/2012	722.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0054	<0.0050
MW-31B	7/13/2012	14.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31B	10/3/2012	154.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31B	7/16/2015	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050

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Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-31B	3/14/2018	5.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31C	11/4/2009	>1000	<0.00100	0.00054 J	<0.00100	<0.0030	**0.116**	<0.010	**0.115**	<0.010
MW-31C	12/15/2009	35.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31C	6/18/2010	79.3	<0.0050	<0.0050	<0.0050	<0.015	**0.0796**	**0.0734**	<0.0050	<0.0050
MW-31C	9/21/2010	0.0	<0.0050	<0.0050	<0.0050	<0.015	**0.0622**	NA	<0.0050	NA
MW-31C	12/17/2010	29.4	<0.0050	<0.0050	<0.0050	<0.015	**0.0504**	NA	<0.0050	NA
MW-31C	3/8/2011	3.0	<0.0050	<0.0050	<0.0050	<0.015	0.0368	0.0395	<0.0050	<0.0050
MW-31C	6/24/2011	--	<0.0050	<0.0050	<0.0050	<0.015	0.0368	0.0384	<0.0050	<0.0050
MW-31C	9/30/2011	20.7	<0.0050	<0.0050	<0.0050	<0.015	0.0252	0.0276	<0.0050	<0.0050
MW-31C	12/16/2011	243.0	<0.0050	<0.0050	<0.0050	<0.015	0.0219	0.022	<0.0050	<0.0050
MW-31C	4/4/2012	44.1	<0.0050	<0.0050	<0.0050	<0.015	0.0146	0.0153	<0.0050	<0.0050
MW-31C	7/13/2012	100.0	<0.0050	<0.0050	<0.0050	<0.015	0.0137	0.0112	<0.0050	<0.0050
MW-31C	10/3/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31C	7/16/2015	0.0	<0.0050	<0.0050	<0.0050	<0.015	0.0158	0.0154	<0.0050	<0.0050
MW-31C	3/14/2018	12.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32A	11/4/2009	318.0	<0.00100	<0.00100	<0.00100	<0.0030	<0.010	<0.010	<0.010	<0.010
MW-32A	12/16/2009	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-32A	6/16/2010	32.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-32A	9/21/2010	0.2	**0.0282**	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-32A	12/15/2010	8.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-32A	3/7/2011	59.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32A	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32A	9/28/2011	19.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-32A	12/13/2011	17.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-32A	4/5/2012	55.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32A	7/10/2012	0.0	**0.0161**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32A	10/3/2012	6.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32A	7/16/2015	379.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32A	3/14/2018	80.2	<0.0050	<0.0050	<0.0050	<0.015	0.0199	<0.010	0.0136	<0.0050
MW-32A	1/7/2020	--	**0.0068**	<0.0050	<0.0050	<0.015	0.016	<0.010	**0.0205**	<0.0050
MW-32B	5/2/2012	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0122	<0.0050
MW-32B	7/11/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32B	10/3/2012	83.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32B	7/16/2015	4.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32B	3/14/2018	4.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32C	5/2/2012	97.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32C	7/11/2012	114.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32C	10/3/2012	109.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32C	7/16/2015	5.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32C	3/14/2018	33.400	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	11/23/2009	16.1	<0.0050	<0.0050	<0.0050	<0.015	0.0127	<0.010	<0.010	<0.010
MW-33A	12/17/2009	152.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-33A	3/14/2010	262.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-33A	6/15/2010	238.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	9/20/2010	0.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	12/13/2010	162.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	3/7/2011	77.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	6/21/2011	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	9/26/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	7/26/2013	--	Well Abandoned Due to Non Detections							
MW-33B	11/23/2009	187.0	<0.0050	<0.0050	<0.0050	<0.015	0.0157	<0.010	<0.010	<0.010

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
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Bloomington, Indiana

Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-33B	12/17/2009	265.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	3/14/2010	309.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	0.0055	NA
MW-33B	6/15/2010	174.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	9/20/2010	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	12/13/2010	12.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	3/7/2011	18.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	6/21/2011	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	9/26/2011	2.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	7/26/2013	--	Well Abandoned Due to Non Detections							
MW-33C	11/23/2009	62.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-33C	12/17/2009	345.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33C	3/14/2010	478.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-33C	6/15/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.005	<0.0050
MW-33C	9/20/2010	0.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33C	12/13/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0058	<0.0050
MW-33C	3/7/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33C	6/21/2011	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33C	9/26/2011	521.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33C	7/26/2013	--	Well Abandoned Due to Non Detections							
MW-34A	11/23/2009	1697.0	0.0153	0.0194	0.029	0.092	<0.010	<0.010	0.0118	<0.010
MW-34A	12/16/2009	251.0	**0.025**	0.0218	0.0328	0.094	0.0129	<0.010	0.0139	<0.0050
MW-34A	6/16/2010	108.0	**0.0500**	0.0243	0.0402	0.095	<0.010	<0.010	<0.0050	<0.0050
MW-34A	9/23/2010	104.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-34A	12/16/2010	>1000	**0.0475**	<0.025	0.0336	0.0863	0.0263	<0.010	**0.0159**	<0.0050
MW-34A	3/7/2011	250.0	**0.0551**	0.0231	0.0434	0.101	<0.010	<0.010	<0.0050	<0.0050
MW-34A	6/23/2011	--	**0.0521**	0.0175	0.039	0.0876	<0.010	<0.010	<0.0050	<0.0050
MW-34A	9/28/2011	420.0	**0.0755**	0.0261	0.0519	0.129	<0.010	<0.010	<0.0050	<0.0050
MW-34A	12/15/2011	123.0	**0.0696**	0.0231	0.0529	0.124	0.0128	<0.010	0.0061	<0.0050
MW-34A	4/4/2012	114.0	**0.0767**	0.0368	0.0639	0.156	<0.010	<0.010	<0.0050	<0.0050
MW-34A	7/12/2012	0.0	**0.0727**	0.0118	0.0548	0.121	0.0344	<0.010	0.0146	<0.0050
MW-34A	10/2/2012	587.0	**0.0797**	0.0195	0.0686	0.124	<0.010	<0.010	<0.0050	<0.0050
MW-34A	7/16/2015	>1000	**0.178**	0.196	0.124	0.319	**0.159**	0.0103	**0.127**	<0.0050
MW-34A	3/15/2018	>1000	**0.1510**	0.216	0.157	0.363	<0.10	<0.10	<0.0050	<0.0050
MW-34A	12/17/2019	>1000	**0.0668**	0.0134	0.0626	0.112	**0.085**	<0.010	**0.0897**	0.005
MW-35A	2/24/2010	31.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-35A	6/18/2010	16.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	9/22/2010	54.0	**0.0078**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	12/22/2010	285.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-35A	3/10/2011	96.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	9/27/2011	25.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	12/16/2011	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	4/6/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	7/12/2012	5.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	10/4/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	7/14/2015	30.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	3/16/2018	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	2/25/2010	23.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-35B	6/18/2010	7.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	9/22/2010	37.0	**0.018**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	12/22/2010	5.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	3/10/2011	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-35B	9/27/2011	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	12/16/2011	1.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	4/6/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	7/12/2012	477.0	**0.0086**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	10/4/2012	19.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	7/14/2015	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	3/16/2018	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	12/16/2019	14.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0053	<0.0050
MW-35C	2/25/2010	0.0	<0.0050	<0.0050	<0.0050	<0.015	0.305	<0.010	**0.0469**	<0.010
MW-35C	6/18/2010	182.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	9/22/2010	122.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	12/22/2010	438.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	3/10/2011	195.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	9/27/2011	395.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	12/16/2011	226.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	4/6/2012	49.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	7/12/2012	58.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	10/4/2012	319.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	7/14/2015	1000+	<0.0050	<0.0050	<0.0050	<0.015	**0.0103**	<0.010	0.0063	<0.0050
MW-35C	3/16/2018	46.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	12/17/2019	230.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0123	0.0059
MW-36A	2/25/2010	55.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	6/18/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	9/22/2010	17.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	12/20/2010	41.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-36A	3/10/2011	11.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	9/27/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	12/14/2011	16.2	<0.0050	0.012	0.0122	0.0338	<0.010	<0.010	<0.0050	<0.0050
MW-36A	4/6/2012	71.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	7/12/2012	97.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	10/3/2012	203.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	7/14/2015	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	3/28/2018	24.3	<0.0050	0.0103	0.012	0.026	<0.010	<0.010	<0.0050	<0.0050
MW-36A	12/16/2019	13.1	<0.0050	<0.0050	0.0139	0.0191	<0.010	<0.010	0.008	0.0055
MW-36B	2/25/2010	110.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-36B	6/18/2010	49.2	<0.0050	<0.0050	<0.0050	<0.015	0.0109	<0.010	<0.0050	<0.0050
MW-36B	9/22/2010	1.9	<0.0050	0.0175	0.0212	0.055	0.0124	<0.010	<0.0050	<0.0050
MW-36B	12/20/2010	60.1	**0.0074**	0.0657	0.0799	0.2	0.0163	0.0123	<0.0050	<0.0050
MW-36B	3/10/2011	26.5	**0.005**	0.0418	0.0389	0.134	<0.010	<0.010	<0.0050	<0.0050
MW-36B	6/24/2011	--	**0.0133**	0.103	0.102	0.261	0.0203	0.0195	<0.0050	<0.0050
MW-36B	9/27/2011	40.3	**0.0111**	0.0813	0.0833	0.213	<0.010	<0.010	<0.0050	<0.0050
MW-36B	7/14/2015	DNAPL In Well - Did Not Sample			--	--	--	--	--	--
MW-36C	2/25/2010	0.0	<0.0050	<0.0050	<0.0050	<0.015	0.0452	<0.010	**0.0451**	<0.010
MW-36C	6/18/2010	--	**0.0533**	0.139	0.0878	0.266	<0.010	<0.010	<0.0050	<0.0050
MW-36C	9/22/2010	93.4	**0.0662**	0.174	0.0822	0.255	<0.010	<0.010	<0.0050	<0.0050
MW-36C	12/20/2010	53.2	**0.0575**	0.143	0.0742	0.218	<0.010	<0.010	<0.0050	<0.0050
MW-36C	3/10/2011	71.4	**0.0652**	0.165	0.0807	0.248	<0.010	<0.010	<0.0050	<0.0050
MW-36C	6/24/2011	--	**0.0305**	0.0735	0.0321	0.107	<0.010	<0.010	<0.0050	<0.0050
MW-36C	9/27/2011	94.3	**0.0485**	0.134	0.0621	0.193	<0.010	<0.010	<0.020	<0.020
MW-36C	7/14/2015	DNAPL In Well - Did Not Sample			--	--	--	--	--	--
MW-36C	3/28/2018	3.8	**0.0175**	0.075	0.0434	0.163	<0.010	<0.010	<0.0050	<0.0050

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	1996 VRP Tier II Residential	--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
	1996 VRP Tier II Non-Residential	--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-37A	2/25/2010	60.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-37A	6/16/2010	210.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	9/23/2010	111.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	12/17/2010	392.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-37A	3/8/2011	95.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	9/28/2011	609.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	12/16/2011	800.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	4/4/2012	205.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	7/11/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	0.0342	<0.010	**0.0804**	<0.0050
MW-37A	10/2/2012	>800	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	7/15/2015	>1000	<0.0050	<0.0050	<0.0050	<0.015	0.0173	<0.010	**0.0199**	<0.0050
MW-37A	3/16/2018	660.0	<0.0050	<0.0050	<0.0050	<0.015	0.0181	<0.010	0.0053	<0.0050
MW-37B	2/25/2010	60.2	**0.0897**	<0.0050	0.0431	0.0159	<0.010	NA	<0.010	NA
MW-37B	6/16/2010	489.0	**0.075**	<0.0050	0.0338	0.0173	<0.010	<0.010	0.0079	<0.0050
MW-37B	9/23/2010	138.0	**0.095**	<0.0050	0.0503	0.0205	<0.010	NA	<0.0050	NA
MW-37B	12/17/2010	146.0	**0.0918**	<0.0050	0.0327	0.0154	<0.010	NA	<0.0050	NA
MW-37B	3/9/2011	49.6	**0.0893**	<0.0050	0.025	0.0158	<0.010	<0.010	<0.0050	<0.0050
MW-37B	6/23/2011	--	**0.0769**	<0.0050	0.0155	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37B	9/28/2011	0.0	**0.0698**	<0.0050	0.0111	<0.015	<0.010	<0.010	0.0072	<0.0050
MW-37B	12/16/2011	>800.0	**0.0803**	<0.0050	0.0076	<0.015	0.0163	<0.010	**0.0244**	<0.0050
MW-37B	4/4/2012	>800.0	**0.0728**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37B	7/11/2012	522.0	**0.0875**	<0.0050	0.0322	<0.015	<0.010	<0.010	0.0082	<0.0050
MW-37B	10/2/2012	494.0	**0.08**	<0.0050	0.0051	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37B	7/15/2015	583.0	**0.0555**	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0089	<0.0050
MW-37B	3/16/2018	512.0	**0.0595**	<0.0050	<0.0050	<0.15	<0.010	<0.010	<0.0050	<0.0050
MW-37C	9/12/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37C	12/16/2011	44.1	**0.0057**	0.0217	0.0112	0.0372	<0.010	NA	<0.0050	NA
MW-37C	4/4/2012	40.0	**0.0129**	0.0499	0.0218	0.0739	<0.010	<0.010	<0.0050	<0.0050
MW-37C	7/11/2012	21.0	**0.0131**	0.059	0.0265	0.0869	<0.010	<0.010	<0.0050	<0.0050
MW-37C	10/2/2012	15.5	**0.0162**	0.0865	0.0413	0.14	<0.010	NA	<0.0050	NA
MW-37C	7/15/2015	0.0	**0.005**	0.0284	0.0171	0.061	<0.010	<0.010	<0.0050	<0.0050
MW-37C	3/15/2018	53.2	**0.005**	0.005	0.005	0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38A	4/14/2010	903.0	**0.0779**	0.0548	0.0881	0.223	<0.010	<0.010	<0.010	<0.010
MW-38A	6/17/2010	97.1	**0.0753**	0.0329	0.089	0.182	<0.010	NA	<0.0050	NA
MW-38A	9/22/2010	0.4	**0.138**	0.114	0.127	0.289	<0.010	NA	<0.0050	NA
MW-38A	12/17/2010	26.2	**0.108**	0.103	0.123	0.27	<0.010	NA	<0.0050	NA
MW-38A	3/8/2011	0.0	**0.0747**	0.05	0.102	0.22	<0.010	<0.010	<0.0050	<0.0050
MW-38A	6/23/2011	--	**0.0875**	0.0275	0.0912	0.205	<0.010	<0.010	<0.0050	<0.0050
MW-38A	9/28/2011	2.1	**0.145**	0.052	0.14	0.301	<0.010	NA	<0.0050	NA
MW-38A	12/13/2011	26.8	**0.111**	0.0204	0.118	0.248	<0.010	NA	<0.0050	NA
MW-38A	4/5/2012	2.2	**0.117**	0.0127	0.126	0.268	<0.010	<0.010	<0.0050	<0.0050
MW-38A	7/10/2012	0.8	**0.0992**	0.0487	0.126	0.274	<0.010	<0.010	<0.0050	<0.0050
MW-38A	10/3/2012	7.3	**0.11**	0.0139	0.126	0.259	<0.010	NA	<0.0050	NA
MW-38A	7/14/2015	0.0	**0.0699**	<0.010	0.0755	0.0941	<0.010	<0.010	<0.0050	<0.0050
MW-38A	3/13/2018	1.2	**0.0701**	0.0126	0.109	0.224	<0.010	<0.010	<0.0050	<0.0050
MW-38A	12/17/2019	5.1	**0.0643**	<0.0050	0.0815	0.181	<0.010	<0.010	0.0059	0.0063
MW-38B	4/14/2010	19.3	**0.0811**	0.015	0.0682	0.142	<0.010	<0.010	<0.010	<0.010
MW-38B	6/17/2010	6.2	**0.0566**	0.0104	0.045	0.113	0.0105	NA	<0.0050	NA
MW-38B	9/22/2010	0.0	**0.107**	0.0941	0.107	0.238	<0.0050	NA	<0.0050	NA
MW-38B	12/17/2010	7.2	**0.097**	0.0899	0.118	0.257	<0.0050	NA	<0.0050	NA

Table 3.
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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-38B	3/8/2011	0.0	**0.102**	0.0612	0.119	0.247	<0.010	<0.010	<0.0050	<0.0050
MW-38B	6/23/2011	--	**0.0863**	0.025	0.106	0.23	<0.010	NA	<0.0050	NA
MW-38B	9/28/2011	20.2	**0.114**	0.0345	0.121	0.257	<0.010	NA	<0.0050	NA
MW-38B	12/13/2011	15.5	**0.124**	0.014	0.119	0.283	<0.010	NA	<0.0050	NA
MW-38B	4/5/2012	58.5	**0.114**	0.0125	0.117	0.252	<0.010	<0.010	<0.0050	<0.0050
MW-38B	7/10/2012	0.2	**0.101**	0.0384	0.143	0.318	<0.010	<0.010	<0.0050	<0.0050
MW-38B	10/3/2012	83.7	**0.102**	0.0168	0.104	0.213	<0.010	<0.010	<0.0050	<0.0050
MW-38B	7/14/2015	0.0	**0.0771**	0.0099	0.0823	0.0948	<0.010	<0.010	<0.0050	<0.0050
MW-38B	3/13/2018	1.8	**0.0603**	0.0126	0.1	0.201	<0.010	<0.010	<0.0050	<0.0050
MW-38C	4/14/2010	739.0	<0.0050	<0.0050	<0.0050	<0.015	0.0102	NA	<0.010	NA
MW-38C	6/16/2010	11.6	<0.0050	<0.0050	<0.0050	<0.015	0.0149	NA	<0.0050	NA
MW-38C	9/22/2010	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	12/15/2010	4.3	<0.0050	<0.0050	<0.0050	<0.015	0.0131	NA	<0.0050	NA
MW-38C	3/8/2011	12.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	9/28/2011	58.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	12/13/2011	672.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	4/5/2012	7.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	7/10/2012	30.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	10/3/2012	246.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	7/15/2015	229.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	3/13/2018	123.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	4/14/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	**0.0274**	NA	**0.018**	NA
MW-38D	6/17/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	9/22/2010	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	12/15/2010	27.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-38D	3/8/2011	15.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	9/28/2011	32.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	12/13/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-38D	4/5/2012	12.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	7/10/2012	5.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	10/3/2012	21.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	7/15/2015	4.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	3/13/2018	29.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-39A	4/14/2010	>1000	*<0.25*	0.54	0.252	<0.75	**0.0482**	NA	**0.0492**	NA
MW-39A	6/17/2010	--	**0.239**	0.457	0.183	0.548	<0.010	<0.010	<0.0050	<0.0050
MW-39A	9/23/2010	60.8	**0.275**	0.493	<0.25	<0.75	<0.010	<0.010	<0.0050	<0.0050
MW-39A	12/21/2010	26.8	**0.216**	0.357	0.147	0.426	<0.010	NA	<0.0050	NA
MW-39A	3/11/2011	81.4	**0.193**	0.394	0.172	0.499	<0.010	<0.010	<0.0050	<0.0050
MW-39A	6/24/2011	--	**0.0906**	0.241E[a]	0.139	0.411	<0.010	<0.010	<0.0050	<0.0050
MW-39A	9/28/2011	50.4	**0.275**	0.463	0.188	0.562	<0.010	<0.010	<0.0050	<0.0050
MW-39B	4/14/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	0.0128	NA	<0.010	NA
MW-39B	6/17/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	0.045	<0.010	<0.0050	<0.0050
MW-39B	9/23/2010	252.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-39B	12/15/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0052	<0.0050
MW-39B	3/8/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0089	<0.0050
MW-39B	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-39B	9/28/2011	124.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-39B	12/13/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-39B	4/5/2012	378.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-39B	7/12/2012	52.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-39B	10/2/2012	65.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050

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Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-39B	7/15/2015	11.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-39B	3/14/2018	40.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	4/14/2010	762.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-40A	6/16/2010	47.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	9/23/2010	65.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	3/7/2011	238.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0075	<0.0050
MW-40A	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	9/27/2011	380.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	12/14/2011	104.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0057	<0.0050
MW-40A	4/3/2012	23.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-40A	7/13/2012	39.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	10/4/2012	89.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	7/16/2015	232.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0083	<0.0050
MW-40A	3/16/2018	22.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	12/16/2019	37.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0055	<0.0050
MW-40B	4/14/2010	314.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-40B	6/16/2010	92.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-40B	9/23/2010	277.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40B	12/14/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0094	<0.0050
MW-40B	3/7/2011	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40B	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40B	9/27/2011	93.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40B	12/14/2011	112.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40B	4/3/2012	99.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40B	7/13/2012	22.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40B	10/4/2012	14.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-40B	7/16/2015	161.0	<0.0050	<0.0050	<0.0050	<0.015	0.0194	<0.010	<0.0050	<0.0050
MW-40B	3/16/2018	83.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40C	4/14/2010	21.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-40C	6/16/2010	62.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-40C	9/23/2010	0.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40C	12/17/2010	30.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-40C	3/7/2011	27.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40C	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40C	9/28/2011	162.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40C	12/14/2011	12.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-40C	4/3/2012	2.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-40C	7/13/2012	32.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.0050
MW-40C	10/4/2012	7.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-40C	7/16/2015	232.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.0050
MW-40C	3/16/2018	160.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40C	12/16/2019	13.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0087	0.0061
MW-41A	12/15/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	0.0329	<0.010	**0.0293**	<0.0050
MW-41A	3/8/2011	254.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-41A	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	0.0129	NA	0.0122	NA
MW-41A	9/28/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.0106	<0.010	<0.0106	<0.0050
MW-41A	12/13/2011	472.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-41A	4/5/2012	476.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-41A	7/10/2012	244.0	<0.0050	<0.0050	<0.0050	<0.015	0.0223	<0.010	**0.0285**	<0.0050
MW-41A	10/3/2012	280.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-41A	7/15/2015	1.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-41A	3/16/2018	903.0	<0.0050	<0.0050	<0.0050	<0.015	**0.0709**	<0.010	**0.0931**	<0.0050

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-42A	12/15/2010	322.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42A	3/8/2011	42.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42A	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42A	9/28/2011	64.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42A	12/13/2011	26.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-42A	4/4/2012	31.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42A	7/10/2012	30.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42A	10/2/2012	74.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42A	7/15/2015	66.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42A	3/14/2018	8.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	12/15/2010	251.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	3/8/2011	139.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-42B	9/28/2011	72.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	12/13/2011	40.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-42B	4/4/2012	69.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	7/10/2012	3.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	10/2/2012	116.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	7/15/2015	30.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	3/14/2018	6.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-43A	12/15/2010	426.0	**0.0517**	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.007	<0.0050
MW-43A	3/8/2011	123.0	**0.0149**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-43A	6/22/2011	--	**0.0226**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-43A	9/28/2011	47.1	**0.0372**	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-43A	12/13/2011	288.0	**0.0282**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-43A	4/5/2012	88.4	**0.0325**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-43A	7/11/2012	46.5	**0.0401**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-43A	10/2/2012	267.0	**0.0278**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-43A	7/17/2015	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-43A	3/14/2018	161.0	**0.0116**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	12/22/2010	94.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	3/10/2011	64.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	6/23/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	9/27/2011	0.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	12/16/2011	151.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	4/6/2012	97.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	7/13/2012	11.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	10/4/2012	2.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	7/14/2015	65.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	3/26/2018	4.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	12/22/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	0.0133	<0.010	**0.0153**	<0.0050
MW-45A	3/10/2011	63.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	6/21/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	9/27/2011	44.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	12/15/2011	416.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	4/4/2012	17.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	7/12/2012	54.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	10/3/2012	136.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	7/14/2015	5.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	4/9/2018	41.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45B	12/22/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	**0.0607**	<0.010	**0.0999**	<0.0050
MW-45B	3/10/2011	784.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0081	<0.0050

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-45B	6/21/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	0.0289	<0.010	**0.0468**	<0.0050
MW-45B	9/27/2011	109.0	<0.0050	<0.0050	<0.0050	<0.015	0.0289	<0.010	0.007	<0.0050
MW-45B	12/15/2011	46.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0063	<0.0050
MW-45B	4/4/2012	580.0	<0.0050	<0.0050	<0.0050	<0.015	0.0153	<0.010	**0.0247**	<0.0050
MW-45B	7/13/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	0.0146	<0.010	0.0146	<0.0050
MW-45B	10/3/2012	>800	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45B	7/14/2015	1000+	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45B	4/9/2018	482.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45C	12/22/2010	>1000	<0.0050	<0.0050	<0.0050	<0.015	0.0196	<0.010	**0.0293**	<0.0050
MW-45C	3/10/2011	138.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45C	6/22/2011	>1000	<0.0050	<0.0050	0.0077	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45C	9/27/2011	692.0	<0.0050	<0.0050	0.0081	<0.015	<0.010	<0.010	0.0067	<0.0050
MW-45C	12/15/2011	340.0	<0.010	<0.010	0.0173	<0.030	<0.010	<0.010	<0.0050	<0.0050
MW-45C	4/4/2012	217.0	<0.0050	<0.0050	0.0107	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45C	7/13/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	0.0303	<0.010	**0.076**	<0.0050
MW-45C	10/3/2012	285.0	<0.0050	<0.0050	0.0056	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45C	7/14/2015	196.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45C	4/9/2018	862.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0059	<0.0050
MW-45C	12/16/2019	205.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0109	0.0056
MW-46A	12/22/2010	>1000	**0.0583**	0.09	0.0393	0.116	<0.010	<0.010	<0.0050	<0.0050
MW-46A	3/10/2011	>1000	**0.0458**	0.0726	0.0305	0.0926	<0.010	<0.010	<0.0050	<0.0050
MW-46A	6/22/2011	--	*<0.050*	0.0668	<0.050	<0.15	<0.010	<0.010	<0.0050	<0.0050
MW-46A	9/27/2011	231.0	**0.0462**	0.0608	0.0176	0.0788	<0.010	<0.010	<0.0050	<0.0050
MW-46A	12/15/2011	691.0	**0.077**	0.0605	0.0373	0.121	<0.010	<0.010	<0.0050	<0.0050
MW-46A	4/6/2012	244.0	**0.0615**	0.0411	0.0287	0.0898	<0.010	<0.010	<0.0050	<0.0050
MW-46A	7/11/2012	70.1	**0.0794**	0.0391	0.0406	0.127	<0.010	<0.010	<0.0050	<0.0050
MW-46A	10/2/2012	67.3	**0.0985**	0.0734	0.0499	0.148	<0.010	<0.010	<0.0050	<0.0050
MW-46A	7/15/2015	1000+	**0.0901**	0.054	0.0274	0.0967	<0.010	<0.010	<0.0050	<0.0050
MW-46A	3/16/2018	141.0	**0.0138**	0.0089	0.0093	0.0244	0.0101	<0.010	<0.0050	<0.0050
MW-46A	1/7/2020	--	**0.0489**	0.0227	0.0402	0.104	<0.010	<0.010	0.0092	<0.0050
MW-47A	12/22/2010	482.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0057	<0.0050
MW-47A	3/10/2011	390.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-47A	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-47A	9/27/2011	362.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-47A	12/14/2011	89.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-47A	4/4/2012	158.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-47A	7/11/2012	327.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0082	<0.0050
MW-47A	10/2/2012	36.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-47A	7/15/2015	216.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-47A	3/28/2018	4.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-47A	12/17/2019	114	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0053	0.0121
MW-48A	1/11/2011	--	**0.0885**	0.197	0.0903	0.25	<0.010	<0.010	<0.0050	<0.0050
MW-48A	6/21/2011	--	**0.264**	0.466	0.169	0.55	<0.010	<0.010	<0.0050	<0.0050
MW-48A	9/26/2011	62.7	**0.186**	0.428	0.125	0.387	<0.010	<0.010	<0.0050	<0.0050
MW-48A	7/13/2015	450.0	**0.0317**	0.1	0.0442	0.158	**0.0156**	**0.0167**	<0.0050	<0.0050
MW-48A	3/12/2018	0.0	**0.164**	0.411	0.163	0.573	**0.02**	0.0247	<0.0050	<0.0050
MW-48B	1/11/2011	419.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-48B	6/21/2011	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-48B	9/26/2011	321.0	**0.0313**	0.0673	<0.025	<0.075	<0.010	<0.010	<0.0050	<0.0050
MW-48B	12/12/2011	37.4	**0.0348**	0.0789	0.0352	0.125	<0.010	<0.010	<0.0050	<0.0050
MW-48B	4/2/2012	39.8	<0.0050	0.0057	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-48B	7/9/2012	2.8	**0.0087**	0.017	0.0058	0.0187	<0.010	<0.010	<0.0050	<0.0050
MW-48B	10/1/2012	4.8	**0.0561**	0.113	0.0385	0.126	<0.010	<0.010	<0.0050	<0.0050
MW-48B	7/13/2015	92.0	**0.0078**	0.0111	0.0067	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-48B	3/12/2018	225	**0.0273**	0.0742	0.0285	0.0865	<0.010	<0.010	<0.0050	<0.0050
MW-49A	8/16/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.01	<0.0050
MW-49A	12/14/2011	17.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49A	4/3/2012	5.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49A	7/12/2012	16.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49A	10/4/2012	58.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49A	7/14/2015	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49A	6/13/2017	Abandoned	--	--	--	--	--	--	--	--
MW-49B	8/16/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49B	12/14/2011	51.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49B	4/3/2012	23.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49B	7/12/2012	27.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49B	10/4/2012	107.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49B	7/14/2015	1000+	<0.0050	<0.0050	<0.0050	<0.015	0.0273	<0.010	**0.0541**	<0.0050
MW-49B	6/13/2017	Abandoned	--	--	--	--	--	--	--	--
MW-49C	8/16/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0109	<0.0050
MW-49C	12/14/2011	508.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49C	4/3/2012	262.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49C	7/12/2012	622.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	0.0196	**0.0204**	0.0084
MW-49C	10/4/2012	288.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49C	7/15/2015	Damaged / Abandoned		--	--	--	--	--	--	--
MW-50A	8/17/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50A	12/15/2011	26.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-50A	4/5/2012	68.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50A	7/9/2012	19.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50A	10/1/2012	137.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50A	7/17/2015	1.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50A	3/26/2018	2.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50B	8/17/2011	562.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.008	<0.0050
MW-50B	12/15/2011	61.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50B	4/5/2012	<1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0126	<0.0050
MW-50B	7/9/2012	16.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50B	10/1/2012	127.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50B	7/17/2015	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50B	3/26/2018	1.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50B	12/16/2019	440	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0093	0.0052
MW-51A	8/17/2011	155.0	**0.106**	0.196	0.0706	0.211	<0.010	<0.010	<0.0050	<0.0050
MW-51A	7/14/2015	DNAPL In Well - Did Not Sample			--	--	--	--	--	--
MW-51B	8/17/2011	197.0	<0.0050	<0.0050	<0.0050	0.017	<0.010	<0.010	<0.0050	<0.0050
MW-51B	12/15/2011	127.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-51B	4/6/2012	68.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-51B	7/12/2012	365.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	**0.016**	<0.0050
MW-51B	10/3/2012	18.8	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-51B	7/14/2015	17.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-51B	3/16/2018	76.2	**0.009**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-52A	8/17/2011	834.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050

Table 3.
Groundwater BTEX & Metals Results
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Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-52A	12/13/2011	700.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-52A	4/5/2012	385.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-52A	7/12/2012	22.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-52A	10/2/2012	322.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-52A	7/16/2015	65.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-52A	3/16/2018	381	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53A	9/12/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53A	12/15/2011	92.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53A	4/2/2012	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53A	7/9/2012	60.4	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53A	10/1/2012	>800	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53A	7/13/2015	625.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	*<0.025*	<0.0050	<0.0050
MW-53A	3/15/2018	531.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53B	9/12/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	**0.252**	<0.010	**0.312**	<0.0050
MW-53B	12/15/2011	>1000	<0.0050	<0.0050	<0.0050	<0.015	**0.549**	<0.010	**0.901**	<0.0050
MW-53B	4/2/2012	>1000	<0.0050	<0.0050	<0.0050	<0.015	**0.101**	<0.010	**0.160**	<0.0050
MW-53B	7/9/2012	428.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53B	10/1/2012	>1000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0073	<0.0050
MW-53B	7/13/2015	352.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53B	3/15/2018	428.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-54A	5/2/2012	--	**0.18**	0.223	0.0749	0.217	<0.010	<0.010	<0.0050	<0.0050
MW-54B	5/2/2012	499.0	**0.0781**	0.0213	0.0671	0.0635	<0.010	<0.010	<0.0050	<0.0050
MW-54B	7/12/2012	36.3	**0.0949**	0.0357	0.0967	0.12	<0.010	<0.010	<0.0050	<0.0050
MW-54B	10/4/2012	188.0	**0.0894**	0.0149	0.0925	0.114	<0.010	<0.010	<0.0050	<0.0050
MW-54B	7/16/2015	>1000	**0.0765**	0.006	0.0498	0.0489	0.018	<0.010	<0.0050	<0.0050
MW-54B	4/9/2018	203.0	**0.07**	0.0253	0.0777	0.0721	<0.010	<0.010	<0.0050	<0.0050
MW-55A	5/2/2012	>1000	<0.0050	<0.0050	<0.0050	<0.015	0.0147	<0.010	**0.0285**	<0.0050
MW-55A	7/10/2012	739.0	<0.0050	<0.0050	<0.0050	<0.015	0.0153	<0.010	**0.0223**	<0.0050
MW-55A	10/3/2012	46.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	N/A	<0.0050	N/A
MW-55A	7/15/2015	8.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	N/A	<0.0050	N/A
MW-55A	3/13/2018	7.7	<0.0050	<0.0050	<0.0050	<0.015	<0.010	N/A	<0.0050	N/A
MW-55B	5/2/2012	509.0	**0.17**	0.167	0.111	0.248	<0.010	<0.010	<0.0050	<0.0050
MW-55B	7/10/2012	94.4	**0.264**	0.238	0.149	0.321	<0.010	<0.010	<0.0050	<0.0050
MW-55B	10/3/2012	18.5	**0.283**	0.224	0.175	0.346	<0.010	N/A	<0.0050	N/A
MW-55B	7/16/2015	0.0	**0.265**	0.0932	0.158	0.38	<0.010	<0.010	<0.0050	<0.0050
MW-55B	3/13/2018	10.1	**0.0702**	0.022	0.0397	0.0933	<0.010	<0.010	<0.0050	<0.0050
MW-56A	5/2/2012	621.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-56A	7/11/2012	24.6	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-56A	10/2/2012	41.9	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-56A	7/15/2015	0.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-56A	3/28/2018	10.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-56B	5/2/2012	>1000	**0.0197**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-56B	7/11/2012	800.0	**0.0405**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-56B	10/2/2012	17.4	**0.0426**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-56B	7/15/2015	0.0	**0.0277**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-56B	3/28/2018	6.1	**0.0484**	<0.0050	0.0116	0.0234	<0.010	<0.010	<0.0050	<0.0050
MW-OW1	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA

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Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-OW1	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-OW1	10/1/2003	--	NA	NA	NA	NA	0.015	<0.0050	**0.025**	<0.0050
MW-OW1	10/30/2003	--	<0.001	<0.002	0.001	0.002	NA	NA	NA	NA
MW-OW1	2/17/2004	--	<0.001	<0.002	0.002	0.0045 J	0.009	<0.0050	**0.034**	<0.0050
MW-OW1	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-OW1	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW1	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW1	11/19/2008	8.2	<0.001	0.00038 J	0.0018	0.0033	<0.010	NA	<0.010	NA
MW-OW1	12/11/2009	32.1	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-OW1	11/10/2011	--	<0.0050	<0.0050	<0.0050	<0.015	NA	<0.010	NA	<0.0050
MW-OW1	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.015	0.0279	<0.010	<0.0050	<0.0050
MW-OW1	3/22/2018	13.9	<0.0050	<0.0050	<0.0050	<0.015	0.0279	<0.010	<0.0050	<0.0050
MW-OW2	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	12/28/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-OW2	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-OW2	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-OW2	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-OW2	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW2	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW2	11/19/2008	9.0	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-OW2	12/10/2009	68.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-OW2	11/10/2011	--	<0.0050	<0.0050	<0.0050	<0.015	NA	<0.010	NA	<0.0050
MW-OW2	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0074	<0.0050
MW-OW2	3/22/2018	3.2	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-OW3	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-OW3	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-OW3	2/18/2004	--	<0.001	<0.002	<0.002	<0.006	**0.063**	<0.0050	**0.056**	<0.0050
MW-OW3	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	0.027	NA	<0.0050	NA
MW-OW3	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW3	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW3	11/19/2008	11.1	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-OW3	12/10/2009	37.5	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-OW3	11/10/2011	--	<0.0050	<0.0050	<0.0050	<0.015	NA	<0.010	NA	<0.0050
MW-OW3	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.015	**0.0646**	<0.010	**0.0245**	<0.0050
MW-OW3	3/22/2018	14.3	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-P1	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA

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Bloomington, Indiana

Chemical Name		Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-P1	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	8/12/2003	--	**0.006**	0.015	0.034	0.048	NA	NA	NA	NA
MW-P1	10/30/2003	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	11/6/2003	--	0.002	0.003	0.012	0.019	NA	NA	NA	NA
MW-P1	2/18/2004	--	0.004	0.005	0.019	0.026	0.006	<0.0050	**0.028**	<0.0050
MW-P1	9/10/2004	--	0.005	0.006	0.019	0.022	<0.0050	NA	<0.0050	NA
MW-P1	8/1/2006	--	**0.009**	0.005	0.025	0.020	NA	NA	NA	NA
MW-P1	7/24/2007	--	Well abandoned August 2006 in preparation for Creek Liner Installation in August 2007							
MW-P2	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P2	10/1/2003	--	NA	NA	NA	NA	0.011	<0.0050	<0.0050	<0.0050
MW-P2	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P2	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	0.005	<0.0050	0.013	<0.0050
MW-P2	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-P2	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P2	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P2	11/20/2008	--	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-P2	12/10/2009	573.0	<0.0050	<0.0050	<0.0050	<0.015	**0.0811**	NA	**0.035**	NA
MW-P2	11/10/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-P2	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.015	0.048	<0.010	**0.021**	<0.0050
MW-P2	3/26/2018		<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-P3	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P3	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P3	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P3	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P3	8/11/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P3	10/1/2003	--	NA	NA	NA	NA	<0.0050	<0.0050	**0.021**	<0.0050
MW-P3	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P3	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.013	<0.0050
MW-P3	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-P3	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P3	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P3	11/19/2008	--	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-P3	12/10/2009	513.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	**0.0255**	NA
MW-P3	11/10/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-P3	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation							
MW-P4	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	8/4/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	8/11/2003	--	<0.001	0.001	0.003	0.003	NA	NA	NA	NA
MW-P4	10/1/2003	--	NA	NA	NA	NA	<0.0050	<0.0050	0.009	<0.0050
MW-P4	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA

Table 3.
Groundwater BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

	Chemical Name	Turbidity (NTU)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	1996 VRP Tier II Residential	--	0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
	1996 VRP Tier II Non-Residential	--	0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date									
MW-P4	2/18/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.006	<0.0050
MW-P4	9/9/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-P4	8/1/2006	--	<0.001	<0.001	0.00055 J	<0.003	NA	NA	NA	NA
MW-P4	7/24/2007	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P4	11/19/2008	--	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-P4	12/9/2009	393.0	<0.0050	<0.0050	<0.0050	<0.015	0.014	NA	**0.0514**	NA
MW-P4	11/10/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-P4	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.015	0.0172	<0.010	**0.0384**	<0.0050
MW-P4	3/22/2018	--	<0.0050	<0.0050	<0.0050	<0.015	NA	NA	NA	NA
MW-P4	4/18/2018	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	**0.016**	<0.0050
MW-P4	12/16/2019	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0082	0.0075
MW-P5	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	8/4/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	10/1/2003	--	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
MW-P5	10/30/2003	--	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P5	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-P5	11/19/2008	--	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-P5	12/9/2009	182.0	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-P5	11/10/2011	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-P5	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-P5	3/22/2018	2.000	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-P6	5/18/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	8/14/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	11/13/2000	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	2/1/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	6/21/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	12/11/2001	--	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	8/11/2003	--	0.001	<0.002	0.076	<0.006	NA	NA	NA	NA
MW-P6	10/30/2003	--	0.002	<0.002	0.001	0.002	NA	NA	NA	NA
MW-P6	2/17/2004	--	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-P6	9/10/2004	--	<.001	<.002	<.002	<.006	<0.0050	NA	<0.0050	NA
MW-P6	8/1/2006	--	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P6	7/24/2007	--	Well abandoned August 2006 in preparation for Creek Liner Installation in August 2007							
RW-1	7/15/2015	14.2	**0.0214**	0.0899	0.0685	0.1890	<0.010	<0.010	<0.0050	<0.0050
RW-4	4/15/2010	75.1	**0.407**	0.559	0.200	0.574	<0.010	<0.010	<0.010	<0.010
RW-5	4/15/2010	364.0	**0.236**	**0.465**	0.185	0.565	<0.010	<0.010	<0.010	<0.010
RW-6	4/15/2010	218.0	**0.194**	**0.324**	0.124	0.346	<0.010	<0.010	<0.010	<0.010

0.68	BOLD - Concentration exceeds 1996 IDEM VRP Tier II Default Residential Closure Levels.
770	BOLD/SHADE - Concentration exceeds 1996 IDEM VRP Tier II Default Non-residential (Industrial) Closure Levels
<	Analyte not detected above the laboratory's Run Detection Limit, displayed as ND (Non-detect) in laboratory analytical data packages.
<0.050	*Italics* - Analyte not detected above the labortory's Run Detection Limit, however Detection Limit is above VRP Closure Levels
NA	Not Analyzed
**	Lead closure levels are from the January 26, 1996 IDEM Non-rule Policy (ID# W-0048), *Guidance for Lead cleanup levels for Voluntary Remediation Program* Tier II sites.

ARCADIS Design & Consultancy for natural and built assets

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-1S	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.1	0.18	<0.010	<0.050	0.34	<0.010	0.07	0.051	0.022	0.022	0.0082	0.025	0.049	<0.010	0.27	0.25	0.0088	<0.010	0.23	0.55	0.22
MW-1S	8/4/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.07	0.21	<0.010	<0.050	0.5	<0.010	0.084	0.074	0.034	0.03	0.012	0.031	0.077	<0.010	0.3	0.26	0.013	<0.010	0.0068	1	0.29
MW-1S	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.013	0.068	<0.010	<0.050	0.11	<0.010	0.019	0.021	0.0086	0.0096	<0.010	0.0076	0.017	<0.010	0.12	0.084	<0.010	<0.010	<0.010	0.2	0.092
MW-1S	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.035	0.089	<0.010	<0.050	0.17	<0.010	0.02	0.019	0.0099	0.012	<0.010	0.0082	0.021	<0.010	0.11	0.11	<0.010	<0.010	0.078	0.19	0.079
MW-1S	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.11	0.3	<0.010	<0.050	0.54	<0.010	0.058	0.081	0.034	0.035	0.01	0.031	0.065	<0.010	0.45	0.31	0.012	<0.010	0.27	0.91	0.34
MW-1S	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.025	<0.010	<0.050	0.055	<0.010	0.0049	0.0053	<0.010	<0.010	<0.010	<0.010	0.0067	<0.010	0.036	0.026	<0.010	<0.010	0.095	0.052	0.026
MW-1S	8/11/2003	--	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	0.104	0.676	<0.022	<0.110	1.07	<0.11	0.334	0.403	0.209	0.299	0.0795	0.103	0.34	0.0203	2.35	0.947	0.0991	<0.110	0.0932	3.49	1.31
MW-1S	10/29/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0163	0.123	<0.005	<0.020	0.213	<0.020	0.0635	0.0726	0.0401	0.0446	0.0192	0.0287	0.0673	0.0039	0.384	0.185	0.0227	<0.020	0.0358	0.614	0.266
MW-1S	2/17/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0071	0.001	<0.0051	0.0086	0.0265	0.0026 J	0.0029 J	0.0035	0.0067	0.0073	0.0067	0.0039	0.0102	0.00088	0.0091	0.0099	0.0069	0.0014 J	0.104	0.0092	0.0059
MW-1S	9/9/2004	--	<0.0048	<0.0048	<0.0048	0.0136	<0.0048	<0.0048	<0.0048	0.0596	0.0933	<0.0048	< 0.0095	0.165	0.0083 J	0.0226	0.0218	0.0273	0.0274	0.0181	0.0155	0.0364	0.0038	0.0853	0.0954	0.0211	< 0.0095	0.0031 J	0.143	0.0535
MW-1S	8/1/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0079	0.0799	<0.005	<0.008	0.203	<0.008	0.0041 J	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0167	0.089	<0.0010	0.0107	0.0184	0.0572	0.008
MW-1S	11/19/2008	7.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	0.00010 J	0.00027	0.00032	0.00025	0.000096 J	0.00056	<0.00019	<0.00097	<0.00097	0.00028	<0.00097	<0.00097	<0.00097	<0.00097
MW-1S	12/10/2009	97.2	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	0.00021	0.0008	0.0011	0.00097	0.00028	0.00070	<0.00019	<0.00097	<0.00097	0.00098	<0.00097	<0.00097	<0.00097	<0.00097
MW-1S	12/9/2011	--	Well damaged beyond repair during City Utility Upgrade and was abandoned 12/9/2011																											
MW-1D	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.15	0.19	<0.010	0.0086	0.52	<0.010	0.018	0.0053	<0.010	<0.010	<0.010	<0.010	0.0051	<0.010	0.058	0.21	<0.010	0.14	3.4	0.18	0.045
MW-1D	8/4/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.15	0.17	<0.010	0.015	0.35	<0.010	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.038	0.17	<0.010	0.16	3.2	0.16	0.025
MW-1D	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.18	0.19	<0.010	<0.050	0.35	<0.010	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.037	0.18	<0.010	0.17	2.6	0.16	0.024
MW-1D	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.17	0.19	<0.010	<0.050	0.49	<0.010	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.035	0.2	<0.010	0.2	3	0.16	0.022
MW-1D	6/21/2001	--	NA	NA	<0.050	NA	<0.050	<0.050	<0.050	0.15	0.19	<0.050	<0.25	0.49	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.19	<0.050	0.1	2.4	0.14	<0.050
MW-1D	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.14	0.18	<0.010	<0.050	0.34	<0.010	0.0071	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.029	0.15	<0.010	0.044	2	0.13	0.016
MW-1D	8/11/2003	--	<0.020	<0.020	<0.020	<.002	<0.020	<0.020	<0.020	0.152	0.225	<0.020	0.0094	0.485	<0.010	0.0133	0.0031	0.0014	0.0021	<0.002	<0.002	0.0027	<0.002	0.05	0.205	<0.002	0.151	3.02	0.179	0.0246
MW-1D	10/29/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.168	0.207	<0.005	<0.02	0.474	<0.020	0.189	0.0038	<0.004	<0.004	<0.004	<0.004	0.003	<0.004	0.0602	0.224	<0.004	0.162	2.68	0.189	0.0351
MW-1D	2/17/2004	--	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.14	0.202	<0.021	<0.021	0.471	<0.021	0.015 J	0.0033 J	<0.0042	<0.0042	<0.0042	<0.0042	0.0026 J	<0.0042	0.0516	0.223	<0.0042	0.155	2.78	0.201	0.0289
MW-1D	9/9/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0204	0.0371	<0.0051	<0.0041	0.0669	<0.0041	.0028 J	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	0.0059	0.0336	<0.00082	0.0116	0.229	0.0264	0.0031 J
MW-1D	8/1/2006	--	<0.053	<0.053	<0.053	<0.053	<0.053	<0.0053	<0.053	<0.0053	0.0012 J	<0.0053	0.00032 J	0.0086	0.0016	0.0018	0.0012	0.0031	0.003	0.0032	0.0015	0.0035	0.00054	0.0029	0.0013	0.0036	<0.0010	0.00047 J	0.0038	0.0018
MW-1D	7/24/2007	--	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	0.172	<0.05	< 0.038	0.367	< 0.038	< 0.038	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	0.038	0.176	<0.0077	0.103	1.09	0.122	0.02 J
MW-1D	11/19/2008	2.6	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	0.167	0.167	<0.024	<0.019	0.314	<0.019	<0.019	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	0.0188 J	0.138	<0.0039	0.0672	1.17	0.139	0.0093 J
MW-1D	12/9/2009	0.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.147	0.174	<0.050	<0.020	0.346	<0.020	<0.020	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.020	0.148	<0.0040	0.0673	1.24	0.112	<0.020
MW-1D	12/14/2010	20.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.107	0.142	<0.0048	<0.019	0.317	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	0.0251	0.154	<0.0038	0.0622	0.699	0.127	<0.019
MW-1D	12/14/2011	13.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0381	0.136	<0.0048	<0.019	0.312	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	0.0268	0.142	<0.0038	0.044	0.76	0.0809	<0.019
MW-1D	7/16/2015	8.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0711	0.0965	<0.0050	<0.010	0.216	<0.010	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0234	0.116	<0.0020	<0.010	0.0803	0.0574	0.0146
MW-1D	3/15/2018	218	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	0.129	0.212	<0.024	<0.019	0.434	<0.019	0.0304	0.0115	0.0048	0.0051	<0.0038	0.0042	0.0091	<0.0038	0.0808	0.236	<0.0038	<0.019	0.166	0.175	0.0661
MW-1D	12/16/2019	49.8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0503	0.137	<0.0050	<0.010	0.287	0.0023	0.0097	0.00055	<0.0020	<0.0020	<0.0020	<0.0020	0.00031	<0.0020	0.0265	NA	<0.0020	<0.010	0.0062	0.0274	0.0172
MW-2S	5/18/2000	--	NA	NA	<0.018	NA	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	< 0.091	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
MW-2S	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2S	2/26/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2S	6/21/2001	--	NA	NA	<0.014	NA	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	< 0.072	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
MW-2S	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2S	10/30/2003	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2S	2/17/2004	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2S	11/20/2008	--	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2S	12/9/2009	214.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	0.00028	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-2S	6/22/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-2S	11/29/2011	86.9	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0057	<0.00097	<0.00097	<0.00097	0.00081	0.00072	0.0011	0.00038	0.00039	0.00083	<0.00019	0.0011	<0.00097	0.00051	<0.00097	<0.00097	<0.00097	0.001
MW-2S	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation																											
MW-2D	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2D	8/14/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	0.012
MW-2D	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2D	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2D	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2D	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2D	8/11/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.0017	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2D	10/30/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.0093	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00085	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	0.00051
MW-2D	2/17/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2D	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0025	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-2D	8/1/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.002	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2D	7/24/2007	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0022	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-2D	11/19/2008	28.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0035	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-2D	12/10/2009	9.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0085	<.00095	<.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-2D	6/23/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0015	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-2D	11/29/2011	2.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.004	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0073	<0.00096	<0.00096
MW-2D	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation																											

ARCADIS Design & Consultancy for natural and built assets

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-3S	5/18/2000	--	NA	NA	0.017	NA	0.0065	<0.010	<0.010	0.27	0.56	<0.010	0.0078	0.79	0.023	0.12	0.16	0.092	0.092	0.036	0.092	0.14	0.0054	0.59	0.57	0.039	0.96	12.00	1.00	< 1.0
MW-3S	8/11/2003	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	31	288	<5.0	<25.0	288	<25.0	83	63	35.60	48.40	13	16.90	51.50	4.37	323	282	17	346	1,160	723	174
MW-3S	10/30/2003	--	<0.053	0.138	0.0664	0.0405	<0.053	<0.053	<0.053	0.31	0.544	<0.053	<0.110	0.768	<0.110	0.117	0.0674	0.036	0.0374	0.0128	0.0312	0.0586	<0.021	0.352	0.567	0.0157	1.23	14.90	0.934	0.222
MW-3S	2/18/2004	--	<0.053	0.0443 J	<0.053	<0.053	<0.053	<0.053	<0.053	0.184	0.332	<0.053	<0.043	0.53	<0.043	0.0421 J	0.0263	0.0194	0.0208	0.0084 J	0.0178	0.0258	<0.0085	0.149	0.331	0.0093	0.369	9.27	0.438	0.092
MW-3S	9/10/2004	--	<.051	0.269	0.138	0.0972	0.0212	<0.051	<0.051	0.316	0.385	<0.051	<0.041	0.489	<0.041	0.0288	0.0079	0.0042	0.0046	<0.0084	<0.0082	0.0061	<0.0082	0.057	0.294	0.0059	0.521	7.44	0.304	0.0319
MW-3S	8/1/2006	--	<0.1	0.158	0.0715 J	0.0638 J	<0.1	<0.1	<0.1	0.231	0.413	<0.1	<0.2	0.523	<0.2	<0.2	0.0288 J	<0.04	0.0154 J	<0.04	<0.04	0.0232 J	<0.04	0.151 J	0.352	<0.04	0.383	7.1	0.513	0.0911 J
MW-3S	7/24/2007	--	Well abandoned in August 2006 for City walk path construction in October 2006																											
MW-3D	5/18/2000	--	NA	NA	1.2	NA	1.4	<0.010	<0.010	0.34	0.21	<0.010	<5.0	0.32	0.015	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	0.18	<0.010	0.66	11.00	0.13	0.0075
MW-3D	8/14/2000	--	NA	NA	1.6	NA	2.4	<0.500	<0.500	0.52	0.47	<0.500	0.59	0.67	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	1.1	13.00	0.46	<0.500
MW-3D	11/13/2000	--	NA	NA	1	NA	1.3	<0.500	<0.500	0.31	0.31	<0.500	0.45	0.43	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.71	9.50	0.36	<0.500
MW-3D	2/1/2001	--	NA	NA	0.56	NA	0.6	<0.100	<0.100	0.28	0.26	<0.100	0.31	0.35	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.2	<0.100	0.79	9.10	0.18	<0.100
MW-3D	6/21/2001	--	NA	NA	0.88	NA	0.98	0.0052	<0.010	< 1.0	< 1.0	<0.010	<5.0	< 1.0	0.02	0.036	0.011	0.0053	<0.010	<0.010	<0.010	0.0088	<0.010	0.071	< 1.0	<0.010	0.67	11.00	< 1.0	0.056
MW-3D	12/11/2001	--	NA	NA	1	NA	1.2	<0.050	<0.050	0.36	0.26	<0.050	0.45	0.41	<0.050	0.018	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.0026	0.17	<0.050	0.61	9.40	0.17	0.018
MW-3D	8/11/2003	--	<0.240	1.8	1.18	1.12	0.689	<0.240	<0.240	1.96	7.06	<0.240	1.45	8.59	< 1.200	2.51	2.07	1.1	1.550	0.403	0.523	1.54	0.121	10.70	8.57	0.506	9.63	40.50	22	5.97
MW-3D	10/30/2003	--	<0.052	0.827	0.562	0.42	0.344	<0.052	<0.052	0.58	1.73	<0.052	0.698	2.05	0.139	0.467	0.394	0.203	0.229	0.0686	0.15	0.308	0.0198	1.86	1.8	0.0854	2.56	17.30	3.96	1.31
MW-3D	2/18/2004	--	<0.110	0.811	0.446	0.315	0.21	<0.110	<0.110	1.03	4.62	<0.110	0.416	6.31	0.44	1.7	1.49	0.752	0.748	0.268	0.66	1.2	0.0704	7.18	5.71	0.327	7.02	34.20	16	4.73
MW-3D	9/10//2004	--	<0.019	1.17	0.68	0.489	0.354	<0.19	<0.19	1.13	4.03	<0.19	0.61	4.19	0.348	1.33	1.17	0.618	0.607	0.22	0.468	0.829	0.0576	4.79	4.21	0.272	5.93	25.60	11	3.16
MW-3D	8/2/2006	--	< 0.08	1.053	0.862	0.927	0.437	< 0.08	< 0.08	0.296	0.248	< 0.08	0.776	0.35	< 0.08	< 0.08	0.0149 J	0.008 J	0.0082 J	<0.016	<0.016	0.0123 J	<0.016	0.082	0.206	<0.016	0.546	6.11	0.252	0.0518 J
MW-3D	7/24/2007	--	Well abandoned in August 2006 for City walk path construction in October 2006																											
MW-4S	8/12/2003	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	0.00053	0.001	0.0019	0.0009	0.00059	0.00069	0.00019	0.00087	<0.0010	0.001	<0.0010	<0.0010	<0.0010	0.00081
MW-4S	10/31/2003	--	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0010	<0.0010	<0.0010	<0.0010	0.00021	0.00045	0.00067	0.00043	0.00037	0.00031	<0.00020	0.0003	<0.0010	0.00047	<0.0010	0.00059	<0.0010	0.00034
MW-4S	2/19/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	0.00036 J	0.00011 J	0.00018 J	0.00027	0.00016 J	0.0002	0.0002	<0.00020	<0.0010	<0.0010	0.00018 J	<0.0010	<0.0010	<0.0010	<0.0010
MW-4S	8/2/2006	--	Well obstructed, unable to collect sample																											
MW-4S	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation																											
MW-4D	8/12/2003	--	<0.050	0.472	0.0207	<0.050	<0.050	<0.050	<0.050	0.15	0.091	<0.050	<0.020	0.191	<0.020	0.0055	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0083	0.0939	<0.004	0.0534	2.86	0.0661	<0.020
MW-4D	10/31/2003	--	<0.020	0.483	0.0866	0.0835	0.0189	<0.020	<0.020	0.146	0.0951	<0.020	<0.020	0.189	<0.020	<0.020	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0058	0.0977	<0.004	0.0745	2.39	0.0657	<0.020
MW-4D	2/19/2004	--	<0.021	0.36	0.0544	0.018 J	0.009 J	<0.021	<0.021	0.174	0.0634	<0.021	<0.0041	0.148	0.0047	0.0094	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	0.0092	0.0856	<0.00082	0.0107	0.262	0.042	0.0055
MW-4D	9/9/2004	--	0.712	<0.053	0.103	0.0653	<0.021	<0.021	<0.021	0.21	0.112	<0.021	<0.011	0.186	0.0114	0.0077 J	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0058 J	0.101	<0.0021	<0.011	1.7	0.051	0.0031 J
MW-4D	8/2/2006	--	<0.020	0.483	0.148	<0.020	<0.020	<0.020	<0.020	0.145	0.0906	<0.020	<0.039	<0.184	<0.039	<0.039	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	<0.039	0.0899	< 0.0078	0.0525	1.52	0.0571	<0.039
MW-4D	7/24/2007	--	<0.049	0.633	0.130	0.0324 J	<0.049	<0.049	<0.049	0.195	0.102	<0.049	<0.049	0.175	<0.049	<0.049	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	<0.049	0.103	< 0.0097	0.0414 J	1.55	0.758	<0.049
MW-4D	11/17/2008	18.5	<0.0048	0.208	0.0179	0.0232	0.0039 J	<0.0048	<0.0048	0.0631	0.0275	<0.0048	<0.00095	0.0408	0.0029	0.0029	0.000054 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0055 B	0.0242	<0.00019	0.0089	0.017	0.0258	0.0032
MW-4D	12/16/2009	--	<0.0048	0.116	0.0068	<0.0048	<0.0048	<0.0048	<0.0048	0.0527	0.035	<0.0048	<0.0095	0.0661	<0.0095	<0.0095	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	<0.0095	0.0346	<0.00109	<0.0095	0.268	0.0233	<0.0095
MW-4D	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation																											
MW-5S	8/12/2003	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	0.00014	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-5S	10/31/2003	--	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-5S	2/19/2004	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-5S	9/9/2004	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00020	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00036 J	<0.00097	0.00013 J	<0.00097	0.00027 J	0.00065 J	0.00025 J
MW-5S	8/2/2006	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-5S	7/24/2007	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-5S	11/17/2008	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-5S	12/16/2009	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-5S	6/22/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0012	<0.00098	<0.00908
MW-5S	7/12/2012	56.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-5S	7/15/2015	>1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-5S	3/13/2018	163.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.0014	<0.00099	<0.00099
MW-5D	8/12/2003	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-5D	10/31/2003	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00093	<0.0010	<0.0010
MW-5D	2/19/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-5D	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00042 J	0.00024 J	<0.00019	<0.00096	0.00028 J	0.00075 J	0.00028 J
MW-5D	8/2/2006	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-5D	7/24/2007	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00033 J	<0.0010	<0.0010
MW-5D	11/17/2008	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-5D	12/16/2009	90.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.004	<0.00095	<0.00095
MW-5D	12/16/2010	390.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.001	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	0.0016	0.0105	<0.0010	<0.0010
MW-5D	12/16/2011	59.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0016	<0.00095	<0.00095
MW-5D	7/16/2015	241.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0068	<0.0010	<0.0010
MW-5D	3/12/2018	87.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0019	<0.0019	<0.0019	<0.0019	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.0019	<0.0019	<0.00038	<0.0019	0.0661	<0.0019	<0.0019
MW-5D	12/17/2019	58.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0033	<0.00095	<0.00095
MW-6S	2/19/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	0.00017 J	0.00024	0.00033	0.00014 J	0.00023	0.00022	<0.00020	<0.0010	<0.0010	0.00019 J	<0.0010	<0.0010	<0.0010	<0.0010
MW-6S	11/17/2008	--	Insufficient water supply to collect sample																											
MW-6S	12/16/2009	62.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0083	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	0.00022	0.00039	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-6S	6/22/2011	--	Insufficient water supply to collect sample																											
MW-6S	7/15/2015	521.0	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-6S	4/9/2018	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-6D	8/14/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-6D	10/31/2003	--	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	*<0.0010*	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-6D	2/19/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-6D	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.00019**	<0.00019	0.000096 J	<0.00019	<0.00019	0.00014 J	<0.00019	0.00089 J	0.00054 J	0.00013 J	0.00025 J	0.00050 J	0.0017	0.00059 J
MW-6D	8/1/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.001	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-6D	7/24/2007	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-6D	11/17/2008	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-6D	12/16/2009	335.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	0.001	0.0062	<0.0010	<0.0010
MW-6D	6/24/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.0020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0037	<0.00098	<0.00098
MW-6D	7/12/2012	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0017	<0.00095	<0.00095
MW-6D	7/15/2015	>1000	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	0.001	0.0064	<0.0010	<0.0010
MW-6D	3/14/2018	212	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0059	<0.0048	<0.0048	<0.00096	0.0045	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.001	0.0052	<0.00019	<0.00096	<0.00096	0.0043	<0.00096
MW-7S	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	8/14/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	8/11/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.0011	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00033	0.00058	<0.00020	<0.0010	0.0065	<0.0010	<0.0010
MW-7S	10/30/2003	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0003	<0.00020	<0.0010	0.0018	<0.0010	<0.0010
MW-7S	2/18/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-7S	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.00011 J**	0.00010 J	0.00012 J	<0.00019	0.000095 J	0.00010 J	<0.00019	<0.00095	<0.00095	0.00016 J	<0.00095	<0.00095	<0.00095	<0.00095
MW-7S	8/1/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.001	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-7S	7/24/2007	--	Well abandoned in August 2006 for City walk path construction in October 2006																											
MW-7D	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7D	8/14/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7D	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	0.0069	<0.010	<0.010
MW-7D	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7D	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7D	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7D	8/11/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	0.0014	**0.00016**	0.00013	0.00019	<0.00020	<0.00020	**0.00022**	<0.00020	0.00066	<0.0010	<0.00020	<0.0010	<0.0010	0.0006	0.00039
MW-7D	10/30/2003	--	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	*<0.0010*	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-7D	2/18/2004	--	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	*<0.0010*	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-7D	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0014	<0.00095	<0.00095
MW-7D	8/1/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.001	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-7D	7/24/2007	--	Well abandoned in August 2006 for City walk path construction in October 2006																											
MW-8S	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.012	**0.067**	*<0.010*	*<0.050*	0.27	<0.010	0.014	**0.0066**	*<0.010*	*<0.010*	<0.010	*<0.010*	**0.0067**	*<0.010*	0.069	0.22	*<0.010*	<0.010	0.023	0.0095	0.053
MW-8S	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.017	**0.077**	*<0.010*	*<0.050*	0.23	<0.010	0.011	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	0.055	0.16	*<0.010*	<0.010	0.058	**0.023**	0.036
MW-8S	8/12/2003	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	0.0041	**0.046**	<0.0053	*<0.0010*	0.158	0.0028	0.0056	**0.0027**	**0.0032**	**0.0044**	0.0014	**0.0013**	**0.0033**	**0.0004**	0.0277	0.0885	**0.0017**	<0.0010	0.00033	0.00094	0.0111
MW-8S	10/31/2003	--	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.0017	**0.022**	<0.0054	*<0.0010*	0.0586	0.0019	0.0034	**0.0021**	**0.003**	**0.0032**	0.0015	**0.0016**	**0.0031**	**0.00034**	0.0172	0.0424	**0.0018**	<0.0010	<0.0010	0.0009	0.0073
MW-8S	2/19/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	0.0014 J	0.004 J	<0.0052	*<0.0021*	0.0168	0.0017 J	0.0028	**0.0029**	**0.0055**	**0.0053**	0.0031	**0.003**	**0.0054**	**0.00061**	0.0102	0.0171	**0.0036**	<0.0021	<0.0021	0.002 J	0.0055
MW-8S	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0068	**0.0745**	<0.0048	*< 0.0038*	0.155	0.0043	0.012	**0.0033**	**0.0043**	**0.0043**	0.0022	**0.0024**	**0.0043**	**0.00062 J**	0.0367	0.142	**0.0029**	< 0.0038	0.0012 J	0.0041	0.0192
MW-8S	8/1/2006	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	**0.0158**	<0.0053	*<0.0084*	0.163	<0.0084	0.0064 J	**0.0024**	**0.002**	**0.0017**	0.00085 J	**0.0015 J**	**0.0024**	**<0.00107**	0.04	0.132	**0.0012 J**	<0.0084	<0.0084	<0.0084	0.0227
MW-8S	7/25/2007	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0353**	<0.0048	<0.00096	0.124	0.002	0.0054	**0.0016**	**0.0025**	**0.0026**	0.0014	**0.0013**	**0.0025**	**0.00031**	0.0146	0.097	**0.0016**	<0.00096	0.00043 J	0.0051	0.0096
MW-8S	11/8/2008	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0125	<0.0048	<0.00096	0.0357	0.00059 J	0.0019	**0.00023**	**0.00041**	**0.00043**	0.00023	0.00011 J	**0.00036**	<0.00019	0.0068	0.00323	0.00027	<0.00096	<0.00096	0.0033	0.0032
MW-8S	12/15/2009	327.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.009	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	0.006	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-8S	12/14/2010	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0057	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0012	<0.00097	<0.00097
MW-8S	12/16/2011	292.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.00033**	**0.00088**	**0.0008**	0.00067	**0.00047**	**0.00063**	<0.00019	0.0011	<0.00095	**0.00085**	<0.00095	<0.00095	<0.00095	<0.00095
MW-8S	7/15/2015	334.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00098	0.0046	<0.00098	<0.00098	**0.00079**	**0.0015**	**0.0019**	0.0012	**0.0006**	**0.0015**	0.00021	0.0019	0.0023	**0.0015**	<0.00098	0.0011	<0.00098	0.0012
MW-8S	4/9/2018	--	Insufficient water supply to collect sample																											
MW-8S	12/17/2019	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0031	<0.0010	<0.0010
MW-8D	6/21/2001	--	NA	NA	<0.020	NA	<0.020	*<0.020*	<0.020	**0.13**	**0.093**	*<0.020*	*<0.100*	0.19	<0.020	<0.020	*<0.020*	*<0.020*	*<0.020*	<0.020	*<0.020*	*<0.020*	*<0.020*	0.043	0.11	*<0.020*	**0.054**	1.0	**0.12**	0.034
MW-8D	12/11/2001	--	NA	NA	0.022	NA	<0.010	<0.010	<0.010	**0.19**	**0.14**	*<0.010*	*<0.050*	0.27	0.0099	0.013	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	0.035	0.15	*<0.010*	0.03	**1.8**	**0.14**	0.021
MW-8D	8/12/2003	--	<0.020	0.234	0.0125	<0.020	<0.020	*<0.020*	<0.020	**0.159**	**0.13**	*<0.020*	*<0.020*	0.263	<0.020	0.0082	**0.0031**	**<0.0040**	**0.0029**	<0.0040	*<0.0040*	**0.0024**	*<0.0040*	0.0352	0.142	*<0.0040*	**0.104**	**2.25**	**0.106**	0.0175
MW-8D	10/31/2003	--	<0.022	0.212	0.0117	<0.022	<0.022	*<0.022*	<0.022	**0.196**	**0.178**	*<0.022*	*<0.056*	0.361	<0.056	<0.056	*<0.011*	*<0.011*	*<0.011*	<0.011	*<0.011*	*<0.011*	*<0.011*	0.029	0.205	*<0.011*	**0.141**	**2.38**	**0.167**	0.0152
MW-8D	2/19/2004	--	<0.021	0.32	0.125	0.0115 J	<0.021	*<0.021*	<0.021	**0.144**	**0.136**	*<0.021*	*<0.010*	0.268	0.0092 J	0.0123	**0.0014 J**	*<0.0021*	*<0.0021*	<0.0021	*<0.0021*	**0.0011 J**	*<0.0021*	0.0297	0.162	*<0.0021*	0.0211	0.972	**0.126**	0.017
MW-8D	9/9/2004	--	<0.0049	0.304	0.0127	0.0105	<0.0049	<0.0049	<0.0049	**0.132**	**0.152**	<0.0049	*< 0.0097*	0.25	0.0109	0.0126	**0.0039**	**0.002**	**0.0023**	<0.00109	**0.0014 J**	**0.0028**	*<0.00109*	0.043	0.157	**0.0019**	**0.055**	**1.38**	**0.116**	0.0255
MW-8D	8/1/2006	--	<0.026	0.214	<0.026	<0.026	<0.026	*<0.026*	<0.026	**0.166**	**0.158**	*<0.026*	*<0.084*	0.29	*<0.084*	<0.084	*<0.017*	*<0.017*	*<0.017*	<0.017	*<0.017*	*<0.017*	*<0.017*	0.0295 J	0.153	*<0.017*	**0.143**	**2.79**	**0.112**	<0.084
MW-8D	7/24/2007	--	<0.048	0.181	<0.048	<0.048	<0.048	*<0.048*	<0.048	**0.175**	**0.156**	*<0.048*	*<0.076*	0.291	*<0.076*	<0.076	**0.0047 J**	*<0.015*	*<0.015*	<0.015	*<0.015*	*<0.015*	*<0.015*	0.0443 J	0.17	*<0.015*	**0.153**	**2.33**	**0.133**	0.0265 J
MW-8D	11/18/2008	26.7	<0.024	0.179	0.0053 J	<0.024	<0.024	*<0.024*	<0.024	**0.158**	**0.103**	*<0.024*	*<0.049*	0.236	<0.049	<0.049	*<0.0097*	*<0.0097*	*<0.0097*	<0.0097	*<0.0097*	*<0.0097*	*<0.0097*	0.0181 J	0.116	*<0.0097*	**0.114**	**1.49**	**0.0692**	<0.049
MW-8D	12/15/2009	2061.0	<0.025	0.161	<0.025	<0.025	<0.025	*<0.025*	<0.025	**0.159**	**0.126**	*<0.025*	*<0.050*	0.161	<0.050	<0.050	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.050	0.117	*<0.010*	**0.107**	**1.4**	**0.0816**	<0.050
MW-8D	6/24/2011	--	<0.019	0.177	<0.019	<0.019	<0.019	*<0.019*	<0.019	**0.173**	**0.151**	*<0.019*	*<0.048*	0.271	<0.048	<0.048	*<0.0096*	*<0.0096*	*<0.0096*	<0.0096	*<0.0096*	*<0.0096*	*<0.0096*	<0.048	0.143	*<0.0096*	**0.179**	**3.19**	**0.105**	<0.048
MW-8D	7/10/2012	0.0	<0.0048	0.132	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.186**	**0.139**	<0.0048	*<0.038*	0.252	<0.038	<0.038	*<0.0076*	*<0.0076*	*<0.0076*	<0.0076	*<0.0076*	*<0.0076*	*<0.0076*	<0.038	0.14	*<0.0076*	**0.165**	**1.51**	**0.0968**	<0.038
MW-8D	7/15/2015	23.4	<0.020	0.063	<0.020	<0.020	<0.020	<0.020	<0.020	**0.176**	**0.108**	<0.020	*<0.039*	0.187	<0.039	<0.039	*<0.0078*	*<0.0078*	*<0.0078*	<0.0078	*<0.0078*	*<0.0078*	*<0.0078*	<0.039	0.0974	*<0.0078*	**0.13**	**1.78**	**0.0608**	<0.039
MW-8D	3/13/2018	176.0	<0.0049	0.0566	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	**0.191**	**0.151**	<0.0049	*<0.049*	0.226	<0.049	<0.049	*<0.0097*	*<0.0097*	*<0.0097*	*<0.0097*	*<0.0097*	*<0.0097*	*<0.0097*	<0.049	0.122	*0.0097*	**0.201**	**1.85**	**0.098**	0.049

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-9	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-9	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-9	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-9	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-9	8/11/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	**0.0006**	**0.00081**	**0.0015**	0.00053	**0.0004**	**0.00069**	0.00013	0.00083	<0.0010	**0.00064**	<0.0010	<0.0010	<0.0010	0.00068
MW-9	10/29/2003	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	**0.00034**	**0.00043**	**0.00061**	0.0003	**0.0004**	**0.00043**	<0.00020	0.0005	<0.0010	0.00034	<0.0010	<0.0010	<0.0010	0.00048
MW-9	2/17/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	**0.00027**	**0.00031**	**0.0004**	0.00021	**0.00034**	**0.00034**	<0.00020	0.0004 J	<0.0010	0.00026	<0.0010	0.00065 J	<0.0010	0.00037 J
MW-9	7/31/2006	--	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0010	<0.0010	<0.0010	<0.0010	0.0001 J	0.00012 J	0.00015 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	0.00011 J	<0.0010	<0.0010	<0.0010	<0.0010
MW-9	7/24/2007	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	**0.00016 J**	**0.00021**	**0.00033**	0.00012 J	0.00017 J	0.00019 J	<0.00020	<0.0010	<0.0010	0.00015 J	<0.0010	<0.0010	<0.0010	<0.0010
MW-9	11/19/2008	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	**0.0003**	**0.00045**	**0.00074**	0.00031	**0.00024**	**0.00025**	0.000074 J	0.00042 J	<0.00096	0.00038	<0.00096	<0.00096	<0.00096	0.00039 J
MW-9	12/9/2009	439.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	**0.00021**	**0.00029**	**0.00059**	<0.00019	<0.00019	**0.00026**	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-9	12/13/2010	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-9	12/14/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.00099	<0.00095	<0.00095
MW-9	7/16/2015	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.00099	<0.00095	<0.00095
MW-9	4/9/2018	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-9	12/16/2019	--	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	<0.00094	<0.00019	<0.00094	<0.00094	<0.00094	<0.00094
MW-10	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**<0.010**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-10	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-10	6/21/2001	--	NA	NA	<0.0010	NA	<0.0010	<0.016	<0.0010	<0.0010	<0.0010	<0.016	< 0.078	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
MW-10	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-10	8/11/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	**0.0011**	**0.0015**	**0.0025**	0.00095	**0.00086**	**0.0013**	0.00022	0.0016	<0.0010	**0.0011**	<0.0010	<0.0010	<0.0010	0.0013
MW-10	10/29/2003	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-10	2/17/2004	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-10	9/9/2004	--	<0.0048	0.0061	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.01	0.0107	<0.0048	0.00032 J	0.0211	0.003	0.00096	**0.00037**	**0.00062**	**0.00062**	0.00037	**0.00036**	**0.00043**	0.00014 J	0.002	0.0102	**0.00042**	0.0049	0.0351	0.0038	0.0013
MW-10	7/31/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	0.000066 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-10	7/24/2007	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	0.000064 J	<0.00020	0.00011 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	0.000068 J	<0.00098	<0.00098	<0.00098	<0.00098
MW-10	11/19/2008	12.7	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-10	12/9/2009	7.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-10	6/22/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00908
MW-10	7/13/2012	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-10	7/16/2015	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-10	3/22/2018	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-11S	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation																											
MW-11D	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-11D	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-11D	8/11/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.0032	<0.0010	<0.0010	**0.0001**	0.00016	**0.00027**	0.00016	<0.00020	0.00016	<0.00020	0.00028	0.00095	0.00017	<0.0010	<0.0010	<0.0010	<0.0010
MW-11D	10/30/2003	--	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	0.00014	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-11D	2/17/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	**0.00014 J**	**0.00021**	**0.00026**	0.0002	**0.0002**	**0.00023**	<0.00020	0.00043 J	<0.0010	0.00021	<0.0010	<0.0010	<0.0010	0.00034 J
MW-11D	9/9/2004	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.00099	0.006	< 0.00099	< 0.00099	**0.00014 J**	**0.0002**	**0.00026**	0.00016 J	**0.00016 J**	0.00018 J	<0.00020	0.00031 J	0.0012	0.00026	< 0.00099	< 0.00099	< 0.00099	0.00028 J
MW-11D	7/31/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-11D	7/24/2007	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0028	<0.00098	<0.00098	0.000064 J	<0.00020	0.00012 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	0.00026 J	0.0001 J	<0.00098	<0.00098	<0.00098	<0.00098
MW-11D	11/19/2008	2.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-11D	12/9/2009	167.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.0015	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0013	<0.0010	<0.0010	0.001	0.0013	<0.0010
MW-11D	6/23/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0175	<0.00096	0.002	**0.00023**	<0.00019	<0.00019	<0.00019	<0.00019	0.00019	<0.00019	0.0089	0.0116	<0.00019	<0.00096	0.0015	0.0091	0.0055
MW-11D	7/13/2012	250.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-11D	7/16/2015	>1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0037	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.001	<0.0010	<0.0010
MW-11D	3/16/2018	62.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0013	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-12S	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-12S	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0095	<0.010	<0.010
MW-12S	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.022	<0.010	<0.010
MW-12S	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.00098
MW-12S	8/11/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0033	0.0076	<0.005	<0.0010	0.0107	0.0014	0.00059	**0.00029**	**0.00045**	**0.00068**	0.00029	0.00018	**0.00035**	<0.00020	0.0011	0.00026	0.00034	<0.0010	0.00095	0.00066	0.00062
MW-12S	10/30/2003	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0013	0.0028	<0.0051	<0.0010	0.0045	0.00082	0.00045	**0.00045**	**0.00087**	**0.001**	0.00052	**0.00054**	**0.00062**	0.00011	0.0011	<0.0010	**0.00064**	<0.0010	<0.0010	<0.0010	0.00082
MW-12S	2/17/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	0.00062 J	0.00091 J	**0.0015**	**0.0026**	**0.0029**	0.0016	**0.0019**	**0.0021**	**0.00037**	0.0028	<0.0010	**0.0018**	<0.0010	<0.0010	0.00071 J	0.0026
MW-12S	9/29/2004	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0033	0.0096	<0.0049	<0.00097	0.0148	0.002	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0005	0.0012	0.00014	<0.00097	0.00081	<0.00097	0.00029
MW-12S	8/1/2006	--	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	<0.0010	0.00079 J	<0.0010	<0.0010	**0.0002 J**	**0.00035**	**0.00039**	0.00023 J	**0.00024 J**	**0.00028**	<0.00020	0.00051 J	<0.0010	0.00029	<0.0010	<0.0010	<0.0010	0.00036 J
MW-12S	7/24/2007	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0011 J	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	**0.00016 J**	**0.00024**	**0.0003**	0.00013 J	0.00015 J	**0.00022**	<0.00019	0.00038 J	<0.00097	0.00016 J	<0.00097	0.00079 J	<0.00097	0.00037 J
MW-12S	11/20/2008	5.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0012	<0.0010	<0.0010
MW-12S	12/11/2009	164.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00019	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-12S	12/14/2010	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-12S	12/14/2011	134.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-12S	7/16/2015	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00019	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-12S	3/26/2018	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095

ARCADIS Design & Consultancy for natural and built assets

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-12D	6/21/2001	--	NA	NA	< 1.0	NA	< 1.0	<0.010	<0.010	< 1.0	< 1.0	<0.010	<5.0	0.61	0.032	0.068	0.055	0.022	0.02	0.0071	0.023	0.045	<0.010	< 1.0	< 1.0	0.0084	0.96	13.00	0.63	< 1.0
MW-12D	8/11/2003	--	<0.051	1.1	0.46	0.455	0.203	<0.051	<0.051	0.864	2.5	<0.051	0.463	2.35	0.289	0.669	0.658	0.375	0.509	0.139	0.178	0.486	< 0.082	3.26	2.46	0.176	3.37	21.60	6.2	1.78
MW-12D	10/30/2003	--	<0.052	4.18	3.12	4.49	1.76	<0.052	<0.052	0.642	0.84	<0.052	0.305	1.01	0.157	0.218	0.183	0.097	0.0999	0.0324	0.0813	0.146	<0.041	0.921	0.919	0.0388	1.65	16.40	1.93	0.576
MW-12D	2/18/2004	--	<0.110	0.813	0.473	0.482	0.294	<0.110	<0.110	0.57	0.844	<0.110	0.236	1.11	0.128	0.235	0.224	0.116	0.109	0.0438	0.104	0.172	0.0104 J	1.03	0.938	0.0513	2.09	15.90	2.04	0.691
MW-12D	9/10/2004	--	<0.97	1.01	0.586	0.624	<0.97	<0.97	<0.97	3.74	16	<0.97	0.426	13.4	1.89	4.41	4.84	2.71	2.66	0.981	1.91	3.39	0.315	18.9	14.7	1.27	17.9	64.90	30.40	12.70
MW-12D	8/2/2006	--	<0.11	3.331	2.01	3.14	1.19	<0.11	<0.11	0.429	0.347	<0.11	0.0672 J	0.444	0.064 J	<0.11	0.0254	0.0132 J	0.0121 J	<0.022	0.011 J	0.0182 J	<0.022	0.132	0.265	0.006 J	0.872	9.54	0.394	0.0756 J
MW-12D	7/24/2007	--	<0.048	0.990	<0.048.0	0.452	0.248	<0.048	<0.048	0.527	0.553	<0.048	0.274	0.606	0.0536	0.092	0.083	0.0446	0.0464	0.0164	0.0339	0.0618	0.0047	0.362	0.466	0.0217	1.35	13.2	0.849	0.277
MW-12D	11/20/2008	13.4	<0.020	1.170	0.790	0.597	0.555	<0.020	<0.020	0.208	0.236	<0.020	0.544	0.321	<0.100	<0.100	0.0146 J	0.0073 J	0.0096 J	<0.020	<0.020	0.010 J	<0.020	0.0753 J	0.0213	<0.020	0.648	8.7	0.251	0.0462 J
MW-12D	12/17/2009	0.0	<0.096	1.530	0.723	0.601	0.335	<0.096	<0.096	0.55	0.367	<0.096	0.471	0.482	<0.019	<0.019	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.019	0.279	<0.038	0.882	11.9	0.234	<0.019
MW-12D	12/21/2010	24.3	<0.097	0.979	0.491	0.433	0.228	<0.097	<0.097	0.464	0.617	<0.097	<0.97	<0.97	<0.97	<0.97	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.97	<0.97	<0.19	1.4	14.1	1.41	<0.97
MW-12D	7/15/2015	0.0	<0.23	1.900	0.936	0.885	0.383	<0.23	<0.23	0.457	0.323	<0.23	0.227	0.358	0.0497	<0.045	0.0221	0.0099	0.0148	<0.0091	<0.0091	0.0175	<0.0091	0.113	0.236	<0.0091	0.641	8.89	0.341	0.0755
MW-13	11/13/2000	--	NA	NA	0.052	NA	<0.010	<0.010	<0.010	0.24	0.24	<0.010	0.13	0.3	0.014	0.081	0.073	0.032	0.036	<0.010	0.028	0.058	0.0056	0.21	0.25	0.0099	0.6	6.4	0.34	0.18
MW-13	2/1/2001	--	NA	NA	0.067	NA	<0.010	<0.010	<0.010	0.28	0.32	<0.010	<0.050	0.58	0.013	0.1	0.07	0.034	0.033	0.015	0.034	0.065	0.0074	0.32	0.33	0.019	0.34	4.7	0.94	0.21
MW-13	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.078	0.18	<0.010	0.013	0.32	0.0071	0.043	0.024	0.011	0.011	<0.010	0.0098	0.022	<0.010	0.13	0.2	<0.010	0.072	0.1	0.33	0.1
MW-13	12/11/2001	--	NA	NA	0.17	NA	<0.050	<0.050	<0.050	0.36	0.34	<0.050	0.12	0.78	<0.050	0.035	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.12	0.28	<0.050	0.44	7.5	0.42	0.076
MW-13	8/12/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0015	0.0247	0.0011	0.0019	0.0013	0.0015	0.0024	0.0011	0.00072	0.0008	0.00024	0.0185	0.00098	0.0011	<0.0010	0.00095	0.0029	0.0039
MW-13	10/31/2003	--	<0.021	0.0195	0.0101	<0.021	<0.021	<0.021	<0.021	0.161	0.227	<0.021	0.0277	0.466	0.0157	0.0382	0.025	0.0196	0.0193	0.0078	0.0167	0.0222	<0.0042	0.182	0.257	0.0098	0.167	2.49	0.254	0.116
MW-13	2/18/2004	--	<0.021	0.0114 J	<0.021	<0.021	<0.021	<0.021	<0.021	0.107	0.216	<0.021	0.0106 J	0.562	0.01 J	0.052	0.0204	0.0118	0.0125	0.0054	0.0113	0.0175	<0.0042	0.248	0.325	0.0067	0.179	1.42	0.491	0.161
MW-13	9/9/2004	--	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	0.273	0.242	<0.048	<0.019	0.387	0.0129 J	0.0364	0.0227	0.0235	0.0241	0.0106	0.0173	0.02	0.0037 J	0.188	0.232	0.0133	0.234	2.91	0.287	0.137
MW-13	8/1/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0025 J	0.0036 J	<0.005	<0.0010	0.0281	0.0018	0.0028	0.0024	0.0046	0.0049	0.0024	0.0028	0.0028	0.00058	0.0272	0.004	0.0032	0.00067 J	0.0032	0.0118	0.0128
MW-13	7/26/2007	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0019	0.0036	0.0032	< 0.0038	0.0074	< 0.0038	0.0019 J	0.0012	0.0032	0.0036	0.003	0.0014	0.0018	0.00031 J	0.0143	0.0039	0.0033	< 0.0038	0.0028	0.0089	0.011
MW-13	11/18/2008	39.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	0.000062 J	0.000062 J	<0.00020	<0.00020	<0.00020	0.00037 J	<0.00098	0.000060 J	<0.00098	<0.00098	<0.00098	<0.00098
MW-13	12/15/2009	51.3	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.03	0.0332	<0.0050	<0.010	0.109	<0.010	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.010	0.0456	<0.0020	0.0174	0.401	0.0157	<0.010
MW-13	6/22/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0307	0.0268	<0.0049	0.0825	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	0.0147	0.037	<0.00098	0.0163	0.207	0.031	0.0079
MW-13	11/29/2011	149.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0428	0.0253	<0.0048	<0.048	0.0886	<0.048	<0.048	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.048	<0.048	<0.0095	<0.048	0.914	<0.048	<0.048
MW-13	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation																											
MW-14S	8/11/2003	--	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.146	0.184	<0.020	0.0214	0.314	0.0039	0.0198	0.009	0.0052	0.0076	0.0023	0.0023	0.0074	0.00072	0.0544	0.0178	0.0028	0.246	0.962	0.189	0.0308
MW-14S	10/31/2003	--	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	0.05	0.0447	<0.0054	<0.0043	0.127	0.0023	0.0055	0.0019	0.001	0.0012	0.00044	0.00074	0.0016	< 0.00087	0.0163	0.0648	0.00048	<0.0043	0.0017	0.0224	0.0094
MW-14S	2/17/2004	--	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.169	0.184	<0.020	<0.020	0.36	<0.020	0.0131 J	0.004	0.0025 J	0.0028 J	<0.004	<0.004	0.0039 J	<0.004	0.0255	0.184	<0.004	0.354	4.01	0.137	0.015 J
MW-14S	9/9/2004	--	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.178	0.176	<0.019	< 0.0096	0.265	0.0059 J	0.014	0.0045	0.0029	0.0031	0.0014 J	0.002	0.0039	<0.00109	0.0294	0.152	0.0026	0.18	1.26	0.112	0.0177
MW-14S	8/1/2006	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	0.13	0.106	<0.0053	<0.0010	0.0263	<0.0010	0.00062 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0012	0.0119	<0.00020	0.0041	0.0199	0.0052	0.00067 J
MW-14S	7/24/2007	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0434	0.0421	<0.0049	<0.00098	0.0668	0.00064 J	0.0022	0.00065	0.00045	0.00063	0.00024	0.00032	0.00063	0.000065 J	0.0062	0.0279	0.00024	0.0027	0.0425	0.0236	0.0048
MW-14S	11/20/2008	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-14S	12/11/2009	76.6	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0014	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-14S	6/23/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0317	0.0327	0.0112	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-14S	11/29/2011	72.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-14S	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation																											
MW-14D	8/11/2003	--	<0.050	0.325	0.119	0.105	0.0702	<0.050	<0.050	0.471	0.393	<0.050	0.319	0.519	0.0373	0.0426	0.0214	0.0115	0.0151	0.0041	0.006	0.017	<0.008	0.126	0.315	0.0054	1.11	12.90	0.435	0.0705
MW-14D	10/31/2003	--	<0.050	0.701	0.403	0.321	0.231	<0.050	<0.050	0.501	0.317	<0.050	0.513	0.517	<0.1	<0.1	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.0265	0.273	<0.020	1.01	12.10	0.226	<0.10
MW-14D	2/17/2004	--	<0.052	0.911	0.459	0.467	0.292	<0.052	<0.052	0.474	0.563	<0.052	0.707	0.84	0.0706 J	0.12	0.0902	0.0453	0.0463	0.0165 J	0.0378	0.0741	<0.021	0.485	0.631	0.0187 J	1.32	13.30	1.12	0.312
MW-14D	9/9/2004	--	<0.048	0.879	0.493	0.403	0.307	<0.048	<0.048	0.519	0.497	<0.048	1.05	0.686	0.0622 J	0.0671 J	0.0429	0.0221	0.023	<0.019	0.0154 J	0.0292	<0.019	0.227	0.456	0.0189 J	1.36	11.50	0.626	0.138
MW-14D	8/2/2006	--	<0.05	0.189	0.0896	0.0652	0.575	<0.05	<0.05	0.387	0.641	<0.05	0.292	1.00	0.07	0.166	0.146	0.0747	0.0715	0.0266	0.06	0.116	0.0069 J	0.684	0.72	0.036	0.838	2.87	1.42	0.445
MW-14D	7/24/2007	--	<0.05	0.509	<0.05	0.225	0.176	<0.05	<0.05	0.43	0.311	<0.05	0.712	0.404	0.0347	< 0.02	0.0055	0.0024 J	0.0029 J	<0.004	<0.004	0.0041	<0.004	0.0411	0.232	0.0011 J	0.766	9.41	0.228	0.0295
MW-14D	11/20/2008	16.8	0.0065 J	0.236	0.0857	0.0771	0.0684	<0.019	<0.019	0.392	0.317	<0.019	0.183	0.471	<0.096	<0.096	0.0254	0.0113 J	0.0156 J	<0.019	0.0052 J	0.0183	<0.019	0.144	0.319	<0.019	0.773	9.55	0.434	0.0892
MW-14D	12/17/2009	13.5	<0.096	0.138	<0.096	<0.096	<0.096	<0.096	<0.096	0.291	0.312	<0.096	<0.19	0.496	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	0.314	<0.19	<0.19	<0.19	<0.19	<0.19
MW-14D	12/21/2010	30.9	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.216	0.203	<0.019	<0.19	0.277	<0.19	<0.19	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.19	<0.19	<0.039	0.404	4.26	0.21	<0.19
MW-14D	11/29/2011	33.1	<0.019	0.367	0.168	0.0816	0.0515	<0.019	<0.019	0.332	0.331	<0.019	<0.19	0.471	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	0.274	<0.038	0.711	6.23	0.358	<0.19
MW-14D	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation																											
MW-15S	8/11/2003	--	<0.052	0.751	0.451	0.42	0.0858	<0.052	<0.052	0.377	0.967	<0.052	<0.210	1.39	0.13	0.35	0.33	0.184	0.292	0.0597	0.082	0.278	<0.042	1.58	1.1	0.0766	1.55	12.50	2.67	0.925
MW-15S	10/30/2003	--	<0.020	0.297	0.191	0.0996	0.0216	<0.020	<0.020	0.12	0.23	<0.020	<0.100	0.415	<0.100	0.0335	0.0141	<0.020	<0.020	<0.020	<0.020	0.0102	<0.020	0.0964	0.231	<0.020	0.628	6.40	0.323	0.0615
MW-15S	2/17/2004	--	<0.054	2.08	1.12	1.22	0.382	<0.054	<0.054	0.222	0.391	<0.054	< 0.086	0.617	0.0555 J	0.0635 J	0.0549	0.0284	0.0294	0.0092 J	0.0258	0.0463	<0.017	0.266	0.339	0.0125 J	1.21	13.10	0.665	0.171
MW-15S	9/9/2004	--	<0.020	0.0507	0.0096	<0.020	<0.020	<0.020	<0.020	0.103	0.243	<0.020	<0.010	0.263	0.0275	0.0399	0.0324	0.0186	0.0192	0.0064	0.0139	0.024	0.0023	0.126	0.189	0.0091	0.342	1.21	0.299	0.0903
MW-15S	8/1/2006	--	<0.1	0.435	0.176	0.0685 J	<0.1	<0.1	<0.1	0.153	0.318	<0.1	< 0.08	0.526	0.0436 J	0.0452 J	0.0376	0.021	0.0204	<0.016	0.018	0.0318	<0.016	0.169	0.272	0.0096 J	0.374	6.29	0.465	0.107
MW-15S	7/24/2007	--	Well destroyed during walk path construction in October 2006																											
MW-15D	8/14/2003	--	<0.052	0.69	0.234	0.139	0.0576	<0.052	<0.052	0.288	0.198	<0.052	<0.100	0.429	<0.100	<0.100	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.0269	0.192	<0.021	0.868	11.00	0.177	<0.100
MW-15D	10/30/2003	--	<0.057	0.703	0.298	0.263	0.0976	<0.057	<0.057	0.4	0.615	<0.057	0.0633	0.853	0.066	0.134	0.124	0.0621	0.0676	0.0198	0.0497	0.0962	0.0053	0.587	0.683	0.025	1.6	12.50	1.32	0.376
MW-15D	2/18/2004	--	<0.140	0.92	0.42	0.293	0.136 J	<0.140	<0.140	0.611	1.67	<0.141	<0.110	2.26	0.141	0.497	0.505	0.252	0.274	0.0869	0.204	0.396	0.0233	2.42	2.06	0.106	2.74	16.70	4.72	1.64
MW-15D	9/9/2004	--	<0.19	1.67	0.66	0.712	0.282	<0.19	<0.19	4.34	25.5	<0.19	<1.9	27.1	1.85	7.44	8.4	4.39	4.41	1.46	3.29	5.67	0.529	35	27.3	2	28.9	77.70	58.6	22.7
MW-15D	8/1/2006	--	<0.021	0.595	0.224	0.185	0.0717	<0.021	<0.021	0.247	0.327	<0.021	<0.042	0.54	0.0245 J	0.0659	0.0596	0.03	0.0282	0.0094	0.0267	0.0423	<0.0084	0.289	0.365	0.0128	0.334	1.42	0.649	0.193
MW-15D	7/24/2007	--	<0.025	0.614	0.328	0.407	0.127	<0.0250	<0.0250	0.316	0.369	<0.025	<0.02	0.521	0.0234	0.0462	0.0345	0.0168	0.018	0.0061	0.013	0.0246	0.0019 J	0.172	0.338	0.0082	0.474	1.89	0.513	0.133
MW-15D	11/20/2008	32.9	<0.020	0.661	0.257	0.16	0.116	<0.020	<0.020	0.278	0.213	<0.020	<0.100	0.322	<0.100	<0.100	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.100	0.192	<0.020	0.484	6.270	0.190	<0.100
MW-15D	12/17/2009	15.9	<0.095	0.298	0.102	<0.095	<0.095	<0.095	<0.095	0.363	0.308	<0.095	<0.19	0.492	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	0.27	<0.038	0.709	8.880	0.280	<0.19
MW-15D	12/21/2010	118.0	<0.020	0.506	0.239	0.132	0.102	<0.020	<0.020	0.29	0.212	<0.020	<0.20	0.398	<0.20	<0.20	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.20	<0.20	<0.039	0.642	6.460	0.208	<0.20
MW-15D	7/15/2015	0.0	<0.022	0.233	0.0922	0.0458	0.0745	<0.022	<0.022	0.3	<0.022	<0.022	<0.11	0.333	<0.11	<0.11	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.11	0.176	<0.022	0.487	7.440	0.163	<0.11

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-16S	8/11/2003	--	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.591	1.19	<0.020	0.0624	1.56	0.0509	0.444	0.213	0.117	0.166	0.044	0.05	0.206	0.0136	1.06	1.16	0.0566	1.28	8.31	2.31	0.596
MW-16S	10/30/2003	--	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.255	0.448	<0.020	0.0465	0.675	<0.04	0.0643	0.0265	0.0129	0.0128	0.0042	0.0116	0.0259	<0.008	0.147	0.401	0.0052	0.453	3.99	0.475	0.093
MW-16S	2/18/2004	--	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.188	0.457	<0.021	0.0098 J	0.685	0.018 J	0.112	0.0557	0.0264	0.0276	0.0088	0.022	0.0552	0.0028 J	0.289	0.47	0.0106	0.233	2.95	0.705	0.194
MW-16S	9/9/2004	--	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	0.442	0.992	<0.097	<0.039	1.37	0.0478	0.578	0.276	0.138	0.134	0.0478	0.0967	0.272	0.0156	1.06	1.05	0.0622	0.291	2.39	2.16	0.682
MW-16S	8/1/2006	--	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.236	0.403	<0.025	0.0044 J	0.654	0.0173	0.112	0.0506	0.0275	0.0277	0.0086	0.0202	0.0514	0.0028	0.249	0.403	0.012	0.251	1.79	0.589	0.161
MW-16S	7/24/2007	--	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.183	0.301	<0.05	< 0.02	0.515	0.0113 J	0.168	0.0785	0.0427	0.0483	0.0146	0.0281	0.0835	0.0046	0.369	0.396	0.0195	0.0541	0.451	0.507	0.264
MW-16S	11/20/2008	23.1	<0.005	<0.005	0.001 J	<0.005	<0.005	<0.005	<0.005	0.0926	0.0997	<0.005	<0.010	0.268	<0.010	0.0104	0.00089 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0238	0.139	<0.020	<0.010	0.0025 J	0.0428	0.011
MW-16S	12/11/2009	58.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0849	0.151	<0.0048	<0.0095	0.325	<0.0095	0.0121	<0.00109	<0.00109	<0.00109	<.0019	<0.00109	<0.00109	<0.00109	0.0203	0.177	<0.00109	<0.0095	0.217	0.071	0.0126
MW-16S	12/14/2010	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.02	0.0366	<0.0049	<0.0039	0.136	0.0049	0.0049	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.001	<0.00078	0.0153	0.055	<0.00078	<0.0039	0.0254	<0.0039	0.0055
MW-16S	12/14/2011	76.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0491	0.107	<0.0048	<0.0096	0.227	<0.0096	0.0122	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0.0288	0.128	<0.0019	<0.0096	<0.0096	0.0334	0.0143
MW-16S	7/16/2015	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0579	0.0496	<0.0048	<0.00096	0.183	0.0022	0.0141	0.0031	0.0014	0.0013	0.00045	0.00093	0.0031	<0.00019	0.0297	0.111	0.0007	<0.00096	0.0124	0.0068	0.0153
MW-16S	3/26/2018	25.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0315	0.0699	<0.0048	0.0013	0.189	0.0021	0.0039	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0.0094	0.0881	<0.00019	0.0043	0.3440	0.0129	0.0037
MW-16S	12/16/2019	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0095	0.004	<0.0095	<0.0095	<0.00019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0.0014	0.0011	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095
MW-16D	8/11/2003	--	< 0.023	0.103	0.048	0.0405	0.0262	< 0.023	< 0.023	0.324	0.454	0.0241	0.0871	0.607	< 0.092	0.175	0.104	0.0596	0.0839	0.0229	0.0256	0.0969	<0.018	0.499	0.495	0.0271	0.711	6.51	1.05	0.286
MW-16D	10/30/2003	--	<0.022	0.188	0.0797	0.0581	0.0387	<0.022	<0.022	0.399	0.292	<0.022	0.126	0.463	<0.043	0.0304	0.0098	0.0051	0.0049	<0.0086	0.0044	0.0087	<0.0086	0.0538	0.248	<0.0086	0.965	10.70	0.229	0.0327
MW-16D	2/18/2004	--	<0.100	0.164	0.0743 J	0.0452 J	<0.100	<0.100	<0.100	1.78	7.42	<0.100	0.149 J	8.07	0.948	2.17	2.52	1.27	1.19	0.433	0.922	2.03	0.109	10.00	8.15	0.519	9.83	42.00	23.00	7.02
MW-16D	9/9/2004	--	<0.97	<0.97	<0.970	<0.970	<0.97	<0.97	<0.97	2.66	12.2	<0.97	0.13 J	10.8	1.34	3.15	3.63	1.93	1.76	0.691	1.26	2.55	0.245	13.60	11.00	0.898	14.7	50.60	28.20	8.78
MW-16D	8/2/2006	--	<0.021	0.0729	0.0356	0.0231	0.0123 j	<0.021	<0.021	0.19	0.176	<0.021	<0.011	0.31	0.0093 J	0.0132	0.0018 J	<0.0021	0.00089 J	<0.0021	<0.0021	0.0011 J	<0.0021	0.0151	0.167	<0.0021	0.0365	0.0197	0.116	0.0093 J
MW-16D	7/24/2007	--	<0.1	0.0801 J	<0.1	0.0279 J	<0.1	<0.1	<0.1	0.465	0.699	<0.1	<0.05	0.839	0.0537	0.116	0.125	0.0673	0.071	0.0237	0.0516	0.0935	0.0067 J	0.529	0.627	0.0313	0.97	6.55	1.17	0.389
MW-16D	11/19/2008	2.4	<0.096	0.0839 J	0.0377 J	0.0233 J	<0.096	<0.096	<0.096	0.368	0.254	<0.096	<0.19	0.353	<0.190	<0.190	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.190	0.178 J	<0.038	0.556	7.280	0.132 J	<0.190
MW-16D	12/17/2009	1.5	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	0.355	0.307	<0.096	<0.19	0.459	<0.190	<0.190	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.190	0.222	<0.038	0.653	7.570	<0.190	<0.190
MW-16D	12/21/2010	62.3	<0.020	0.0618	0.0239	<0.020	<0.020	<0.020	<0.020	0.316	0.233	<0.020	<0.20	0.387	<0.20	<0.20	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.20	<0.20	<0.040	0.66	6.790	<0.20	<0.20
MW-16D	7/15/2015	298.0	<0.020	0.05	0.0213	<0.020	<0.020	<0.020	<0.020	0.221	0.212	<0.020	<0.10	0.284	<0.10	<0.10	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.10	0.14	<0.020	0.392	4.800	0.101	<0.10
MW-17S	8/12/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0013	0.0038	0.0039	<0.004	0.0076	<0.004	0.0029	0.0114	0.0111	0.0192	0.0057	0.0051	0.0092	0.0015	0.026	0.004	0.0069	0.0018	0.0061	0.0131	0.0173
MW-17S	10/31/2003	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	0.00058	0.0008	0.0011	0.0005	0.00063	0.00055	<0.00020	0.001	<0.0010	0.00057	<0.0010	0.00036	0.00058	0.00076
MW-17S	2/18/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	0.00078	0.0011	0.0014	0.0008	0.00091	0.00086	0.00018 J	0.0012	<0.0010	0.00082	<0.0010	0.00051 J	0.00049 J	0.0011
MW-17S	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0014 J	<0.0048	0.00058 J	0.0014	<0.00096	0.00058 J	0.00093	0.00082	0.00089	0.00045	0.00065	0.00069	0.00015 J	0.0029	0.0016	0.00057	0.00094 J	0.0018	0.0048	0.002
MW-17S	8/1/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00076 J	<0.0010	<0.0010	<0.0010	0.00042	0.00063	0.00077	0.00042	0.00053	0.00037	0.000091 J	0.00059 J	<0.0010	0.00053	<0.0010	<0.0010	<0.0010	0.00051 J
MW-17S	7/26/2007	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	0.00068	0.00093	0.0012	0.00061	0.00076	0.00062	0.00015	0.001	<0.00095	0.00077	<0.00095	0.00029	<0.00095	0.00095
MW-17S	11/18/2008	23.6	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-17S	12/15/2009	161.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	0.00022	0.00032	0.00049	0.00021	<0.00019	0.00021	<0.00019	<0.00095	<0.00095	0.00025	<0.00095	<0.00095	<0.00095	<0.00095
MW-17S	6/22/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-17S	7/10/2012	187.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0132	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	0.00025	0.00043	0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	0.00025	<0.00095	<0.00095	<0.00095	<0.00095
MW-17S	7/14/2015	589.0	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	<0.00019	<0.00019	0.00021	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	<0.00094	<0.00019	<0.00094	<0.00094	<0.00094	<0.00094
MW-17S	4/9/2018	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-17D	8/12/2003	--	<0.020	0.285	0.198	0.0952	0.0978	<0.020	<0.020	0.147	0.0817	<0.020	<0.04	0.131	<0.04	<0.04	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.04	0.0731	<0.008	0.259	4.80	0.0612	<0.04
MW-17D	10/31/2003	--	<0.024	0.382	0.252	0.168	0.116	<0.024	<0.024	0.151	0.0694	<0.024	<0.049	0.144	<0.049	<0.049	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.049	0.0706	<0.0098	0.227	4.62	0.0559	<0.049
MW-17D	2/18/2004	--	<0.021	0.23	0.167	0.0889	0.0891	<0.021	<0.021	0.217	0.108	<0.021	<0.021	0.203	0.014 J	0.0089 J	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	0.0063 J	0.109	<0.0042	0.262	5.68	0.0877	<0.021
MW-17D	9/9/2004	--	<0.020	0.286	0.151	0.0971	0.0747	<0.020	<0.020	0.233	0.141	<0.020	<0.010	0.197	0.0158	0.0094 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0092 J	0.115	<0.002	0.313	4.63	0.101	0.0052 J
MW-17D	8/1/2006	--	<0.025	0.153	0.0847	0.0265	0.012 J	<0.025	<0.025	0.202	0.114	<0.025	<0.01	0.193	0.0112	0.0985	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0077 J	0.107	<0.002	0.155	2.23	0.0978	0.0042 J
MW-17D	7/26/2007	--	<0.025	0.129	0.0729	0.0186 J	<0.025	<0.025	<0.025	0.234	0.129	<0.025	<0.01	0.179	0.0122	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0114	0.101	<0.002	0.169	2.25	0.101	0.0072
MW-17D	11/18/2008	31.1	<0.0049	0.0154	<0.0049	0.0013 J	<0.0049	<0.0049	<0.0049	0.0052	<0.0049	<0.0049	<0.00097	0.004	<0.00097	0.00073 J	0.000069 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0012	0.0031	<0.00019	<0.00097	0.0030 J	0.0065	0.00083 J
MW-17D	12/15/2009	5.3	<0.0048	0.006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0051	<0.0048	<0.0048	<0.00096	0.0026	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.002	0.0021	<0.00019	<0.00096	<0.00096	0.005	0.0016
MW-17D	6/24/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0166	0.0177	0.0086	<0.00097	0.0187	<0.00097	0.0036	0.00026	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0086	0.0138	<0.00019	0.006	0.0265	0.0343	0.0046
MW-17D	7/13/2012	108.0	<0.0048	0.021	0.0133	0.0083	0.0085	<0.0048	<0.0048	0.0096	<0.0048	<0.0048	<0.0038	0.0107	<0.0038	<0.0038	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.0038	<0.0038	<0.00076	0.0156	0.356	<0.0038	<0.038
MW-17D	7/14/2015	17.2	<0.0048	0.0056	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0176	0.0154	<0.0048	<0.00095	0.0225	0.0017	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0013	0.0143	<0.00010	0.0221	0.213	0.0131	<0.00055
MW-17D	3/14/2018	35.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096
MW-18S	8/12/2003	--	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0010	<0.0010	<0.0010	0.00068	0.0033	0.0049	0.0069	0.0031	0.0021	0.0037	0.00076	0.0052	<0.0010	0.0039	<0.0010	0.00032	0.002	0.0043
MW-18S	10/31/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	0.00018	0.00025	0.00032	0.00019	0.00019	0.00023	<0.00020	0.00028	<0.0010	0.00022	<0.0010	<0.0010	<0.0010	0.00026
MW-18S	2/18/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	0.00073 J	0.0035	0.0046	0.0049	0.0034	0.0035	0.004	0.00062	0.0058	<0.0010	0.0036	<0.0010	0.00028 J	0.0021	0.0051
MW-18S	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	0.00098	0.0012	0.0013	0.00079	0.00083	0.00095	0.00019	0.0019	0.0004	0.00097	<0.00095	0.00036	0.0017	0.0015
MW-18S	8/1/2006	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0010	<0.0010	<0.0010	<0.0010	0.00026	0.00036	0.0004	0.00024	0.00028	0.0003	<0.00020	0.00039 J	<0.0010	0.00032	<0.0010	<0.0010	<0.0010	0.00034 J
MW-18S	7/24/2007	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	0.0009	0.0013	0.0014	0.00079	0.00081	0.001	0.00019	0.0013	<0.00095	0.001	<0.00095	<0.00095	0.00050 J	0.0014
MW-18S	11/18/2008	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	0.00013 J	0.00018 J	0.00024	0.00010 J	0.000076 J	0.00014 J	<0.00019	<0.00095	<0.00095	0.00012 J	<0.00095	<0.00095	<0.00095	<0.00095
MW-18S	12/15/2009	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-18S	6/22/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-18S	7/15/2015	61.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0029	<0.00098	<0.00098
MW-18S	3/13/2018	10.7	Insufficient water to collect for SVOCs																											

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Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-18D	8/12/2003	--	< 0.0074	0.012	0.0034	< 0.0074	< 0.0074	< 0.0074	< 0.0074	0.0362	**0.0409**	< 0.0074	<0.0010	0.0875	0.0019	0.0023	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.001	0.0391	<0.00020	0.0283	0.327	0.0192	0.00061
MW-18D	10/31/2003	--	<0.0058	0.0109	0.0028	<0.0058	<0.0058	<0.0058	<0.0058	0.0233	0.0146	<0.0058	<0.0010	0.0537	0.0031	<0.0023	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0023	0.023	<0.00020	<0.0010	0.00037	0.0142	0.0014
MW-18D	2/18/2004	--	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0010	0.0011	<0.0010	<0.0010	**0.00011 J**	0.00016 J	0.00016 J	0.00011 J	0.00013 J	0.00012 J	<0.00020	0.00034 J	<0.0010	<0.00020	<0.0010	0.00042 J	<0.0010	0.00032 J
MW-18D	8/1/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.00065 J	<0.0010	<0.0010	**0.00013 J**	**0.00034**	**0.00035**	0.00021	0.00019 J	0.00017 J	<0.00020	0.00026 J	<0.0010	0.00026	<0.0010	<0.0010	<0.0010	<0.0010
MW-18D	7/24/2007	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0016 J	0.0063	<0.005	<0.0010	0.0167	0.00065	0.00089	**0.00039**	**0.00085**	**0.00088**	0.00056	**0.00051**	**0.00058**	0.00013 J	0.0027	0.0126	**0.00062**	<0.0010	0.0022	0.0014	0.0018
MW-18D	11/18/2008	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-18D	12/15/2009	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0015	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0013	<0.00097	<0.00019	<0.00097	<0.00097	0.0029	<0.00097
MW-18D	6/24/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0051	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0023	0.0026	<0.00019	<0.00096	0.0021	0.0032	0.0013
MW-18D	7/10/2012	84.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0054	<0.00095	<0.00095	<0.00019	**0.00027**	**0.00038**	0.0002	<0.00019	<0.00019	<0.00019	0.0012	0.0022	0.00025	0.0026	0.022	0.0024	<0.00095
MW-18D	7/15/2015	3.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00098	0.0014	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0029	<0.00098	<0.00098
MW-18D	3/13/2018	3.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0013	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-19S	10/31/2003	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	**0.00062**	**0.0013**	**0.0017**	0.00094	**0.001**	**0.00082**	0.00017	0.00069	<0.0010	**0.001**	<0.0010	<0.0010	<0.0010	0.00079
MW-19S	2/18/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	0.0011	0.001	**0.0039**	**0.006**	**0.0078**	0.0043	**0.0049**	**0.0048**	**0.0011**	0.0049	<0.0010	**0.0049**	<0.0010	<0.0010	0.00087 J	0.005
MW-19S	12/15/2009	87.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	**0.00094**	**0.0017**	**0.0027**	0.0013	**0.00075**	**0.0011**	**0.00027**	0.0013	<0.00098	**0.0015**	<0.00098	<0.00098	<0.00098	0.0014
MW-19S	6/22/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	0.00019	**0.00025**	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-19S	7/15/2015	742.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	**0.00024**	**0.00045**	0.00021	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	0.00027	<0.00096	<0.00096	<0.00096	<0.00096
MW-19S	3/13/2018	--	Insufficient water to collect sample																											
MW-19D	8/12/2003	--	< 0.0091	0.0534	0.0275	0.0143	< 0.0091	< 0.0091	< 0.0091	0.0149	**0.0208**	< 0.0091	< 0.0073	0.0279	< 0.0073	0.0075	**0.0152**	**0.0165**	**0.0265**	0.0075	**0.0068**	**0.0152**	**0.0018**	0.043	0.0255	**0.0092**	0.0073	0.136	**0.0585**	0.0279
MW-19D	10/31/2003	--	<0.011	0.155	0.0482	0.0175	<0.011	<0.011	<0.011	0.0377	**0.0284**	<0.011	**0.0423**	0.0735	0.0088	<0.0045	**0.0018**	**0.0013**	**0.0016**	0.00062	**0.001**	**0.0014**	< 0.00091	0.0117	0.0298	**0.00071**	0.0254	0.137	0.018	0.0073
MW-19D	2/18/2004	--	<0.021	0.207	0.0739	0.0338	<0.021	<0.021	<0.021	0.015 J	**0.0217**	<0.021	**0.0532**	0.111	0.0163	0.0046	**0.00056 J**	< 0.00083	< 0.00083	< 0.00083	< 0.00083	< 0.00083	< 0.00083	0.0101	0.0289	< 0.00083	0.0288	0.276	0.0137	0.006
MW-19D	9/9/2004	--	<0.052	0.396	0.122	0.0936	<0.052	<0.052	<0.052	**0.393**	**1.89**	<0.052	**0.119**	**2.35**	**0.268**	0.606	**0.714**	**0.378**	**0.354**	0.134	**0.304**	**0.474**	**0.0426**	**2.98**	**2.22**	**0.178**	**2.52**	**8.46**	**5.06**	**1.98**
MW-19D	8/2/2006	--	<0.047	0.379	0.126	0.102	0.0216 J	<0.047	<0.047	**0.127**	**0.199**	<0.047	**0.119**	0.32	0.0377 J	<0.059	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	0.0191 J	0.164	<0.012	**0.287**	**2.82**	**0.137**	<0.059
MW-19D	7/24/2007	--	<0.048	0.486	<0.048	0.106	0.025 J	<0.048	<0.048	**0.157**	**0.216**	<0.048	**0.118**	0.30	0.0398	<0.019	**0.0024 J**	< 0.0038	**0.0018 J**	<0.0038	< 0.0038	**0.002 J**	< 0.0038	0.0221	0.166	<0.0038	**0.167**	**3.64**	**0.143**	0.0168 J
MW-19D	11/18/2008	29.5	0.0142 J	0.156	0.0655	0.0827	0.133	<0.020	<0.020	0.0114 J	**0.0438**	<0.020	<0.015	0.0979	0.0133 J	<0.015	**0.0009 J**	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0063 J	0.0381	<0.003	**0.032**	0.366	**0.0321**	0.004 J
MW-19D	12/17/2009	308.0	<0.020	0.392	0.125	0.0757	0.0764	<0.020	<0.020	**0.164**	**0.337**	<0.020	<0.010	0.603	<0.010	<0.010	**0.0716**	**0.0366**	**0.0528**	<0.020	<0.020	**0.0525**	<0.020	0.285	0.422	<0.020	**0.81**	**4.37**	**0.772**	0.264
MW-19D	12/16/2010	825.0	<0.050	0.238	0.0632	<0.050	<0.050	<0.050	<0.050	**0.125**	**0.202**	<0.050	<0.020	0.534	<0.020	<0.020	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.020	0.0304	<0.0040	**0.0949**	**0.638**	**0.0352**	<0.020
MW-19D	7/15/2015	8.4	<0.047	0.517	0.103	0.088	<0.047	<0.047	<0.047	**0.222**	**0.221**	<0.047	<0.094	0.259	<0.094	<0.094	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.094	0.135	<0.019	**0.431**	**4.77**	**0.153**	<0.094
MW-19D	3/13/2018	28.3	<0.0050	0.146	0.0324	0.0241	<0.0050	<0.0050	<0.0050	NA	NA	<0.0050	<0.050	0.209	<0.050	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	0.107	<0.010	**0.347**	**3.33**	**0.106**	<0.050
MW-20S	11/13/2003	--	<0.0051	0.0115	0.0031	<0.0051	<0.0051	<0.0051	<0.0051	0.0285	**0.0236**	<0.0051	<0.004	0.0739	0.0024	0.0048	**0.0095**	**0.0064**	**0.0071**	0.0021	**0.0055**	**0.0073**	**0.0006**	0.0451	0.0283	**0.0026**	0.0018	0.12	**0.0249**	0.0282
MW-20S	2/19/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0012 J	<0.0051	<0.010	<0.010	0.0056 J	0.008 J	**0.0348**	**0.0317**	**0.0347**	0.0127	**0.0231**	**0.0345**	**0.0032**	0.0791	0.003 J	**0.0153**	<0.010	0.177	0.0112	0.0482
MW-20S	11/18/2008	--	<0.0049	<0.0021 J	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0094	0.0076	<0.0049	<0.019	0.0227	<0.019	<0.019	**0.0536**	**0.0566**	**0.0735**	0.0224	**0.0232**	**0.0479**	**0.0058**	0.09	0.0111 J	**0.029**	<0.019	0.0063 J	0.0105 J	0.0603
MW-20S	12/16/2009	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0067	0.0022	0.0034	**0.0174**	**0.0186**	**0.024**	0.0078	**0.0083**	**0.0169**	**0.0023**	0.0203	0.004	**0.0099**	<0.00095	0.0021	0.0042	0.0208
MW-20S	12/14/2010	--	<0.0048	0.0059	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0062	<0.0048	<0.0048	**0.009**	**0.012**	**0.0163**	0.0059	**0.0055**	**0.0091**	**0.0013**	0.0149	<0.0048	**0.0071**	<0.0048	0.14	<0.0048	0.0096
MW-20S	12/16/2011	853.0	<0.0048	0.0059	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0085	<0.00096	0.0023	0.0024	0.0031	**0.0137**	**0.0146**	**0.0181**	0.0057	**0.0072**	**0.0132**	**0.0022**	0.0165	0.002	**0.0086**	<0.00096	0.0012	0.0034	0.0129
MW-20S	7/14/2015	469.0	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	0.0067	0.0112	<0.0047	<0.00094	0.0202	0.0154	0.0109	**0.0641**	**0.0755**	**0.0807**	0.0274	**0.058**	**0.0704**	**0.0111**	0.0898	0.0107	**0.0432**	<0.00094	0.0041	0.0104	0.0547
MW-20S	3/15/2018	212.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0105	<0.00095	<0.00095	**0.00083**	**0.00091**	**0.00088**	0.00044	**0.00069**	**0.00092**	**<0.00019**	0.0012	0.0026	**0.00063**	0.0016	0.0345	0.0013	<0.00095
MW-20S	12/17/2019	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	0.0013	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.0031	<0.00099	<0.00099
MW-20D	11/13/2003	--	<0.020	0.245	0.149	0.0629	0.079	<0.020	<0.020	**0.131**	**0.0973**	<0.020	**0.0545**	0.221	<0.04	0.0109	**0.0077**	**0.0042**	**0.0048**	<0.008	<0.008	**0.0051**	<0.008	0.0557	0.107	<0.008	**0.303**	**4.37**	**0.106**	0.0328
MW-20D	2/18/2004	--	<0.100	0.282	0.112	0.0593 J	.0441 J	<0.100	<0.100	**1.17**	**4.81**	<0.100	**0.107 J**	**5.92**	**0.598**	1.77	**1.94**	**0.982**	**0.965**	0.351	**0.728**	**1.52**	**0.0935**	**7.87**	**5.52**	**0.423**	**7.26**	**31.20**	**16.70**	**5.53**
MW-20D	9/10/2004	--	<0.100	0.212	0.114	<0.10	<0.10	<0.10	<0.10	**0.342**	**0.624**	<0.100	<0.082	0.861	**0.0853**	0.142	**0.13**	**0.0681**	**0.0646**	0.022	**0.056**	**0.0883**	**0.0104**	**0.555**	0.64	**0.034**	**1.49**	**9.63**	**1.10**	0.355
MW-20D	8/2/2006	--	< 0.08	0.217	0.0864	0.0394 J	< 0.08	< 0.08	< 0.08	**0.339**	**0.543**	< 0.08	<0.10	0.762	<0.10	0.102	**0.089**	**0.0485**	**0.0462**	0.0152 J	**0.0407**	**0.0654**	**< 0.02**	**0.406**	0.494	**0.0219**	**0.978**	**6.59**	**0.916**	0.271
MW-20D	7/26/2007	--	< 0.095	0.11	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	**0.428**	**0.853**	< 0.095	**0.0116 J**	1.21	0.0589	0.221	**0.219**	**0.139**	**0.154**	0.0473	**0.0929**	**0.183**	**0.0131**	**1.05**	0.956	**0.064**	**1.73**	**10.9**	**2.13**	0.752
MW-20D	11/18/2008	2.2	<0.0049	0.0072	0.0016 J	0.0016 J	<0.0049	<0.0049	<0.0049	0.0069	0.0062	<0.0049	<0.0039	0.0091	<0.0039	<0.0039	**0.00039 J**	**0.0003 J**	**0.0004 J**	<0.00078	<0.00078	<0.00078	<0.00078	0.0019 J	0.005	<0.00078	0.0109	0.1	0.0064	0.0015 J
MW-20D	12/17/2009	0.0	<0.00109	0.162	0.0414	0.0203	<0.00109	<0.00109	<0.00109	**0.231**	**0.307**	<0.00109	<0.077	0.476	<0.077	<0.077	**0.0302**	<0.015	**0.0207**	<0.015	<0.015	**0.0199**	<0.015	0.133	0.29	<0.015	**0.515**	**5.65**	**0.384**	**0.104**
MW-20D	12/21/2010	40.3	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	**0.19**	**0.246**	<0.049	<0.098	0.399	<0.098	<0.098	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.098	0.211	<0.020	**0.452**	**3.34**	**0.241**	<0.098
MW-21S	11/13/2003	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	0.003	0.0033	<0.0010	0.0091	0.00054	0.00071	**0.00089**	**0.0011**	**0.0012**	0.00044	**0.00092**	**0.0008**	<0.00020	0.0029	0.0035	**0.00052**	<0.0010	0.00043	0.00062	0.0015
MW-21S	2/18/2004	--	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.0014 J	<0.0054	<0.0010	0.0101	<0.0010	<0.0010	<0.00020	0.00016 J	0.00016 J	<0.00020	0.00012 J	0.00011 J	<0.00020	0.00058 J	0.0031	<0.00020	<0.0010	<0.0010	<0.0010	0.00030 J
MW-21S	9/10/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.006	<0.0010	0.008	<0.0010	<0.0010	<0.0010	**0.0014**	**0.0014**	0.00069	**0.0009**	**0.00099**	0.00022	0.0041	0.00059	**0.00086**	0.0004	0.0028	0.00088	0.0024
MW-21S	8/2/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	0.000055 J	<0.00020	0.00007 J	<0.00020	<0.00020	<0.00020	<0.00020	0.00051 J	<0.0010	0.000067 J	<0.0010	<0.0010	<0.0010	<0.0010
MW-21S	7/26/2007	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.00099	0.0044	< 0.00099	< 0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0033	< 0.00099	<0.00020	< 0.00099	0.0003	< 0.00099	0.0016
MW-21S	11/18/2008	--	<0.076	0.0209 J	<0.076	<0.076	<0.076	<0.076	<0.076	**0.225**	**0.213**	<0.076	<0.120	0.36	<0.120	<0.120	**0.0092**	<0.024	**0.0063**	<0.024	<0.024	<0.024	<0.024	0.0485 J	0.185	<0.024	**0.448**	**3.580**	**0.211**	<0.120
MW-21S	12/16/2009	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.013	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0023	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-21S	12/14/2010	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-21S	7/14/2015	125.0	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	<0.00094	<0.00019	<0.00094	<0.00094	<0.00094	<0.00094
MW-21S	4/9/2018	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-21S	12/17/2019	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.0010	<0.0010	<0.00021	<0.0010	<0.0010	<0.0010	<0.0010
MW-21D	11/13/2003	--	<0.022	0.0116	<0.022	<0.022	<0.022	<0.022	<0.022	**0.271**	**0.251**	<0.022	<0.043	0.445	<0.043	0.0147	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	0.0206	0.227	<0.0086	**0.74**	**7.35**	**0.193**	0.0121
MW-21D	2/18/2004	--	<0.021	0.0263	0.0105 J	<0.021	<0.021	<0.021	<0.021	**0.312**	**0.333**	<0.021	<0.042	0.551	<0.042	0.0241 J	**0.0055 J**	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	0.0517	0.292	<0.0084	**0.893**	**8.46**	**0.301**	0.0301 J
MW-21D	8/2/2006	--	<0.04	0.0212 J	<0.04	<0.04	<0.04	<0.04	<0.04	**0.194**	**0.294**	<0.04	<0.05	0.469	<0.05	0.0461 J	**0.047**	**0.0253**	**0.0243**	0.0082 J	**0.022**	**0.0363**	<0.01	0.224	0.301	**0.0115**	**0.395**	**2.8**	**0.465**	0.146
MW-21D	7/26/2007	--	<0.049	0.0232 J	<0.049	<0.049	<0.049	<0.049	<0.049	**0.251**	**0.359**	<0.049	<0.097	0.463	<0.097	<0.097	**0.0205**	**0.0099 J**	**0.0101 J**	<0.019	<0.019	**0.0158 J**	<0.019	0.111	0.281	**0.0052 J**	**0.539**	**5.82**	**0.361**	0.0764 J
MW-21D	11/18/2008	2.1	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	**0.273**	**0.313**	<0.095	<0.190	0.452	<0.190	<0.190	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.190	0.226	<0.038	**0.556**	**5.33**	**0.249**	<0.190
MW-21D	12/17/2009	167.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**0.186**	**0.263**	<0.020	<0.080	0.441	<0.080	<0.080	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.080	0.225	<0.016	**0.275**	**3.46**	**0.235**	<0.080
MW-21D	12/21/2010	305.0	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	**0.177**	**0.192**	<0.019	<0.096	0.416	<0.096	<0.096	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.096	0.22	<0.019	**0.397**	**3.84**	**0.185**	<0.096

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-22D	11/13/2003	--	<0.020	0.089	0.0487	0.0908	0.0146	<0.020	<0.020	0.0906	0.159	0.0101	0.0771	0.241	0.026	0.0357	0.0326	0.0161	0.0191	0.0049	0.0129	0.0253	<0.004	0.171	0.201	0.0062	0.268	1.85	0.399	0.112
MW-22D	2/18/2004	--	<0.011	0.0478	0.029	0.055	0.0091 J	<0.011	<0.011	0.0355	0.0367	<0.011	0.0284	0.0658	0.0079 J	0.0061 J	0.0022	<0.0021	<0.0021	<0.0021	<0.0021	0.0017 J	<0.0021	0.0181	0.0422	<0.0021	0.0938	1.02	0.061	0.011
MW-22D	9/10/2004	--	<.049	0.0478	0.0259	0.0476	<0.049	<0.049	<0.049	0.0792	0.147	<0.049	0.0323	0.174	0.0217	0.0357	0.0368	0.0199	0.0205	0.0066	0.0142	0.0257	0.0023	0.161	0.158	0.0088	0.254	1.57	0.298	0.105
MW-22D	8/2/2006	--	<0.049	0.918	0.433	0.805	0.116	<0.049	<0.049	0.310	0.275	<0.049	0.324	0.374	0.0414 j	0.0344 J	0.0152	0.0068 J	0.0069 J	<0.0098	0.0059 J	0.0105	<0.0098	0.0902	0.206	0.003 J	0.567	5.34	0.304	0.0563
MW-22D	7/26/2007	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0278	0.0622	0.0024 J	< 0.02	0.0767	< 0.02	0.0135 J	0.0112	0.0065	0.0074	0.0027 J	0.0055	0.0091	<0.004	0.052	0.0645	0.0038 J	0.0686	0.549	0.129	0.0389
MW-22D	11/18/2008	3.7	<0.019	0.152 J	0.0062 J	0.0092 J	<0.019	<0.019	<0.019	0.0288	0.0656	<0.019	<0.024	0.0891	<0.024	0.0179 J	0.0213	0.0111	0.0156	0.0034 J	0.005	0.0159	<0.0048	0.0934	0.0737	0.0042 J	0.0774	0.787	0.184	0.0687
MW-22D	12/17/2009	>1000	<0.019	0.0284	<0.019	<0.019	<0.019	<0.019	<0.019	0.0489	0.264	<0.019	<0.024	0.335	0.0283	0.0626	0.0622	0.0312	0.0414	0.0112	0.0152	0.0402	<0.0048	0.242	0.292	0.0139	0.136	1.13	0.609	0.249
MW-22D	12/21/2010	>1000	<0.048	0.0149	0.0071	0.0084	<0.048	<0.048	<0.048	0.028	0.0608	<0.048	<0.19	1.14	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	0.802	<0.038	0.653	5.49	1.16	<0.19
MW-22D	7/15/2015	34.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0056	0.0087	<0.0048	<0.00095	0.0107	<0.00095	0.0016	0.0018	0.00089	0.0013	0.00035	0.00044	0.0014	<0.00019	0.0089	0.0076	0.00042	0.0065	0.107	0.0153	0.0056
MW-22D	3/15/2018	3.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0227	0.0159	<0.0048	<0.019	0.0215	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	<0.019	<0.0038	<0.019	0.326	<0.019	<0.019
MW-23D	11/13/2003	--	<0.021	1.03	0.331	0.407	0.105	<0.021	<0.021	0.3	0.186	0.0366	0.568	0.396	<0.100	<0.100	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.0274	0.191	<0.021	0.645	9.27	0.154	<0.100
MW-23D	2/18/2004	--	<0.050	1.13	0.422	0.527	0.134	<0.050	<0.050	0.321	0.23	0.0956	0.491	0.416	0.0512	0.034 J	0.0162	0.0077 J	0.0079 J	<0.008	0.007 J	0.0119	<0.008	0.0981	0.237	<0.008	0.71	7.78	0.31	0.062
MW-23D	9/10/2004	--	<0.048	1.17	0.436	0.563	0.15	<0.048	<0.048	0.31	0.231	0.183	0.495	0.375	0.0449	0.0335	0.0208	0.0111	0.0125	0.0076	0.0074	0.0143	<0.0076	0.106	0.224	0.0084	0.663	5.53	0.382	0.0637
MW-23D	8/2/2006	--	0.022	0.762	0.279	0.316	0.129	<0.021	<0.021	0.169	0.113	0.0184 J	0.105	0.231	<0.053	<0.053	0.0034 J	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	0.0225 J	0.109	<0.011	0.132	1.28	0.0939	0.0147 J
MW-23D	7/26/2007	--	0.0194 J	0.622	0.19	0.175	0.0703	<0.025	<0.025	0.238	0.132	0.0279	0.0659	0.224	0.0207 J	<0.04	0.0037 J	< 0.0079	< 0.0079	< 0.0079	< 0.0079	< 0.0079	< 0.0079	0.0251 J	0.114	< 0.0079	0.178	1.52	0.0973	0.0176 J
MW-23D	11/18/2008	12.2	<0.020	0.0973	0.027	0.0136 J	0.007 J	<0.020	<0.020	<0.020	0.0211	<0.020	0.0748	0.0544	0.0031 J	<0.0038	0.00031 J	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	0.0032 J	0.026	<0.00076	<0.0038	0.0015 J	0.0175	0.0021 J
MW-23D	12/16/2009	3.6	0.0061	0.0666	0.013	0.0149	<0.0048	<0.0048	<0.0048	0.0782	0.073	<0.0048	0.0533	0.111	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	0.0533	<0.0038	0.139	1.26	0.0429	<0.0038
MW-23D	12/17/2010	35.3	<0.0096	0.0256	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	0.016	<0.0096	<0.0096	0.0096	0.0382	<0.0038	0.0038	0.0118	0.0077	0.0104	0.0028	0.004	0.0097	<0.00077	0.0319	0.0077	0.0037	<0.0038	0.0082	0.022	0.0305
MW-23D	12/16/2011	76.5	<0.019	0.11	0.0563	<0.019	<0.019	<0.019	<0.019	0.0562	0.0464	<0.019	0.0299	0.0791	<0.0095	<0.0095	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0095	0.0375	<0.0019	0.141	1.52	0.0333	<0.0095
MW-23D	7/16/2015	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.009	<0.0050	<0.0010	0.0322	0.0012	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0015	0.0124	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-23D	3/15/2018	32.0	<0.0049	0.0419	0.0055	<0.0049	<0.0049	<0.0049	<0.0049	0.142	<0.0049	<0.0049	<0.098	0.122	<0.098	<0.098	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.098	<0.098	<0.020	<0.098	2.68	<0.098	<0.098
MW-23D	1/7/2020	122.0	<0.0050	0.0317	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.189	0.0988	<0.0050	<0.010	NA	<0.0040	0.004	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	0.0048	0.0684	<0.00080	NA	5.37	0.0516	<0.0040
MW-24A	11/17/2008	--	Not Sampled do the presence of Free-product																											
MW-24A	3/3/2009	--	<0.057	1.1	0.418	0.678	0.104	<0.057	<0.057	0.395	0.458	<0.057	0.167	0.705	0.0896 J	0.0877 J	0.0761	0.0393	0.0521	0.0101 J	0.02 J	0.0558	< 0.023	0.357	0.494	0.0150 J	1.31	10.6	0.863	0.241
MW-24A	12/17/2009	16.4	<0.12	1.3	0.478	0.757	<0.12	<0.12	<0.12	0.408	0.43	<0.12	<0.19	0.654	<0.19	<0.19	0.0703	<0.038	0.0461	<0.038	<0.038	0.0486	<0.038	0.293	0.459	<0.038	0.977	10.0	0.8	0.236
MW-24A	12/21/2010	12.6	<0.098	1.2	0.439	0.654	<0.098	<0.098	<0.098	0.442	0.565	<0.098	<0.49	0.772	<0.49	<0.49	0.141	<0.098	<0.098	<0.098	<0.098	0.105	<0.098	0.622	0.611	<0.098	1.22	11.5	1.4	<0.49
MW-24A	3/11/2011	48.8	<0.095	1.4	0.534	0.725	<0.095	<0.095	<0.095	0.398	0.439	<0.095	0.172	0.584	0.0651	0.105	0.0807	0.0408	0.056	0.0129	0.0208	0.0617	<0.0095	0.364	0.413	0.0173	1.02	11.5	0.858	0.23
MW-24A	6/24/2011	--	<0.097	1.03	0.283	0.391	<0.097	<0.097	<0.097	0.444	0.518	<0.097	<0.97	<0.97	<0.97	<0.97	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.97	<0.97	<0.19	1.31	15.5	1.32	<0.97
MW-24A	9/28/2011	26.7	<0.19	1.23	0.421	0.596	<0.19	<0.19	<0.19	0.377	0.536	<0.19	<0.49	0.635	<0.49	<0.49	0.117	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	0.543	0.502	<0.097	0.998	9.7	1.17	<0.49
MW-25A	11/18/2008	70.9	<0.0049	0.0086	0.0066	0.0028 J	0.022 J	<0.0049	<0.0049	0.0468	0.051	<0.0049	0.0034 J	0.142	<0.0098	<0.0098	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0113	0.0682	<0.002	0.0203	0.265	0.0582	0.0069 J
MW-25A	12/15/2009	97.9	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0134	0.0296	<0.0049	<0.0049	0.151	<0.0049	<0.0049	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	0.0075	0.0521	<0.00098	<0.0049	0.016	0.0225	0.0053
MW-25A	12/17/2010	>1000	<0.0048	0.102	0.0633	<0.0048	<0.0048	<0.0048	<0.0048	0.0104	0.0275	<0.0048	<0.00096	0.0911	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	0.0289	<0.00019	<0.00096	0.345	0.0175	<0.00096
MW-25A	3/7/2011	89.1	<0.024	0.22	0.122	0.0424	<0.024	<0.024	<0.024	0.049	0.0784	<0.024	<0.019	0.203	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0712	<0.0038	0.0472	1.56	0.0516	<0.019
MW-25A	6/23/2011	--	<0.049	0.242	0.118	<0.049	<0.049	<0.049	<0.049	0.0575	0.0705	<0.049	<0.039	0.18	<0.039	<0.039	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.039	0.0662	<0.0078	0.0395	1.14	0.0496	<0.039
MW-25A	9/28/2011	>1000	<0.049	0.29	0.186	<0.049	<0.049	<0.049	<0.049	0.0632	0.0739	<0.096	<0.049	0.209	<0.049	<0.049	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.049	0.0695	<0.0098	0.0924	1.7	0.0516	<0.049
MW-25A	12/16/2011	55.8	<0.019	0.11	0.0563	<0.019	<0.019	<0.019	<0.019	0.0585	0.101	<0.019	<0.0096	0.262	<0.0096	<0.0096	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0.0137	0.110	<0.0019	0.1	1.42	0.101	<0.0096
MW-25A	4/4/2012	68.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.008	0.0193	<0.0048	<0.00095	0.0414	<0.00095	0.0017	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0072	0.026	<0.00019	0.002	0.0755	0.0179	0.0035
MW-25A	7/10/2012	31.6	<0.038	0.208	<0.038	<0.038	<0.038	<0.038	<0.038	0.302	0.0509	<0.0048	<0.0038	0.137	0.0044	<0.0038	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	0.0128	0.057	<0.00076	<0.0038	0.111	0.0302	0.0061
MW-25A	10/3/2012	18.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0056	0.0123	<0.0048	<0.00095	0.0218	<0.00095	0.0016	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0088	0.017	<0.00019	<0.00095	0.0181	0.0048	0.0047
MW-25A	7/14/2015	105.0	<0.0048	0.0107	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0151	0.0227	<0.0048	<0.00095	0.603	<0.00095	0.0014	0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0073	0.270	<0.00019	<0.00095	0.436	0.0033	0.0036
MW-25A	3/13/2018	13.8	0.0052	0.0255	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0327	0.0371	0.0048	<0.019	0.0736	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.034	<0.0038	0.0233	0.689	<0.019	<0.019
MW-26A	11/18/2008	--	<0.019	0.0058 J	<0.019	<0.019	<0.019	<0.019	<0.019	0.0081 J	0.0277	<0.019	0.0518	0.048	<0.015	<0.015	0.0037	0.0015 J	0.0022 J	<0.003	<0.003	0.0023 J	<0.003	0.0203	0.0361	<0.003	0.0445	0.321	0.0586	0.0185
MW-26A	12/16/2009	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0237	0.0092	<0.00095	<0.00095	0.00029	0.00029	0.00042	<0.00019	<0.00019	0.00024	<0.00019	0.0014	0.0046	<0.00019	0.003	0.019	0.0022	<0.00095
MW-26A	12/16/2010	6.2	<0.0050	0.0089	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0455	0.0084	<0.0020	<0.0020	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	0.0025	0.0025	<0.00040	<0.0020	0.002	<0.0020	<0.0020
MW-26A	3/7/2011	10.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0449	0.0035	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0013	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-26A	6/24/2011	--	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.062	0.0039	<0.0038	<0.0038	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.0038	<0.0038	<0.00077	<0.0038	<0.0038	<0.00038	<0.00038
MW-26A	9/28/2011	26.6	<0.024	0.0243	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	0.112	0.0112	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.0048	0.0057	<0.00096	0.0098	0.12	0.0058	<0.0048
MW-26A	12/14/2011	50.0	<0.019	0.0292	<0.019	<0.019	<0.019	<0.019	<0.019	0.0215	0.024	<0.019	0.0972	0.05	<0.019	<0.019	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	0.02	0.0351	<0.0038	0.0227	0.338	0.0435	<0.019
MW-26A	4/4/2012	151.0	<0.0050	0.0421	0.0069	0.0084	<0.0050	<0.0050	<0.0050	0.0508	0.0272	<0.0050	0.0907	0.0393	0.0085	0.004	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	0.0073	0.0251	<0.00080	0.0591	1.14	0.0274	<0.0040
MW-26A	7/13/2012	18.2	<0.019	0.0339	<0.019	<0.019	<0.019	<0.019	<0.019	0.076	0.0495	<0.019	0.0723	0.0626	<0.019	<0.019	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.019	0.0408	<0.0038	0.122	3.38	0.0425	<0.019
MW-26A	10/2/2012	175.0	<0.019	0.0515	<0.019	<0.019	<0.019	<0.019	<0.019	0.164	0.133	<0.019	0.207	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	<0.19	<0.038	0.366	3.99	<0.19	<0.19
MW-27A	11/17/2008	--	Not Sampled do the presence of Free-product																											
MW-27A	3/3/2009	--	<0.056	0.437	0.136	0.198	0.0233 J	<0.056	<0.056	0.389	0.839	<0.056	0.0745 J	1.04	0.107 J	0.221	0.213	0.114	0.159	0.0316	0.052	0.161	0.0099 J	0.943	0.864	0.0458	1.59	10.1	1.91	0.646
MW-27A	12/17/2009	14.9	<0.096	0.319	<0.096	<0.096	<0.096	<0.096	<0.096	0.723	2.32	<0.096	<0.038	4.11	<0.038	0.057	1.11	0.545	0.746	0.182	0.26	0.737	<0.077	4.03	3.85	0.237	4.48	23.2	9.13	4.02
MW-27A	4/15/2010	101.0	<0.038	0.239	0.0686	0.0612	<0.038	<0.038	<0.038	0.151	0.546	<0.038	<0.38	0.756	<0.38	<0.38	0.103	<0.076	<0.076	<0.076	<0.076	0.0783	<0.076	0.523	0.576	<0.076	1.21	12.3	1.22	<0.38
MW-27A	6/6/2013	--	Convert to RW-17		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-28A	2/12/2009	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0031	<0.005	0.0036	<0.0010	0.0051	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0012	<0.00020	0.0026	0.0196	0.00082	<0.0010
MW-28A	8/5/2009	5.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.00099	<0.00096	<0.00096	0.000055 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	0.00096	0.0057	<0.00096	<0.00096
MW-28A	12/16/2009	--	Frozen: No Sample Collected																											
MW-28A	6/16/2010	9.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-28A	9/21/2010	0.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0046	<0.00095	<0.00095
MW-28A	3/8/2011	43.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0035	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0034	<0.00095	<0.00095
MW-28A	6/22/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-28A	9/27/2011	10.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0019	<0.00096	<0.00096
MW-28A	12/15/2011	12.4	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00019	<0.00097	<0.00097
MW-28A	4/5/2012	0.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0019	<0.00096	<0.00096
MW-28A	7/11/2012	52.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-28A	10/2/2012	2.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-28A	7/16/2015	19.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-28A	3/14/2018	10.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0014	<0.0014	<0.0014	<0.0014	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.0014	<0.0014	<0.00029	<0.0014	<0.0014	<0.0014	<0.0014
MW-28B	2/12/2009	--	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.0409	0.0066	<0.020	<0.0039	0.059	<0.0039	<0.0039	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.0039	0.0156	<0.00078	**0.0811**	0.4300	0.0059	<0.0039
MW-28B	8/5/2009	1.1	<0.0048	0.009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0753**	**0.0151**	<0.0048	<0.019	0.102	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0315	<0.0038	**0.137**	0.9360	0.0122 J	<0.019
MW-28B	12/16/2009	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	**0.0561**	0.0095	<0.0049	<0.0039	0.102	<0.0039	<0.0039	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.0039	0.0303	<0.00078	**0.113**	0.1710	0.0124	<0.0039
MW-28B	6/16/2010	14.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0326	<0.0048	<0.0048	<0.00109	0.0512	<0.00109	<0.00109	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00109	0.0144	<0.00038	0.0254	0.0099	0.0076	<0.00109
MW-28B	9/21/2010	0.1	<0.0048	0.0135	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0699**	**0.0193**	<0.0048	<0.0076	0.105	<0.0076	<0.0076	<0.0076	<0.0076	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0076	0.0340	<0.0010	**0.151**	**1.34**	0.0142	<0.0076
MW-28B	12/15/2010	36.4	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	**0.0715**	**0.0162**	<0.0049	<0.019	0.108	<0.019	<0.019	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.019	0.0332	<0.0039	**0.139**	0.49	<0.019	<0.019
MW-28B	3/8/2011	53.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0434**	<0.0048	<0.0048	<0.0038	0.0803	<0.0038	<0.0038	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.0038	0.0213	<0.00076	**0.0591**	0.01	0.0094	<0.0038
MW-28B	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0313	<0.0050	<0.0050	<0.0020	0.0516	<0.0020	<0.0020	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.0020	0.0144	<0.00040	0.0147	0.01	0.0069	<0.0020
MW-28B	9/27/2011	4.1	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	**0.0574**	<0.019	<0.019	<0.019	0.0825	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0269	<0.0038	**0.102**	0.40	<0.019	<0.019
MW-28B	12/13/2011	15.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0412	<0.0048	<0.0048	<0.0038	0.0704	<0.0038	<0.0038	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.0038	0.0218	<0.00077	**0.0525**	0.005	0.0118	<0.0038
MW-28B	4/5/2012	16.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0421	0.0077	<0.0049	<0.00097	0.0593	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	0.0156	<0.00019	**0.0518**	0.0294	0.0069	<0.00097
MW-28B	7/11/2012	4.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0457**	0.0116	<0.0048	<0.019	0.0744	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0234	<0.0038	**0.0908**	0.43	<0.019	<0.019
MW-28B	10/2/2012	7.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0516**	0.0113	<0.0048	<0.00095	0.0648	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0178	<0.00019	**0.079**	0.08	0.0076	<0.00095
MW-28B	7/16/2015	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0251	<0.0048	<0.0048	<0.00096	0.05	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	0.0131	<0.00019	<0.00096	0.0012	0.0063	<0.00096
MW-28B	3/14/2018	1.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.044**	0.0133	<0.0048	<0.0050	0.121	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0050	0.0323	<0.0010	0.0431	0.132	0.0123	<0.0050
MW-28B	1/7/2020	31.4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.054**	<0.0050	<0.0050	<0.0010	0.115	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0361	<0.00020	0.0019	0.0045	**0.0215**	<0.0010
MW-28C	2/12/2009	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-28C	8/5/2009	4.7	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-28C	12/16/2009	0.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	0.0027	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	0.0017	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-28C	6/16/2010	8.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-28C	9/21/2010	0.2	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0015	<0.00097	<0.00097
MW-28C	12/15/2010	21.8	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-28C	3/8/2011	14.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-28C	6/22/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0022	<0.00097	<0.00097
MW-28C	9/27/2011	7.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.001	<0.00095	<0.00095
MW-28C	12/13/2011	9.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-28C	4/5/2012	120.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-28C	7/11/2012	2.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-28C	10/2/2012	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-28C	7/16/2015	6.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-28C	3/14/2018	14.0	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.002	<0.00095	<0.00095
MW-28C	1/7/2020	8.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0039	<0.0010	<0.0010
MW-29A	2/12/2009	107.8	<0.0049	0.0046	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0182	**0.0306**	**0.0085**	<0.00098	0.06	0.0022	0.0085	**0.0018**	**0.00088**	**0.0015**	0.00042	**0.00048**	**0.002**	0.00013	0.0174	0.0393	**0.00048**	0.0011	0.0016	**0.0547**	0.0107
MW-29A	8/5/2009	5.7	<0.0049	0.0043 J	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0096	0.0063	<0.0049	<0.00098	0.0199	0.00054 J	0.0022	**0.00028**	0.000068 J	0.00010 J	<0.00020	<0.00020	**0.00024**	<0.00020	0.0049	0.0112	<0.00020	<0.00098	<0.00098	0.0081	0.003
MW-29A	12/15/2009	0.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0085	0.0089	<0.0050	<0.0020	0.0193	<0.0020	0.0031	**0.001**	<0.0040	**0.00051**	<0.0040	<0.0040	**0.00093**	<0.0040	0.0078	0.013	<0.0040	0.008	0.0514	0.0131	0.0069
MW-29A	6/17/2010	104.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.005	<0.0050	<0.0050	<0.0010	0.0078	<0.0010	0.0012	**0.0002**	<0.00020	<0.00020	<0.00020	<0.00020	**0.00023**	<0.00020	0.003	0.0053	<0.00020	<0.0010	0.0029	0.0032	0.0025
MW-29A	9/21/2010	0.2	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0055	<0.0049	<0.0049	<0.00097	0.0074	<0.00097	0.0013	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0026	0.0052	<0.00019	0.0041	0.027	0.0048	0.0017
MW-29A	3/11/2011	39.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0052	<0.0048	<0.0048	<0.00095	0.0072	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0011	0.0045	<0.00019	0.0035	0.0273	0.0035	<0.00095
MW-29A	6/24/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-29A	9/30/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0072	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0012	0.005	<0.00019	0.0033	0.0154	0.0032	<0.00095
MW-29A	12/14/2011	22.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0065	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00095	0.0045	<0.00019	0.0027	0.011	0.0026	<0.00095
MW-29A	7/13/2012	25.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0016	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.001	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-29A	10/4/2012	53.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0059	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00096	0.0044	<0.00019	<0.00095	0.0051	0.0028	<0.00095
MW-29A	7/17/2015	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00095	0.0012	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0019	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-29A	3/26/2018	--	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	0.014	<0.00094	0.0039	<0.00094	0.001	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.001	0.004	<0.00019	0.002	0.0111	0.0041	<0.00094
MW-29B	3/3/2009	--	<0.11	**1.63**	0.153	0.0817 J	0.0815 J	<0.11	<0.11	**0.415**	**0.51**	<0.11	**0.201 J**	0.823	<0.22	0.123 J	**0.075**	**0.0383 J**	**0.0541**	<0.044	**0.0187 J**	**0.0557**	<0.044	**0.386**	0.581	**0.0125 J**	**1.71**	**14**	**1.01**	0.248
MW-29B	8/5/2009	31.4	<0.099	0.494	0.0603 J	0.0462 J	0.0355 J	<0.099	<0.099	**0.411**	**0.432**	<0.099	**0.505**	0.653	<0.40	<0.40	**0.0646 J**	**0.0313 J**	**0.0430 J**	<0.079	<0.079	**0.0480 J**	<0.079	**0.312 J**	0.453	<0.079	**1.02**	**11.6**	**0.763**	0.206
MW-29B	12/17/2009	27.8	<0.048	0.339	0.0625	<0.048	<0.048	<0.048	<0.048	**0.343**	**0.332**	<0.048	**0.623**	0.503	<0.019	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	0.312	<0.038	**0.806**	**8.6**	**0.444**	<0.019
MW-29B	6/17/2010	--	<0.098	0.196	<0.098	<0.098	<0.098	<0.098	<0.098	**0.321**	**0.413**	<0.098	**0.376**	0.662	<0.20	<0.20	**0.0535**	<0.039	<0.039	<0.039	<0.039	**0.0411**	<0.039	**0.271**	0.441	<0.039	**1.11**	**11.2**	**0.728**	0.2
MW-29B	9/21/2010	0.2	<0.050	0.129	<0.050	<0.050	<0.050	<0.050	<0.050	**0.322**	**0.429**	<0.050	**0.198**	0.602	<0.10	0.112	**0.0934**	**0.0461**	**0.0663**	<0.020	**0.0200**	**0.0675**	<0.020	**0.439**	0.464	**0.0204**	**0.909**	**9.47**	**0.965**	0.281
MW-29B	12/21/2010	30.8	<0.040	0.183	<0.040	<0.040	<0.040	<0.040	<0.040	**0.263**	**0.31**	<0.040	**0.21**	0.337	<0.20	<0.20	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.20	0.224	<0.040	**0.572**	**5.21**	**0.382**	<0.20
MW-29B	3/11/2011	64.7	<0.096	0.125	<0.096	<0.096	<0.096	<0.096	<0.096	**0.286**	**0.316**	<0.096	**0.143**	0.311	<0.038	0.0458	**0.0142**	<0.0077	0.009	<0.0077	<0.0077	0.0102	<0.0077	0.0779	0.194	<0.0077	**0.522**	**7.58**	**0.273**	<0.038
MW-29B	6/24/2011	--	<0.20	0.325	<0.20	<0.20	<0.20	<0.20	<0.20	**0.315**	**0.419**	<0.98	<0.98	<0.98	<0.98	<0.98	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.98	<0.98	<0.20	<0.98	**12.50**	<0.98	<0.98
MW-29B	9/28/2011	82.3	<0.096	0.29	<0.096	<0.096	<0.096	<0.096	<0.096	**0.362**	**0.534**	<0.096	**1.01**	0.584	<0.19	<0.19	**0.0885**	**0.0381**	**0.0561**	<0.038	<0.038	**0.0671**	<0.038	**0.418**	0.438	<0.038	**0.0849**	**7.36**	**0.937**	0.274
MW-29B	7/15/2015	316.0	0.0275	0.197	0.0372	0.0244	0.0226	0.139	<0.022	**0.292**	**0.344**	<0.022	**0.202**	0.476	<0.11	<0.11	**0.0427**	<0.022	**0.0262**	<0.022	<0.022	**0.0348**	<0.022	0.22	0.323	<0.022	**0.734**	**8.88**	**0.576**	0.141

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-30A	11/4/2009	70.4	0.0565 J	**0.824**	<0.10	0.376	0.0242 J	<0.10	<0.10	**0.222**	**0.127**	<0.10	<0.1	0.267	<0.10	<0.10	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.10	0.0987 J	<0.020	**0.492**	**9.28**	**0.0465 J**	<0.10
MW-30A	12/16/2009	263.0	<0.10	0.628	0.119	0.279	<0.10	<0.10	<0.10	**0.167**	<0.10	<0.10	<0.10	0.204	<0.10	<0.10	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.10	<0.10	<0.020	**0.334**	**5.60**	<0.10	<0.10
MW-30A	6/16/2010	74.8	<0.020	0.407	0.145	0.163	<0.020	<0.020	<0.020	**0.0726**	**0.0298**	<0.020	<0.039	0.0751	<0.039	<0.039	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.039	<0.039	<0.039	**0.0756**	1.12	<0.039	<0.039
MW-30A	9/23/2010	104.0	<0.049	**0.742**	0.191	0.188	<0.049	<0.049	<0.049	**0.211**	**0.0975**	<0.049	<0.49	<0.49	<0.49	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.49	<0.49	<0.098	<0.49	**8.14**	<0.49	<0.49
MW-30A	12/16/2010	>1000	<0.19	0.715	<0.19	<0.19	<0.19	<0.19	<0.19	**0.238**	<0.19	<0.19	<0.38	0.395	<0.38	<0.38	<0.077	<0.077	<0.077	<0.077	<0.077	<0.077	<0.077	<0.38	<0.38	<0.077	**0.61**	**8.61**	<0.38	<0.38
MW-30A	3/8/2011	24.0	<0.095	0.522	0.118	<0.095	<0.095	<0.095	<0.095	**0.175**	<0.095	<0.095	<0.095	0.217	<0.095	<0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.095	<0.095	<0.019	**0.369**	**3.56**	<0.095	<0.095
MW-30A	6/24/2011	--	<0.048	0.527	0.122	0.0733	<0.048	<0.048	<0.048	**0.164**	**0.0898**	<0.048	<0.096	0.194	<0.096	<0.096	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.096	<0.096	<0.019	**0.291**	**7.5**	<0.096	<0.096
MW-30A	9/30/2011	8.7	<0.019	0.492	0.106	0.083	<0.019	<0.019	<0.019	**0.117**	**0.0523**	<0.019	<0.096	0.166	<0.096	<0.096	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.096	<0.096	<0.019	**0.281**	**5.41**	<0.096	<0.096
MW-30A	12/16/2011	84.3	<0.048	0.582	0.123	0.0675	<0.048	<0.048	<0.048	**0.191**	**0.115**	<0.048	<0.19	0.254	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	<0.19	<0.038	**0.446**	**8.54**	<0.19	<0.19
MW-30A	4/4/2012	25.0	<0.096	0.566	0.106	<0.096	<0.096	<0.096	<0.096	**0.179**	<0.096	<0.096	<0.19	<0.19	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	<0.19	<0.038	**0.264**	**4.86**	<0.19	<0.19
MW-30A	7/12/2012	15.2	<0.048	0.475	0.102	0.0745	<0.048	<0.048	<0.048	**0.188**	**0.102**	<0.048	<0.048	0.224	<0.048	<0.048	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.048	0.0824	<0.0095	**0.398**	**7.33**	<0.048	<0.048
MW-30A	10/3/2012	256.0	<0.048	0.493	0.0978	<0.048	<0.048	<0.048	<0.048	**0.178**	**0.0937**	<0.048	<0.24	<0.24	<0.24	<0.24	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.24	<0.24	<0.048	**0.326**	**5.97**	<0.24	<0.24
MW-30A	7/16/2015	0.0	0.0308	0.15	0.0201	<0.020	<0.020	<0.020	<0.020	**0.061**	**0.0329**	<0.020	<0.040	0.0809	<0.040	<0.040	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.040	<0.040	<0.0080	**0.091**	**3.56**	<0.040	<0.040
MW-30A	3/12/2018	1.2	<0.019	0.209	0.0311	<0.019	<0.019	<0.019	<0.019	**0.221**	0.13	<0.019	<0.048	0.281	<0.048	0.281	<0.048	<0.048	0.0104	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.0505	**0.136**	0.0095	**0.161**	<0.048
MW-30B	11/4/2009	13.0	<0.0053	<0.0053	<0.0053	<0.0053	0.0034 J	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	0.0013	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.00055 J	<0.00020	0.0014	0.0171	0.00038 J	<0.0010
MW-30B	12/16/2009	0.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040	<0.0040	<0.0040	<0.0040	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.0040	<0.0040	<0.00080	<0.0040	<0.0040	<0.0040	<0.0040
MW-30B	6/16/2010	5.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.00099	<0.00098	<0.00098	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.00020	<0.00098	<0.00098	<0.020	0.0012	0.0128	<0.00098	<0.00098
MW-30B	9/23/2010	118.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	0.0012	0.0157	<0.0010	<0.0010
MW-30B	12/16/2010	29.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	0.0011	0.0107	<0.00097	<0.00097
MW-30B	3/8/2011	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-30B	6/24/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0049	<0.00096	<0.00096
MW-30B	9/30/2011	16.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	0.0012	0.01	<0.00096	<0.00096
MW-30B	12/16/2011	0.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.002	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	0.0029	0.0289	<0.00096	<0.00096
MW-30B	4/4/2012	26.7	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0102	<0.00097	<0.00097
MW-30B	7/12/2012	9.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0029	<0.00095	<0.00095
MW-30B	10/3/2012	12.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0083	<0.00095	<0.00095
MW-30B	7/16/2015	18.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0084	<0.0010	<0.0010
MW-30B	3/12/2018	33.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0058	<0.00095	<0.00095
MW-31A	11/4/2009	>1000	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00084 J	<0.0010	<0.0010
MW-31A	12/15/2009	1025.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-31A	6/18/2010	>1000	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-31A	9/21/2010	0.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31A	12/17/2010	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0026	<0.00096	<0.00096
MW-31A	3/8/2011	27.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-31A	6/24/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-31A	9/30/2011	57.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0026	<0.00097	<0.00097
MW-31A	12/16/2011	542.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0045	<0.00095	<0.00095
MW-31A	4/4/2012	144.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-31A	7/13/2012	60.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-31A	10/3/2012	151.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-31A	7/16/2015	332.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0322	0.0012	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0011	<0.0010	<0.0010
MW-31A	3/14/2018	1.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0027	<0.00095	<0.00095
MW-31A	12/17/2019	40.9	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-31B	11/4/2009	755.0	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00073 J	<0.0010	<0.0010
MW-31B	12/15/2009	93.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31B	6/18/2010	9.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-31B	9/21/2010	0.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-31B	3/8/2011	58.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-31B	6/24/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-31B	9/30/2011	481.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31B	12/16/2011	35.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31B	4/4/2012	722.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-31B	7/13/2012	14.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-31B	10/3/2012	154.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-31B	7/16/2015	0.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0013	<0.0010	<0.0010
MW-31B	3/14/2018	5.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-31C	11/4/2009	>1000	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	*<0.00020*	*<0.00020*	*<0.00020*	*<0.00020*	<0.0010	<0.0010	<0.00020	<0.0010	0.00038 J	<0.0010	<0.0010
MW-31C	12/15/2009	35.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	*<0.00109*	<0.00109	<0.00109	<0.00109	*<0.00038*	*<0.00038*	*<0.00038*	*<0.00038*	*<0.00038*	*<0.00038*	*<0.00038*	<0.00109	<0.00109	<0.00038	<0.00109	<0.00109	<0.00109	<0.00109
MW-31C	6/18/2010	79.3	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040	<0.0040	<0.0040	<0.0040	*<0.00080*	*<0.00080*	*<0.00080*	*<0.00080*	*<0.00080*	*<0.00080*	*<0.00080*	<0.0040	<0.0040	<0.00080	<0.0040	<0.0040	<0.0040	<0.0040
MW-31C	9/21/2010	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0038	<0.0038	<0.0038	<0.0038	*<0.00076*	*<0.00076*	*<0.00076*	*<0.00076*	*<0.00076*	*<0.00076*	*<0.00076*	<0.0038	<0.0038	*<0.00076*	<0.0038	<0.0038	<0.0038	<0.0038
MW-31C	12/17/2010	29.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31C	3/8/2011	3.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31C	6/24/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31C	9/30/2011	20.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0021	<0.00095	<0.00095
MW-31C	12/16/2011	243.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0046	<0.00095	<0.00095
MW-31C	4/4/2012	44.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31C	7/13/2012	100.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31C	10/3/2012	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.00097	<0.00095	<0.00095
MW-31C	7/16/2015	0.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	*<0.00020*	<0.00099	<0.00099	<0.00020	<0.00099	0.002	<0.00099	<0.00099
MW-31C	3/14/2018	12.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.005	<0.00095	<0.00095
MW-32A	11/4/2009	318.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00051 J	<0.0010	<0.0010
MW-32A	12/16/2009	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-32A	6/16/2010	32.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	*<0.0010*	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-32A	9/21/2010	0.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0106	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	0.0011	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-32A	12/15/2010	8.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.002	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-32A	3/7/2011	59.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-32A	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-32A	9/28/2011	19.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00095	0.000098	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0017	<0.00095	<0.00095
MW-32A	12/13/2011	17.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-32A	4/5/2012	55.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.000098	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.004	<0.00095	<0.00095
MW-32A	7/11/2012	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0111	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-32A	10/3/2012	6.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0022	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0015	<0.00095	<0.00095
MW-32A	7/16/2015	379.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-32A	3/14/2018	80.2	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0010	0.0168	<0.0010	<0.0010	*<0.0020*	*<0.0020*	*<0.0020*	<0.0020	*<0.0020*	*<0.0020*	*<0.0020*	<0.0010	<0.0010	*<0.0020*	<0.0010	0.0055	<0.0010	<0.0010
MW-32A	1/7/2020	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	0.0285	<0.00099	<0.00099	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	*<0.00020*	<0.00099	<0.00099	*<0.00020*	0.0014	0.0167	<0.00099	<0.00099
MW-32B	5/2/2012	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-32B	7/11/2012	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-32B	10/3/2012	83.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-32B	7/16/2015	4.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-32B	3/14/2018	4.8	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0013	0.0025	<0.0013	<0.0013	*<0.00025*	*<0.00025*	*<0.00025*	*<0.00025*	*<0.00025*	*<0.00025*	*<0.00025*	<0.0013	0.0017	<0.00025	<0.0013	0.0128	0.0026	<0.0013
MW-32C	5/2/2012	97.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-32C	7/11/2012	114.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-32C	10/3/2012	109.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-32C	7/16/2015	5.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-32C	3/14/2018	33.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0037	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0061	<0.00096	<0.00096
MW-33A	11/23/2009	16.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33A	12/17/2009	152.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33A	3/14/2010	262.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33A	6/15/2010	238.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33A	9/20/2010	0.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33A	12/13/2010	162.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33A	3/7/2011	77.8	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33A	6/21/2011	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33A	9/26/2011	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33A	7/26/2013	--	Abandoned Due to Non Detections			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-33B	11/23/2009	187.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0078**	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33B	12/17/2009	265.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33B	3/14/2010	309.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33B	6/15/2010	174.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33B	9/20/2010	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33B	12/13/2010	12.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33B	3/7/2011	18.2	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
MW-33B	6/21/2011	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33B	9/26/2011	2.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33B	7/26/2013	--	Abandoned Due to Non Detections			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

ARCADIS Design & Consultancy for natural and built assets

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-33C	11/23/2009	62.3	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33C	12/17/2009	345.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33C	3/14/2010	478.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33C	6/15/2010	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33C	9/20/2010	0.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-33C	12/13/2010	>1000	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-33C	3/7/2011	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33C	6/21/2011	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097
MW-33C	9/26/2011	521.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33C	7/26/2013	--	Abandoned Due to Non Detections			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-34A	11/23/2009	1697.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.0404	<0.020	<0.020	<0.020	<0.010	0.035	<0.010	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.010	0.0151	<0.0020	**0.0691**	**1.29**	<0.010	<0.010
MW-34A	12/16/2009	251.0	<0.0050	0.0369	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0523**	**0.0285**	<0.0050	<0.040	0.0591	<0.040	<0.040	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080	<0.040	<0.040	<0.0080	**0.113**	**1.92**	<0.040	<0.040
MW-34A	6/16/2010	108.0	<0.0050	0.061	0.0058	<0.0050	<0.0050	<0.0050	<0.0050	**0.0441**	**0.0299**	<0.0050	<0.050	0.0544	<0.050	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.010	**0.106**	**1.53**	<0.050	<0.050
MW-34A	9/23/2010	104.0	<0.0098	0.13	0.0176	<0.0098	<0.0098	<0.0098	<0.0098	**0.0548**	**0.0328**	<0.0098	<0.20	<0.20	<0.20	<0.20	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.20	<0.20	<0.039	<0.20	**1.89**	<0.20	<0.20
MW-34A	12/16/2010	>1000	<0.020	0.116	<0.020	<0.020	<0.020	<0.020	0.0404	**0.0562**	**0.0323**	<0.020	<0.039	0.0616	<0.039	<0.039	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.039	<0.039	<0.0078	**0.101**	**1.3**	<0.039	<0.039
MW-34A	3/7/2011	250.0	<0.038	0.0802	<0.038	<0.038	<0.038	<0.038	<0.038	**0.0553**	<0.038	<0.038	<0.0038	0.0626	<0.0038	<0.0038	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.0038	0.0271	<0.00076	**0.117**	<0.0038	0.0192	<0.0038
MW-34A	6/23/2011	--	<0.0048	0.986	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0558**	**0.0356**	<0.0048	<0.019	0.0615	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0266	<0.0038	**0.0826**	**2.03**	0.0196	<0.019
MW-34A	9/28/2011	420.0	<0.019	0.175	<0.019	<0.019	<0.019	<0.019	<0.019	**0.0576**	**0.0331**	<0.019	<0.048	0.0536	<0.048	<0.048	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.048	<0.048	<0.0095	**0.0982**	**1.68**	<0.048	<0.048
MW-34A	12/15/2011	123.0	<0.020	0.118	<0.020	<0.020	<0.020	<0.020	<0.020	**0.0646**	**0.037**	<0.020	<0.039	0.0626	<0.039	<0.039	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.039	<0.039	<0.0078	**0.122**	**2.53**	<0.039	<0.039
MW-34A	4/4/2012	114.0	<0.095	0.123	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.038	0.0819	<0.038	<0.038	<0.0076	<0.0076	<0.0076	<0.0076	<0.0076	<0.0076	<0.0076	<0.038	<0.038	<0.0076	**0.15**	**3.11**	<0.038	<0.038
MW-34A	7/12/2012	0.0	<0.0095	0.0773	<0.0095	<0.0095	<0.0095	<0.0095	0.0383	**0.0244**	<0.0095	<0.0095	<0.038	0.0551	<0.038	<0.038	<0.0076	<0.0076	<0.0076	<0.0076	<0.0076	<0.0076	<0.0076	<0.038	<0.038	<0.0076	**0.0916**	**1.24**	<0.038	<0.038
MW-34A	10/2/2012	587.0	<0.019	0.0874	<0.019	<0.019	<0.019	<0.019	<0.019	**0.0722**	**0.0475**	<0.019	<0.096	<0.096	<0.096	<0.096	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.096	<0.096	<0.019	**0.132**	**2.21**	<0.096	<0.096
MW-34A	7/16/2015	>1000	<0.050	0.458	0.0762	0.108	<0.050	<0.050	<0.050	**0.217**	**0.21**	<0.050	**0.522**	0.24	<0.10	<0.10	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.10	0.124	<0.020	**0.408**	**5.53**	0.118	<0.10
MW-34A	3/15/2018	>1000	<0.024	0.324	0.0613	0.0367	<0.024	<0.024	<0.024	**0.325**	**0.244**	<0.024	<0.19	0.351	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	<0.19	<0.038	**0.587**	10.9	<0.19	<0.19
MW-34A	12/17/2019	>1000	<0.0050	0.0743	0.005	<0.0050	<0.0050	<0.0050	<0.0050	**0.145**	**0.0999**	<0.0050	<0.010	0.175	<0.010	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.010	0.0884	<0.0020	**0.274**	<0.010	**0.0827**	<0.010
MW-35A	2/24/2010	31.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35A	6/18/2010	16.8	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
MW-35A	9/22/2010	54.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.006	<0.0010	<0.0010
MW-35A	12/22/2010	285.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35A	3/10/2011	96.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-35A	6/23/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.0020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-35A	9/27/2011	25.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35A	12/16/2011	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35A	4/6/2012	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097	0.0061	<0.00097	<0.00097
MW-35A	7/12/2012	5.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35A	10/4/2012	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35A	7/14/2015	30.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-35A	3/16/2018	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35B	2/25/2010	23.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35B	6/18/2010	7.9	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-35B	9/22/2010	37.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0024	<0.00098	<0.00098
MW-35B	12/22/2010	5.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35B	3/10/2011	0.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-35B	6/23/2011	--	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0096	<0.00097	<0.00097
MW-35B	9/27/2011	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35B	12/16/2011	1.9	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-35B	4/6/2012	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35B	7/12/2012	477.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35B	10/4/2012	19.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35B	7/14/2015	0.0	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.025	<0.025	<0.025	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	<0.025	<0.0050	<0.025	<0.025	<0.025	<0.025
MW-35B	3/16/2018	0.0	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35B	12/16/2019	14.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-35C	2/25/2010	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35C	6/18/2010	182.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-35C	9/22/2010	122.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0023	<0.00098	<0.00098
MW-35C	12/22/2010	438.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35C	3/10/2011	195.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.0023	<0.00099	<0.00099
MW-35C	6/23/2011	--	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0096	<0.00097	<0.00097
MW-35C	9/27/2011	395.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35C	12/16/2011	226.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35C	4/6/2012	49.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0038	<0.00096	<0.00096
MW-35C	7/12/2012	58.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35C	10/4/2012	319.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35C	7/14/2015	1000+	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-35C	3/16/2018	46.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35C	12/17/2019	230.0	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.0010	<0.0010	<0.00021	<0.0010	<0.0010	<0.0010	<0.0010

ARCADIS Design & Consultancy for natural and built assets

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-36A	2/25/2010	55.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0026	<0.00095	<0.00095
MW-36A	6/18/2010	>1000	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0013	<0.0010	<0.0010
MW-36A	9/22/2010	17.4	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0047	<0.00097	<0.00097
MW-36A	12/20/2010	41.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0026	<0.00098	<0.00098
MW-36A	3/10/2011	11.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0013**	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-36A	6/23/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0228**	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-36A	9/27/2011	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.00096	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0019	<0.00095	<0.00095
MW-36A	12/14/2011	16.2	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0171	**0.0275**	<0.0049	**0.0959**	0.0476	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.0049	0.0207	<0.00097	0.0455	0.166	<0.0049	<0.0049
MW-36A	4/6/2012	71.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0073	<0.0049	<0.0049	0.0054	<0.0049	**0.0214**	0.0128	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	0.0046	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-36A	7/12/2012	97.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0024**	0.004	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0017	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-36A	10/3/2012	203.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0119**	<0.0048	0.0048	**0.0082**	<0.0048	**0.0045**	0.0081	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0046	<0.00019	<0.00095	0.006	0.0024	<0.00095
MW-36A	7/14/2015	0.0	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	**0.0062**	<0.0051	<0.0010	0.0098	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0052	<0.00020	<0.0010	0.0128	<0.0010	<0.0010
MW-36A	3/28/2018	24.3	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	0.0161	**0.0184**	<0.0047	<0.0094	0.0539	<0.0094	<0.0094	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.0094	0.0183	<0.0019	<0.0094	0.27	<0.0094	<0.0094
MW-36A	12/16/2019	13.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0252	**0.0481**	<0.0048	<0.019	0.0757	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0431	<0.0038	<0.019	0.307	**0.0363**	<0.019
MW-36B	2/25/2010	110.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-36B	6/18/2010	49.2	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0010	0.0017	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0013	<0.0010	<0.0010	<0.0010	0.0011	<0.0010
MW-36B	9/22/2010	1.9	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	**0.0461**	**0.12**	<0.0049	<0.019	0.167	<0.019	0.036	**0.0352**	**0.0182**	**0.0263**	0.0064	**0.0083**	**0.0263**	<0.039	0.167	0.148	**0.0077**	**0.212**	**1.35**	**0.352**	0.105
MW-36B	12/20/2010	60.1	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**0.224**	**0.573**	<0.020	<0.20	**0.941**	<0.20	0.219	**0.234**	**0.116**	**0.166**	0.0437	**0.0544**	**0.179**	<0.039	**1.02**	0.81	**0.0489**	**1.21**	**6.5**	**2.09**	0.723
MW-36B	3/10/2011	26.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.085**	**0.141**	<0.0048	**0.0264**	0.179	0.0116	0.0245	**0.0168**	**0.0083**	**0.0114**	0.0031	**0.0041**	**0.0123**	<0.0010	0.0815	0.12	**0.0036**	**0.209**	**1.3**	**0.22**	0.515
MW-36B	6/24/2011	--	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	**0.332**	**0.831**	<0.098	<0.098	**1.45**	<0.98	<0.98	**0.337**	<0.20	<0.20	<0.20	<0.20	**0.272**	<0.20	**1.6**	**1.26**	<0.20	**1.72**	**11.5**	**3.22**	**1.25**
MW-36B	9/27/2011	40.3	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	**0.131**	**0.242**	<0.048	**0.653**	0.302	<0.038	0.0443	**0.039**	**0.0196**	**0.0188**	<0.0076	**0.0172**	**0.0306**	<0.0076	0.181	**0.226**	**0.0103**	**0.447**	**3.75**	**0.429**	**0.116**
MW-36B	7/14/2015	--	DNAPL In Well - Did Not Sample			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-36C	2/25/2010	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0018	<0.00095	<0.00095	**0.00021**	<0.00019	0.00019	<0.00019	<0.00019	0.00019	<0.00019	<0.00095	0.0018	<0.00019	0.0037	**0.0083**	0.0031	<0.00095
MW-36C	6/18/2010	--	<0.039	0.0864	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	**0.26**	<0.039	<0.25	0.39	<0.25	<0.25	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.25	0.26	<0.049	**0.531**	**5.7**	**0.433**	<0.25
MW-36C	9/22/2010	93.4	<0.038	0.105	<0.038	<0.038	<0.038	<0.038	<0.038	**0.118**	**0.249**	<0.038	<0.019	0.339	<0.019	<0.019	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.019	0.236	<0.038	**0.564**	**5.9**	**0.439**	<0.019
MW-36C	12/20/2010	53.2	<0.019	0.114	<0.019	<0.019	<0.019	<0.019	<0.019	**0.195**	**0.194**	<0.019	<0.19	0.332	<0.19	<0.19	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.19	0.211	<0.039	**0.576**	**5.72**	**0.319**	<0.19
MW-36C	3/10/2011	71.4	<0.019	0.0956	<0.019	<0.019	<0.019	<0.019	<0.019	**0.159**	**0.176**	<0.019	<0.039	0.191	<0.039	0.137	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.039	0.111	<0.0078	**0.348**	**5.56**	**0.116**	<0.039
MW-36C	6/24/2011	--	<0.019	0.055	<0.019	<0.019	<0.019	<0.019	<0.019	**0.0808**	**0.204**	<0.019	<0.097	0.341	<0.097	<0.097	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.097	0.21	<0.019	**0.426**	**2.71**	**0.218**	<0.097
MW-36C	9/27/2011	94.3	<0.048	0.0968	<0.048	<0.048	<0.048	<0.048	<0.048	**0.17**	**0.176**	<0.048	<0.019	0.237	0.0377	0.0248	**0.0149**	**0.0072**	**0.0072**	<0.0038	**0.0069**	**0.0112**	<0.0038	0.0721	0.162	<0.0038	**0.344**	**5.68**	**0.217**	0.046
MW-36C	7/14/2015	--	DNAPL In Well - Did Not Sample			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-36C	3/28/2018	3.8	<0.0048	0.037	0.0063	0.0113	0.0054	<0.0048	<0.0048	**0.179**	**0.16**	<0.0048	<0.019	0.274	<0.019	<0.019	0.0066	<0.0038	<0.0038	<0.0038	0.0038	0.0053	<0.0038	0.0474	0.143	<0.0038	0.18	1.35	0.16	0.0313
MW-37A	2/25/2010	60.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.00666	<0.00096	<0.00096
MW-37A	6/16/2010	210.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-37A	9/23/2010	111.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0026	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0012	<0.00097	<0.00097
MW-37A	12/17/2010	392.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0037	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0053	<0.00096	<0.00096
MW-37A	3/8/2011	95.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-37A	6/23/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0014	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096
MW-37A	9/28/2011	609.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0025	<0.00095	<0.00095
MW-37A	12/16/2011	800.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-37A	4/4/2012	205.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-37A	7/11/2012	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0034	<0.00095	<0.00095
MW-37A	10/2/2012	>800	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096	0.0011	<0.00096	<0.00096
MW-37A	7/15/2015	>1000	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-37A	3/16/2018	660.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-37B	2/25/2010	60.2	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.0196	<0.0095	<0.0095	<0.019	0.0254	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	<0.019	<0.0038	0.0334	0.453	<0.019	<0.019
MW-37B	6/16/2010	489.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0176	<0.0050	<0.0050	<0.0040	0.0228	<0.0040	<0.0040	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.0040	<0.0040	<0.00079	0.021	0.179	<0.0040	<0.0040
MW-37B	9/23/2010	138.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0359	<0.0049	<0.0049	<0.00097	0.0365	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	0.0075	<0.00019	**0.0487**	0.169	0.0014	<0.00097
MW-37B	12/17/2010	146.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0256	<0.0048	<0.0048	<0.0077	0.0385	<0.0077	<0.0077	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0077	<0.0077	<0.0010	**0.05**	0.225	<0.0077	<0.0077
MW-37B	3/9/2011	49.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0248	<0.0048	<0.0048	<0.0038	0.0293	<0.0038	<0.0038	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.0038	0.0038	<0.00077	0.0291	0.0947	<0.0038	<0.0038
MW-37B	6/23/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0138	<0.0048	<0.0048	<0.00095	0.0192	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0021	<0.00019	0.0168	0.0476	<0.00095	<0.00095
MW-37B	9/28/2011	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.016	<0.0048	<0.0048	<0.00096	0.022	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	0.0036	<0.00096	0.0222	0.0193	<0.00096	<0.00096
MW-37B	12/16/2011	>800.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0225	<0.0048	<0.0048	<0.00095	0.0261	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0036	<0.00019	**0.0316**	0.0171	<0.00095	<0.00095
MW-37B	4/4/2012	>800.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0126	<0.0050	<0.0050	<0.0010	0.0243	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0034	<0.00020	0.019	0.004	<0.0010	<0.0010
MW-37B	7/11/2012	522.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0273	<0.0048	<0.0048	<0.00095	0.0463	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.009	<0.00019	**0.0514**	0.0131	0.0014	<0.00095
MW-37B	10/2/2012	494.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0244	<0.0048	<0.0048	<0.00095	0.0312	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0056	<0.00019	0.027	0.0113	<0.00095	<0.00095
MW-37B	7/15/2015	583.0	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0202	<0.0051	<0.0051	<0.0010	0.0393	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0081	<0.00020	**0.047**	0.0033	0.0013	<0.0010
MW-37B	3/16/2018	512.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0101	0.0103	<0.0048	<0.0048	0.116	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.0048	0.0295	<0.00096	**0.0996**	0.157	0.0059	0.0048
MW-37C	9/12/2011	>1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0050	<0.0050	0.0054	0.0059	0.005	<0.0010	0.0077	<0.0010	0.0025	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0062	<0.00020	0.0045	0.0291	0.0051	<0.0010
MW-37C	12/16/2011	44.1	<0.0048	0.0052	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0183	0.0149	<0.0048	<0.024	0.0251	<0.024	<0.024	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.024	<0.024	<0.0048	**0.0468**	0.719	<0.024	<0.024
MW-37C	4/4/2012	40.0	<0.0050	0.0095	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0305	**0.0205**	<0.0050	<0.0040	0.0297	0.0043	<0.0040	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.0040	0.016	<0.00080	**0.0459**	0.975	0.0112	<0.0040
MW-37C	7/11/2012	21.0	<0.0048	0.0102	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0283	0.019	<0.0048	<0.048	0.0558	<0.048	<0.048	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.048	<0.048	<0.0095	**0.0719**	0.884	<0.048	<0.048
MW-37C	10/2/2012	15.5	<0.0048	0.0102	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0576**	**0.0452**	<0.0048	<0.095	<0.095	<0.095	<0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.095	<0.095	<0.019	<0.095	**1.81**	<0.095	<0.095
MW-37C	7/15/2015	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	**0.0507**	**0.0375**	<0.0049	<0.039	0.0544	<0.039	<0.039	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.039	<0.039	<0.0078	**0.0612**	**1.32**	<0.039	<0.039
MW-37C	3/15/2018	53.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	***0.0073***	0.0035	<0.00096	<0.00096	<0.0011	0.00082	0.00082	0.00039	0.00073	0.0012	0.00021	0.0045	0.003	***0.00056***	<0.00096	0.0057	0.0022	0.003

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-38A	4/14/2010	903.0	<0.019	0.0579	<0.019	<0.019	<0.019	<0.019	<0.019	0.196	0.119	<0.019	<0.095	0.257	<0.095	<0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.095	<0.095	<0.019	0.305	6.51	<0.095	<0.095
MW-38A	6/17/2010	97.1	<0.025	0.0552	<0.025	<0.025	<0.025	<0.025	<0.025	0.110	0.0719	0.025	<0.020	0.131	<0.020	<0.020	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.020	0.0587	<0.0040	0.12	3.24	0.0412	<0.020
MW-38A	9/22/2010	0.4	<0.049	0.206	0.0588	0.0616	<0.049	<0.049	<0.049	0.212	0.0850	<0.049	<0.20	0.221	<0.20	<0.20	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.20	<0.20	<0.039	0.317	7.31	<0.20	<0.20
MW-38A	12/17/2010	26.2	<0.0048	0.214	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.174	0.0879	<0.0048	<0.19	0.215	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	<0.19	<0.038	0.29	6.08	<0.19	<0.19
MW-38A	3/8/2011	0.0	<0.12	0.153	<0.12	<0.12	<0.12	<0.12	<0.12	0.239	0.121	<0.12	<0.097	0.256	<0.097	<0.097	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.097	<0.097	<0.019	0.275	5.62	<0.097	<0.097
MW-38A	6/23/2011	--	<0.048	0.0935	<0.048	<0.048	<0.048	<0.048	<0.048	0.14	0.0704	<0.048	<0.019	0.186	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0587	<0.0038	0.141	5.38	0.0314	<0.019
MW-38A	9/28/2011	2.1	<0.048	0.209	<0.048	<0.048	<0.048	<0.048	<0.048	0.237	0.108	<0.048	<0.048	0.254	<0.048	0.048	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.048	0.0978	<0.0096	0.345	6.87	<0.048	<0.048
MW-38A	12/13/2011	26.8	<0.096	0.127	<0.096	<0.096	<0.096	<0.096	<0.096	0.194	0.108	<0.096	<0.24	<0.24	<0.24	<0.24	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.24	<0.24	<0.048	<0.24	6.25	<0.24	<0.24
MW-38A	4/5/2012	2.2	<0.048	0.114	<0.048	<0.048	<0.048	<0.048	<0.048	0.185	0.0869	<0.048	<0.96	0.216	<0.096	<0.096	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.096	<0.096	<0.019	0.227	5.36	<0.096	<0.096
MW-38A	7/10/2012	0.8	<0.019	0.132	0.0206	<0.019	<0.019	<0.019	<0.019	0.198	0.118	<0.019	<0.19	0.251	<0.19	<0.19	<0.038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	<0.19	0.225	5.59	<0.19	<0.19
MW-38A	10/3/2012	7.3	<0.048	0.111	<0.048	<0.048	<0.048	<0.048	<0.048	0.23	0.123	<0.048	<0.048	0.215	<0.048	<0.048	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.048	0.0857	<0.0096	0.228	7.23	<0.048	<0.048
MW-38A	7/14/2015	0.0	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.149	0.111	<0.0020	<0.095	0.202	<0.095	<0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.095	<0.095	<0.019	<0.095	3.06	<0.095	<0.095
MW-38A	3/13/2018	1.2	<0.020	0.0648	<0.020	<0.020	<0.020	<0.020	<0.020	0.275	0.207	<0.020	<0.050	0.309	<0.050	<0.050	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.050	0.151	<0.0099	0.225	6.05	0.108	<0.050
MW-38A	12/17/2019	5.1	<0.0048	0.0743	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.293	0.222	<0.0048	<0.0038	0.406	<0.0038	0.0054	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.0038	0.163	<0.00076	0.357	8.6	0.122	<0.0038
MW-38B	4/14/2010	19.3	<0.0048	0.0201	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0743	0.0223	<0.0048	<0.0095	<0.0095	<0.0095	<0.0095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.0095	<0.0095	<0.00109	<0.0095	2.49	<0.0095	<0.0095
MW-38B	6/17/2010	6.2	<0.0099	0.0272	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.0582	0.0154	<0.0099	<0.020	0.0486	<0.020	<0.020	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.020	<0.020	<0.0040	0.03	0.604	<0.020	<0.020
MW-38B	9/22/2010	0.0	<0.049	0.197	0.0524	0.0554	<0.049	<0.049	<0.049	0.246	0.119	<0.19	0.297	<0.19	<0.19	<0.19	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.19	<0.19	<0.039	0.395	8.92	<0.19	<0.19
MW-38B	12/17/2010	7.2	<0.0048	0.235	0.0544	0.0527	<0.0048	<0.0048	<0.0048	0.201	0.0982	<0.0048	<0.19	0.284	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	<0.19	<0.038	0.391	7.58	<0.19	<0.19
MW-38B	3/8/2011	0.0	<0.12	0.134	<0.12	<0.12	<0.12	<0.12	<0.12	0.174	<0.12	<0.12	<0.097	0.188	<0.097	<0.097	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.097	<0.097	<0.00109	0.211	6.54	<0.097	<0.097
MW-38B	6/23/2011	--	<0.048	0.085	<0.048	<0.048	<0.048	<0.048	<0.048	0.13	0.062	<0.048	<0.48	<0.48	<0.48	<0.48	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.48	<0.48	<0.096	<0.48	6	<0.48	<0.48
MW-38B	9/28/2011	20.2	<0.048	0.161	<0.048	<0.048	<0.048	<0.048	<0.048	0.229	0.124	<0.048	<0.048	0.276	<0.048	<0.048	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.048	0.114	<0.0095	0.296	6.3	0.0536	<0.048
MW-38B	12/13/2011	15.5	<0.019	0.164	<0.019	<0.019	<0.019	<0.019	<0.019	0.135	0.0823	<0.019	<0.19	<0.19	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	<0.19	<0.038	0.208	5.66	<0.19	<0.19
MW-38B	4/5/2012	58.5	<0.048	0.131	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.147	0.0968	<0.0048	<0.095	0.233	<0.0095	<0.0095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.0095	<0.0095	<0.00109	0.264	7.03	<0.0095	<0.0095
MW-38B	7/10/2012	0.2	<0.038	0.208	<0.038	<0.038	<0.038	<0.038	<0.038	0.302	0.176	<0.038	<0.095	0.388	<0.0095	<0.0095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.0095	0.158	<0.00109	0.397	15	<0.0095	<0.0095
MW-38B	10/3/2012	83.7	<0.024	0.171	<0.024	<0.024	<0.024	<0.024	<0.024	0.199	0.121	<0.024	<0.095	0.211	<0.0095	<0.0095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.0095	0.158	<0.00109	0.21	6.4	<0.0095	<0.0095
MW-38B	7/14/2015	0.0	<0.0048	0.0161	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.153	0.107	<0.0048	<0.095	0.198	<0.095	<0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.095	<0.095	<0.019	<0.095	3.33	<0.095	<0.095
MW-38B	3/13/2018	1.8	<0.019	0.0399	<0.019	<0.019	<0.019	<0.019	<0.019	0.207	0.168	<0.019	<0.048	0.355	<0.048	<0.048	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.048	0.174	<0.0096	0.189	3.78	0.131	<0.048
MW-38C	4/14/2010	739.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0095	<0.0095	<0.0095	<0.0095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.0095	<0.0095	<0.00109	<0.0095	<0.0095	<0.0095	<0.0095
MW-38C	6/17/2010	11.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-38C	9/22/2010	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.00098	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	0.00098	0.0081	0.0013	<0.00096
MW-38C	12/15/2010	4.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-38C	3/8/2011	12.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-38C	6/23/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-38C	9/28/2011	58.8	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.001	<0.00096	<0.00096
MW-38C	12/13/2011	672.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.009	<0.00096	<0.00096
MW-38C	4/5/2012	7.7	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-38C	7/10/2012	30.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0035	<0.00095	<0.00095
MW-38C	10/3/2012	246.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.006	<0.00096	<0.00096
MW-38C	7/15/2015	229.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-38C	3/13/2018	123.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0014	<0.0010	<0.0010
MW-38D	4/14/2010	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0095	<0.0095	<0.0095	<0.0095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.0095	<0.0095	<0.00109	<0.0095	<0.0095	<0.0095	<0.0095
MW-38D	6/17/2010	>1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-38D	9/22/2010	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0071	<0.00097	<0.00097
MW-38D	12/15/2010	27.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-38D	3/8/2011	15.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-38D	6/23/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-38D	9/28/2011	32.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0018	<0.00095	<0.00095
MW-38D	12/13/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0032	<0.00095	<0.00095
MW-38D	4/5/2012	12.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-38D	7/10/2012	5.8	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-38D	10/3/2012	21.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0047	<0.00095	<0.00095
MW-38D	7/15/2015	4.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-38D	3/13/2018	29.6	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0082	<0.00097	<0.00097
MW-39A	4/14/2010	>1000	<0.095	0.498	<0.095	<0.095	<0.095	<0.095	<0.095	1.28	5.35	<0.095	<0.48	6.6	1.13	2.23	2.37	1.42	1.7	0.682	0.68	1.81	0.178	9.31	6.97	0.788	8.36	38.2	17.4	6.54
MW-39A	6/16/2010	--	<0.0050	0.656	0.0806	0.0842	<0.0050	<0.0050	<0.0050	0.36	0.428	<0.0050	<0.20	0.324	0.2	0.2	0.0452	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.201	0.246	<0.040	0.617	6.56	0.485	0.2
MW-39A	9/23/2010	60.8	<0.079	0.692	0.0933	0.119	<0.079	<0.079	<0.079	0.621	1.2	<0.079	<0.40	1.77	<0.40	0.533	0.577	0.306	0.473	0.0852	0.146	0.426	<0.079	2.35	1.74	0.102	2.5	15.8	4.59	1.62
MW-39A	12/21/2010	26.8	<0.038	0.38	0.0475	0.0644	<0.038	<0.038	<0.038	0.336	0.256	<0.038	<0.19	0.342	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	0.228	<0.038	0.702	7.3	0.338	<0.19
MW-39A	3/11/2011	81.4	<0.095	0.33	<0.095	<0.095	<0.095	<0.095	<0.095	0.391	0.4	<0.095	<0.048	0.427	0.0716	0.085	0.0567	0.0283	0.0386	<0.0095	0.137	0.0429	<0.0095	0.252	0.315	0.0113	0.79	9.2	0.618	0.161
MW-39A	6/24/2011	--	<0.049	0.0919	<0.049	<0.049	<0.049	<0.049	<0.049	0.353	0.334	<0.049	<0.98	0.98	<0.98	<0.98	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.98	<0.98	<0.20	<0.98	11.2	<0.98	<0.98
MW-39A	9/28/2011	50.4	<0.19	0.481	<0.19	<0.19	<0.19	<0.19	<0.19	0.349	0.641	<0.19	<0.48	0.802	<0.48	<0.48	0.185	<0.096	0.119	<0.096	<0.096	0.149	<0.096	0.84	0.702	<0.096	1.27	10.9	1.74	0.518

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-39B	4/14/2010	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0077	0.0125	<0.0048	*<0.0095*	0.0153	0.0028	0.0035	**0.0029**	**0.0016**	**0.002**	0.00085	**0.00075**	**0.0021**	**0.00022**	0.0127	0.0138	0.00099	0.0195	0.0153	**0.0284**	0.0088
MW-39B	6/17/2010	>1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-39B	9/23/2010	252.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.0022	<0.00099	<0.00099
MW-39B	12/15/2010	>1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-39B	3/8/2011	>1000	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-39B	6/23/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.0097
MW-39B	9/28/2011	124.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-39B	12/13/2011	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0018	<0.00095	<0.00095
MW-39B	4/5/2012	378.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0016	<0.00097	<0.0097
MW-39B	7/12/2012	52.9	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.0097
MW-39B	10/2/2012	65.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-39B	7/15/2015	11.8	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	<0.00095	<0.00019	<0.00094	<0.00094	<0.00094	<0.00094
MW-39B	3/14/2018	40.2	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	*<0.0013*	*<0.0013*	*<0.0013*	*<0.0013*	*<0.00025*	*0.00029*	*0.00053*	0.00033	*0.00031*	*0.00026*	*<0.00025*	<0.0013	<0.0013	*0.00042*	*<0.0013*	0.0045	*<0.0013*	*<0.0013*
MW-40A	4/14/2010	762.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-40A	6/16/2010	47.3	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-40A	9/23/2010	65.4	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0043	<0.00097	<0.00097
MW-40A	3/7/2011	238.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40A	6/22/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0043	<0.00097	<0.0097
MW-40A	9/27/2011	380.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0042	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0012	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40A	12/14/2011	104.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40A	4/3/2012	23.8	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0079	<0.00095	<0.00095
MW-40A	7/13/2012	39.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40A	10/4/2012	89.8	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0032	<0.00095	<0.00095
MW-40A	7/16/2015	232.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0037	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-40A	3/16/2018	22.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0027	<0.00096	<0.00096
MW-40A	12/16/2019	37.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40B	4/20/2010	314.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0011	0.002	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-40B	6/16/2010	92.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0105	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0013	0.0042	<0.00020	<0.0010	0.0159	0.0034	<0.0010
MW-40B	9/23/2010	277.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0042	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00099	0.0017	<0.00020	<0.00098	0.0027	0.0015	<0.00098
MW-40B	12/14/2010	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0041	<0.00096	<0.00096	0.00032	0.00023	0.00043	<0.00019	<0.00019	**0.00032**	<0.00019	0.0015	0.0016	0.00019	<0.00096	0.0012	<0.00096	0.001
MW-40B	3/7/2011	0.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-40B	6/23/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0081	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	0.0035	<0.00019	<0.00096	0.0054	<0.00096	<0.00096
MW-40B	9/27/2011	93.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40B	12/14/2011	112.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0076	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0019	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40B	4/3/2012	99.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0029	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40B	7/13/2012	22.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0029	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40B	10/4/2012	14.8	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0103	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0026	<0.00019	<0.00095	0.0064	<0.00095	<0.00095
MW-40B	7/16/2015	162.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-40B	3/16/2018	83.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0024	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40C	4/14/2010	21.8	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0071	0.00134	<0.0049	<0.00098	0.0268	<0.00098	0.0049	**0.00039**	<0.00020	**0.00022**	<0.00020	<0.00020	**0.00034**	<0.00020	0.01	0.0137	<0.00020	<0.00098	<0.00098	**0.0214**	0.0058
MW-40C	6/16/2010	62.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	*<0.0020*	0.0333	<0.0020	0.0073	**0.00048**	*<0.00040*	*<0.00040*	<0.00040	*<0.00040*	*<0.00040*	*<0.00040*	0.016	0.014	<0.0004	0.0151	0.0559	**0.0335**	0.0088
MW-40C	9/23/2010	0.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.007	**0.0178**	<0.0049	<0.00098	0.0325	<0.00098	0.0055	**0.00039**	<0.00020	<0.00020	<0.00020	<0.00020	**0.00033**	<0.00020	0.016	0.0211	<0.00020	0.0023	0.0155	**0.0319**	0.0088
MW-40C	12/17/2010	30.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.007	<0.0048	<0.00096	0.0173	<0.00096	0.0028	**0.00025**	<0.00019	<0.00019	<0.00019	<0.00019	**0.00024**	<0.00019	0.00091	0.0109	<0.00019	<0.00096	0.0033	0.0134	0.006
MW-40C	3/7/2011	27.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0104	<0.00098	0.0021	**0.0024**	0.0017	**0.003**	0.0011	**0.0011**	**0.0024**	**0.00033**	0.0108	0.0064	**0.0013**	<0.00098	<0.00098	0.0073	0.0063
MW-40C	6/23/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0056	<0.0049	<0.00097	0.0187	<0.00097	0.0021	**0.00026**	<0.00019	<0.00019	<0.00019	<0.00019	**0.00021**	<0.00019	0.0094	0.0123	<0.00019	<0.00097	0.0014	0.0098	0.0057
MW-40C	9/28/2011	162.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0152	<0.00095	0.0011	**0.00023**	<0.00019	<0.00019	<0.00019	<0.00019	0.00019	<0.00019	0.0084	0.0098	<0.00019	<0.00095	0.001	0.0035	0.0034
MW-40C	12/14/2011	12.5	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0133	<0.00097	0.001	**0.00062**	0.00031	0.00045	0.00019	**0.00029**	**0.00055**	<0.00019	0.0092	0.0102	0.00023	<0.00097	<0.00097	0.0036	0.0051
MW-40C	4/3/2012	2.6	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0071	<0.00097	<0.00097	*<0.00019*	*<0.00019*	*<0.00019*	<0.00019	*<0.00019*	*<0.00019*	*<0.00019*	0.005	0.0054	<0.00019	<0.00097	0.0039	0.0012	0.0025
MW-40C	7/13/2012	32.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0108	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00019	<0.00019	0.0087	0.0075	<0.00019	<0.00095	<0.00095	0.00095	0.0047
MW-40C	10/4/2012	7.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0068	<0.00097	<0.00097	*<0.00019*	*<0.00019*	*<0.00019*	<0.00019	*<0.00019*	*<0.00019*	*<0.00019*	0.0071	0.0038	<0.00019	<0.00097	<0.00097	0.0037	0.0025
MW-40C	7/16/2015	232.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0019	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0051	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	0.0026
MW-40C	3/16/2018	160.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	*<0.00019*	<0.00095	<0.00095	<0.00095	0.0025
MW-40C	12/16/2019	13.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	*<0.00019*	<0.00095	<0.00095	<0.00095	0.0014
MW-41A	12/15/2010	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-41A	3/8/2011	254.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-41A	6/23/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0038	<0.00097	<0.00097
MW-41A	9/28/2011	>1000	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0017	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	0.001	0.0092	<0.00097	<0.048
MW-41A	12/13/2011	472.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0078	<0.00096	<0.00096
MW-41A	4/5/2012	476.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0015	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0037	<0.00098	<0.00098
MW-41A	7/10/2012	244.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.00098	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0062	<0.00095	<0.00095
MW-41A	10/3/2012	280.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-41A	7/15/2015	1.6	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	<0.00095	<0.00019	<0.00094	<0.00094	<0.00094	<0.00094
MW-41A	3/16/2018	903.0	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	*<0.0011*	*<0.0011*	*<0.0011*	*<0.0011*	*<0.00022*	*<0.00022*	*<0.00022*	*<0.00022*	*<0.00022*	*<0.00022*	*<0.00022*	*<0.0011*	*<0.0011*	*<0.00022*	*<0.0011*	0.0019	*<0.0011*	*<0.0011*

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-42A	12/15/2010	322.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0043	<0.00097	<0.00097
MW-42A	3/8/2011	42.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-42A	6/23/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-42A	9/28/2011	64.5	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-42A	12/13/2011	26.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0016	<0.00095	<0.00095
MW-42A	4/4/2012	31.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-42A	7/10/2012	30.8	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-42A	10/2/2012	74.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-42A	7/15/2015	66.6	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	<0.00095	<0.00019	<0.00094	0.0021	<0.00094	<0.00094
MW-42A	3/14/2018	8.9	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0013	<0.0013	<0.0013	<0.0013	*<0.00027*	*<0.00027*	*<0.00027*	*<0.00027*	*<0.00027*	*<0.00027*	*<0.00027*	<0.0013	<0.0013	*<0.00027*	<0.0013	0.0026	<0.0013	<0.0013
MW-42B	12/15/2010	251.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0043	<0.00097	<0.00097
MW-42B	3/8/2011	139.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0013	<0.00095	<0.00095
MW-42B	6/23/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-42B	9/28/2011	72.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-42B	12/13/2011	40.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0032	<0.00096	<0.00096
MW-42B	4/4/2012	69.7	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-42B	7/10/2012	3.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-42B	10/2/2012	116.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-42B	7/15/2015	30.6	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	<0.00095	<0.00019	<0.00094	<0.00094	<0.00094	<0.00094
MW-43A	12/15/2010	426.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0067	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	0.0039	0.0189	<0.00098	<0.00098
MW-43A	3/8/2011	123.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.0022	<0.00099	<0.00099
MW-43A	6/22/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0029	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0073	<0.00097	<0.00097
MW-43A	9/28/2011	47.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0049	<0.0049	<0.0049	<0.00097	0.0042	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	0.0014	0.0088	<0.00097	<0.00097
MW-43A	12/13/2011	288.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0032	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.005	<0.00096	<0.00096
MW-43A	4/5/2012	88.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0036	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	0.0017	0.0085	<0.00095	<0.00095
MW-43A	7/11/2012	46.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0054	<0.0048	<0.0048	<0.00096	0.0046	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	0.0018	0.0027	<0.00096	<0.00096
MW-43A	10/2/2012	267.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0049	<0.0049	<0.0049	<0.00097	0.0039	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	0.0011	0.0019	<0.00097	<0.00097
MW-43A	7/17/2015	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0054	<0.0048	<0.0048	<0.00096	0.0023	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-44A	12/22/2010	94.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-44A	3/10/2011	64.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0027	<0.0010	<0.0010
MW-44A	6/23/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.0020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-44A	9/27/2011	0.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-44A	12/16/2011	151.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0031	<0.00095	<0.00095
MW-44A	4/6/2012	97.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0059	<0.00095	<0.00095
MW-44A	7/13/2012	11.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-44A	10/4/2012	2.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0057	<0.00095	<0.00095
MW-44A	7/14/2015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-44A	3/26/2018	4.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00095	0.002	<0.00095	<0.00095	*<0.00019*	*<0.00019*	*<0.00019*	*<0.00019*	*<0.00019*	*<0.00019*	*<0.00019*	<0.00095	0.0013	*<0.00019*	<0.00095	0.0021	<0.00095	<0.00095
MW-45A	12/22/2010	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-45A	3/10/2011	63.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0017	<0.00095	<0.00095
MW-45A	6/21/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-45A	9/27/2011	44.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0014	<0.00095	<0.00095
MW-45A	12/15/2011	416.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-45A	4/4/2012	17.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0011	<0.00096	<0.00096
MW-45A	7/13/2012	54.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0011	<0.00095	<0.00095
MW-45A	10/3/2012	136.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-45A	7/14/2015	5.3	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	<0.00094	<0.00019	<0.00094	<0.00019	<0.00019	<0.00019
MW-45A	4/9/2018	41.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-45B	12/22/2010	>1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-45B	3/10/2011	784.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.001	<0.00095	<0.00095
MW-45B	6/21/2011	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-45B	9/27/2011	109.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-45B	12/15/2011	46.7	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-45B	4/4/2012	580.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-45B	7/13/2012	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-45B	10/3/2012	>800	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-45B	7/14/2015	1000+	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	*<0.0011*	<0.0011	<0.0011	<0.0011	*<0.00022*	*<0.00022*	*<0.00022*	<0.00022	*<0.00022*	*<0.00022*	<0.00022	<0.0011	<0.0011	<0.00022	<0.0011	*<0.00022*	<0.00022	<0.00022
MW-45B	4/9/2018	482.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010

ARCADIS Design & Consultancy for natural and built assets

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-45C	12/22/2010	>1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0012	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-45C	3/10/2011	138.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0017	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0099	<0.00095	<0.00095
MW-45C	6/22/2011	>1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0080	0.0315	<0.0080	<0.0080	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0080	0.0155	<0.0010	<0.0080	0.205	0.0082	<0.0080
MW-45C	9/27/2011	692.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0272	**0.0188**	<0.0048	<0.00095	0.0362	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0172	<0.00019	<0.00095	0.104	0.0078	<0.00095
MW-45C	12/15/2011	340.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.074**	**0.0688**	<0.0048	<0.015	0.128	<0.015	<0.015	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.015	0.0633	<0.0031	<0.015	<0.015	**0.0391**	<0.015
MW-45C	4/4/2012	217.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	**0.0672**	**0.0535**	<0.0049	<0.00097	0.0869	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	0.0463	<0.00019	<0.00097	0.47	**0.0283**	<0.00097
MW-45C	7/13/2012	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0615**	**0.0523**	<0.0048	<0.019	0.178	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0927	<0.0038	<0.019	0.545	**0.0476**	<0.019
MW-45C	10/3/2012	285.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0248	**0.0198**	<0.0048	<0.00095	0.0378	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0194	<0.00019	0.0017	0.13	0.0108	<0.00095
MW-45C	7/14/2015	196.0	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	0.0159	**0.0174**	<0.0056	<0.0011	0.0326	<0.0011	<0.0011	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.0011	0.0161	<0.00022	<0.0011	0.0078	0.0068	<0.0011
MW-45C	4/9/2018	862.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-45C	12/16/2019	205.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.024	**0.0213**	<0.0050	<0.010	0.0441	<0.010	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.010	0.0213	<0.0020	<0.010	0.188	0.0122	<0.010
MW-46A	12/22/2010	>1000	<0.048	0.164	<0.048	<0.048	<0.048	<0.048	<0.048	**0.0766**	<0.048	<0.048	**0.129**	0.0871	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.04	<0.0038	**0.107**	0.643	**0.0233**	<0.019
MW-46A	3/10/2011	>1000	<0.0049	0.0264	0.006	<0.0049	<0.0049	<0.0049	<0.0049	**0.0106**	0.0079	<0.0049	**0.115**	0.0135	<0.0039	<0.0039	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.0039	0.0055	<0.00078	0.01	0.0631	<0.0039	<0.0039
MW-46A	6/22/2011	--	<0.019	0.199	0.0418	0.0201	<0.019	**0.0439**	<0.019	**0.0542**	**0.0332**	<0.019	<0.048	0.0817	<0.048	<0.048	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.048	<0.048	<0.0095	**0.111**	**1.63**	<0.048	<0.048
MW-46A	9/27/2011	231.0	0.0269	0.214	0.0376	<0.019	<0.019	**0.0401**	<0.019	<0.019	**0.0236**	<0.019	<0.0038	0.0434	0.0047	<0.0038	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.0038	0.0176	<0.00076	0.0243	0.0477	0.0065	<0.0038
MW-46A	12/15/2011	691.0	<0.019	0.0506	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.015	0.0239	<0.015	<0.015	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.015	<0.015	<0.0031	**0.0346**	0.493	<0.015	<0.015
MW-46A	4/6/2012	244.0	0.007	0.131	0.0199	0.0055	<0.0048	<0.0048	<0.0048	0.0175	**0.0213**	<0.0048	<0.024	0.0509	<0.024	<0.024	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.024	<0.024	<0.0048	**0.0417**	0.757	<0.024	<0.024
MW-46A	7/11/2012	70.1	<0.019	0.143	<0.019	<0.019	<0.019	<0.019	<0.019	**0.0522**	**0.0326**	<0.019	<0.0038	0.0637	0.0067	<0.0038	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.0038	0.0264	<0.00077	**0.0974**	**1.29**	0.0142	<0.0038
MW-46A	10/2/2012	67.3	<0.019	0.147	<0.019	<0.019	<0.019	<0.019	<0.019	**0.0522**	**0.0326**	<0.019	<0.095	<0.095	<0.095	<0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.095	<0.095	<0.019	**0.141**	**2.14**	<0.095	<0.095
MW-46A	7/15/2015	1000+	<0.0063	0.225	0.014	<0.0063	<0.0063	<0.0063	<0.0063	**0.0661**	**0.0366**	<0.0063	<0.013	0.0732	<0.013	<0.013	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.013	0.0317	<0.025	**0.0339**	0.127	0.0165	<0.013
MW-46A	3/16/2018	141.0	<0.0048	0.0171	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0144	**0.0178**	<0.0048	<0.019	0.026	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	<0.019	<0.0038	<0.0299	0.418	<0.019	<0.019
MW-46A	1/7/2020	--	<0.0054	0.0701	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	**0.0838**	**0.0553**	<0.0054	<0.0011	<0.11	0.0024	0.0027	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	0.0022	<0.11	<0.00022	**0.113**	**1.9**	**0.0363**	<.00011
MW-47A	12/22/2010	482.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0026	<0.00096	<0.00096
MW-47A	3/10/2011	390.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-47A	6/22/2011	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
MW-47A	9/27/2011	362.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0022	<0.00096	<0.00096
MW-47A	12/14/2011	89.9	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-47A	4/4/2012	158.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
MW-47A	7/11/2012	327.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0362	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0048	<0.00095	<0.00095
MW-47A	10/2/2012	36.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-47A	7/15/2015	216.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-47A	3/28/2018	4.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0028	<0.00095	<0.00095	0.00035	0.00019	0.0002	<0.00019	0.00019	0.00032	<0.00019	0.002	0.0022	<0.00019	0.0012	0.0044	0.0046	0.0014
MW-47A	12/17/2019	114.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
MW-48A	1/11/2011	--	<0.095	0.134	<0.095	<0.095	<0.095	<0.095	<0.095	**0.351**	**1.09**	<0.095	<0.38	1.34	<0.38	<0.38	**0.365**	**0.18**	**0.254**	<0.076	**0.102**	**0.277**	<0.076	**1.64**	**1.26**	<0.076	**1.69**	**8.48**	**3.15**	**1.01**
MW-48A	6/21/2011	--	<0.020	0.408	0.0367	0.0381	<0.020	<0.020	<0.020	**0.318**	**0.452**	<0.020	<0.20	0.672	<0.20	<0.20	**0.101**	**0.05**	**0.0561**	<0.039	**<0.039**	**0.0814**	<0.039	**0.471**	0.522	<0.039	**0.866**	**4.52**	**1.04**	0.314
MW-48A	9/26/2011	62.7	<0.019	0.41	0.0317	0.0333	<0.019	<0.019	<0.019	**0.276**	**0.197**	<0.019	<0.019	0.346	<0.019	<0.019	<0.038	<0.038	<0.038	<0.028	<0.038	<0.038	<0.038	<0.19	0.219	<0.038	**0.666**	**9.21**	**0.223**	<0.19
MW-48A	7/13/2015	450.0	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	**0.147**	**0.296**	<0.054	<0.20	0.585	<0.20	<0.20	**0.0824**	<0.040	**0.0573**	<0.040	<0.040	**0.0716**	<0.040	**0.411**	0.469	<0.040	**0.92**	**7.89**	**1.03**	0.277
MW-48A	3/12/2018	0.0	<0.020	0.444	<0.099	<0.020	<0.020	<0.020	<0.020	**1.69**	**6.61**	<0.020	<0.20	0.393	<0.20	<0.020	**0.0457**	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	0.217	0.276	<0.041	**0.666**	**7.38**	**0.536**	<0.20
MW-48B	1/11/2011	419.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0068	<0.0048	<0.0038	0.0112	<0.0038	<0.0038	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.0038	0.0087	<0.00076	0.0142	0.0509	0.0135	<0.0038
MW-48B	6/21/2011	0.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	0.0023	0.001	<0.00097
MW-48B	9/26/2011	321.0	<0.0048	0.0527	0.0053	0.0052	<0.0048	<0.0048	<0.0048	0.0304	0.0181	<0.0048	<0.024	0.0253	<0.024	<0.024	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.024	<0.024	<0.0048	**0.0552**	1.03	<0.024	<0.024
MW-48B	12/12/2011	37.4	<0.019	0.0696	<0.019	<0.019	<0.019	<0.019	<0.019	**0.0741**	**0.0543**	<0.019	<0.076	<0.076	<0.076	<0.076	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.076	<0.076	<0.015	**0.116**	**1.87**	<0.076	<0.076
MW-48B	4/2/2012	39.8	<0.0048	0.121	0.0093	0.0101	<0.0048	<0.0048	<0.0048	**0.0623**	**0.0181**	<0.0048	<0.048	0.0601	<0.048	<0.048	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.048	<0.048	<0.0095	**0.14**	**1.83**	<0.048	<0.048
MW-48B	7/9/2012	2.8	<0.0048	0.0393	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0141	0.0088	<0.0048	<0.019	<0.019	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	<0.019	<0.0038	**0.0313**	0.487	<0.019	<0.019
MW-48B	10/1/2012	4.8	<0.019	0.125	<0.019	<0.019	<0.019	<0.019	<0.019	**0.0769**	**0.0463**	<0.019	<0.096	<0.096	<0.096	<0.096	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.096	<0.019	<0.096	**0.143**	**2.35**	<0.096	<0.096
MW-48B	7/13/2015	92.0	<0.0048	0.0088	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0245	**0.0091**	<0.0048	<0.00096	0.0096	0.0015	0.0014	0.00026	<0.00019	<0.00019	<0.00019	<0.00019	**0.00021**	<0.00019	0.0014	0.009	<0.00019	0.0172	0.246	0.005	0.0013
MW-48B	3/12/2018	225.0	0.0179	0.0783	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0817	**0.0563**	<0.0049	<0.097	<0.097	<0.097	<0.097	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.097	<0.097	<0.019	0.155	**2.49**	<0.097	<0.097
MW-49A	8/16/2011	>1000	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-49A	12/14/2011	17.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-49A	4/3/2012	5.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0088	<0.00097	<0.00097
MW-49A	7/12/2012	16.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-49A	10/4/2012	58.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-49A	7/14/2015	0.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0011	<0.0011	<0.0011	<0.0011	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.0011	<0.0011	<0.00022	<0.0011	<0.0011	<0.0011	<0.0011
MW-49A	6/13/2017	Abandoned	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49B	8/16/2011	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-49B	12/14/2011	51.3	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-49B	4/3/2012	23.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0058	<0.00095	<0.00095
MW-49B	7/12/2012	27.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-49B	10/4/2012	107.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-49B	7/14/2015	1000+	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0011	<0.0011	<0.0011	<0.0011	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0011	<0.0011	<0.0021	<0.0011	<0.0011	<0.0011	<0.0011
MW-49B	6/13/2017	Abandoned	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-49C	8/16/2011	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-49C	12/14/2011	508.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-49C	4/3/2012	262.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0013	<0.00095	<0.00095
MW-49C	7/12/2012	622.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-49C	10/4/2012	288.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-49C	7/15/2015	--	Damaged / Abandoned		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

ARCADIS Design & Consultancy for natural and built assets

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-50A	8/17/2011	>1000	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-50A	12/15/2011	26.3	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-50A	4/5/2012	68.7	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-50A	7/9/2012	19.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	**0.00026**	<0.00019	<0.00019	0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-50A	10/1/2012	137.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	**0.0022**	<0.00095	<0.00095
MW-50A	7/17/2015	1.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-50A	3/26/2018	2.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-50B	8/17/2011	562.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-50B	12/15/2011	61.5	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-50B	4/5/2012	<1000	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0017	<0.00096	<0.00096
MW-50B	7/9/2012	16.9	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-50B	10/1/2012	127.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-50B	7/17/2015	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-50B	3/26/2018	1.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-50B	12/16/2019	440	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.005	<0.00099	<0.00099
MW-51A	8/17/2011	155.0	<0.048	0.336	<0.048	<0.048	<0.048	<0.048	<0.048	0.115	0.0962	<0.048	**0.5**	0.147	<0.024	<0.024	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.024	0.0894	<0.0048	**0.212**	**2.03**	**0.118**	<0.024
MW-51A	7/14/2015	--	DNAPL In Well - Did Not Sample			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-51B	8/17/2011	197.0	<0.0048	0.006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0199	0.0343	<0.0048	<0.00095	0.0724	0.0054	0.0019	<0.00019	<0.0038	<0.0038	<0.0038	<0.0038	<0.00019	<0.0038	0.0031	0.0344	<0.0038	**0.0937**	0.571	**0.0302**	0.0017
MW-51B	12/15/2011	127.0	<0.0048	0.006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0662	0.0147	<0.0048	<0.0038	0.0236	<0.0038	<0.0038	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.0038	0.0158	<0.00076	0.0241	0.125	0.0156	<0.0038
MW-51B	4/6/2012	68.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0083	<0.0048	<0.00096	0.0146	0.0011	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00099	0.0101	<0.00019	0.0135	0.0631	0.0106	<0.00096
MW-51B	7/12/2012	365.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0048	<0.0048	<0.00096	0.0078	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	0.0057	<0.00019	0.007	0.0263	0.0071	<0.00096
MW-51B	10/3/2012	18.8	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0058**	<0.0048	<0.00095	0.0092	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0064	<0.00019	0.0084	0.0542	0.0078	<0.00095
MW-51B	7/14/2015	17.3	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	0.0033	<0.0010	<0.0010	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.0010	0.0031	<0.00021	<0.0010	0.0043	0.0049	<0.0010
MW-51B	3/16/2018	76.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00095	0.0033	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0029	<0.00019	<0.00095	0.0092	0.0051	<0.00095
MW-52A	8/17/2011	834.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	0.0011	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-52A	12/13/2011	700.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-52A	4/5/2012	385.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0042	<0.00095	<0.00095
MW-52A	7/12/2012	22.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0013	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-52A	10/2/2012	322.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0012	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-52A	7/16/2015	65.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-52A	3/16/2018	381.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-53A	9/12/2011	>1000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.0021	<0.00099	<0.00099
MW-53A	12/15/2011	92.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-53A	4/2/2012	0.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-53A	7/9/2012	60.4	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-53A	10/1/2012	>800	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-53A	7/13/2015	625.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-53A	3/15/2018	531.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	0.00019	<0.00095	0.0031	<0.00095	<0.00095
MW-53B	9/12/2011	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-53B	12/15/2011	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-53B	4/2/2012	>1000	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-53B	7/9/2012	428.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0037	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0022	<0.00019	0.0038	**0.0213**	<0.00095	<0.00095
MW-53B	10/1/2012	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-53B	7/13/2015	352.0	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0011	<0.0011	<0.0011	<0.0011	<0.00021	**0.00022**	**0.00027**	<0.00021	**0.00025**	**0.00024**	<0.00021	<0.0011	<0.0011	<0.00021	<0.0011	<0.0011	<0.0011	<0.0011
MW-53B	3/15/2018	428.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00019	<0.00095	0.0059	<0.00095	<0.00095
MW-54A	5/2/2012	--	<0.0048	0.25	0.0537	0.063	<0.048	<0.048	<0.048	**0.248**	**0.375**	<0.048	<0.19	0.617	<0.19	0.921	**0.0821**	**0.0396**	**0.0395**	<0.038	<0.038	**0.0646**	<0.038	**0.394**	0.445	<0.038	**0.899**	**9.39**	**0.899**	0.267
MW-54B	5/2/2012	499.0	<0.019	0.0535	<0.019	<0.019	<0.019	<0.019	<0.019	**0.0545**	**0.0369**	<0.019	<0.048	0.113	<0.048	<0.048	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.048	<0.048	<0.0095	**0.107**	**1.26**	<0.048	<0.048
MW-54B	7/13/2012	36.3	<0.019	0.0835	0.0205	0.0256	<0.019	<0.019	<0.019	**0.0866**	**0.0523**	<0.019	<0.019	0.183	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.059	<0.0038	**0.194**	**2.95**	**0.0502**	<0.019
MW-54B	10/4/2012	188.0	<0.019	0.0416	<0.019	<0.019	<0.019	<0.019	<0.019	**0.0926**	**0.0707**	<0.019	<0.048	0.187	<0.048	<0.048	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.048	<0.048	<0.0096	**0.168**	**3.02**	<0.048	<0.048
MW-54B	7/16/2015	>1000	<0.0050	0.0065	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0658**	**0.0491**	<0.0050	<0.0010	0.152	0.0014	0.0025	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0035	0.0635	<0.00020	**0.143**	**1.02**	**0.0512**	0.002
MW-54B	4/9/2018	203.0	<0.024	0.0429	<0.024	<0.024	<0.024	<0.024	<0.024	**0.0672**	**0.0559**	<0.024	<0.00097	0.214	<0.0097	<0.0097	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0097	0.061	<0.0019	**0.0912**	**1.35**	**0.0563**	<0.0097
MW-55A	5/2/2012	>1000	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0097	<0.00097	0.0011	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0014	0.0022	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-55A	7/10/2012	739.0	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.00095	0.0116	<0.00095	0.0026	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0017	0.0087	<0.00019	0.0105	0.0377	0.0111	<0.00095
MW-55A	10/3/2012	46.2	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.00095	0.0037	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0023	<0.00019	<0.00095	0.0074	0.0016	<0.00095
MW-55A	7/15/2015	8.5	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.00094	0.00096	<0.00094	<0.00094	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	0.0011	<0.00019	<0.00094	0.0038	0.0025	<0.00094
MW-55A	3/13/2018	7.7	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0017	<0.00097	<0.00097
MW-55B	5/2/2012	509.0	<0.048	0.345	0.179	0.181	<0.048	<0.048	<0.048	**0.113**	**0.058**	<0.048	<0.095	0.128	<0.095	<0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.095	<0.095	<0.019	**0.219**	**3.56**	<0.095	<0.095
MW-55B	7/10/2012	94.4	0.0852	0.683	0.29	0.353	0.0606	<0.019	<0.019	**0.141**	**0.0758**	<0.019	<0.095	0.185	<0.095	<0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.095	<0.095	<0.019	**0.358**	**5.21**	<0.095	<0.095
MW-55B	10/3/2012	18.5	0.0318	**1.06**	0.531	0.633	0.102	<0.019	<0.019	**0.247**	**0.111**	<0.019	<0.019	0.175	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0671	<0.0038	**0.346**	**8.48**	**0.034**	<0.019
MW-55B	7/16/2015	0.0	<0.020	**1.01**	0.195	0.105	<0.020	<0.020	<0.020	**0.208**	**0.109**	<0.020	<0.039	0.218	<0.039	<0.039	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.039	0.0874	<0.0078	**0.357**	**7.16**	**0.0504**	<0.039
MW-55B	3/13/2018	10.1	<0.0049	0.164	0.0192	0.0081	<0.0049	<0.0049	<0.0049	**0.0645**	**0.0462**	0.0049	0.0049	0.0879	0.0049	0.0049	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	0.049	0.049	<0.0098	**0.146**	**1.83**	**0.049**	0.049
MW-56A	5/2/2012	621.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0014	<0.00095	<0.00095

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-56A	7/11/2012	24.6	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-56A	10/2/2012	41.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-56A	7/15/2015	0.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-56A	3/28/2018	10.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0018	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.003	0.002	<0.00095
MW-56B	5/2/2012	>1000	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.016	<0.00096	<0.00096
MW-56B	7/11/2012	800.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0022	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	0.0013	0.0325	<0.00096	<0.00096
MW-56B	10/2/2012	17.4	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0055	<0.0049	<0.0049	<0.00097	0.0049	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	0.0025	0.0262	<0.00097	<0.00097
MW-56B	7/15/2015	0.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	0.0032	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	0.0015	0.0115	<0.0010	<0.0010
MW-56B	3/28/2018	6.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0261	<0.0048	<0.0048	<0.0019	0.0363	<0.0019	0.002	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0019	0.0048	<0.00038	0.0219	0.0955	0.0021	<0.0019
MW-OW1	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.01	**0.041**	<0.010	<0.050	0.067	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0053	0.039	<0.010	<0.010	<0.010	0.019	<0.010
MW-OW1	8/14/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW1	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.0052	<0.010	<0.050	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW1	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW1	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	0.0055	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0057	<0.010	<0.010
MW-OW1	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW1	8/11/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0143	**0.041**	<0.005	<0.002	0.0643	<0.002	0.0019	**0.00033**	**0.00029**	**0.00044**	< 0.00040	< 0.00040	**0.0003**	< 0.00040	0.0054	0.0333	0.00021	0.0039	0.0049	**0.0249**	0.0029
MW-OW1	10/30/2003	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	0.0058	**0.019**	<0.0053	<0.0010	0.0387	0.00067	0.00067	**0.00027**	**0.00023**	**0.00028**	<0.00020	0.00016	**0.00022**	<0.00020	0.0035	0.0158	0.00013	0.00039	0.0042	0.0013	0.0018
MW-OW1	2/17/2004	--	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.0134	**0.038**	<0.0054	<0.0022	0.0744	.0011 J	0.0012 J	< 0.00043	< 0.00043	< 0.00043	< 0.00043	< 0.00043	< 0.00043	< 0.00043	0.0043	0.0312	< 0.00043	0.0039	0.0401	0.0086	0.0025
MW-OW1	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0176	**0.0272**	<0.0048	<0.00095	0.0557	0.00076 J	0.0012	**0.00032**	**0.00027**	**0.00034**	0.00014	0.00016 J	**0.00025 J**	<0.00019	0.0046	0.0257	0.00027	<0.00095	<0.00095	0.0075	0.003
MW-OW1	8/1/2006	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0015 J	<0.0048	<0.00095	0.0067	<0.00095	<0.00095	0.000077 J	<0.00019	0.000069 J	<0.00019	<0.00019	<0.00019	<0.00019	0.0014	0.00054 J	<0.00019	<0.00095	<0.00095	<0.00095	0.001
MW-OW1	7/24/2007	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.022	**0.0448**	<0.005	<0.0010	0.0717	0.00052 J	0.002	**0.00028**	**0.00021**	**0.00026**	0.00011 J	0.00015 J	**0.00021**	<0.00020	0.0065	0.0353	0.00014 J	0.0129	0.0435	0.0195	0.0051
MW-OW1	11/19/2008	8.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0156	**0.0441**	<0.0048	<0.00109	0.0936	<0.00109	0.0013 J	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	0.0033	0.038	<0.00038	0.0166	0.0831	0.0173	0.0014 J
MW-OW1	12/11/2009	32.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-OW1	11/10/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0058	**0.0295**	<0.0048	<0.00096	0.0727	0.0015	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0024	0.0184	<0.00019	<0.00096	0.0123	<0.00096	<0.00096
MW-OW1	7/16/2015	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0456**	**0.122**	<0.0048	<0.00096	0.212	0.0012	0.0028	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.101	<0.00019	0.973	0.0018	0.0081	0.0592	0.0039
MW-OW1	3/22/2018	13.9	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0089	<0.0048	<0.00095	0.0124	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0015	0.0054	<0.00019	<0.00095	<0.00095	0.0018	<0.00095
MW-OW2	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW2	8/14/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW2	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.00075	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW2	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW2	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW2	12/28/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW2	8/11/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	0.00018	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00068	<0.0010	<0.0010
MW-OW2	10/30/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-OW2	2/17/2004	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-OW2	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0016	<0.00096	<0.00096
MW-OW2	8/1/2006	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	0.000061 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-OW2	7/24/2007	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	**0.00021**	0.00017 J	**0.00028**	0.00014 J	0.00019 J	**0.00023**	<0.00020	0.00054 J	<0.00098	0.00017 J	<0.00098	0.00036 J	<0.00098	0.00058 J
MW-OW2	11/19/2008	9.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0015	<0.00098	<0.00098
MW-OW2	12/10/2009	68.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-OW2	11/10/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-OW2	7/16/2015	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-OW2	3/22/2018	3.2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-OW3	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW3	8/14/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW3	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW3	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.005	<0.010	<0.010	<0.010	<0.010	<0.010	0.0056
MW-OW3	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW3	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-OW3	8/11/2003	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	0.00064	**0.0012**	**0.0016**	**0.0024**	0.0009	**0.00069**	**0.0013**	0.00027	0.0019	<0.0010	**0.0012**	<0.0010	<0.0010	<0.0010	0.0019
MW-OW3	10/30/2003	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	0.0006	0.00034	**0.002**	**0.0025**	**0.0027**	0.0013	**0.0023**	**0.0022**	**0.00037**	0.0031	<0.0010	**0.0016**	<0.0010	<0.0010	0.00026	0.0033
MW-OW3	2/18/2004	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	0.0013	0.00067 J	**0.0035**	**0.0048**	**0.0051**	0.0027	**0.0041**	**0.0039**	**0.00071**	0.0052	<0.0010	**0.0032**	<0.0010	<0.0010	0.00034 J	0.0066
MW-OW3	9/9/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00044	<0.0010	<0.00020	<0.0010	0.0011	<0.0010	0.00033
MW-OW3	8/1/2006	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0010	<0.0010	0.0006 J	<0.0010	**0.0014**	**0.0019**	**0.0021**	0.00098	**0.0015**	**0.0014**	0.00028	0.0017	<0.0010	**0.0013**	<0.0010	<0.0010	<0.0010	0.0024
MW-OW3	7/24/2007	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.0099	< 0.0099	0.00073 J	< 0.0099	**0.0030**	**0.0041**	**0.0042**	0.0025	**0.0031**	**0.0032**	**0.00073**	0.0037	< 0.00099	**0.0033**	< 0.00099	< 0.00099	< 0.00099	0.0056
MW-OW3	11/19/2008	11.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	0.000057 J	0.000065 J	0.000090 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	0.000055 J	<0.00097	0.001	<0.00097	<0.00097
MW-OW3	12/10/2009	37.5	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.00021**	**0.00025**	**0.00041**	<0.00019	<0.00019	**0.00021**	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-OW3	11/10/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.0012**	**0.0015**	**0.0017**	0.0011	**0.0012**	**0.0014**	0.00023	0.0019	<0.00095	**0.0014**	<0.00095	0.0039	<0.00095	0.0017
MW-OW3	7/16/2015	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	**0.00035**	**0.0004**	**0.00043**	0.00024	**0.00035**	**0.00039**	<0.00019	<0.00096	<0.00096	0.00032	<0.00096	<0.00096	<0.00096	<0.00096
MW-OW3	3/22/2018	14.3	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-P1	5/18/2000	--	NA	NA	< 30	NA	< 30	< 30	< 30	**95**	**580**	< 30	< 150	**650**	**60**	**190**	**210**	**100**	**110**	40	**96**	**160**	< 30	**780**	**650**	**42**	**780**	**2,400**	**1,600**	**620**
MW-P1	8/14/2000	--	NA	NA	< 1.0	NA	< 1.0	< 1.0	< 1.0	**1**	**3.7**	< 1.0	<5.0	**4.5**	**0.4**	1.2	**1.1**	**0.68**	**0.52**	0.41	**0.64**	**0.99**	< 1.0	**5.80**	**4.20**	**0.13**	**4.9**	**18**	**11**	**4.30**
MW-P1	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	**0.092**	**0.15**	<0.010	<0.050	0.2	0.017	0.02	**0.016**	**0.0081**	**0.0088**	<0.010	**0.0069**	**0.011**	<0.010	0.075	0.13	<0.010	**0.14**	**1.4**	**0.19**	0.052
MW-P1	2/1/2001	--	NA	NA	<0.100	NA	<0.100	<0.100	<0.100	**1**	**5.2**	<0.100	<0.500	**6.1**	**0.62**	1.6	**1.9**	**0.97**	**0.99**	0.36	**0.84**	**1.4**	**0.2**	**7.10**	**5.90**	**0.41**	**6.3**	**16.00**	**14.00**	**5.70**
MW-P1	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.039	**0.06**	<0.010	<0.050	0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	0.05	<0.010	0.012	0.025	**0.044**	0.01
MW-P1	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	**0.055**	**0.065**	<0.010	<0.050	0.1	0.0067	0.0089	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.03	0.067	<0.010	**0.043**	0.14	**0.11**	0.023
MW-P1	8/12/2003	--	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**0.107**	**0.141**	<0.020	<0.004	0.193	0.0111	0.0281	**0.0167**	**0.016**	**0.0213**	0.0073	**0.0065**	**0.0143**	**0.0019**	0.0743	0.133	**0.0093**	**0.0317**	0.26	**0.171**	0.0495
MW-P1	10/30/2003	--	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	**0.0527**	**0.0907**	<0.0055	<0.0044	0.121	0.006	0.0111	**0.0076**	**0.0057**	**0.0061**	0.0026	**0.0036**	**0.0061**	**0.00052**	0.0392	0.0793	**0.0032**	**0.0406**	0.194	**0.0963**	0.0231
MW-P1	2/18/2004	--	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**0.101**	**0.445**	<0.020	<0.04	0.637	0.0474	0.174	**0.178**	**0.0985**	**0.104**	0.0359	**0.0783**	**0.135**	**0.0088**	**0.795**	0.634	**0.0413**	**0.455**	1.05	**1.44**	0.543
MW-P1	9/10/2004	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.191**		<0.1	<0.083	1.04	0.072	0.304	**0.317**	**0.175**	**0.181**	0.0564	**0.12**	**0.204**	**0.0217**	**1.28**	1.07	**0.0805**	**0.677**	1.02	**2.16**	0.864
MW-P1	8/1/2006	--	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	**0.116**	**0.222**	< 0.0095	< 0.0095	0.333	0.0119	0.0796	**0.061**	**0.0311**	**0.0283**	0.0104	**0.0264**	**0.0416**	**0.0031**	**0.258**	0.276	**0.0153**	**0.119**	0.16	**0.533**	0.181
MW-P1	7/24/2007	--	Well abandoned August 2006 in preparation for Creek Liner Installation in August 2007																											
MW-P2	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P2	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P2	8/14/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.02	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.02**	<0.010	0.13	<0.010	<0.010	<0.010	<0.010	**0.026**	0.088
MW-P2	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0058	<0.010	<0.010
MW-P2	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0058	<0.010	<0.010
MW-P2	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P2	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P2	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P2	8/11/2003	--	<0.005	0.0488	0.0561	0.0711	0.0489	<0.005	<0.005	0.0142	**0.031**	<0.005	**0.0108**	0.0358	<0.010	0.0125	**0.0118**	**0.0069**	**0.0092**	0.0027	**0.0033**	**0.0085**	<0.0020	0.0568	0.0393	**0.0031**	**0.0453**	0.289	**0.109**	0.0318
MW-P2	10/30/2003	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	0.00067	<0.0010	<0.0010	**0.00032**	**0.00049**	**0.00043**	0.0003	**0.0003**	**0.00039**	<0.00020	0.00036	<0.0010	0.00029	<0.0010	0.0061	<0.0010	0.00078
MW-P2	2/17/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	**0.00016 J**	**0.00024**	**0.00021**	0.00017 J	0.00017 J	**0.00020 J**	<0.00020	<0.0010	<0.0010	0.00018 J	<0.0010	0.00054 J	<0.0010	0.00036 J
MW-P2	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.00021**	**0.00029**	**0.00023**	0.00019	**0.0002**	**0.00023**	<0.00019	0.00036 J	<0.00095	0.00029	<0.00095	<0.00095	<0.00095	0.00068 J
MW-P2	8/1/2006	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	< 0.0095	< 0.0095	< 0.0095	0.000056 J	<0.00019	0.000077 J	<0.00109	<0.00109	<0.00109	<0.00019	< 0.0095	< 0.0095	0.000064 J	< 0.0095	< 0.0095	< 0.0095	< 0.0095
MW-P2	7/24/2007	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	**0.00024**	**0.00041**	**0.00037**	0.00033	**0.00029**	**0.00031**	0.000071 J	0.00035 J	<0.00097	0.00034	<0.00097	<0.00097	<0.00097	<0.00097
MW-P2	11/20/2008	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.00083 J	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0017	<0.00098	<0.00098
MW-P2	12/10/2009	573.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0013	<0.00096	<0.00096	**0.0005**	**0.00083**	**0.0015**	0.00059	**0.00047**	**0.00063**	<0.00019	<0.00096	<0.00096	**0.00065**	<0.00096	<0.00096	<0.00096	<0.00096
MW-P2	11/10/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0017	<0.00095	<0.00095
MW-P2	7/16/2015	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-P2	3/26/2018	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00094	<0.00094	<0.00094	<0.00094	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	<0.00094	<0.00019	<0.00094	<0.00094	<0.00094	<0.00094
MW-P3	8/14/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.058	<0.010	<0.010	<0.010	<0.010	<0.010	0.044
MW-P3	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P3	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P3	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P3	8/11/2003	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	**0.00024**	**0.00042**	**0.00051**	0.00031	0.00017	**0.00029**	<0.00020	0.00043	<0.0010	0.00033	<0.0010	<0.0010	<0.0010	0.0004
MW-P3	10/30/2003	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.0021	0.00014	0.00013	<0.00020	0.00011	0.00012	<0.00020	<0.0010	<0.0010	0.0001	<0.0010	<0.0010	<0.0010	<0.0010
MW-P3	2/17/2004	--	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	**0.00021**	**0.00031**	**0.00029**	0.00021	**0.00023**	**0.00026**	<0.00020	0.00035 J	<0.0010	0.00023	<0.0010	<0.0010	<0.0010	0.00039 J
MW-P3	9/9/2004	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	**0.00026**	**0.00035**	**0.00034**	0.00024	**0.00023**	**0.00027**	<0.00019	0.00055 J	<0.00097	0.00034	<0.00097	<0.00097	<0.00097	0.00053 J
MW-P3	8/1/2006	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.00015 J**	**0.00023**	**0.00022**	0.00015 J	0.00017 J	0.00017 J	<0.00019	0.00025 J	<0.00095	0.00018 J	<0.00095	<0.00095	<0.00095	0.00025 J
MW-P3	7/24/2007	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0011 J	<0.0049	<0.0049	<0.00098	0.0015	<0.00098	<0.00098	**0.00025**	**0.00043**	**0.00043**	0.00032	**0.00034**	**0.00033**	0.000066 J	0.00044 J	0.00052 J	0.00033	<0.00098	<0.00098	<0.00098	0.00061J
MW-P3	11/19/2008	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	0.000049 J	0.000065 J	0.000087 J	0.000049 J	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	0.000054 J	<0.00096	<0.00096	<0.00096	<0.00096
MW-P3	12/10/2009	513.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	**0.00049**	**0.00075**	**0.001**	0.00036	**0.00032**	**0.00054**	<0.00019	<0.00097	<0.00097	0.00039	<0.00097	<0.00097	<0.00097	0.001
MW-P3	11/10/2011	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0025	<0.00097	<0.00097
MW-P3	12/9/2011	--	Well Abandoned December 2011 in Preparation for Site Excavation																											
MW-P4	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.0066	<0.010	<0.050	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.01	0.0054	<0.010	<0.010	<0.010	<0.010	0.0078
MW-P4	8/4/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.0065	<0.010	<0.050	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0081	0.0059	<0.010	<0.010	<0.010	<0.010	0.0051
MW-P4	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	0.0054	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P4	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P4	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0051	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P4	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0056	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P4	8/11/2003	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0407	**0.0554**	<0.0051	<0.0010	0.118	0.0026	0.0069	**0.0035**	**0.0019**	**0.0026**	0.00074	**0.00074**	**0.0025**	0.00023	0.0322	0.0757	**0.00091**	0.0013	0.0834	**0.0269**	0.0151
MW-P4	10/30/2003	--	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.0019	<0.0054	<0.0010	0.0046	0.00067	0.001	**0.0028**	**0.0029**	**0.0029**	0.0013	**0.0022**	**0.0028**	**0.00036**	0.0082	0.0024	**0.0016**	<0.0010	<0.0010	<0.0010	0.0049
MW-P4	2/18/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0015 J	<0.0051	<0.0010	0.0092	0.00072 J	0.00093 J	**0.0014**	**0.0016**	**0.0018**	0.00083	**0.0011**	**0.0015**	0.00019 J	0.0064	0.006	**0.00093**	<0.0010	0.0011	0.00051 J	0.0034
MW-P4	9/9/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0136	0.0132	<0.0048	<0.00095	0.0205	0.001	0.0016	**0.0025**	**0.0022**	**0.0025**	0.0011	**0.0014**	**0.0021**	**0.00032**	0.0098	0.0129	**0.0013**	<0.00095	0.0318	0.0029	0.0058
MW-P4	8/1/2006	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0038 J	0.0023 J	<0.005	<0.0010	0.0239	0.00068 J	0.00064 J	**0.00056**	**0.0006**	**0.0006**	0.00026	**0.00044**	**0.00059**	0.000061 J	0.0054	0.0113	0.00033	<0.0010	<0.0010	<0.0010	0.0021
MW-P4	7/24/2007	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0046	0.00054 J	0.00078 J	**0.0032**	**0.0038**	**0.0042**	0.0019	**0.0026**	**0.0035**	**0.00058**	0.0077	0.0026	**0.0023**	<0.00096	0.00072 J	0.00092 J	0.0064
MW-P4	11/19/2008	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0024	<0.00097	<0.00097	**0.00078**	**0.001**	**0.0013**	0.00056	**0.00045**	**0.00056**	0.00015 J	0.0029	<0.00097	**0.00068**	<0.00097	<0.00097	<0.00097	0.0016
MW-P4	12/9/2009	393.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0045	<0.00097	<0.00097	**0.0015**	**0.0019**	**0.0029**	0.00079	**0.001**	**0.0015**	0.00019	0.004	<0.00097	**0.00095**	<0.00097	<0.00097	<0.00097	0.0034
MW-P4	11/10/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0025	<0.00096	<0.00096	<0.00019	<0.00019	0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0027	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	0.001
MW-P4	7/16/2015	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0025	<0.00096	<0.00096	<0.00019	<0.00019	0.0021	<0.00019	0.00019	0.00019	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096
MW-P4	4/9/2018	--	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0159	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	0.0032	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098
MW-P4	12/16/2019	--	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.00094	0.0041	<0.00094	<0.00094	<0.00019	<0.00019	0.00026	<0.00019	<0.00019	<0.00019	<0.00019	<0.00094	0.00097	<0.00019	<0.00094	<0.00094	<0.00094	<0.00094

Table 4.
Groundwater SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name		Turbidity (NTU)	2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		--	0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		--	0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-P5	5/18/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	8/4/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	0.007	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	10/30/2003	--	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	*<0.0010*	0.0083	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	0.00037
MW-P5	2/17/2004	--	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	0.0073	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.00071 J	<0.00020	<0.0010	0.0029	<0.0010	<0.0010
MW-P5	11/19/2008	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	0.000058 J	<0.00019	0.000080 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-P5	12/9/2009	182.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0124	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-P5	11/10/2011	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-P5	7/16/2015	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096
MW-P5	3/22/2018	2	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-P6	5/18/2000	--	NA	NA	0.0059	NA	<0.010	<0.010	<0.010	0.021	**0.046**	*<0.010*	*<0.050*	0.066	<0.010	0.0075	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	0.018	0.049	*<0.010*	**0.055**	0.51	**0.061**	0.013
MW-P6	8/14/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.022	**0.023**	*<0.010*	*<0.050*	0.046	0.014	<0.010	**0.011**	*<0.010*	*<0.010*	<0.010	*<0.010*	**0.01**	*<0.010*	0.048	0.035	*<0.010*	<0.010	<0.010	<0.010	0.044
MW-P6	11/13/2000	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.0051	*<0.010*	*<0.050*	0.0097	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	0.005	*<0.010*	<0.010	0.0068	<0.010	<0.010
MW-P6	2/1/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.0068	*<0.010*	*<0.050*	0.012	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	0.0069	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P6	6/21/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.01	*<0.010*	*<0.050*	0.019	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	0.0064	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P6	12/11/2001	--	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.01	*<0.010*	*<0.050*	0.018	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	0.0096	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P6	8/11/2003	--	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	0.0041	0.0089	<0.0057	*<0.0010*	0.0133	0.00061	0.0017	**0.00064**	**0.00067**	**0.00088**	0.00048	**0.00029**	**0.00066**	0.00012	0.0048	0.0088	**0.00058**	<0.0010	0.0015	0.00091	0.0026
MW-P6	10/30/2003	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	0.0112	**0.0208**	<0.0052	<0.0010	0.027	0.0015	0.0037	**0.002**	**0.002**	**0.002**	0.001	**0.0013**	**0.0021**	0.00027	0.0117	0.0221	**0.0013**	<0.0010	0.00035	0.0011	0.0072
MW-P6	2/17/2004	--	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	0.0029 J	0.006	<0.0052	<0.0010	0.0111	0.00082 J	0.0015	**0.0013**	**0.0016**	**0.0017**	0.00096	**0.001**	**0.0016**	0.00021	0.0041	0.0068	**0.001**	<0.0010	0.00030 J	0.00092 J	0.0025
MW-P6	9/10/2004	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0091	<0.00095	0.00075	**0.0004**	**0.00034**	**0.00037**	0.00019	**0.00021**	**0.00038**	<0.00019	0.003	0.0058	0.00031	<0.00095	0.00052	0.0011	0.0016
MW-P6	8/1/2006	--	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0103	0.00049 J	0.0005 J	**0.00039**	**0.00046**	**0.00043**	0.00029	**0.00032**	**0.00044**	0.000058 J	0.0046	0.0084	0.00039	<0.00095	0.00031 J	<0.00095	0.0024
MW-P6	7/24/2007	--	Well abandoned August 2006 in preparation for Creek Liner Installation in August 2007																											
RW-1	7/15/2015	14.2	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	**0.232**	**0.15**	<0.023	<0.045	0.203	<0.045	<0.045	*<0.0091*	*<0.0091*	*<0.0091*	<0.0091	*<0.0091*	*<0.0091*	*<0.0091*	<0.0045	0.142	<0.0091	**0.185**	**2.68**	**0.198**	<0.045
RW-4	4/15/2010	75.1	<0.095	**1.38**	0.374	0.482	<0.095	<0.095	<0.095	**0.479**	**0.63**	<0.095	*<0.38*	0.886	*<0.38*	<0.38	**0.157**	**0.083**	**0.114**	<0.076	*<0.076*	**0.122**	*<0.076*	**0.881**	0.731	*<0.076*	**1.37**	**13.2**	**1.59**	0.566
RW-5	4/15/2010	364.0	<0.019	0.392	0.042	0.0359	<0.019	<0.019	<0.019	**0.312**	**0.294**	<0.019	*<0.19*	0.36	*<0.19*	<0.19	*<0.038*	*<0.038*	*<0.038*	<0.038	*<0.038*	*<0.038*	*<0.038*	<0.19	0.256	*<0.038*	**0.692**	**7.16**	**0.397**	<0.19
RW-6	4/15/2010	218.0	<0.019	0.606	0.229	0.267	0.021	<0.019	<0.019	**0.327**	**0.25**	<0.019	*<0.38*	0.381	*<0.38*	<0.38	*<0.38*	*<0.076*	*<0.076*	<0.076	*<0.076*	*<0.076*	*<0.076*	<0.38	<0.38	*<0.076*	**0.719**	**9.33**	*<0.38*	<0.38

0.68	BOLD - Concentration exceeds 1996 IDEM VRP Tier II Default Residential Closure Levels
770	BOLD/SHADE - Concentration exceeds 1996 IDEM VRP Tier II Default Non-residential (Industrial) Closure Levels
<	Analyte not detected above the laboratory's Run Detection Limit, displayed as ND (Non-detect) in laboratory analytical data packages.
<0.050	*Italics* - Analyte not detected above the laboratory's Run Detection Limit, however Detection Limit is above VRP Closure Levels
NA	Not Analyzed
*	Cleanup goals with an asterisk are taken form the January 31, 2006 IDEM RISC Technical Guide Appendix 1, since the Constituents did not have cleanup goals in the 1996 VRP Guidance Manual
***	Benzo(g,h,i)perylene does not have a cleanup goal in the 1996 VRP Guidance Manual or in the current IDEM RISC Technical Guide Appendix 1, dated January 26, 2006.

Table 5.
Surface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			16.6	1,000	1,000	1,000	612	1,000 **
Location ID	Sample Date	Depth Interval						
A1	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A2	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A3	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A4	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A5	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A6	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A7	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A8	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A9	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A10	8/7/2003	0 - 2	< .0057	< .0057	< .0057	< .017	25.1	58.2
A10	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A10E	8/7/2003	0 - 2	< 15	< 15	< 15	< 46	18.9	26.7
A10N	8/7/2003	0 - 2	< .0056	< .0056	< .0056	< .017	3.2	< 12
A10S	8/7/2003	0 - 2	< 2.6	1.39	< 2.6	4.43	16.9	21.5
A10W	8/7/2003	0 - 2	< .0063	< .0063	< .0063	< .019	35.1	69.0
A11	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A12	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A13	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
A14	8/5/2003	0 - 2	< .0061	< .0061	< .0061	< .018	7.7	15.6
A15	8/5/2003	0 - 2	< .0058	< .0058	< .0058	< .018	14.5	29.3
A16	8/5/2003	0 - 2	< .0052	< .0052	< .0052	< .016	10.6	28.0
B1	8/7/2003	0 - 2	< .0064	< .0064	< .0064	< .019	475	55.4
B1	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
B1E	8/7/2003	0 - 2	< .0062	< .0062	< .0062	< .019	297	29.9
B1N	8/7/2003	0 - 2	< .006	< .006	< .006	< .018	180	110
B1S	8/7/2003	0 - 2	< .0057	< .0057	< .0057	< .017	124	169
B1W	8/7/2003	0 - 2	< .006	< .006	< .006	< .018	3.3	13.3
B2	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
B3	8/7/2003	0 - 2	< .0062	< .0062	< .0062	< .019	31.9	33.8
B3	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
B3E	8/7/2003	0 - 2	< .0056	< .0056	< .0056	< .017	15.2	24.6
B3N	8/7/2003	0 - 2	< 5.3	2.36	< 5.3	10.9	220	135
B3S	8/8/2003	0 - 2	< .0058	< .0058	< .0058	< .018	12.2	17.6
B3W	8/8/2003	0 - 2	< .0056	< .0056	< .0056	.006	4.4	14.0
B4	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
B5	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
B6	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
B7	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
B8	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
B9	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
B10	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
B10	8/7/2003	0 - 2	< .0048	< .0048	< .0048	< .014	57.9	17.1
B10E	8/7/2003	0 - 2	< .0066	< .0066	< .0066	< .02	10.9	25.2
B10N	8/7/2003	0 - 2	< .0046	< .0046	< .0046	< .014	81.6	26.5
B10S	8/7/2003	0 - 2	< .0057	< .0057	< .0057	< .017	26.7	62.8
B10W	8/7/2003	0 - 2	< .0051	< .0051	< .0051	< .015	140	46.2

Table 5.
Surface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			16.6	1,000	1,000	1,000	612	1,000 **
Location ID	Sample Date	Depth Interval						
B11	4/4/2000	0 - 2	N/A	N/A	N/A	N/A	N/A	N/A
B12	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
B13	4/3/2000	0 - 2	NA	NA	NA	NA	NA	NA
C1	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
C2	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
C3	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
C4	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
C5	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
C6	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
C7	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
C8	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
D1	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
D2	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
D3	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
D4	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
D4	8/6/2003	0 - 2	< .0051	< .0051	< .0051	< .015	9.1	< 12
D4E	8/6/2003	0 - 2	< .0065	< .0065	< .0065	< .019	112	100
D4N	8/6/2003	0 - 2	< .0039	< .0039	< .0039	< .012	17.5	13.8
D4S	8/6/2003	0 - 2	< .0059	< .0059	< .0059	< .018	6.1	13.8
D4W	8/6/2003	0 - 2	< .0042	< .0042	< .0042	< .013	91.9	50.5
D5	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
D6	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
D6	8/6/2003	0 - 2	< .0077	< .0077	< .0077	< .023	9.5	72.8
D6N	8/6/2003	0 - 2	< .0063	< .0063	< .0063	< .019	7.4	65.4
D6S	8/6/2003	0 - 2	< .0061	< .0061	< .0061	< .018	6.4	54.9
D6E	8/6/2003	0 - 2	< .0066	< .0066	< .0066	< .02	5.8	54.5
D6W	8/6/2003	0 - 2	< .0064	< .0064	< .0064	< .019	20.2	52.4
D7	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
D8	8/6/2003	0 - 2	< .0077	< .0077	< .0077	< .023	9.5	72.8
D8	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
D8E	8/6/2003	0 - 2	< .0066	< .0066	< .0066	< .02	5.8	54.5
D8N	8/6/2003	0 - 2	< .0063	< .0063	< .0063	< .019	7.4	65.4
D8S	8/6/2003	0 - 2	< .0061	< .0061	< .0061	< .018	6.4	54.9
D8W	8/6/2003	0 - 2	< .0064	< .0064	< .0064	< .019	20.2	52.4
D9	8/6/2003	0 - 2	< .0059	< .0059	< .0059	< .018	8.2	12.0
D10	8/6/2003	0 - 2	< .27	< .27	< .27	< .8	NA	NA
E1	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
E1	8/6/2003	0 - 2	< .0046	< .0046	< .0046	< .014	8.3	39.7
E1E	8/6/2003	0 - 2	< .0063	< .0063	< .0063	< .019	9.4	40.8
E1N	8/6/2003	0 - 2	< .0052	< .0052	< .0052	< .016	41.9	90.2
E1S	8/6/2003	0 - 2	< .0063	< .0063	< .0063	< .019	5.1	< 12
E1W	8/6/2003	0 - 2	< .0056	< .0056	< .0056	< .017	14.7	19.9
E2	8/6/2003	0 - 2	< .0061	< .0061	< .0061	< .018	13	14.6
E2	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
E2E	8/6/2003	0 - 2	< .0059	< .0059	< .0059	< .018	8.3	25.6
E2N	8/6/2003	0 - 2	< .0044	< .0044	< .0044	< .013	47.2	< 11

Table 5.
Surface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			16.6	1,000	1,000	1,000	612	1,000 **
Location ID	Sample Date	Depth Interval						
E2S	8/6/2003	0 - 2	< .0071	< .0071	< .0071	< .021	117	70.3
E2W	8/6/2003	0 - 2	< .0036	< .0036	< .0036	< .011	7.8	11.7
E3	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
E3	8/6/2003	0 - 2	< .0064	< .0064	< .0064	< .019	9.7	126
E3E	8/6/2003	0 - 2	< .0066	< .0066	< .0066	< .02	7.6	114
E3N	8/6/2003	0 - 2	< .0064	< .0064	< .0064	< .019	30.0	169
E3S	8/6/2003	0 - 2	< .0062	< .0062	< .0062	< .018	6.1	73.4
E3W	8/6/2003	0 - 2	< .0072	< .0072	< .0072	< .022	7.0	50.2
E4	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
E4	8/6/2003	0 - 2	< .0052	< .0052	< .0052	< .016	9.8	66.7
E4E	8/6/2003	0 - 2	< .004	< .004	< .004	< .012	7.8	63.6
E4N	8/6/2003	0 - 2	< .0056	< .0056	< .0056	< .017	5.4	60.2
E4S	8/6/2003	0 - 2	< .0055	< .0055	< .0055	< .017	9.8	45.9
E4W	8/6/2003	0 - 2	< .0065	< .0065	< .0065	< .02	9.3	98.4
E5	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
E6	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
E7	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
E8	4/5/2000	0 - 2	NA	NA	NA	NA	NA	NA
E9	8/6/2003	0 - 2	< .0055	< .0055	< .0055	< .016	19.4	19.5
F1	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
F2	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
F3	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
F4	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
F5	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
F5	8/5/2003	0 - 2	< .0061	< .0061	< .0061	< .018	7.8	< 13
F5E	8/5/2003	0 - 2	< .0056	< .0056	< .0056	< .017	3.3	13.0
F5N	8/5/2003	0 - 2	< .0067	< .0067	< .0067	< .02	14.3	40.3
F5S	8/5/2003	0 - 2	< .0065	< .0065	< .0065	< .019	7.0	13.9
F5W	8/5/2003	0 - 2	< .0061	< .0061	< .0061	< .018	205	32.3
F6	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
F7	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
F8	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
G1	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
G2	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
G3	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
G4	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
G5	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
G6	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
G7	4/4/2000	0 - 2	NA	NA	NA	NA	NA	NA
G7	8/5/2003	0 - 2	< .0053	< .0053	< .0053	< .016	10.5	< 11
G7E	8/5/2003	0 - 2	< .0063	< .0063	< .0063	< .019	14.9	85.2
G7N	8/5/2003	0 - 2	< .0057	< .0057	< .0057	< .017	8.2	94.9
G7S	8/5/2003	0 - 2	< .0059	< .0059	< .0059	< .018	3.5	< 11
G7W	8/5/2003	0 - 2	< .0062	< .0062	< .0062	< .019	31.1	65.6
G8	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
H1	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA

Table 5.
Surface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			16.6	1,000	1,000	1,000	612	1,000 **
Location ID	Sample Date	Depth Interval						
H2	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
H3	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
H4	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
H5	8/5/2003	0 - 2	< .0061	< .0061	< .0061	< .018	72.6	25.6
H5	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
H5E	8/5/2003	0 - 2	< .0067	< .0067	< .0067	< .02	58.8	598
H5N	8/5/2003	0 - 2	< .0054	< .0054	< .0054	< .016	21.1	< 12
H5S	8/5/2003	0 - 2	< .0059	< .0059	< .0059	< .018	31.2	30.5
H5W	8/5/2003	0 - 2	< .0054	< .0054	< .0054	< .016	57.6	30.5
H6	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
H7	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
H8	4/6/2000	0 - 2	NA	NA	NA	NA	NA	NA
I1	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
I2	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
I3	8/5/2003	0 - 2	< .0059	< .0059	< .0059	< .018	29.1	14.3
I3	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
I3E	8/5/2003	0 - 2	< .0053	< .0053	< .0053	< .016	22.9	14.6
I3N	8/5/2003	0 - 2	< .0052	< .0052	< .0052	< .015	100	< 9.9
I3S	8/5/2003	0 - 2	< .0057	< .0057	< .0057	< .017	11.4	< 12
I3W	8/5/2003	0 - 2	< .0075	< .0075	< .0075	< .023	7.4	27.9
I4	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
I5	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
I6	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
I7	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
I8	4/11/2000	0 - 2	NA	NA	NA	NA	NA	NA
J1	8/20/2003	0 - 2	< .0041	< .0041	< .0041	< .012	54.2	117
J2	8/20/2003	0 - 2	< .0048	< .0048	< .0048	< .015	13.3	25.2
J3	8/20/2003	0 - 2	< .0059	< .0059	< .0059	< .018	159	43.9
J4	8/21/2003	0 - 2	< .008	< .008	< .008	< .024	242	82.8
J5	8/21/2003	0 - 2	< .0061	< .0061	< .0061	< .018	36.1	18.4
J6	8/21/2003	0 - 2	< .006	< .006	< .006	< .018	78.6	109
J7	8/21/2003	0 - 2	< .006	< .006	< .006	< .018	174	66.9
J8	8/21/2003	0 - 2	< .0057	< .0057	< .0057	< .017	5.9	14.5
J9	8/21/2003	0 - 2	< .0059	< .0059	< .0059	< .018	20.9	117
J10	8/20/2003	0 - 2	< .005	< .005	< .005	< .015	15.6	70.5
J11	8/21/2003	0 - 2	< .0064	< .0064	< .0064	< .019	54.4	46.7
K1	8/21/2003	0 - 2	< .0061	< .0061	< .0061	< .018	188	129
K2	8/21/2003	0 - 2	< .0061	< .0061	< .0061	< .018	62.3	80.3
K3	8/21/2003	0 - 2	< .0071	< .0071	< .0071	< .021	29.8	42.5
K4	8/21/2003	0 - 2	< .0042	< .0042	< .0042	< .013	6.6	16.2
K5	8/21/2003	0 - 2	< .0056	< .0056	< .0056	< .017	85.6	55.8
K7	8/21/2003	0 - 2	< .0054	< .0054	< .0054	< .016	37.0	69.7
K8	8/21/2003	0 - 2	< .0056	< .0056	< .0056	< .017	11.4	25.6
K9	8/20/2003	0 - 2	< .0061	< .0061	< .0061	< .018	23.0	73.2
L1	8/20/2003	0 - 2	< .0054	< .0054	< .0054	< .016	95.7	194
L2	8/20/2003	0 - 2	< .005	< .005	< .005	< .015	50.0	81.3

Table 5.
Surface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			16.6	1,000	1,000	1,000	612	1,000 **
Location ID	Sample Date	Depth Interval						
L3	8/20/2003	0 - 2	< .0056	< .0056	< .0056	< .017	51.4	182
L4	8/20/2003	0 - 2	< .0055	< .0055	< .0055	< .017	59.5	82.1
L5	8/20/2003	0 - 2	< .0045	< .0045	< .0045	< .013	78.5	48.5
L6	8/21/2003	0 - 2	< .0079	< .0079	< .0079	< .024	18.7	22.5
L7	8/21/2003	0 - 2	< .0056	< .0056	< .0056	< .017	85.2	40.5
L8	8/21/2003	0 - 2	< .0061	< .0061	< .0061	< .018	12.0	23.3
L9	8/21/2003	0 - 2	< .0062	< .0062	< .0062	< .019	140	86.6
L10	8/21/2003	0 - 2	< .0072	< .0072	< .0072	< .022	NA	NA
L11	8/21/2003	0 - 2	< .0068	< .0068	< .0068	< .02	232	74.9
L12	8/21/2003	0 - 2	< .0067	< .0067	< .0067	< .02	4.6	14.2
L13	8/21/2003	0 - 2	< .0059	< .0059	< .0059	< .018	19.1	24.4
LAGOON A1	8/8/2003	0 - 2	< .0046	< .0046	< .0046	< .014	64.2	60.2
LAGOON A2	8/8/2003	0 - 2	< .006	< .006	< .006	< .018	12.3	22.4
LAGOON A3	8/8/2003	0 - 2	< .0059	< .0059	< .0059	< .018	67.9	151
LAGOON B1	8/8/2003	0 - 2	< .0049	< .0049	< .0049	< .015	7.0	16.3
LAGOON B2	8/8/2003	0 - 2	< .0048	< .0048	< .0048	< .014	7.1	13.0
LAGOON B3	8/8/2003	0 - 2	< .0057	< .0057	< .0057	< .017	47.5	113
M1	8/20/2003	0 - 2	< .0073	< .0073	< .0073	< .022	60.2	22.9
M2	8/20/2003	0 - 2	< .0071	< .0071	< .0071	< .021	5.0	14.6
M3	8/20/2003	0 - 2	< .0055	< .0055	< .0055	< .016	5.9	18.0
M4	8/20/2003	0 - 2	< .0066	< .0066	< .0066	< .02	3.9	13.2
M5	8/20/2003	0 - 2	< .0065	< .0065	< .0065	< .02	3.7	14.0
M6	8/20/2003	0 - 2	< .0063	< .0063	< .0063	< .019	3.9	13.0
M7	8/20/2003	0 - 2	< .0051	< .0051	< .0051	< .015	26.3	20.3
M8	8/20/2003	0 - 2	< .006	< .006	< .006	< .018	6.7	17.6
M9	8/21/2003	0 - 2	< .0071	< .0071	< .0071	< .021	6.5	15.1
MW-14S	7/30/2003	0 - 2	< .005	< .005	< .005	< .015	NA	NA
MW-14D	7/30/2003	0 - 2	< .0054	< .0054	< .0054	< .016	7.2	11.6
MW-15S	7/31/2003	0 - 2	< .005	< .005	< .005	< .015	NA	NA
MW-15D	7/31/2003	0 - 2	.0064	.028	.0422	.12	4.4	< 12
MW-16S	7/31/2003	0 - 2	< .0062	< .0062	< .0062	< .019	NA	NA
MW-16D	7/31/2003	0 - 2	< .006	< .006	< .006	< .018	5.8	13.0
MW-17S	7/31/2003	0 - 2	< .0059	< .0059	< .0059	< .018	83.4	30.3
MW-17D	7/31/2003	0 - 2	< .0061	< .0061	< .0061	< .018	35.2	74.4
MW-18S	8/1/2003	0 - 2	< .0056	< .0056	< .0056	< .017	18.1	57.1
MW-18D	8/1/2003	0 - 2	< .0057	< .0057	< .0057	< .017	7.3	26.3
MW-19S	8/1/2003	0 - 2	< .006	< .006	< .006	< .018	7.4	14.5
MW-19D	8/1/2003	0 - 2	< .0057	< .0057	< .0057	< .017	8.8	17.7
MW-20S	10/24/2003	0 - 2	< .0068	< .0068	< .0068	< .021	6.2	105
MW-20D	10/27/2003	0 - 2	<.0063	<.0063	<.0063	<.019	6.7	157
MW-21S	10/24/2003	0 - 2	< .0066	< .0066	< .0066	< .02	5.2	108
MW-21D	10/27/2003	0 - 2	<.0063	<.0063	<.0063	<.019	6.2	103
MW-22D	10/27/2003	0 - 2	<.0056	<.0056	<.0056	<.017	14.4	28.3
MW-23D	10/23/2003	0 - 2	< .0077	< .0077	< .0077	< .023	7.1	109
MW-24A	7/21/2008	0 - 1.5	< 0.0053	< 0.0053	< 0.0053	< 0.0016	8.6	78.8
MW-25A	7/24/2008	0 - 2	< 0.052	0.466	0.202	1.25	53.4	96.6

Table 5.
Surface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			16.6	1,000	1,000	1,000	612	1,000 **
Location ID	Sample Date	Depth Interval						
MW-26A	7/29/2008	0 - 2	< 0.0052	< 0.0052	< 0.0052	< 0.016	6.5	27.7
MW-27A	8/5/2008	0 - 2	< 0.0054	< 0.0054	< 0.0054	< 0.016	2.9	10.8
MW-27B	8/8/2008	0 - 2	< 0.0061	< 0.0061	< 0.0061	< 0.018	6.2	125
MW-28A	1/5/2009	0 - 2	< 0.0064	< 0.0064	< 0.0064	< 0.019	6.2	71.3
MW-28B	1/12/2009	0 - 2	< 0.0065	< 0.0065	< 0.0065	< 0.020	6.4	< 24
MW-28C	1/14/2009	0 - 2	< 0.0055	< 0.0055	< 0.0055	< 0.017	5.4	74.7
MW-29A	1/22/2009	0 - 2	0.368 J	0.904 J	0.611 J	2.58 J	9.8	36.6
MW-29B	2/3/2009	0 - 2	< 0.0071	0.0016 J	< 0.0071	< 0.021	21.6	34.5
MW-30A	10/12/2009	0 - 2	< 0.0059	< 0.0059	< 0.0059	< 0.018	3.4	12.5
MW-30B	10/14/2009	0 - 2	<0.0054	< 0.0054	< 0.0054	< 0.016	8.8	15.4
MW-30C	10/15/2009	0 - 2	< 0.010	<0.010	< 0.010	< 0.030	13	26.5
MW-31A	10/19/2009	0 - 2	< 0.0060	< 0.0060	< 0.0060	< 0.018	4.7	33.2
MW-31B	10/20/2009	0 - 2	< 0.0055	0.0017 J	< 0.0055	< 0.017	3.8	11.5
MW-31C	10/26/2009	0 - 2	< 0.0052	0.0015 J	< 0.0052	< 0.016	5.9	73.9
MW-32A	10/27/2009	0 - 2	< 0.0050	< 0.0050	< 0.0050	< 0.015	4	16.9
MW-32B	4/9/2012	0 -2	<0.0044	<0.0044	<0.0044	<0.013	19.4	35.5
MW-33A	11/2/2009	0 - 2	< 0.0063	< 0.0063	< 0.0063	< 0.019	11.3	18.2
MW-33B	11/5/2009	0 - 2	< 0.0062	< 0.0062	< 0.0062	< 0.019	7	21.8
MW-33C	11/9/2009	0 - 2	< 0.0046	< 0.0046	< 0.0046	< 0.014	7.1	21.4
MW-34A	11/18/2009	0 - 2	< 0.0058	< 0.0058	< 0.0058	< 0.017	32	59.5
MW-35A	2/8/2010	0 - 2	<0.0069	<0.0069	<0.0069	<0.021	7.3	14.6
MW-35B/C	2/8/2010	0 - 2	<0.0078	<0.0078	<0.0078	<0.024	7.9	25.4
MW-36A/B	2/11/2010	0 - 2	<0.0069	<0.0069	<0.0069	<0.021	5.1	19.2
MW-36C	2/15/2010	0 - 2	<0.0046	<0.0046	<0.0046	<0.014	10	18.3
MW-37A/B	2/17/2010	0 - 2	<0.0054	<0.0054	<0.0054	<0.016	6.9	44.9
MW-37C	9/2/2011	0 - 2	NA	NA	NA	NA	5.6	61
MW-38A	3/22/2010	0 - 2	<0.0055	<0.0055	<0.0055	<0.016	11.8	17.4
MW-38B	3/23/2010	0 - 2	<0.0051	<0.0051	<0.0051	<0.15	9.6	14.2
MW-39A	3/23/2010	0 - 2	<0.0057	<0.0057	<0.0057	<0.017	10.4	<23
MW-39B	3/23/2010	0 - 2	<0.0049	<0.0049	<0.0049	<0.015	8.2	25.4
MW-40A	4/2/2010	0 - 2	<0.0052	<0.0052	<0.0052	<0.016	4.2	<23
MW-40B/C	4/6/2010	0 - 2	<0.0044	<0.0044	<0.0044	<0.013	7.2	13.2
MW-41A	11/2/2010	0 - 2	< 0.0059	< 0.0059	< 0.0059	0.018	6.7	18.5
MW-42A	11/3/2010	0 - 2	<0.0042	<0.0042	<0.0042	<0.012	7.2	16.6
MW-42B	11/3/2010	0 - 2	< 0.0058	< 0.0058	< 0.0058	< 0.017	8	15.3
MW-43A	11/9/2010	0 - 2	<0.0055	<0.0055	<0.0055	<0.016	7.7	26.3
MW-44A	11/11/2010	0 - 2	<0.0062	<0.0062	<0.0062	<0.019	8.2	17.9
MW-45A/B	11/12/2010	0 - 2	<0.0063	<0.0063	<0.0063	<0.019	4.5	18.4
MW-45C	11/17/2010	0 - 2	<0.0063	<0.0063	<0.0063	<0.019	5.9	21
MW-46A	11/18/2010	0 - 2	<0.0064	<0.0064	<0.0064	<0.019	3.8	12.9
MW-47A	11/19/2010	0 - 2	<0.0057	<0.0057	<0.0057	<0.017	4.5	46.1
MW-48	1/4/2011	0 - 2	<0.0041	<0.0041	<0.0041	<0.012	4.8	21.1
MW-49A	7/26/2011	0 - 2	<0.0051	<0.0051	<0.0051	<0.015	5.7	12.9
MW-49C	7/28/2011	0 - 2	<0.0041	<0.0041	<0.0041	<0.012	17.4	21.6
MW-50A	8/1/2011	0 - 2	<0.0044	<0.0044	<0.0044	<0.013	1.7	0.87
MW-51A	8/4/2011	0 - 2	<0.0054	<0.0054	<0.0054	<0.016	5.1	18

Table 5.
Surface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			16.6	1,000	1,000	1,000	612	1,000 **
Location ID	Sample Date	Depth Interval						
MW-52A	8/10/2011	0 - 2	<0.0042	<0.0042	<0.0042	<0.013	6.9	12.5
MW-53A	8/29/2011	0 - 2	<0.0064	<0.0064	<0.0064	<0.019	8.1	31.4
MW-54A	4/11/2012	0 - 2	<0.0056	<0.0056	<0.0056	<0.017	4.8	23.2
MW-55A	4/12/2012	0 - 2	<0.0039	<0.0039	<0.0039	<0.012	13.9	14.9
MW-56A	4/16/2012	0 - 2	<0.0041	<0.0041	<0.0041	<0.012	4.5	11.3
RW-1	10/29/2009	0 - 2	1.13	1.92	0.652	3.11	9.4	86.8
RW-2	11/10/2009	0 - 2	< 0.0064	< 0.0064	< 0.0064	< 0.019	6.5	10.5
RW-3	11/11/2009	0 - 2	< 0.0065	< 0.0065	< 0.0065	< 0.019	6.3	11.8
RW-4	11/13/2009	0 - 2	< 0.0055	< 0.0055	< 0.0055	< 0.017	3.6	17.3
RW-5	11/16/2009	0 - 2	< 0.011	< 0.011	< 0.011	< 0.034	4.4	67.8
RW-6	3/31/2010	0 - 2	<0.0058	<0.0058	<0.0058	<0.017	5.8	57.2
RW-7	11/1/2010	0 - 2	<0.0071	<0.0071	<0.0071	<0.021	22.9	16.3
RW-8	4/18/2012	0 - 2	<0.0072	<0.0072	<0.0072	<0.022	78.1	177
N1	8/19/2003	0 - 2	< .0054	< .0054	< .0054	< .016	207	55.3
N2	8/19/2003	0 - 2	< .007	< .007	< .007	< .021	165	65.6
N3	8/19/2003	0 - 2	< .0057	< .0057	< .0057	< .017	4.2	< 11
N4	8/19/2003	0 - 2	< .0061	< .0061	< .0061	< .018	6.0	15.1
N5	8/19/2003	0 - 2	< .0061	< .0061	< .0061	< .018	3.7	15.0
N6	8/19/2003	0 - 2	< .0062	< .0062	< .0062	< .019	50.1	31.0
N7	8/19/2003	0 - 2	< .0052	< .0052	< .0052	< .015	61.7	52.1
N8	8/19/2003	0 - 2	< .0055	< .0055	< .0055	< .017	44.1	30.7
P1	8/19/2003	0 - 2	< .0055	< .0055	< .0055	< .016	8.1	256
P2	8/19/2003	0 - 2	< .0053	< .0053	< .0053	< .016	14.0	74.2
P3	8/19/2003	0 - 2	< .0054	< .0054	< .0054	< .016	3.5	14.8
P4	8/19/2003	0 - 2	< .0047	< .0047	< .0047	< .014	6.5	69.7
P5	8/19/2003	0 - 2	< .0058	.0109	< .0058	< .017	172	140
P6	8/19/2003	0 - 2	< .0055	< .0055	< .0055	< .016	73.2	143
P7	8/19/2003	0 - 2	< .0058	< .0058	< .0058	< .018	121	202
P8	8/19/2003	0 - 2	< .0061	< .0061	< .0061	< .018	21.2	99.0
Q1	8/19/2003	0 - 2	< .0051	.0109	0.0025	.0111	46.2	90.3
Q2	8/19/2003	0 - 2	< .0056	< .0056	< .0056	< .017	69.4	148
Q3	8/19/2003	0 - 2	< .0058	< .0058	< .0058	< .017	89	116
Q4	8/19/2003	0 - 2	< .0053	< .0053	< .0053	< .016	82.4	**1750**
Q5	8/19/2003	0 - 2	< .0051	< .0051	< .0051	< .015	33.2	62.5
Q6	8/19/2003	0 - 2	< .0048	< .0048	< .0048	< .015	14.5	16.7
Q7	8/19/2003	0 - 2	< .0064	< .0064	< .0064	< .019	35.8	314
Q8	8/19/2003	0 - 2	< .0059	< .0059	< .0059	< .018	10.9	18.9
S1	9/25/2000	0 - 2	NA	NA	NA	NA	NA	NA
S2	9/25/2000	0 - 2	NA	NA	NA	NA	NA	NA
S3	9/25/2000	0 - 2	NA	NA	NA	NA	NA	NA
S4	9/25/2000	0 - 2	NA	NA	NA	NA	NA	NA
S6	9/25/2000	0 - 2	NA	NA	NA	NA	NA	NA
S7	9/25/2000	0 - 2	NA	NA	NA	NA	NA	NA
S8	9/25/2000	0 - 2	NA	NA	NA	NA	NA	NA
S9	9/29/2000	0 - 2	NA	NA	NA	NA	NA	NA
S10	9/29/2000	0 - 2	NA	NA	NA	NA	NA	NA

Table 5.
Surface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			16.6	1,000	1,000	1,000	612	1,000 **
Location ID	Sample Date	Depth Interval						
S11	9/29/2000	0 - 2	NA	NA	NA	NA	NA	NA
S12	9/29/2000	0 - 2	NA	NA	NA	NA	NA	NA
S13	9/29/2000	0 - 2	NA	NA	NA	NA	NA	NA
S14	8/8/2003	0 - 2	< .0058	< .0058	< .0058	< .017	17.0	21.6
S14	9/29/2000	0 - 2	NA	NA	NA	NA	NA	NA
S14E	8/8/2003	0 - 2	< .0057	< .0057	< .0057	< .017	63.4	45.4
S14N	8/8/2003	0 - 2	< .0057	< .0057	< .0057	< .017	104	104
S14W	8/8/2003	0 - 2	< .0053	< .0053	< .0053	< .016	51.6	110
S-15	5/6/2004	0 - .5	< .006	< .006	< .006	< .018	38.9	70.1
S-16	5/6/2004	0 - .5	< .0061	< .0061	< .0061	< .018	98.3	67.4
S-17	5/6/2004	0 - .5	< .006	< .006	< .006	< .018	188	74.8
S-18	5/6/2004	0 - .5	< .0065	< .0065	< .0065	< .019	68.1	150
S-19	5/6/2004	0 - .5	< .0058	< .0058	< .0058	< .018	1.6	38.4
S-20	5/6/2004	0 - .5	< .0058	< .0058	< .0058	< .017	7.5	70
S-20	5/6/2004	0 - .5	< .0054	< .0054	< .0054	< .016	6.6	52.1
S-21	5/6/2004	0 - .5	< .0067	< .0067	< .0067	< .02	**793**	157
S-22	5/6/2004	0 - .5	< .0051	< .0051	< .0051	< .015	62.9	47.6
S-23	5/6/2004	0 - .5	< .0063	< .0063	< .0063	< .019	206	56.6
S-24	5/6/2004	0 - .5	< .0055	< .0055	< .0055	< .017	123	34
S-25	5/6/2004	0 - .5	< .0054	< .0054	< .0054	< .016	98.8	48.7
S-26	5/6/2004	0 - .5	< .0061	< .0061	< .0061	< .018	357	27.8
S-27	5/6/2004	0 - .5	< .0069	< .0069	< .0069	< .021	151	127
S-28	5/6/2004	0 - .5	< .0062	< .0062	< .0062	< .019	41.6	72.4
S-29	5/6/2004	0 - .5	< .0062	< .0062	< .0062	< .019	6.2	290
S-30	5/7/2004	0 - .5	< .0068	.0099	< .0068	.0097	26.8	89.1
S-30	5/7/2004	0 - .5	< .007	.0042	< .007	< .021	16.6	107
S-31	5/7/2004	0 - .5	< .006	< .006	< .006	< .018	23.1	55.1
S-32	5/7/2004	0 - .5	< .0071	.0029	< .0071	< .021	< 1.4	242
S-33	5/7/2004	0 - .5	< .0093	.0096	< .0093	< .028	172	156
S-34	5/7/2004	0 - .5	< .0049	< .0049	< .0049	< .015	1.5	17.6
S-35	5/7/2004	0 - .5	< .0059	< .0059	< .0059	< .018	6.1	106
S-36	5/7/2004	0 - .5	< .0058	< .0058	< .0058	< .017	15.2	31.6
S-37	5/7/2004	0 - .5	< .0057	.0038	< .0057	< .017	207	155
S-38	5/7/2004	0 - .5	< .0071	< .0071	< .0071	< .021	3.8	40.8
S-39	5/7/2004	0 - .5	.003	.0087	< .0053	< .016	51	78.5
S-40	5/7/2004	0 - .5	< .013	< .013	< .013	< .038	6	27.2
S-41	5/7/2004	0 - .5	< .006	< .006	< .006	< .018	3.9	35.7
S-42	5/7/2004	0 - .5	< .0068	< .0068	< .0068	< .02	< 1.3	22.3
S-43	5/7/2004	0 - .5	< .0066	.0109	< .0066	< .02	120	151
S-44	5/7/2004	0 - .5	.0035	.0074	< .008	< .024	166	261
S-45	5/7/2004	0 - .5	< .0067	< .0067	< .0067	< .02	233	23.5
S-46	5/7/2004	0 - .5	< .0078	< .0078	< .0078	< .023	192	39.8
S-47	5/7/2004	0 - .5	< .0077	< .0077	< .0077	< .023	53.3	31.3
S-48	5/7/2004	0 - .5	.0033	.0156	< .0067	< .02	134	138
S-49	5/7/2004	0 - .5	< .0071	< .0071	< .0071	< .021	44.3	**1000**
S-50	5/7/2004	0 - .5	.0039	.0125	< .0066	< .02	40.1	85.1

Table 5.
Surface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			16.6	1,000	1,000	1,000	612	1,000 **
Location ID	Sample Date	Depth Interval						
S-51	5/7/2004	0 - .5	.0032	.0148	< .0078	< .023	214	116
S-52	5/7/2004	0 - .5	< .0067	< .0067	< .0067	< .02	364	47.2
S-53	5/7/2004	0 - .5	< .0081	.0042	< .0081	< .024	99	84.2
S-54	5/7/2004	0 - .5	< .0059	< .0059	< .0059	< .018	47.6	136
VAT1	8/8/2003	0 - 2	< .0047	< .0047	< .0047	< .014	12.6	92.8
VAT2	8/8/2003	0 - 2	< .0059	< .0059	< .0059	< .018	9.7	40.5
VAT3	8/8/2003	0 - 2	< .006	< .006	< .006	< .018	9.1	76.2
WALL1	8/5/2003	0 - 2	< .0054	< .0054	< .0054	< .016	11.8	87.7
WALL2	8/5/2003	0 - 2	< .0071	< .0071	< .0071	< .021	24.1	130
WALL3	8/5/2003	0 - 2	< .0056	< .0056	< .0056	< .017	14.8	30.9

Notes:

Bold	Exceeds Tier II Non-residential (Industrial) Cleanup Goal
**	Lead cleanup goals are from the January 26, 1996 IDEM Non-rule Policy (ID# W-0048), *Guidance for Lead cleanup levels for Voluntary Remediation Program* Tier II sites.
NA	Not analyzed
	Soil boring location has been excavated

Table 6.
SubSurface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Residential			0.059	278.93	834.37	1,000	438	400**
Tier II Non-Residential			4.77	1,000	1,000	1,000	438	1000**
Location ID	Sample Date	Depth/ Interval						
Area-J-CS-1	1/20/2012	5	<0.0042	<0.0042	<0.0042	<0.012	3.6	12.7
Area-J-CS-2	1/20/2012	5	<0.0038	<0.0038	<0.0038	<0.011	4.4	14.4
Area-J-CS-3	1/20/2012	5	<0.27	<0.27	<0.27	<0.80	5.1	14.4
Area-J-CS-4	1/31/2012	5	0.0088	0.0107	0.0579	0.203	4	17.2
Area-J-CS-5	1/31/2012	5	<0.0040	<0.0040	<0.0040	<0.012	9.8	18.1
Area-J-CS-6	2/1/2012	5	<0.0036	<0.0036	<0.0036	<0.011	6.8	14.4
Area-J-CS-7	2/2/2012	5	<0.25	<0.25	<0.25	0.974	4.4	15.5
Area-J-CS-8	2/3/2012	5	<0.29	<0.29	<0.29	<0.86	5.5	23.3
Area-K-CS-1	12/19/2011	2	<0.0045	<0.0045	<0.0045	<0.014	15.7	17.7
Area-K-CS-2	12/19/2011	2	<0.0044	<0.0044	<0.0044	<0.013	7.9	14.5
Area-K-CS-3	12/19/2011	2	<0.0038	<0.0038	<0.0038	<0.011	8.1	20.5
Area-K-CS-4	12/19/2011	2	<0.0043	<0.0043	<0.0043	<0.013	9.7	31.3
Area-K-CS-5	12/19/2011	2	<0.0039	<0.0039	<0.0039	<0.012	6.6	16.1
Area-K-CS-6	12/19/2011	2	<0.0033	<0.0033	<0.0033	<0.0099	5.6	14.1
Area-L-CS-1	12/15/2011	2	<0.0044	<0.0044	<0.0044	<0.013	6.9	15
Area-L-CS-2	12/15/2011	2	<0.0056	<0.0056	<0.0056	<0.017	5.7	13.9
Area-L-CS-3	12/15/2011	2	<0.0047	<0.0047	<0.0047	<0.014	7.1	17.3
Area-L-CS-4	12/15/2011	2	<0.0042	<0.0042	<0.0042	<0.012	5.2	18.8
Area-L-CS-5	12/15/2011	2	<0.0038	<0.0038	<0.0038	<0.011	5.1	13.8
Area-M-CS-1	1/12/2012	5	<0.0046	<0.0046	<0.0046	<0.014	6.7	57.4
Area-M-CS-2	1/12/2012	5	<0.0041	<0.0041	<0.0041	<0.012	7	40.3
Area-M-CS-3	1/12/2012	5	<0.0038	<0.0038	<0.0038	<0.011	5.5	31.2
Area-M-CS-4	1/13/2012	5	<0.0046	<0.0046	<0.0046	<0.014	8.8	16.3
Area-M-CS-5	1/13/2012	5	<0.0042	<0.0042	<0.0042	<0.013	6.2	15.8
Area-N-CS-1	1/12/2012	2	<0.0041	<0.0041	<0.0041	<0.012	6.3	45.8
Area-N-CS-2	1/12/2012	2	<0.0044	<0.0044	<0.0044	<0.013	6.8	55.3
Area-N-CS-3	1/13/2012	2	<0.0036	<0.0036	<0.0036	<0.011	6.4	56.4
Area-O-CS-1	1/18/2012	2	<0.0031	<0.0031	<0.0031	<0.0093	40.8	26.9
Area-O-CS-2	1/18/2012	2	<0.0032	<0.0032	<0.0032	<0.0097	331	136
Area-O-CS-3	1/18/2012	2	0.0179	0.016	0.0294	0.0747	46.2	30.6
Area-P-CS-1	1/17/2012	5	<0.0041	<0.0041	<0.0041	<0.012	8.1	19.7
Area-P-CS-2	1/17/2012	5	<0.0065	<0.0065	<0.0065	<0.019	4.5	16.3
Area-P-CS-3	1/17/2012	5	<0.0062	<0.0062	<0.0062	<0.019	10.1	120
Area-P-CS-4	1/19/2012	5	<0.0054	<0.0054	<0.0054	<0.016	5	10.5
Area-P-CS-5	1/18/2012	5	<0.0029	<0.0029	<0.0029	<0.0086	5.4	16.6
Area-P-CS-6	1/18/2012	5	<0.0031	<0.0031	<0.0031	<0.0094	7.1	14.3
A1	4/3/2000	4 - 5	NA	NA	NA	NA	NA	NA
A2	4/3/2000	4 - 5	NA	NA	NA	NA	NA	NA
A3	4/3/2000	3 - 4.5	NA	NA	NA	NA	NA	NA
A4	8/8/2003	2 - 4	.015	< .006	.0477	.38	14.0	96.2
A4	4/3/2000	5 - 6	NA	NA	NA	NA	NA	NA
A4E	8/8/2003	5 - 6	**< 5.6**	10.2	17.1	104	9.0	25.7
A4N	8/5/2003	4 - 5	< .3	.182	.176	1.46	13.9	138

Table 6.
SubSurface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Residential			0.059	278.93	834.37	1,000	438	400**
Tier II Non-Residential			4.77	1,000	1,000	1,000	438	1000**
Location ID	Sample Date	Depth/ Interval						
A4S	8/8/2003	4 - 5	1.98	12.7	24.6	80.3	9.7	66.2
A4W	8/8/2003	3 - 4	< .27	< .27	.281	.739	19.8	56.6
A5	4/3/2000	4 - 4.5	NA	NA	NA	NA	NA	NA
A6	4/3/2000	3 - 4.5	NA	NA	NA	NA	NA	NA
A7	4/3/2000	4 - 6	NA	NA	NA	NA	NA	NA
A8	4/3/2000	4 - 6	NA	NA	NA	NA	NA	NA
A9	4/3/2000	5 - 6	NA	NA	NA	NA	NA	NA
A10	4/3/2000	6 - 7	NA	NA	NA	NA	NA	NA
A10N	8/7/2003	5 - 7	.0095	< .0058	< .0058	< .018	9.6	19.4
A10S	8/7/2003	5 - 7	**< 13**	< 13	< 13	< 38	5.5	14.7
A11	4/3/2000	4 - 6	NA	NA	NA	NA	NA	NA
A12	4/3/2000	4 - 6	NA	NA	NA	NA	NA	NA
A13	4/3/2000	8 - 10	NA	NA	NA	NA	NA	NA
A14	8/5/2003	5 - 6	.0045	.0059	.0266	.0576	12.9	21.6
A15	8/5/2003	6 - 8	< .33	< .33	< .33	< .98	13.0	24.2
A16	8/5/2003	5 - 6	< 1.3	< 1.3	.609	1.37	10.6	13.2
B1	4/4/2000	2 - 3	NA	NA	NA	NA	NA	NA
B1E	8/7/2003	6 - 8	**< 5.8**	3.78	< 5.8	11.6	5.3	12.3
B1S	8/7/2003	5 - 6	< .0063	< .0063	< .0063	< .019	15.3	12.9
B2	4/4/2000	6 - 7	NA	NA	NA	NA	NA	NA
B3	4/4/2000	4 - 6	NA	NA	NA	NA	NA	NA
B3	8/7/2003	6 - 8	< .29	< .29	.192	.632	11.5	14.3
B3S	8/7/2003	7 - 8	< .32	.14	.277	.948	11.1	21.8
B3W	8/7/2003	4 - 6	**16.7**	46	16.5	79.3	23.0	71.6
B8	4/3/2000	2 - 3	NA	NA	NA	NA	NA	NA
B9	4/4/2000	4 - 6	NA	NA	NA	NA	NA	NA
B9	8/7/2003	5 - 7	< .0048	< .0048	< .0048	< .015	9.7	20.7
B9E	8/7/2003	5 - 6	< .0056	< .0056	< .0056	< .017	11.0	21.7
B9N	8/7/2003	4 - 5	< .0049	< .0049	< .0049	< .015	15.4	16.9
B9S	8/7/2003	6 - 7	< .29	< .29	< .29	< .88	4.7	14.1
B9W	8/7/2003	5 - 7	< .0057	< .0057	< .0057	< .017	3.2	13.5
B10	8/5/2003	4 - 6	< .28	< .28	< .28	< .84	13.3	19.4
B10	4/4/2000	4 - 6	NA	NA	NA	NA	NA	NA
B10S	8/7/2003	3 - 5	< .0054	< .0054	< .0054	< .016	4.0	15.9
B10W	8/5/2003	3 - 4.5	< .3	< .3	< .3	< .91	4.5	13.2
B12	4/4/2000	4 - 6	NA	NA	NA	NA	NA	NA
B13	4/3/2000	6 - 7	NA	NA	NA	NA	NA	NA
C1	4/4/2000	4 - 6	NA	NA	NA	NA	NA	NA
C2	4/5/2000	6 - 7	NA	NA	NA	NA	NA	NA
C4	4/5/2000	4 - 5	NA	NA	NA	NA	NA	NA
C5	4/5/2000	4 - 6	NA	NA	NA	NA	NA	NA

Table 6.
SubSurface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Residential			0.059	278.93	834.37	1,000	438	400**
Tier II Non-Residential			4.77	1,000	1,000	1,000	438	1000**
Location ID	Sample Date	Depth/ Interval						
C6	4/5/2000	5 - 7	NA	NA	NA	NA	NA	NA
C7	4/5/2000	7 - 8	NA	NA	NA	NA	NA	NA
C8	4/5/2000	5 - 7	NA	NA	NA	NA	NA	NA
D1	4/5/2000	5 - 7	NA	NA	NA	NA	NA	NA
D2	4/5/2000	5 - 7	NA	NA	NA	NA	NA	NA
D3	4/5/2000	5 - 7	NA	NA	NA	NA	NA	NA
D4	4/5/2000	6 - 7	NA	NA	NA	NA	NA	NA
D5	4/5/2000	6 - 8	NA	NA	NA	NA	NA	NA
D6	4/5/2000	7 - 8	NA	NA	NA	NA	NA	NA
D7	4/5/2000	2 - 4	NA	NA	NA	NA	NA	NA
D8	4/5/2000	2 - 4	NA	NA	NA	NA	NA	NA
D9	8/6/2003	3.5 - 5.5	< .007	< .007	< .007	< .021	8.5	18.0
D10	8/6/2003	4 - 6	< .35	< .35	< .35	< 1	6.9	16.0
E1	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
E2	4/4/2000	4 - 6	NA	NA	NA	NA	NA	NA
E2E	8/6/2003	4.5 - 5	< .0064	< .0064	< .0064	< .019	15.4	40.4
E2S	8/6/2003	4 - 4.5	< .24	< .24	.159	.286	20.7	33.9
E3	4/5/2000	2 - 3	NA	NA	NA	NA	NA	NA
E4	4/5/2000	2 - 3.5	NA	NA	NA	NA	NA	NA
E4W	8/6/2003	4 - 4	< .006	< .006	< .006	< .018	12.9	23.5
E5	4/5/2000	4 - 6	NA	NA	NA	NA	NA	NA
E6	4/5/2000	4 - 6	NA	NA	NA	NA	NA	NA
E7	4/5/2000	4 - 6	NA	NA	NA	NA	NA	NA
E8	4/5/2000	4 - 6	NA	NA	NA	NA	NA	NA
E9	8/6/2003	4 - 6	< .0057	< .0057	< .0057	< .017	10.3	16.9
F1	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
F2	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
F3	4/6/2000	5 - 7	NA	NA	NA	NA	NA	NA
F4	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
F5	4/6/2000	4.5 - 6.5	NA	NA	NA	NA	NA	NA
F6	4/6/2000	3 - 5	NA	NA	NA	NA	NA	NA
F7	4/4/2000	4 - 6	NA	NA	NA	NA	NA	NA
F8	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
G1	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
G2	4/6/2000	2 - 4	NA	NA	NA	NA	NA	NA
G3	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
G4	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
G5	4/6/2000	3.5 - 5.5	NA	NA	NA	NA	NA	NA
G6	4/4/2000	3 - 5	NA	NA	NA	NA	NA	NA
G7	4/4/2000	3 - 5	NA	NA	NA	NA	NA	NA
G7E	8/5/2003	4.5 - 4.5	< .0056	< .0056	< .0056	< .017	13.4	22.1

Table 6.
SubSurface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Residential			0.059	278.93	834.37	1,000	438	400**
Tier II Non-Residential			4.77	1,000	1,000	1,000	438	1000**
Location ID	Sample Date	Depth/ Interval						
G8	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
H1	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
H2	4/6/2000	2 - 4	NA	NA	NA	NA	NA	NA
H3	4/6/2000	4 - 6	NA	NA	NA	NA	NA	NA
H4	4/6/2000	6 - 8	NA	NA	NA	NA	NA	NA
H5	4/6/2000	2 - 4	NA	NA	NA	NA	NA	NA
H6	4/11/2000	5 - 7	NA	NA	NA	NA	NA	NA
H7	4/11/2000	4 - 6	NA	NA	NA	NA	NA	NA
H8	4/6/2000	5 - 7	NA	NA	NA	NA	NA	NA
I1	4/11/2000	7.5 - 9.5	NA	NA	NA	NA	NA	NA
I2	4/11/2000	5.5 - 7.5	NA	NA	NA	NA	NA	NA
I3	4/11/2000	6.5 - 8.5	NA	NA	NA	NA	NA	NA
I4	4/11/2000	6 - 8	NA	NA	NA	NA	NA	NA
I5	4/11/2000	6 - 8	NA	NA	NA	NA	NA	NA
I6	4/11/2000	7 - 9	NA	NA	NA	NA	NA	NA
I7	4/11/2000	7 - 9	NA	NA	NA	NA	NA	NA
I8	4/11/2000	6 - 8	NA	NA	NA	NA	NA	NA
J1	8/20/2003	6 - 8	< .0055	< .0055	< .0055	.006	6.9	14.8
J2	8/20/2003	4 - 6	< .0051	< .0051	< .0051	< .015	17.1	15.5
J3	8/20/2003	4 - 6	< .005	< .005	.0269	.0417	12.3	< 11
J4	8/21/2003	3.5 - 5.5	< .0067	< .0067	.0104	.0296	13.8	14.1
J5	8/21/2003	4 - 6	< .0064	< .0064	< .0064	< .019	7.4	< 13
J6	8/21/2003	9 - 11	< .0054	< .0054	< .0054	< .016	NA	NA
J7	8/21/2003	9 - 11	< .0073	< .0073	< .0073	< .022	7.2	17.3
J8	8/21/2003	7 - 9	< .0064	< .0064	< .0064	< .019	9.1	13.5
J9	8/21/2003	4 - 6	< .0066	< .0066	< .0066	< .02	15.4	21.1
J10	8/20/2003	4 - 6	< .0051	.0023	.0717	.128	20.8	18.6
J11	8/21/2003	2 - 4	< .006	< .006	< .006	< .018	5.8	< 12
K1	8/21/2003	7 - 9	< .0061	< .0061	< .0061	< .018	4.5	< 12
K2	8/21/2003	6 - 8	< .0058	< .0058	< .0058	< .018	1.5	< 11
K3	8/21/2003	4 - 6	< .0055	< .0055	< .0055	< .017	0.84	< 11
K4	8/21/2003	8 - 10	< .0077	< .0077	< .0077	< .023	10.7	19.3
K5	8/21/2003	3 - 5	< .0057	< .0057	< .0057	< .017	14.4	16.6
K7	8/21/2003	5 - 7	< .0061	< .0061	< .0061	< .018	5.1	< 13
K8	8/21/2003	5 - 7	< .0067	< .0067	< .0067	< .02	7.5	14.1
K9	8/20/2003	4.5 - 6.5	< .0061	< .0061	< .0061	< .018	6.2	14.7
L1	8/20/2003	4 - 5	< .0059	< .0059	< .0059	< .018	5.9	13.5
L2	8/20/2003	3 - 4	< .006	< .006	< .006	< .018	3.5	12.0
L3	8/20/2003	4 - 6	< .0058	< .0058	< .0058	< .017	0.92	< 12
L4	8/20/2003	5 - 7	< .0073	< .0073	< .0073	< .022	14.5	15.5
L5	8/20/2003	4 - 6	< .0041	< .0041	< .0041	< .012	26.8	22.3

Table 6.
SubSurface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Residential			0.059	278.93	834.37	1,000	438	400**
Tier II Non-Residential			4.77	1,000	1,000	1,000	438	1000**
Location ID	Sample Date	Depth/ Interval						
L6	8/21/2003	6 - 8	< .0059	< .0059	< .0059	< .018	1.1	< 12
L7	8/21/2003	6 - 8	< .0064	< .0064	< .0064	< .019	1.8	< 12
L8	8/21/2003	5 - 7	< .0062	< .0062	< .0062	< .019	1.9	< 11
L9	8/21/2003	5 - 7	< .0059	< .0059	< .0059	< .018	9.2	< 11
L10	8/21/2003	5 - 7	< .007	< .007	< .007	< .021	12.2	< 12
L11	8/21/2003	5 - 7	< .0057	< .0057	< .0057	< .017	9.9	< 12
L12	8/21/2003	6 - 8	< .006	< .006	< .006	< .018	< 0.57	< 11
L13	8/21/2003	8 - 10	< .0058	< .0058	< .0058	< .017	0.72	< 12
LAGOON A1	8/8/2003	8 - 10	< .0058	< .0058	< .0058	< .017	9.9	17.3
LAGOON A2	8/8/2003	10 - 11	< .31	< .31	< .31	< .94	13.3	16.7
LAGOON A3	8/8/2003	8 - 10	< .0064	< .0064	< .0064	< .019	19.0	39.4
LAGOON B1	8/8/2003	8 - 8.5	< .005	< .005	.0044	.0056	8.1	18.6
LAGOON B2	8/8/2003	6.5 - 8.5	< .0041	< .0041	< .0041	< .012	13.0	15.0
LAGOON B3	8/8/2003	6 - 8	< .005	< .005	< .005	< .015	7.2	12.6
M1	8/20/2003	8 - 10	< .0061	< .0061	< .0061	< .018	1.2	< 11
M2	8/20/2003	6 - 8	< .0061	< .0061	< .0061	< .018	1.4	< 12
M3	8/20/2003	6 - 8	< .0062	< .0062	< .0062	< .019	1.5	< 12
M4	8/20/2003	4 - 6	< .0069	< .0069	< .0069	< .021	14.9	20.6
M5	8/20/2003	5 - 7	< .0061	< .0061	< .0061	< .018	18.1	24.9
M6	8/20/2003	6 - 8	< .0056	< .0056	< .0056	< .017	0.77	< 11
M7	8/20/2003	6 - 8	< .0053	< .0053	< .0053	< .016	0.68	< 12
M8	8/20/2003	8 - 10	< .0049	< .0049	< .0049	< .015	1.3	< 11
M9	8/21/2003	6 - 8	< .0061	< .0061	< .0061	< .018	< 0.58	< 12
MW-14D	7/30/2003	2 - 4	< .0055	< .0055	< .0055	< .017	11.7	18.3
MW-14D	7/30/2003	4 - 5	< .0058	< .0058	< .0058	< .018	NA	NA
MW-14D	7/30/2003	5 - 5.75	< 1.4	< 1.4	< 1.4	< 4.3	NA	NA
MW-14S	7/30/2003	2 - 4	< .0056	< .0056	< .0056	< .017	NA	NA
MW-14D	7/30/2003	2 - 4	< .0055	< .0055	< .0055	< .017	11.7	18.3
MW-14D	7/30/2003	4 - 5	< .0058	< .0058	< .0058	< .018	NA	NA
MW-14D	7/30/2003	5 - 5.75	< 1.4	< 1.4	< 1.4	< 4.3	NA	NA
MW-15S	7/31/2003	2 - 4	< .31	< .31	< .31	< .94	4.9	13.5
MW-15S	7/31/2003	4 - 5	< .29	< .29	< .29	< .88	NA	NA
MW-15S	7/31/2003	5 - 6	< 1.3	< 1.3	< 1.3	< 4	NA	NA
MW-15D	7/31/2003	2 - 4	< .29	< .29	< .29	< .86	5.8	14.4
MW-15D	7/31/2003	4 - 5	< .33	< .33	< .33	< .98	6.0	14.1
MW-15D	7/31/2003	5 - 6	< 1.3	< 1.3	.64	1.62	NA	NA
MW-16S	7/31/2003	2 - 4	< 2.7	< 2.7	1.89	4.45	4.8	13.1
MW-16S	7/31/2003	4 - 6	< 1.4	< 1.4	.862	2.07	5.8	13.5
MW-16D	7/31/2003	2 - 4	< .006	< .006	< .006	< .018	26.8	30.4
MW-16D	7/31/2003	4 - 6	< .0061	< .0061	< .0061	< .018	9.8	24.6
MW-17S	7/31/2003	2 - 4	<.0066	<.0066	<.0066	<.02	5.6	14.2

Table 6.
SubSurface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Residential			0.059	278.93	834.37	1,000	438	400**
Tier II Non-Residential			4.77	1,000	1,000	1,000	438	1000**
Location ID	Sample Date	Depth/ Interval						
MW-17S	7/31/2003	4 - 6	<.0051	<.0051	<.0051	<.015	11.5	17.9
MW-17D	7/31/2003	4 - 8	<.0068	<.0068	<.0068	<.02	6.7	< 14
MW-18S	8/1/2003	4 - 6	< .0056	< .0056	< .0056	< .017	5.9	13.5
MW-18D	8/1/2003	2 - 4	< .0059	< .0059	< .0059	< .018	3.8	24.5
MW-19S	8/1/2003	2 - 4	< .0051	< .0051	< .0051	< .015	19.8	20.3
MW-19D	8/1/2003	2 - 4	< .0054	< .0054	< .0054	< .016	5.0	< 13
MW-20S	10/24/2003	2 - 4	< .0062	< .0062	< .0062	< .019	6.0	18.8
MW-20D	10/27/2003	3 - 5	<.0063	<.0063	<.0063	<.019	4.8	88.8
MW-21S	10/24/2003	2 - 4	< .0065	< .0065	< .0065	< .019	4.7	66.5
MW-21D	10/27/2003	2 - 4	<.006	<.006	<.006	<.018	6.2	103
MW-23D	10/23/2003	2 - 4	< .0067	< .0067	< .0067	< .02	8.3	29.9
MW-27A	8/5/2008	4 - 6	< .0063	< .0063	< .0063	< .019	6.2	62
MW-27B	8/8/2008	2 - 4	< .0056	< .0056	< .0056	< .017	4.1	17.8
MW-28A	1/5/2009	4 - 6	< 0.0057	0.0038	< 0.0057	< 0.017	7.4	25.6
MW-28B	1/12/2009	2 - 6	< 0.0052	< 0.0052	< 0.0052	< 0.016	5.6	< 25
MW-28C	1/14/2009	9 - 10	< 0.0047	< 0.0047	< 0.0047	< 0.014	5.8	< 54
MW-29A	1/22/2009	6 - 8	< 3.3	< 3.3	0.892 J	2.8 J	5.5	11.7
MW-29B	2/3/2009	2 - 4	0.549	0.110 J	0.558	3.64	6.7	16.9
MW-30A	10/12/2009	4 - 6	< 0.0048	< 0.0048	< 0.0048	< 0.014	< 3.9	< 48
MW-30B	10/14/2009	4 - 6	< 0.0043	< 0.0043	< 0.0043	< 0.013	5	15
MW-30C	10/15/2009	4 - 6	< 0.0052	< 0.0052	< 0.0052	< 0.016	9.3	15.2
MW-31A	10/19/2009	4 - 6	< 0.0058	< 0.0058	< 0.0058	< 0.017	4.9	14.5
MW-31B	10/20/2009	2 - 4	< 0.0042	< 0.0042	< 0.0042	< 0.013	5.4	15.9
MW-31C	10/26/2009	2 - 4	< 0.0057	< 0.0057	< 0.0057	< 0.017	3.6	28
MW-32A	10/27/2009	2 - 4	< 0.0051	< 0.0051	< 0.0051	< 0.015	11.4	18
MW-32B	4/9/2012	8-Jun	< 0.0050	< 0.0050	< 0.0050	< 0.015	10.5	22.6
MW-33A	11/2/2009	4 - 5	< 0.0059	< 0.0059	< 0.0059	< 0.018	10.9	22
MW-33B	11/5/2009	2 - 4	< 0.0050	< 0.0050	< 0.0050	< 0.015	8.1	12.4
MW-33C	11/9/2009	8 - 10	< 0.0052	< 0.0052	< 0.0052	< 0.016	11	< 22
MW-34A	11/18/2009	2 - 4	< 0.0046	< 0.0046	< 0.0046	< 0.014	5.8	14.2
MW-35A	2/8/2010	3 - 5	<0.0055	<0.0055	<0.0055	<0.017	8.5	27.3
MW-35B/C	2/8/2010	2 - 4	<0.0070	<0.0070	<0.0070	<0.021	9.3	31.2
MW-36A/B	2/11/2010	8 - 10	<0.0091	<0.0091	<0.0091	<0.027	9.4	17.6
MW-36C	2/15/2010	7 - 9	<0.0055	<0.0055	<0.0055	0.016	16.9	21.3
MW-37A/B	2/17/2010	5 - 7	<0.0056	<0.0056	<0.0056	<0.017	9.4	13
MW-38A	3/22/2010	8 - 10	<0.0048	<0.0048	<0.0048	<0.014	8.8	20.4
MW-38B	3/23/2010	8 - 10	<0.0052	<0.0052	<0.0052	<0.016	5.4	34.1
MW-39A	3/30/2010	8 - 10	<0.0035	<0.0035	<0.0035	<0.010	5.9	14
MW-39B	3/30/2010	8 - 10	<0.0046	<0.0046	<0.0046	<0.014	4.9	10.9
MW-40A	4/2/2010	2 - 4	<0.0048	<0.0048	<0.0048	<0.014	4.1	11.8
MW-40B/C	4/6/2010	2 - 4	<0.0052	<0.0052	<0.0052	<0.015	3.8	14.4

Table 6.
SubSurface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Residential			0.059	278.93	834.37	1,000	438	400**
Tier II Non-Residential			4.77	1,000	1,000	1,000	438	1000**
Location ID	Sample Date	Depth/ Interval						
MW-41A	11/2/2010	12 - 14	< 0.0042	< 0.0042	< 0.0042	< 0.013	10.6	20.2
MW-42A	11/3/2010	8 - 10	< 0.0050	< 0.0050	< 0.0050	< 0.015	9.2	16.3
MW-42B	11/5/2010	8 - 10	<0.0037	<0.0037	<0.0037	<0.011	9.3	15.2
MW-43A	11/9/2010	2 - 4	< 0.0042	< 0.0042	< 0.0042	< 0.013	9.7	26.2
MW-44A	11/11/2010	7 - 9	<0.0070	<0.0070	<0.0070	<0.021	13.1	17.6
MW-45A/B	11/12/2010	6 - 8	<0.0021	<0.0021	<0.0021	<0.062	6.1	16.7
MW-45C	11/17/2010	6 - 8	< 0.0057	< 0.0057	< 0.0057	< 0.017	6.9	15.1
MW-46A	11/18/2010	6 - 8	<0.0053	<0.0053	<0.0053	<0.016	5	17.1
MW-47A	11/19/2010	4 - 5	<0.0047	<0.0047	<0.0047	<0.014	8.9	15.4
MW-48	1/4/2011	18 - 20	<0.0044	<0.0044	<0.0044	<0.013	16.5	35.5
MW-49A	7/26/2011	8 - 10	<0.0043	<0.0043	<0.0043	<0.013	4.7	11
MW-49C	7/28/2011	8 - 10	<0.0041	<0.0041	<0.0041	<0.012	5.1	12.2
MW-50A	8/1/2011	8 - 9	<0.0050	<0.0050	<0.0050	<0.015	17.5	24.2
MW-51A	8/4/2011	8 - 10	<0.0045	<0.0045	<0.0045	<0.014	21.4	50.6
MW-53A	8/29/2011	10 - 12	--	--	--	--	14.8	32.1
MW-54A	4/11/2012	5 - 6.5	<0.0046	<0.0046	<0.0046	<0.014	2.8	3.2
MW-55A	4/12/2012	4 - 5	<0.0056	<0.0056	<0.0056	<0.017	7.2	38.3
MW-56A	4/16/2012	5 - 6.5	<0.0048	<0.0048	<0.0048	<0.014	5.5	17.2
RW-1	10/29/2009	2 - 4	< 0.67	0.208 J	0.467 J	1.48 J	13.6	72.9
RW-4	11/13/2009	2 - 4	< 0.0049	< 0.0049	< 0.0049	< 0.015	2.9	17.1
RW-5	11/16/2009	2 - 4	< 0.0050	< 0.0050	< 0.0050	< 0.015	2.3	12.9
RW-6	3/31/2010	2 - 4	<0.0047	<0.0047	<0.0047	<0.014	4.5	24
RW-7	11/1/2010	6 - 8	<0.0044	<0.0044	<0.0044	<0.013	6.9	8.9
RW-8	4/18/2012	4.5 - 5.5	<0.0051	<0.0051	<0.0051	<0.015	14.3	29.5
N1	8/19/2003	4 - 6	< .006	< .006	< .006	< .018	3.1	15.3
N2	8/19/2003	6 - 8	< .0061	< .0061	< .0061	< .018	1.1	< 11
N3	8/19/2003	5 - 7	< .0057	< .0057	< .0057	< .017	6.0	< 12
N4	8/19/2003	6 - 8	< .0071	< .0071	< .0071	< .021	3.1	< 13
N5	8/19/2003	5 - 7	< .0066	< .0066	< .0066	< .02	8.0	< 11
N6	8/19/2003	5 - 7	< .0055	< .0055	< .0055	< .017	13.1	18.1
N7	8/19/2003	6 - 8	< .0062	< .0062	< .0062	< .018	5.1	< 13
N8	8/19/2003	5 - 7	< .0064	< .0064	< .0064	< .019	4.7	< 13
P1	8/19/2003	4 - 6	< .005	< .005	< .005	< .015	6.9	17.6
P2	8/19/2003	5 - 7	< .0059	< .0059	.0089	.0658	6.9	15.7
P3	8/19/2003	5 - 7	< .0064	< .0064	< .0064	< .019	6.6	20.2
P4	8/19/2003	4 - 6	< .006	< .006	< .006	< .018	6.5	13.7
P5	8/19/2003	5 - 7	< .006	< .006	< .006	< .018	5.5	< 13
P6	8/19/2003	4 - 6	< .0067	< .0067	< .0067	< .02	7.7	15.4
P7	8/19/2003	4 - 6	< .0066	< .0066	< .0066	< .02	9.2	17.3
P8	8/19/2003	4 - 6	< .0058	< .0058	< .0058	< .017	7.8	25.2
Q1	8/19/2003	3 - 5	< .0063	< .0063	< .0063	< .019	6.4	14.6

Table 6.
SubSurface Soil BTEX & Metals Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic	Lead
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Residential			0.059	278.93	834.37	1,000	438	400**
Tier II Non-Residential			4.77	1,000	1,000	1,000	438	1000**
Location ID	Sample Date	Depth/ Interval						
Q2	8/19/2003	5 - 7	< .0063	< .0063	< .0063	< .019	5.5	15.6
Q3	8/19/2003	5 - 7	< .0068	< .0068	< .0068	< .02	12.2	16.2
Q4	8/19/2003	4 - 6	< .0053	< .0053	< .0053	< .016	22.0	86.6
Q5	8/19/2003	5 - 7	< .0058	< .0058	< .0058	< .018	1.5	< 12
Q6	8/19/2003	5 - 7	< .0059	< .0059	< .0059	< .018	0.99	< 11
Q7	8/19/2003	5 - 7	< .006	< .006	< .006	< .018	4.1	16.0
Q8	8/19/2003	5 - 7	< .0055	< .0055	< .0055	< .016	1.4	< 12
VAT1	8/8/2003	4 - 6	< .0052	< .0052	< .0052	< .016	7.9	81.1
VAT2	8/8/2003	2 - 4	< .0056	< .0056	< .0056	< .017	14.3	104
VAT3	8/8/2003	4 - 5	< .0055	< .0055	< .0055	< .017	7.8	43.5
WALL1	8/5/2003	2.5 - 4.5	< .0055	< .0055	< .0055	< .017	12.9	16.6
WALL2	8/5/2003	3 - 5	< .0068	< .0068	< .0068	< .02	8.3	16.0
WALL3	8/5/2003	3 - 5	< .0056	< .0056	< .0056	< .017	22.9	17.3

Bold Exceeds Tier II Non-residential (Industrial) Clean-up Goal

** Lead cleanup goals are from the January 26, 1996 IDEM Non-rule Policy (ID# W-0048), *Guidance for Lead cleanup levels for Voluntary Remediation Program* Tier II sites.

Soil boring location has been excavated

Table 7.
Surface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID	Sample Date	Depth Interval	2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Chemical Name																														
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			6,120	9,800 *	10,000	10,000	10,000	1,922.89	10,000	690 *	980 *	4,142.86	483.33	10,000	2,800 *	10,000	79.45	7.94	79.45	***	794.52	7,945.21	7.95	10,000	10,000	79.45	1,600 *	10,000	1,200 *	10,000
Area-J-CS-1A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.26	--	--	--	--	--	--	--	--	--	--	--	--
Area-J-CS-2A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.33	--	--	--	--	--	--	--	--	--	--	--	--
Area-J-CS-3A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.49	--	--	--	--	--	--	--	--	--	--	--	--
Area-J-CS-4A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-J-CS-5A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.59	--	--	--	--	--	--	--	--	--	--	--	--
Area-J-CS-6A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-J-CS-7A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.26	--	--	--	--	--	--	--	--	--	--	--	--
Area-J-CS-8A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-J-CS-9A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.27	--	--	--	--	--	--	--	--	--	--	--	--
Area-J-CS-10A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-K-CS-1A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.24	--	--	--	--	--	--	--	--	--	--	--	--
Area-K-CS-2A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-K-CS-3A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-K-CS-4A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-K-CS-5A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-K-CS-6A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-L-CS-1A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-L-CS-2A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-L-CS-3A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-L-CS-4A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.22	--	--	--	--	--	--	--	--	--	--	--	--
Area-L-CS-5A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.24	--	--	--	--	--	--	--	--	--	--	--	--
Area-M-CS-1A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.26	--	--	--	--	--	--	--	--	--	--	--	--
Area-M-CS-2A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.26	--	--	--	--	--	--	--	--	--	--	--	--
Area-M-CS-3A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.34	--	--	--	--	--	--	--	--	--	--	--	--
Area-M-CS-4A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.46	--	--	--	--	--	--	--	--	--	--	--	--
Area-M-CS-5A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3	--	--	--	--	--	--	--	--	--	--	--	--
Area-N-CS-1A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.27	--	--	--	--	--	--	--	--	--	--	--	--
Area-N-CS-2A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.26	--	--	--	--	--	--	--	--	--	--	--	--
Area-N-CS-3A	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.26	--	--	--	--	--	--	--	--	--	--	--	--
Area-O-CS-1A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.27	--	--	--	--	--	--	--	--	--	--	--	--
Area-O-CS-2A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.27	--	--	--	--	--	--	--	--	--	--	--	--
Area-O-CS-3A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.27	--	--	--	--	--	--	--	--	--	--	--	--
Area-P-CS-1A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3	--	--	--	--	--	--	--	--	--	--	--	--
Area-P-CS-2A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.41	--	--	--	--	--	--	--	--	--	--	--	--
Area-P-CS-3A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.27	--	--	--	--	--	--	--	--	--	--	--	--
Area-P-CS-4A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
Area-P-CS-5A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.55	--	--	--	--	--	--	--	--	--	--	--	--
Area-P-CS-6A	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.27	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-1	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.78	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-2	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-3	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-4	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.24	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-5	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.81	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-6	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.41	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-6	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.23	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-8	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.24	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-9	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-10	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.24	--	--	--	--	--	--	--	--	--	--	--	--
CS-Area U-11	10/28/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--
A1	4/3/2000	0 - 2	NA	NA	< .46	< .46	< .46	< .46	< .46	.13	.12	.068	< 2.4	.094	.082	.46	.8	1	0.97	1.2	.94	1	.4	1.6	.11	1.4	.051	.15	1.1	1.3
A2	4/3/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	.5	.13	< .4	.44	< 2.1	< .4	.13	.22	.05	.54	.27	.71	.28	.089	.34	.067	.046	.8	< .4	< .4	.074	< .4
A3	4/3/2000	0 - 2	NA	NA	< .42	< .42	< .42	< .42	.29	.18	.1	.075	< 2.2	.16	.6	.89	1.9	2.8	2.6	2.2	2.8	2.6	0.89	2.6	.16	2.3	.05	.12	.88	2.8
A4	4/3/2000	0 - 2	NA	NA	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< 1.9	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36
A5	4/3/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	.13	.15	.081	< 2.1	.23	.76	.75	2.1	3	3.9	2.3	2.2	2.7	1	2.9	.25	2.7	.088	.16	1.4	2.8
A6	4/3/2000	0 - 2	NA	NA	< .37	< .37	< .37	< .37	< .37	.069	< .37	.059	< 1.9	< .37	.043	.21	.14	.17	.35	.13	.31	.19	.063	.16	< .37	.11	< .37	< .37	.074	.18
A7	4/3/2000	0 - 2	NA	NA	< .43	< .43	< .43	< .43	< .43	< .43	< .43	.067	< 2.2	< .43	.033	.057	.038	.098	.063	.21	.074	.05	.091	.047	< .43	.19	< .43	< .43	.033	< .43
A8	4/3/2000	0 - 2	NA	NA	< .39	< .39	< .39	< .39	< .39	.042	.039	.054	< 2	.064	.33	.17	1.1	3	2.3	1.3	2.5	1.4	.66	1.3	.044	1.6	< .39	< .39	.12	2.1
A9	4/3/2000	0 - 2	NA	NA	< 8.1	< 8.1	< 8.1	< 8.1	< 8.1	270	59	< 8.1	< 42	2.5	1.2	660	7.7	7.8	7.7	4.2	7.8	22	1.9	18	140	4.4	50	29	160	15
A10	8/7/2003	0 - 2	< 20	< 20	< 20	< 20	< 20	< 20	< 41	**2120**	608	< 41	< 100	506	163	6090	**456**	**342**	**387**	159	229	1070	**69.1**	1890	1440	**203**	317	249	2390	1120
A10	4/3/2000	0 - 2	NA	NA	< 72	< 72	< 72	< 72	< 72	660	91	< 72	< 370	21	< 72	2000	43	**32**	37	19	28	130	**8.1**	110	230	24	54	56	300	100

ARCADIS Design & Consultancy for natural and built assets

Table 7.
Surface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID	Sample Date	Depth Interval	2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Chemical Name			2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			6,120	9,800 *	10,000	10,000	10,000	1,922.89	10,000	690 *	980 *	4,142.86	483.33	10,000	2,800 *	10,000	79.45	7.94	79.45	***	794.52	7,945.21	7.95	10,000	10,000	79.45	1,600 *	10,000	1,200 *	10,000
A10E	8/7/2003	0 - 2	< 20	< 20	< 20	< 20	< 20	< 20	< 39	543	**1740**	< 39	< 99	1960	201	1470	**863**	**468**	**538**	234	424	840	**57**	4390	2360	**285**	1510	3850	6870	2640
A10N	8/7/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .42	1.19	.159	< .42	< 1.1	.0985	.781	4.14	1.22	2.35	2.88	1.24	1.46	1.88	.532	1.79	.343	1.47	.135	.186	.557	1.25
A10S	8/7/2003	0 - 2	< 18	< 18	< 18	< 18	< 18	< 18	< 37	629	**2210**	< 37	< 91	2260	431	1480	**930**	**487**	**509**	176	396	793	**20.8**	4690	2680	**241**	2760	3280	7330	2770
A10W	8/7/2003	0 - 2	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 8.5	7.88	1.68	< 8.5	< 21	1.22	9.19	32	21.7	**23.6**	26.8	14.2	21.7	26.3	3.96	47.8	2.98	16.4	< 4.3	1.26	18.2	32.1
A11	4/3/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< 2	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38
A12	4/3/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	.46	.59	.074	1.2	.2	2.4	1.8	6.5	7.8	12	6.7	9.6	8	2.5	12	.22	8.3	.24	.43	3.5	11
A13	4/3/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	.044	< .38	.084	< 2	< .38	.23	.14	.64	0.72	.8	.66	.91	.83	.23	.98	< .38	.56	< .38	< .38	.26	1
A14	8/5/2003	0 - 2	< .22	< .22	< .22	< .22	< .22	< .22	< .43	.34	.128	< .43	< 1.1	.0934	.0849	1.36	.263	.279	.328	.175	.3	.431	< .22	.498	.193	.216	.0906	.149	.52	.383
A15	8/5/2003	0 - 2	< .8	< .8	< .8	< .8	< .8	< .8	< 1.6	1.58	.48	< 1.6	2.45	.302	3.18	4.7	2.08	4.57	6.75	5.98	4.01	3.45	1.71	4.58	.396	6.3	.243	.691	1.86	3.38
A16	8/5/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .41	3.68	.388	< .41	< 1	.0689	.133	12.3	1.01	1.13	1.88	.617	.626	1.51	.168	1.51	.944	.767	.258	.281	1.62	1.4
B1	8/7/2003	0 - 2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 8.4	4.3	6.49	< 8.4	< 21	1.54	9.75	17	60.3	**54.1**	**80.8**	31.8	48.5	56.7	**8.39**	125	3.81	38.8	3	6.33	58.2	102
B1	4/4/2000	0 - 2	NA	NA	< .43	< .43	< .43	< .43	< .43	2.3	1.8	< .43	< 2.2	.49	4.1	4.4	16	**13**	23	10	12	19	1.2	33	.74	11	.92	1.5	11	28
B1E	8/7/2003	0 - 2	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 3.5	1.34	1.51	< 3.5	< 8.7	< 1.7	3.07	3.2	8.78	**11.6**	15.2	7.97	10.5	10.9	2.44	17.8	< 1.7	9.98	.811	1.74	10	12.8
B1N	8/7/2003	0 - 2	< 2	< 2	< 2	< 2	< 2	< 2	< 4	1.12	.781	< 4	< 10	< 2	6.07	3.93	14.1	**15.6**	20.5	9.3	14	15.4	3.29	29.7	.459	11.8	.466	.8	8.21	21.1
B1S	8/7/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .41	.516	.18	< .41	< 1	.0843	1.15	1.45	2.67	2.79	4.18	1.84	2.15	3.13	.524	6.91	.104	2.23	.0993	.189	2.31	4.55
B1W	8/7/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .41	< .2	.0672	< .41	< 1	< .2	< .2	.0582	.0987	.0814	.0875	< .2	.0741	.0891	< .2	.31	< .2	< .2	< .2	.0883	.248	.185
B2	4/4/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< 2	< .38	< .38	< .38	1.2	**1.2**	1.7	.84	.98	1.6	.41	2.4	< .38	.87	< .38	.19	1.2	2.1
B3	8/7/2003	0 - 2	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 8.7	3.23	24.9	< 8.7	< 22	18.2	33.7	23	36.7	**66.2**	87	40.4	39	60.6	**16.6**	92.2	13.7	52.7	13.8	24.3	65.7	55.6
B3	4/4/2000	0 - 2	NA	NA	< .42	< .42	< .42	< .42	< .42	2.4	5.1	.064	.52	5.4	2.8	11	11	**14**	*19*	6.4	9.9	20	3	29	5.9	7.8	2	4.2	19	23
B3E	8/7/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .41	.431	.148	< .41	.71	.111	.732	1.48	1.17	1.71	2.46	1.32	1.48	1.56	.45	2.1	.16	1.59	.0725	.133	.676	1.66
B3N	8/7/2003	0 - 2	< 20	< 20	< 20	< 20	< 20	< 20	< 40	11.5	36.5	< 40	< 100	123	63.1	51.8	**173**	**157**	**179**	72.3	121	196	**26.3**	657	40.2	**90.7**	23.6	67	89.7	358
B3S	8/8/2003	0 - 2	< .22	< .22	< .22	< .22	< .22	< .22	< .44	< .22	< .22	< .44	< 1.1	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22
B3W	8/8/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .41	.142	.202	< .41	< 1	.201	.177	.166	.295	0.832	1.19	.58	.353	.629	.153	.316	.209	.74	< .2	.122	.361	.437
B4	4/4/2000	0 - 2	NA	NA	< .43	< .43	< .43	< .43	< .43	15	43	< .43	< 2.2	45	5.3	34	15	7.4	8	3.2	8.2	20	1.2	62	49	3.8	36	95	120	46
B5	4/4/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4
B6	4/4/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< 1.9	< .38	< .38	.23	.46	.63	.66	.53	.35	.62	< .38	.82	< .38	.49	< .38	< .38	.53	.71
B7	4/4/2000	0 - 2	NA	NA	< .39	< .39	< .39	< .39	< .39	.29	< .39	< .39	< 2	< .39	1	1.3	5.3	5	5.6	3	4.9	6.1	1.1	9.2	.26	3.2	< .39	< .39	2	7.7
B8	4/3/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	.1	.064	< .4	2.3	.037	.6	.36	1.7	2.2	2.2	1.7	2	2.2	.61	2.5	.07	1.6	.052	.066	.59	3
B9	4/11/2000	0 - 2	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	.2	.66	1	1.2	1.2	.9	.96	1.3	.32	1.8	< .42	.87	< .42	< .42	.57	1.7
B10	4/4/2000	0 - 2	NA	NA	< .36	< .36	< .36	< .36	< .36	.68	.21	.057	< 1.9	.076	4.8	2.5	9	**12**	22	11	12	12	3.9	10	.077	12	.15	.24	1.8	11
B10	8/7/2003	0 - 2	< 20	< 20	< 20	< 20	< 20	< 20	< 39	14.6	10.7	< 39	< 98	10.8	18.2	38.5	**124**	**129**	**197**	73.8	67	140	**21.5**	280	22.5	**88.9**	< 20	< 20	154	192
B10E	8/7/2003	0 - 2	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 8.2	18.4	2.04	< 8.2	< 20	< 4.1	< 4.1	52.5	3.39	3.14	5.51	3.23	1.99	5.2	< 4.1	12	5.06	3.53	.991	1.73	13.2	8.9
B10N	8/7/2003	0 - 2	< 15	< 15	< 15	< 15	< 15	< 15	< 30	25.9	12.6	< 30	42.5	18.8	44.9	148	**218**	**212**	**306**	140	102	237	**45.8**	557	33	**187**	3.46	4.37	170	365
B10S	8/7/2003	0 - 2	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 8.2	2.82	< 4.1	< 8.2	< 20	< 4.1	6.51	8.94	24.7	**38.7**	68.9	35.8	21.4	32.8	**8.33**	29.2	< 4.1	40.4	< 4.1	< 4.1	5.37	31.2
B10W	8/7/2003	0 - 2	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 9.6	3.24	1.76	< 9.6	< 24	1.21	10.9	14.1	52.1	**62.2**	**104**	48.7	29.7	66.4	**13.1**	84.1	1.88	57.1	< 4.8	1.64	11.6	73.6
B11	4/4/2000	0 - 2	NA	NA	< .39	< .39	< .39	< .39	< .39	< .39	< .39	.057	.95	< .39	.2	.28	.48	.67	.81	.53	.51	.75	< .39	.71	< .39	.5	< .39	< .39	.22	.66
B12	4/4/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	.59	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4
B13	4/3/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	.19	.12	.059	< 1.9	< .38	.7	.42	2.7	2.5	4.5	2.2	3.6	3.9	0.85	3.6	.047	2.5	.066	.08	.89	3.6
C1	4/4/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< 2	< .38	.94	.81	5.5	4.7	5.9	2.6	3.6	6.2	1.2	9.5	< .38	2.9	< .38	< .38	.48	8.6
C2	4/5/2000	0 - 2	NA	NA	< 120	< 120	< 120	< 120	< 120	**1400**	**2500**	< 120	< 600	2400	600	2700	**1400**	**850**	**720**	380	**870**	1400	**190**	6300	3300	**390**	**2400**	3800	**11,000**	3600
C3	4/4/2000	0 - 2	NA	NA	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	.67	.28	< 4.1	1.7	< 4.1	1.7	2	5.5	5.7	8.8	4.4	4.2	6.5	1.5	8.2	.28	4.7	.22	.24	2	7.3
C4	4/5/2000	0 - 2	NA	NA	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< 2.3	< .44	.92	.53	3.3	4.2	3	2.8	2.6	3.7	1.2	3.3	< .44	2.2	< .44	< .44	.77	5.3
C5	4/5/2000	0 - 2	NA	NA	< .36	< .36	< .36	< .36	< .36	.039	< .36	.16	< 1.9	< .36	< .36	.12	.21	.31	.33	.31	.28	.26	.14	.27	< .36	.34	< .36	< .36	.095	.25
C6	4/5/2000	0 - 2	NA	NA	< .35	< .35	< .35	< .35	< .35	< .35	< .35	< .35	< 1.8	< .35	< .35	< .35	.64	0.78	.78	.72	.72	.88	.26	1.2	< .35	.64	< .35	< .35	.27	1.1
C7	4/5/2000	0 - 2	NA	NA	< .43	< .43	< .43	< .43	< .43	.1	.16	.094	< 2.2	.11	.26	.19	2.9	2.6	6	2.3	3.5	4.5	0.92	5.4	.05	3.1	< .43	.15	1	4.9
C8	4/5/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	.18	< .41	< 2.1	.089	.064	.074	0.92	1.6	2.6	1.1	2	1.7	.42	1.6	< .41	1.6	.051	.23	.49	1.2
D1	4/5/2000	0 - 2	NA	NA	< .37	< .37	< .37	< .37	< .37	< .37	< .37	< .37	< 1.9	< .37	< .37	< .37	.23	.28	.32	.21	.22	.3	< .37	.42	< .37	.21	< .37	< .37	.26	.37
D2	4/5/2000	0 - 2	NA	NA	< .36	< .36	< .36	< .36	< .36	.32	.22	< .36	.21	< .36	2	.87	5.5	5.6	9.5	3.9	3.5	7	1.9	8.8	< .36	4.6	< .36	.19	1.7	7.2
D3	4/5/2000	0 - 2	NA	NA	< .37	< .37	< .37	< .37	< .37	< .37	< .37	< .37	< 1.9	< .37	.26	< .37	1.2	1.1	1.3	.65	1.1	1.5	.26	2.2	< .37	.69	< .37	< .37	.48	2
D4	4/5/2000	0 - 2	NA	NA	< .43	< .43	< .43	< .43	< .43	.63	.32	< .43	< 2.2	< .43	4.1	1.5	11	**8.9**	15	6.1	9	13	3.1	14	.26	7.1	< .43	.29	2.3	14
D4	8/6/2003	0 - 2	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 3.2	< 1.6	< 1.6	< 3.2	< 8	< 1.6	.948	.966	5.47	5.53	9.26	3.48	2.93	6.67	0.896	8.71	< 1.6	4.08	< 1.6	< 1.6	1.26	6.74
D4E	8/6/2003	0 - 2	< .87	< .87	< .87	< .87	< .87	< .87	< 1.7	.611	.35	< 1.7	< 4.4	< .87	1.58	1.24	7.56	**8.97**	17	7.2	5.1	9.32	1.83	11.7	< .87	8.78	.261	.429	2.27	10.6
D4N	8/6/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .37	.0946	.0486	< .37	< .91	< .18	.324	.227	1.61	1.74	3.06	1.22	1.06	1.82	.308	2.29	< .18	1.49	< .18	.0441	.441	2.17
D4S	8/6/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< 1	< .21	< .21	< .21	.0555	.0574	.0646	< .21	< .21	.0455	< .21	.112	< .21	< .21	< .21	< .21	< .21	.0901
D4W	8/6/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .37	.0828	.0598	< .37	< .93	< .19	.283	.219	1.28	1.38	2.49	1.05	.818	1.64	.283	2.33	< .19	1.28	.0393	.0568	.401	1.96
D5	4/5/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	.045	< .41	.17	< 2.1	< .41	.066	.078	.64	0.82	0.95	.65	1.2	.98	.24	1	< .41	.86	< .41	< .41	.26	1
D6	4/5/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	.52	< 2	< .4	< .4	< .4	.81	0.91	1.4	.68	.79	1.2	.25	1.6	< .4	.72	< .4	< .4	.71	1.7
D6	8/6/2003	0 - 2	< .25	< .25	< .25	< .25	< .25	< .25	< .5	< .25	< .25	< .5	< 1.3	< .25	.497	.412	2.3	2.78	2.77	2	.983	2.52	.476	2.7	.0503	1.94	< .25	< .25	.472	3.53
D6N	8/6/2003	0 - 2	<.86	<.86	<.86	<.86	<.86	<.86	<1.7	<.86	<.86	<1.7	<4.3	<.86	3.25	2.28	9.24	**12.4**	8.5	7.34	6.53	10.1	**2**	1.12	<.86	6.83	<.86	0.2	1.84	1.51

ARCADIS Design & Consultancy for natural and built assets

Table 7.
Surface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID	Sample Date	Depth Interval	2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Chemical Name																														
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			6,120	9,800 *	10,000	10,000	10,000	1,922.89	10,000	690 *	980 *	4,142.86	483.33	10,000	2,800 *	10,000	79.45	7.94	79.45	***	794.52	7,945.21	7.95	10,000	10,000	79.45	1,600 *	10,000	1,200 *	10,000
D6S	8/6/2003	0 - 2	<.22	<.22	<.22	<.22	<.22	<.22	<.44	<.22	<.22	<.44	<1.1	<.22	1.03	0.335	1.25	2.36	1.54	1.54	1.16	1.57	0.451	0.963	<.22	1.44	<.22	<.22	0.179 J	1.37
D6E	8/6/2003	0 - 2	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<4.7	<2.4	<2.4	<4.7	<12	<2.4	5.43	4.21	16.2	**21.1**	11.3	11.5	13.7	17.4	3.67	20.6	<2.4	11.1	<2.4	<2.4	<4.9	27.9
D6W	8/6/2003	0 - 2	<.9	<.9	<.9	<.9	<.9	<.9	<1.8	.782 J	<.9	<1.8	<4.5	<.9	3.46	2.33	9.98	**11.8**	13.9	6.85	9.07	11.9	2.56	16.6	<.9	7.84	<.9	.237 J	2.59	13.8
D7	4/5/2000	0 - 2	NA	NA	< .39	< .39	< .39	< .39	< .39	.3	.22	< .39	< 2	.2	.2	.57	1.4	1.4	1.2	.83	.98	1.6	.34	3.2	.24	.8	< .39	< .39	2.4	2.6
D8	8/6/2003	0 - 2	< .25	< .25	< .25	< .25	< .25	< .25	< .5	< .25	< .25	< .5	< 1.3	< .25	.497	.412	2.3	2.78	2.77	2	.983	2.52	.476	2.7	.0503	1.94	< .25	< .25	.472	3.53
D8	4/5/2000	0 - 2	NA	NA	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< 2	< .39	2.2	1.8	8.1	6.3	9.8	4.9	< .39	9	1.8	7.9	.44	4.4	.61	< .39	2.2	12
D8E	8/6/2003	0 - 2	< 2.4	< 2.4	< 2.4	< 2.4	< 2.4	< 2.4	< 4.7	< 2.4	< 2.4	< 4.7	< 12	< 2.4	5.43	4.21	16.2	**21.1**	11.3	11.5	13.7	17.4	3.67	20.6	< 2.4	11.1	< 2.4	< 2.4	4.9	27.9
D8N	8/6/2003	0 - 2	< .86	< .86	< .86	< .86	< .86	< .86	< 1.7	< .86	< .86	< 1.7	< 4.3	< .86	3.25	2.28	9.24	**12.4**	8.5	7.34	6.53	10.1	2	11.2	< .86	6.83	< .86	.2	1.84	15.1
D8S	8/6/2003	0 - 2	< .22	< .22	< .22	< .22	< .22	< .22	< .44	< .22	< .22	< .44	< 1.1	< .22	1.03	.335	1.25	2.36	1.54	1.54	1.16	1.57	.451	.963	< .22	1.44	< .22	< .22	.179	1.37
D8W	8/6/2003	0 - 2	< .9	< .9	< .9	< .9	< .9	< .9	< 1.8	.782	< .9	< 1.8	< 4.5	< .9	3.46	2.33	9.98	**11.8**	13.9	6.85	9.07	11.9	2.56	16.6	< .9	7.84	< .9	.237	2.59	13.8
D9	8/6/2003	0 - 2	< 3.9	< 3.9	< 3.9	< 3.9	< 3.9	< 3.9	< 7.8	1.67	< 3.9	< 7.8	< 20	3.35	11.4	14.9	52.7	**59.4**	**87**	25.2	35	71.1	**13.1**	107	2.01	33.1	< 3.9	< 3.9	5.89	83.3
D10	8/6/2003	0 - 2	< 7.6	< 7.6	< 7.6	< 7.6	< 7.6	< 7.6	< 15	10.2	17.5	< 15	< 38	56.6	33.9	74.6	**141**	**107**	**128**	42.7	96.2	135	**20.6**	402	46.6	58.8	6.39	5.01	116	290
E1	4/6/2000	0 - 2	NA	NA	< .37	< .37	< .37	< .37	< .37	1.3	.75	< .37	< 1.9	.33	2.5	8	19	**21**	25	12	21	24	5.7	36	.56	16	.21	.48	6.4	30
E1	8/6/2003	0 - 2	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 3.7	2.51	1.78	< 3.7	< 9.1	1.42	16.9	12.7	34.8	**40.2**	51.1	27.7	34.8	37.6	**9.07**	57.8	1.89	32.7	.656	1.01	13.5	45.5
E1-E	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.1	--	--	--	--	--	--	--	--	--	--	--	--
E1-S	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.36	--	--	--	--	--	--	--	--	--	--	--	--
E1E	8/6/2003	0 - 2	< .86	< .86	< .86	< .86	< .86	< .86	< 1.7	.303	.503	< 1.7	< 4.3	< .86	1.08	.931	3.12	3.86	5.87	3.9	3.1	3.96	1.19	6.06	< .86	3.21	.384	.633	2.88	4.47
E1N	8/6/2003	0 - 2	< .79	< .79	< .79	< .79	< .79	< .79	< 1.6	3.23	1.45	< 1.6	< 4	.748	11.6	13.5	44.1	**40.9**	51.1	25.8	38.8	47.1	6.96	111	.905	30.3	.506	.894	16.5	84.9
E1N-N	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.6	--	--	--	--	--	--	--	--	--	--	--	--
E1N-E	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.78	--	--	--	--	--	--	--	--	--	--	--	--
E1N-W	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.1	--	--	--	--	--	--	--	--	--	--	--	--
E1S	8/6/2003	0 - 2	< .87	< .87	< .87	< .87	< .87	< .87	< 1.7	.455	.252	< 1.7	< 4.4	< .87	1.25	1.13	4.3	4.15	7.16	2.68	4.4	5.41	0.956	7.52	< .87	3.44	.22	.207	1.66	5.78
E1W	8/6/2003	0 - 2	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5	< 7	2.39	1	< 7	< 17	2.99	41.9	32.5	**152**	**150**	**170**	60.9	108	180	**22.4**	327	7.93	79.5	< 3.5	< 3.5	20.9	328
E1W-N	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**33**	--	--	--	--	--	--	--	--	--	--	--	--
E1W-S	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**52**	--	--	--	--	--	--	--	--	--	--	--	--
E1W-SS	3/19/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**22**	--	--	--	--	--	--	--	--	--	--	--	--
E1W-W	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**29**	--	--	--	--	--	--	--	--	--	--	--	--
E2	8/6/2003	0 - 2	< .8	< .8	< .8	< .8	< .8	< .8	< 1.6	< .8	< .8	< 1.6	< 4	< .8	.965	.727	7.16	6.91	10	4.04	3.23	7.22	1.3	9.21	< .8	4.77	< .8	< .8	.381	9.01
E2	4/4/2000	0 - 2	NA	NA	< .37	< .37	< .37	< .37	< .37	2.2	.4	< .37	< 1.9	.19	6.1	5.6	30	**31**	40	12	4.6	37	3	43	.56	20	.24	.45	5.3	45
E2-N	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**16**	--	--	--	--	--	--	--	--	--	--	--	--
E2-E	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**86**	--	--	--	--	--	--	--	--	--	--	--	--
E2-EE	3/19/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.21	--	--	--	--	--	--	--	--	--	--	--	--
E2-W	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**38**	--	--	--	--	--	--	--	--	--	--	--	--
E2E	8/6/2003	0 - 2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.2	.815	< 2.1	< 4.2	< 10	< 2.1	3.69	3.37	24.4	**24.2**	37.6	15.5	11.3	25.8	4.78	35.9	< 2.1	18.9	< 2.1	.589	4.13	36.6
E2N	8/6/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .36	.136	< .18	< .36	< .9	.0422	.719	.452	2.69	3.45	5.78	3.02	1.79	3.17	0.766	3.72	.0505	3.3	< .18	< .18	.372	4.11
E2S	8/6/2003	0 - 2	< 11	< 11	< 11	< 11	< 11	< 11	< 21	3.16	< 11	< 21	< 53	< 11	25.7	15.8	**146**	**154**	**253**	108	87.7	163	**27.9**	222	< 11	132	< 11	< 11	20	213
E2S-E	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**75**	--	--	--	--	--	--	--	--	--	--	--	--
E2S-EE	3/19/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.5**	--	--	--	--	--	--	--	--	--	--	--	--
E2S-S	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**15**	--	--	--	--	--	--	--	--	--	--	--	--
E2S-W	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.7	--	--	--	--	--	--	--	--	--	--	--	--
E2W	8/6/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .36	.0912	.0406	< .36	< .89	< .18	.31	.218	1.34	1.54	2.55	1.25	.812	1.49	.354	1.65	< .18	1.45	.0805	.0974	.257	1.62
E3	4/5/2000	0 - 2	NA	NA	< .43	< .43	< .43	< .43	< .43	.47	< .43	< .43	< 2.2	< .43	1.9	2.5	14	**11**	14	5.6	12	15	2.7	18	.27	6.4	< .43	< .43	3.2	22
E3	8/6/2003	0 - 2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.2	1.23	.547	< 4.2	< 10	.654	3.51	4.91	24.4	**21.9**	30.6	15.7	9.35	23.9	4.43	37	.764	19.2	< 2.1	.549	7.15	35.3
E3E	8/6/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .4	.125	.049	< .4	< 1	.0621	.496	.411	2.04	2.38	2.31	1.47	.718	2.18	.39	2.69	.107	1.62	.0563	.0891	1.15	3.22
E3N	8/6/2003	0 - 2	< 18	< 18	< 18	< 18	< 18	< 18	< 36	12.2	3.92	< 36	< 89	4.21	16.6	45.1	**126**	**100**	**135**	61.2	47	119	**18.3**	224	5.23	76.4	< 18	6.35	45	183
E3S	8/6/2003	0 - 2	< 2	< 2	< 2	< 2	< 2	< 2	< 4.1	< 2	< 2	< 4.1	< 10	< 2	2.49	2.38	13.1	**16.3**	14.9	11.8	5.19	13.9	2.74	14.8	< 2	11.9	< 2	< 2	2.46	22.9
E3W	8/6/2003	0 - 2	< .92	< .92	< .92	< .92	< .92	< .92	< 1.8	< .92	< .92	< 1.8	< 4.6	< .92	3.07	.878	3.18	**12.8**	9.48	15.1	2.81	2.69	2.55	1.69	< .92	11.5	< .92	< .92	.402	3.18
E4	4/5/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2	< .4	3.7	2	9.4	**8.8**	6.6	4.6	6.6	9.8	2.3	12	.62	4.7	.86	.29	3.3	12
E4	8/6/2003	0 - 2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.2	< 2.1	< 2.1	< 4.2	< 10	< 2.1	4.92	1.93	8.19	**12.1**	6.77	6.51	7.66	9.26	1.55	9.45	< 2.1	6.69	< 2.1	< 2.1	2.09	11.8
E4E	8/6/2003	0 - 2	< 1	< 1	< 1	< 1	< 1	< 1	< 2.1	< 1	< 1	< 2.1	< 5.2	< 1	5.53	2.01	8.83	**13.1**	8.45	7.44	7.04	9.93	2.47	10.1	< 1	7.18	.256	.357	1.86	12.7
E4N	8/6/2003	0 - 2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.2	< 2.1	< 2.1	< 4.2	< 11	< 2.1	8.45	6.17	20.5	**28.7**	16.1	16.3	15.2	22.4	3.33	25.3	.584	16.3	< 2.1	.602	6.2	33.4
E4S	8/6/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .41	< .21	< .21	< .41	< 1	< .21	.608	.312	1.57	2.33	1.64	1.37	1.46	1.72	.398	2	< .21	1.45	< .21	.0542	.375	1.99
E4W	8/6/2003	0 - 2	< .94	< .94	< .94	< .94	< .94	< .94	< 1.9	.194	< .94	< 1.9	< 4.7	< .94	1.96	1.2	6.19	7.57	6.06	3.86	5.4	6.89	1.13	8.54	< .94	4.06	< .94	< .94	1.9	9.39
E5	4/5/2000	0 - 2	NA	NA	< .39	< .39	< .39	< .39	< .39	.32	< .39	< .39	< 2	< .39	2.1	1.2	7.5	7.6	12	5.1	7.8	8.6	2.1	11	< .39	5.5	< .39	< .39	1	12
E6	4/5/2000	0 - 2	NA	NA	< .39	< .39	< .39	< .39	< .39	.45	.23	< .39	< 2	< .39	1.1	1	4.2	5.2	10	3.2	5.6	5.9	1.4	6.2	< .39	4	< .39	< .39	1.7	6.3
E7	4/5/2000	0 - 2	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	.63	0.78	1.3	.5	1.1	.92	.23	.85	< .42	.6	< .42	< .42	< .42	.91
E8	4/5/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	.034	.066	< .38	< 2	< .38	.039	.064	.34	.44	.7	.52	.45	.5	.14	.7	< .38	.61	.048	.049	.33	.64
E9	8/6/2003	0 - 2	< .71	< .71	< .71	< .71	< .71	< .71	< 1.4	.725	.204	< 1.4	< 3.6	.183	1.49	1.73	3.67	4.19	6.24	2.99	3.96	4.78	1.06	11.1	.357	3.74	< .71	< .71	5.24	7.97
F1	4/6/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	1.3	1.7	2.4	1.4	2.4	1.9	.47	2	< .41	1.7	< .41	< .41	.36	2.4

ARCADIS Design & Consultancy for natural and built assets

Table 7.
Surface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID	Sample Date	Depth Interval	2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Chemical Name																														
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			6,120	9,800 *	10,000	10,000	10,000	1,922.89	10,000	690 *	980 *	4,142.86	483.33	10,000	2,800 *	10,000	79.45	7.94	79.45	***	794.52	7,945.21	7.95	10,000	10,000	79.45	1,600 *	10,000	1,200 *	10,000
F2	4/6/2000	0 - 2	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	.49	0.72	.81	.5	.98	.69	< .42	.62	< .42	.56	< .42	< .42	< .42	.7
F3	4/6/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	.31	2.1	2.2	3.6	1.8	3.3	3	.64	3.5	< .41	2.3	< .41	< .41	1.5	3.4
F4	4/6/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	.088	.04	.12	< 2	< .38	.15	.18	2.2	2.3	3.3	1.6	2.5	3.1	.65	2.7	.043	2	< .38	.046	.38	2.4
F5	4/6/2000	0 - 2	NA	NA	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	3.2	7.7	< 4.2	< 22	8.4	5.2	20	59	**45**	56	20	38	64	**9.6**	130	13	25	3.2	3.8	46	89
F5	8/5/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .43	< .21	< .21	< .43	< 1.1	< .21	< .21	< .21	.125	.123	.216	< .21	.0755	.16	< .21	.267	< .21	.103	< .21	< .21	.0449	.22
F5-E	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.23	--	--	--	--	--	--	--	--	--	--	--	--
F5-N	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.58	--	--	--	--	--	--	--	--	--	--	--	--
F5-W	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.22	--	--	--	--	--	--	--	--	--	--	--	--
F5E	8/5/2003	0 - 2	< .22	< .22	< .22	< .22	< .22	< .22	< .44	< .22	< .22	< .44	< 1.1	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22
F5N	8/5/2003	0 - 2	< .23	< .23	< .23	< .23	< .23	< .23	< .45	.0492	< .23	< .45	< 1.1	< .23	.098	.123	.855	0.761	1.34	.474	.43	.974	.127	2.26	< .23	.575	< .23	< .23	.24	1.54
F5S	8/5/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< 1.1	< .21	< .21	< .21	< .21	.053	.0494	< .21	.0423	< .21	< .21	.0646	< .21	< .21	< .21	< .21	< .21	< .21
F5W	8/5/2003	0 - 2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.1	.866	< 2.1	< 4.1	< 10	< 2.1	4.4	2.77	11.5	**15.3**	20.9	9.78	12.3	14.9	3.2	21.7	< 2.1	11.2	< 2.1	.431	3.29	16.7
F6	4/6/2000	0 - 2	NA	NA	< .37	< .37	< .37	< .37	< .37	< .37	< .37	< .37	< 1.9	< .37	< .37	< .37	.64	1.1	1.5	.72	1.4	1	.3	.73	< .37	0.92	< .37	< .37	< .37	.76
F7	4/4/2000	0 - 2	NA	NA	< .36	< .36	< .36	< .36	< .36	.034	< .36	< .36	< 1.9	< .36	.17	.15	.61	.65	.67	.61	.6	.88	.27	1	< .36	.64	< .36	< .36	.19	.99
F8	4/6/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	.84	.54	4.2	4	5.6	1.9	2.7	4.7	0.78	5.6	< .41	1.8	< .41	< .41	1.1	5.5
G1	4/6/2000	0 - 2	NA	NA	< .35	< .35	< .35	< .35	< .35	< .35	< .35	< .35	< 1.8	< .35	< .35	< .35	.27	.39	.68	.3	.38	.44	< .35	.47	< .35	.38	< .35	< .35	< .35	.48
G2	4/6/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	.52	2.1	< .4	< 2.1	2.6	< .4	1.6	.84	.56	1	.24	< .4	1.7	< .4	4.6	2.2	.3	.5	2.1	9	3.2
G3	4/6/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2	< .4	< .4	< .4	.22	.28	.46	.26	.44	.34	< .4	.35	< .4	.3	< .4	< .4	< .4	.34
G4	4/6/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	.21	**3**	2.2	4.2	1.8	4.3	4.3	0.72	6.9	< .41	2.3	< .41	< .41	.98	5.3
G5	4/6/2000	0 - 2	NA	NA	< .36	< .36	< .36	< .36	< .36	< .36	< .36	.1	< 1.9	< .36	< .36	< .36	.088	.089	.09	.068	.11	.11	< .36	.07	< .36	< .36	< .36	< .36	.031	< .36
G6	4/4/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< 2	< .38	.31	.28	1.7	1.8	2.3	1.1	1.3	2.2	.49	3.8	< .38	1.2	< .38	< .38	.2	2.8
G7	4/4/2000	0 - 2	NA	NA	< 15	< 15	< 15	< 15	< 15	6.3	2.1	< 15	< 76	2.2	20	48	**240**	**160**	**220**	77	150	250	**40**	370	6.1	**90**	< 15	1.3	48	370
G7	8/5/2003	0 - 2	< 15	< 15	< 15	< 15	< 15	< 15	< 30	5.82	< 15	< 30	< 75	< 15	35.4	41.1	**123**	**116**	**144**	60.2	98.8	146	**25.9**	221	< 15	73.2	< 15	< 15	26.5	165
G7E	8/5/2003	0 - 2	< 4.7	< 4.7	< 4.7	< 4.7	< 4.7	< 4.7	< 9.4	3.7	< 4.7	< 9.4	< 23	< 4.7	15.2	9.76	41.7	**44.6**	62.4	27.2	30.1	52.8	**10.1**	97.7	< 4.7	32.8	< 4.7	< 4.7	18.1	73.7
G7N	8/5/2003	0 - 2	< 16	< 16	< 16	< 16	< 16	< 16	< 33	< 16	< 16	< 33	< 82	8.37	42.6	31.6	**135**	**119**	**182**	68.9	87	152	**29.2**	330	3.48	**83.2**	< 16	< 16	9.55	182
G7S	8/5/2003	0 - 2	< 38	< 38	< 38	< 38	< 38	< 38	< 76	11.3	< 38	< 76	< 190	66.3	71.5	83.2	**291**	**197**	**209**	85.1	152	237	**40**	1050	25.4	**108**	< 38	< 38	69.3	601
G7W	8/5/2003	0 - 2	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 8.8	2.35	< 4.4	< 8.8	< 22	< 4.4	11.4	5.98	28.2	**31.2**	40.5	19.3	26	32.2	6.97	61.9	< 4.4	22.4	< 4.4	< 4.4	9.96	48
G7W-N	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--	--	--
G7W-S	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.26	--	--	--	--	--	--	--	--	--	--	--	--
G7W-W	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--	--	--
G8	4/6/2000	0 - 2	NA	NA	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< 2.2	< .43	< .43	.22	2.6	2.4	2.8	1.4	2.7	3.1	.59	4.6	< .43	1.8	< .43	< .43	.68	4.4
H1	4/6/2000	0 - 2	NA	NA	< .36	< .36	< .36	< .36	< .36	.026	< .36	.1	< 1.8	< .36	< .36	.024	.21	.31	.44	.22	.44	.39	.09	.41	< .36	.31	< .36	< .36	.11	.37
H2	4/6/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4
H3	4/6/2000	0 - 2	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42
H4	4/6/2000	0 - 2	NA	NA	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< 1.9	< .36	< .36	< .36	.64	**2.5**	3.4	1.1	2.2	3.2	.45	.31	< .36	1.5	< .36	< .36	< .36	2
H5	8/5/2003	0 - 2	< 2	< 2	< 2	< 2	< 2	< 2	< 4	1.01	.736	< 4	< 10	< 2	1.45	2.4	22.2	**17.2**	34	9.27	12.2	24	2.7	37.9	< 2	11.7	< 2	.485	11.5	35.6
H5	4/6/2000	0 - 2	NA	NA	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 20	< 3.8	7	16	**190**	**140**	**220**	71	130	220	**44**	260	2.2	**100**	< 3.8	< 3.8	12	250
H5-N	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.55	--	--	--	--	--	--	--	--	--	--	--	--
H5-S	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**27**	--	--	--	--	--	--	--	--	--	--	--	--
H5-W	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.1	--	--	--	--	--	--	--	--	--	--	--	--
H5E	8/5/2003	0 - 2	< .93	< .93	< .93	< .93	< .93	< .93	< 1.9	< .93	< .93	< 1.9	< 4.6	< .93	< .93	< .93	.32	.341	.555	< .93	< .93	.39	< .93	.539	< .93	.371	< .93	< .93	.258	.471
H5N	8/5/2003	0 - 2	< .83	< .83	< .83	< .83	< .83	< .83	< 1.7	< .83	< .83	< 1.7	< 4.2	< .83	.321	.229	2.68	3.19	5.69	1.91	1.78	3.28	.516	3.98	< .83	2.28	< .83	< .83	.568	3.64
H5S	8/5/2003	0 - 2	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	< 8.2	1.05	< 4.1	< 8.2	< 20	< 4.1	4.78	3.26	35.5	**42.4**	72.4	27	25.2	40.8	7.25	52.8	< 4.1	32.8	< 4.1	< 4.1	6.23	60.7
H5S-E	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**12**	--	--	--	--	--	--	--	--	--	--	--	--
H5S-W	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**17**	--	--	--	--	--	--	--	--	--	--	--	--
H5S-S	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.6**	--	--	--	--	--	--	--	--	--	--	--	--
H5W	8/5/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .96	< .19	< .19	< .19	.276	.298	.621	.204	.187	.339	< .19	.492	< .19	.244	< .19	< .19	.104	.438
H6	4/11/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	1.1	1.1	1.4	.64	1.4	1.6	.28	1.7	< .4	.79	< .4	< .4	.28	1.6
H7	4/11/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4
H8	4/6/2000	0 - 2	NA	NA	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< .36	< 1.9	< .36	.41	.27	3.3	4.2	5.4	2.7	3.7	4.2	1.2	4.6	< .36	3.1	< .36	< .36	.63	4.7
I1	4/11/2000	0 - 2	NA	NA	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< 2	< .39	< .39	< .39	.68	0.81	0.91	.57	.84	1	< .39	1.2	< .39	.55	< .39	< .39	.29	1.1
I2	4/11/2000	0 - 2	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	< .42	.32	.3	.54	.33	.26	< .42	.32	< .42	.5	< .42	< .42	< .42	.31
I3	8/5/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .4	.0534	< .2	< .4	.757	< .2	.8	.414	.719	2.48	3.5	4.6	.944	1.31	0.875	.987	< .2	4.59	< .2	< .2	.114	.676
I3	4/11/2000	0 - 2	NA	NA	< .39	< .39	< .39	< .39	< .39	.48	1.5	< .39	3.9	.66	4.1	1.9	5.8	**13**	12	13	24	9.4	4.6	9.9	.36	13	.91	2.4	4.6	7.9
I3E	8/5/2003	0 - 2	< 2	< 2	< 2	< 2	< 2	< 2	< 3.9	< 2	1.71	< 3.9	< 9.8	4.12	.989	2.16	6.35	**9.23**	13.1	6.42	3.46	10.8	1.29	23	3.62	7.2	< 2	< 2	19.2	16.5
I3N	8/5/2003	0 - 2	< .88	< .88	< .88	< .88	< .88	< .88	< 1.8	< .88	< .88	< 1.8	2.5	< .88	2.27	1.17	2.18	**9.05**	11.8	15.9	3.39	2.76	3.03	3	< .88	16	< .88	< .88	.442	2.38
I3S	8/5/2003	0 - 2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 8.3	< 4.2	2.46	< 8.3	< 21	< 4.2	4.02	2.42	21.7	**29.7**	73	24.7	20.5	23.7	5.91	42.8	< 4.2	29.1	1.39	4.77	6.27	42.3
I3W	8/5/2003	0 - 2	< .9	< .9	< .9	< .9	< .9	< .9	< 1.8	.322	.233	< 1.8	< 4.5	< .9	.631	.519	5.06	4.71	10.5	3.54	3.4	6.9	0.913	9.2	< .9	4.39	< .9	.223	1.92	8.77
I4	4/11/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	.32	.4	.39	.3	.41	.48	< .4	.59	< .4	.28	< .4	< .4	< .4	.53

Table 7.
Surface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID	Sample Date	Depth Interval	2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Chemical Name																														
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			6,120	9,800 *	10,000	10,000	10,000	1,922.89	10,000	690 *	980 *	4,142.86	483.33	10,000	2,800 *	10,000	79.45	7.94	79.45	***	794.52	7,945.21	7.95	10,000	10,000	79.45	1,600 *	10,000	1,200 *	10,000
I5	4/11/2000	0 - 2	NA	NA	< .39	< .39	< .39	< .39	< .39	3.7	11	< .39	1.6	12	.7	4.9	6.2	3.1	3.5	1.5	3.1	6.4	0.76	32	10	1.6	2.9	34	49	23
I6	4/11/2000	0 - 2	NA	NA	< .37	< .37	< .37	< .37	< .37	< .37	< .37	< .37	< 1.9	< .37	1.1	.81	8.4	7.9	9.9	4.2	7.6	8.8	1.9	14	< .37	6.1	< .37	< .37	1.4	12
I7	4/11/2000	0 - 2	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42
I8	4/11/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	.22	.61	< .38	< 1.9	.54	.72	1.4	3.5	2.9	3.8	1.7	2.2	4	.61	7.7	.81	1.8	.43	.97	4.2	5.6
J1	8/20/2003	0 - 2	< .7	< .7	< .7	< .7	< .7	< .7	< 1.4	.426	.409	< 1.4	< 3.5	< .7	3.44	1.43	4.11	6.75	9.12	4.83	5.67	5.19	1.68	6.99	< .7	5.67	.437	1.08	1.62	5.2
J2	8/20/2003	0 - 2	< 37	< 37	< 37	< 37	< 37	< 37	< 73	611	83.6	< 73	< 180	30.5	200	1660	**572**	**439**	**662**	260	443	825	**127**	1400	165	**327**	28.8	41.4	890	742
J3	8/20/2003	0 - 2	< 15	< 15	< 15	< 15	< 15	< 15	< 31	< 15	< 15	< 31	< 77	< 15	33.8	12.4	39.1	**78.8**	**109**	59.8	61.3	54.3	**20.2**	51.5	< 15	65.3	< 15	< 15	12.2	44.8
J4	8/21/2003	0 - 2	< .27	< .27	< .27	< .27	< .27	< .27	< .54	< .27	< .27	< .54	< 1.4	< .27	< .27	< .27	.167	.221	.407	.175	.134	.165	< .27	.288	< .27	.194	< .27	< .27	.115	.271
J5	8/21/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .41	.0524	.0416	< .41	< 1	< .21	.131	.146	.383	.439	.562	.286	.43	.473	< .21	.797	< .21	.337	.0413	.0495	.375	.615
J6	8/21/2003	0 - 2	< .82	< .82	< .82	< .82	< .82	< .82	< 1.6	.484	.47	< 1.6	< 4.1	< .82	2.39	1.87	4.27	5.09	6.76	3.3	4.48	5.06	1.07	8.5	< .82	4.02	.248	.309	3.85	6.23
J7	8/21/2003	0 - 2	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 3.8	1.24	< 1.9	< 3.8	< 9.5	< 1.9	5.12	3.55	6.76	**12.4**	17.7	9.23	10.6	10.3	2.31	12.4	< 1.9	10.8	< 1.9	< 1.9	2.66	9.98
J8	8/21/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .95	< .19	.0902	.0607	.224	.341	.393	.244	.296	.27	< .19	.389	< .19	.279	< .19	< .19	.106	.296
J9	8/21/2003	0 - 2	< .81	< .81	< .81	< .81	< .81	< .81	< 1.6	.436	.224	< 1.6	< 4.1	< .81	.947	1.3	7.39	**8.1**	12.5	5.57	3.89	8.39	1.38	13.1	< .81	6.31	< .81	.244	3.05	11.5
J10	8/20/2003	0 - 2	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 2.9	1.11	1.69	< 2.9	< 7.1	1.8	4.69	3.26	9.09	**10.9**	15.6	7.81	9.22	10.3	2.17	17.9	1.64	9	.894	.99	8.78	13.5
J11	8/21/2003	0 - 2	< .22	< .22	< .22	< .22	< .22	< .22	< .44	.045	.06	< .44	< 1.1	< .22	.138	.0907	.51	.629	1.01	.528	.307	.603	.126	.772	< .22	.579	.121	.0505	.293	.719
K1	8/21/2003	0 - 2	< .8	< .8	< .8	.198	< .8	< .8	< 1.6	.908	1.06	< 1.6	< 4	< .8	3.11	3.02	7.42	6.64	8.75	4.2	5.35	8.55	1.41	17.2	.162	4.93	.493	.666	9.51	11.5
K2	8/21/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .41	.118	< .21	< .41	< 1	< .21	.33	.175	.449	0.67	0.93	.509	.643	.686	.134	1.12	< .21	.543	< .21	< .21	.368	.819
K3	8/21/2003	0 - 2	< .24	< .24	< .24	< .24	< .24	< .24	< .48	.145	.0691	< .48	< 1.2	< .24	.21	.204	1.29	1.07	2.48	1.08	.721	2.01	.272	3.04	< .24	1.16	.0546	< .24	.862	2.63
K4	8/21/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .39	< .2	< .2	< .39	< .99	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
K5	8/21/2003	0 - 2	< 2	< 2	< 2	< 2	< 2	< 2	< 4	1.11	.83	< 4	< 10	.57	4.56	3.38	21.9	**38.6**	67.1	32.4	18.1	23.7	6.91	24.8	< 2	37.1	< 2	.719	6.78	25.4
K7	8/21/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .36	.0811	.0461	< .36	< .89	< .18	.188	.174	1.06	1.12	1.94	1.02	.638	1.41	.259	2.02	< .18	1.1	.0666	.0645	.632	1.92
K8	8/21/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .41	.261	.215	< .41	< 1	.0481	.683	.535	3.17	4.19	7.82	4.42	2.39	4.29	1.09	5.02	.0558	5.12	.148	.285	1.77	5.36
K9	8/20/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .37	< .18	.0653	< .37	< .91	< .18	.0793	.054	.174	.213	.211	.143	.219	.202	< .18	.313	< .18	.152	.12	< .18	.262	.253
L1	8/20/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .36	.109	.139	< .36	< .9	.0386	.194	.187	.641	0.967	1.25	.656	.66	.758	.175	1.22	< .18	.76	.541	.199	.767	.874
L2	8/20/2003	0 - 2	< .7	< .7	< .7	< .7	< .7	< .7	< 1.4	.597	.25	< 1.4	< 3.5	.271	1.12	1.22	3.78	5.51	5.94	3.86	4.39	4.27	0.931	7.16	.173	4.43	< .7	.187	2.84	4.93
L3	8/20/2003	0 - 2	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 3.7	2.11	.505	< 3.7	< 9.1	1.22	1.3	3.42	16.8	**26.8**	27.8	17	12.2	17.5	5.88	27.2	.694	20.4	< 1.8	.379	9.99	18.9
L4	8/20/2003	0 - 2	< .17	< .17	< .17	< .17	< .17	< .17	< .35	.193	.157	< .35	< .87	.0742	.54	.441	1.43	2.15	2.61	1.62	1.62	1.74	.544	2.73	.0498	1.87	.161	.158	1.09	1.94
L5	8/20/2003	0 - 2	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 3.8	3.51	2.23	< 3.8	< 9.5	.654	8.93	7.12	13	**18.8**	27.8	16.6	18	18.8	5.24	30	< 1.9	19	1.08	2.3	12.9	20.1
L6	8/21/2003	0 - 2	< .22	< .22	< .22	< .22	< .22	< .22	< .43	< .22	< .22	< .43	< 1.1	< .22	< .22	< .22	.0459	.063	.116	< .22	.0684	.0748	< .22	.104	< .22	< .22	< .22	< .22	< .22	< .22
L7	8/21/2003	0 - 2	< .78	< .78	< .78	< .78	< .78	< .78	< 1.6	.283	< .78	< 1.6	< 3.9	< .78	1.17	.727	3.08	3.78	4.58	2.22	3.8	3.8	0.868	4.62	< .78	2.57	< .78	.199	.929	3.61
L8	8/21/2003	0 - 2	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 3.7	1.28	.788	< 3.7	< 9.3	< 1.9	3.74	2.52	9.18	**10.5**	18.4	7.52	11.2	12.4	2.91	22.3	< 1.9	9.18	.438	.783	6.98	15.1
L9	8/21/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .38	.29	.19	< .38	< .95	.0381	.964	.617	1.97	2.38	3.3	1.63	1.98	2.47	.597	3.44	.0401	1.96	.301	.23	1.08	2.7
L10	8/21/2003	0 - 2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.1	1.25	.461	< 4.1	< 10	< 2.1	6.22	4.81	16.4	**17.1**	27.8	11.5	14.3	19.5	3.61	28.4	< 2.1	14	< 2.1	.43	4.14	22.2
L11	8/21/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .4	.316	.121	< .4	< 1	.065	1.32	.912	1.7	2.67	4	2.16	1.85	2.27	0.707	3	< .2	2.54	.12	.0951	.837	2.57
L12	8/21/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .39	< .2	< .2	< .39	< .98	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
L13	8/21/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .37	< .19	< .19	< .37	< .94	< .19	< .19	< .19	.0518	.0683	.0958	< .19	.0658	.067	< .19	.103	< .19	< .19	< .19	< .19	< .19	.0764
LAGOON A1	8/8/2003	0 - 2	< .76	< .76	< .76	< .76	< .76	< .76	< 1.5	.41	.239	< 1.5	< 3.8	< .76	.985	.834	4.06	4.78	7.65	4.39	2.28	5.1	0.929	8.72	.275	4.73	< .76	< .76	3.82	8.38
LAGOON A2	8/8/2003	0 - 2	< .82	< .82	< .82	< .82	< .82	< .82	< 1.6	.767	.19	< 1.6	< 4.1	< .82	.682	2.47	3.82	3.79	5.72	2.82	2.06	4.31	0.677	7.26	.309	3.2	< .82	.192	2.52	6.5
LAGOON A3	8/8/2003	0 - 2	< .77	< .77	< .77	< .77	< .77	< .77	< 1.5	.502	< .77	< 1.5	< 3.9	< .77	1.43	.93	5.66	7.34	12.9	7.24	3.77	6.94	1.8	6.47	< .77	8.21	< .77	.175	1.24	7.25
LAGOON B1	8/8/2003	0 - 2	< .77	< .77	< .77	< .77	< .77	< .77	< 1.5	1.17	.749	< 1.5	< 3.8	.198	1.84	2.19	4.23	4.3	4.55	2.73	4.09	4.84	0.837	12.1	.654	3.07	.558	1.15	8.06	6.95
LAGOON B2	8/8/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< 1	< .21	.135	.112	.419	.579	.483	.261	.472	.405	< .21	.496	< .21	.345	< .21	< .21	.0974	.419
LAGOON B3	8/8/2003	0 - 2	< .22	< .22	< .22	< .22	< .22	< .22	< .44	.35	.123	< .44	< 1.1	< .22	1.61	.887	2.26	3.08	4.07	2.25	2.89	3.02	0.801	4.23	< .22	2.53	.166	.175	1.19	3.1
M1	8/20/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .39	< .2	< .2	< .39	< .98	< .2	.163	.0814	.516	0.709	0.941	.428	.586	.617	.104	.596	< .2	.489	< .2	< .2	.0973	.513
M2	8/20/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
M3	8/20/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .37	< .18	< .18	< .37	< .92	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18
M4	8/20/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .95	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	.0396	< .19	< .19	< .19	< .19	< .19	< .19
M5	8/20/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
M6	8/20/2003	0 - 2	< .75	< .75	< .75	< .75	< .75	< .75	< 1.5	.391	< .75	< 1.5	< 3.7	< .75	1.29	.788	1.69	2.38	3.86	1.97	2.64	2.82	.45	4.02	< .75	2.22	< .75	.164	1.12	2.81
M7	8/20/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .39	< .2	< .2	< .39	< .99	< .2	< .2	< .2	< .2	.0473	.0678	< .2	.0666	.0538	< .2	.0673	< .2	< .2	< .2	< .2	< .2	< .2
M8	8/20/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .39	.2	.105	< .39	< .97	< .19	.729	.432	1.07	1.35	2.62	1.13	1.46	1.92	.365	2.63	< .19	1.32	.0861	.0824	.66	1.77
M9	8/21/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .96	< .19	.108	.0556	.177	.225	.316	.165	.27	.242	< .19	.338	< .19	.194	< .19	< .19	.0889	.245
MW-14S	7/30/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .37	.0636	.0414	.217	< .91	< .18	.0628	.304	.326	.272	.401	.207	.153	.403	< .18	.548	.0534	.239	< .18	.0397	.281	.418
MW-14D	7/30/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .37	< .19	< .19	< .37	< .93	< .19	.0785	.144	.306	.313	.485	.276	.158	.318	< .19	.453	< .19	.322	< .19	< .19	.126	.347
MW-15S	7/31/2003	0 - 2	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 3.7	**271**	25.1	< 3.7	< 9.3	1.08	1.72	867	7.43	**9.56**	13.2	4.9	4.15	21.5	1.51	10.6	71	6.11	21.8	17.7	94.9	7.59
MW-15D	7/31/2003	0 - 2	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 3.8	.997	< 1.9	< 3.8	< 9.6	.404	5.48	12.3	32	**64.2**	**97.7**	33.1	**24.6**	67.2	**8.96**	22.4	.572	41.1	< 1.9	< 1.9	.891	13.7
MW-15D-N	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.7	--	--	--	--	--	--	--	--	--	--	--	--
MW-15D-E	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.8	--	--	--	--	--	--	--	--	--	--	--	--
MW-15D-S	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**28**	--	--	--	--	--	--	--	--	--	--	--	--
MW-15D-W	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**39**	--	--	--	--	--	--	--	--	--	--	--	--

Table 7.
Surface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID	Sample Date	Depth Interval	2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Chemical Name			2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			6,120	9,800 *	10,000	10,000	10,000	1,922.89	10,000	690 *	980 *	4,142.86	483.33	10,000	2,800 *	10,000	79.45	7.94	79.45	***	794.52	7,945.21	7.95	10,000	10,000	79.45	1,600 *	10,000	1,200 *	10,000
MW-16S	7/31/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .42	.0864	.184	< .42	< 1	.175	< .21	.377	.169	.1	.158	< .21	.0558	.403	< .21	.625	.249	< .21	.0728	.0734	.977	.445
MW-16D	7/31/2003	0 - 2	< .22	< .22	< .22	< .22	< .22	< .22	< .43	.0675	.0785	< .43	< 1.1	.0575	< .22	.125	.0498	< .22	< .22	< .22	< .22	.0516	< .22	.219	.0963	< .22	< .22	< .22	.316	.13
MW-17S	7/31/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .4	.159	.14	.598	< 1	.0544	.846	.611	1.17	1.54	2.14	1.19	1.27	1.32	.388	1.82	< .2	1.39	.0996	.119	.955	1.53
MW-17D	7/31/2003	0 - 2	< .86	< .86	< .86	< .86	< .86	< .86	< 1.7	.184	< .86	< 1.7	< 4.3	< .86	1.49	.956	1.73	2.46	2.87	1.86	2.41	2	.472	2.92	< .86	2.08	< .86	< .86	.714	2.38
MW-18S	8/1/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .39	.0456	< .2	< .39	< .99	< .2	.141	.118	.274	.33	.424	.251	.377	.394	< .2	.634	< .2	.28	< .2	< .2	.232	.476
MW-18D	8/1/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .4	.0819	.0653	< .4	< 1	< .2	.171	.155	.387	.412	.528	.279	.435	.562	< .2	1.1	< .2	.311	.0546	.102	.576	.77
MW-19S	8/1/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
MW-19D	8/1/2003	0 - 2	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 3.9	5.7	2.19	< 3.9	< 9.7	1.73	36	32.3	**79.8**	**106**	**129**	56.4	**82.4**	**93.7**	**20.7**	123	3.14	70.4	1.22	2.14	17	104
MW-19D-N	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**130**	--	--	--	--	--	--	--	--	--	--	--	--
MW-19D-NN	3/19/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**58**	--	--	--	--	--	--	--	--	--	--	--	--
MW-19D-N15	4/2/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**22**	--	--	--	--	--	--	--	--	--	--	--	--
MW-19D-N/W15	4/2/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.5**	--	--	--	--	--	--	--	--	--	--	--	--
MW-19D-E	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**36**	--	--	--	--	--	--	--	--	--	--	--	--
MW-19D-S	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**34**	--	--	--	--	--	--	--	--	--	--	--	--
MW-19D-W	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**190**	--	--	--	--	--	--	--	--	--	--	--	--
MW-19D-WW	3/19/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**42**	--	--	--	--	--	--	--	--	--	--	--	--
MW-19D-W15	4/2/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**120**	--	--	--	--	--	--	--	--	--	--	--	--
MW-20S	10/24/2003	0 - 2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 4.5	1.61	< 2.2	< 4.5	< 11	< 2.2	5.49	8.8	9.69	**15**	19	10.2	6.79	13.2	**2.84**	7.17	.499	11.1	< 2.2	< 2.2	1.96	9.63
MW-20D	10/27/2003	0 - 2	<2	<2	<2	<2	<2	<2	<4	0.797	<2	<4	<10	<2	16.5	7.5	14.2	**31.8**	41.6	23.5	15.7	21	**8.14**	11.3	<2	25.7	<2	456	2.35	17.9
MW-21S	10/24/2003	0 - 2	< .22	< .22	< .22	< .22	< .22	< .22	< .44	.0556	.118	< .44	< 1.1	.054	.421	.348	1	1.53	1.55	1.39	.515	1.16	.258	1.14	.0851	1.2	.118	.225	.948	1.55
MW-21D	10/27/2003	0 - 2	<.21	<.21	<.21	<.21	<.21	<.21	0.116 J	0.183 J	0.0594 J	0.265 J	<1.1	0.1 J	0.342	0.35	1.71	2.25	2.64	2.07	0.801	2.05	0.418	3.11	0.127 J	1.93	0.0696	0.076 J	1.57	3.32
MW-22D	10/27/2003	0 - 2	<.22	<.22	<.22	<.22	<.22	<.22	<.43	.171 J	0.049J	.357 J	<1.1	0.0707	0.0795	0.234	1.08	1.32	1.77	1.13	0.569	1.39	0.246	2.34	0.0807	1.28	<.22	<.22	1.24	2.28
MW-23D	10/23/2003	0 - 2	< .26	< .26	< .26	< .26	< .26	< .26	< .51	.49	.129	.587	< 1.3	.184	.102	.556	2.75	3.06	4.58	2.47	1.49	3.41	.509	5.99	.219	2.61	< .26	.0832	3.14	5.63
MW-24A	7/21/2008	0 - 1.5	< .22	< .22	< .22	< .22	<.22	< .22	< .43	0.426	0.138	1.11	<.35	0.183	0.0956	0.467	2.44	2.84	3.88	1.81	1.29	2.84	0.398	4.26	0.219	2.15	.0551	0.0971	2.6	4.77
MW-25A	7/24/2008	0 - 2	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 3.7	4.64	1.96	< 3.7	< 60	< 60	< 60	12.3	30.9	46	98.4	30.1	31.6	59.1	6.92	93.4	< 60	37.1	< 60	< 60	15.8	80.7
MW-26A	7/29/2008	0 - 2	< .20	< .20	< .20	< .20	< .20	< .20	< .40	< .20	< .20	< .40	< .32	< .32	< .32	< .32	0.117	0.122	0.232	0.0752	0.073	0.136	0.0172	0.192	< .32	0.0926	< .32	< .32	< .32	0.186
MW-27A	8/5/2008	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< .33	< .33	< .33	< .33	< .033	< .033	< .033	< .033	< .033	< .033	< .033	< .33	< .33	< .033	< .33	< .33	< .33	< .33
MW-27B	8/8/2008	0 - 2	< .20	< .20	.1861	< .20	< .20	< .20	< .39	0.0974	0.0433	< .39	< .31	< .31	0.1860	0.211	0.765	0.974	1.21	0.62	0.416	0.956	0.129	1.53	< .31	0.642	< .31	0.0606	0.882	1.55
MW-28A	1/5/2009	0 - 2	< .20	< .20	< .20	< .20	< .20	< .20	< .41	< .20	< .20	< .41	< .33	< .33	< .33	< .33	0.176	0.206	0.365	0.0996	0.106	0.216	0.0243	0.424	< .33	0.119	< .33	< .33	0.167	0.366
MW-28B	1/12/2009	0 - 2	< .20	< .20	< .20	< .20	< .20	< .20	< .41	< .20	< .20	< .41	< .33	< .33	< .33	< .33	< .033	<. 033	0.0162	< .033	< .033	< .033	< .033	< .33	< .33	< .033	< .33	< .33	< .33	< .33
MW-28C	1/14/2009	0 - 2	< .20	< .20	< .20	< .20	< .20	< .20	< .41	< .20	< .20	< .41	< .33	< .33	< .33	< .33	0.0928	0.127	0.197	0.0597	0.059	0.121	< .033	0.232	< .33	0.0735	< .33	< .33	0.076	0.169
MW-29A	1/22/2009	0 - 2	< 10	< 10	< 10	< 10	< 10	< 10	< 21	134	109	< 21	< 100	173	< 100	763	**143**	**89.9**	**157**	39.1	58.1	166	**12.9**	573	282	51.4	80.1 J	104	487	370
MW-29A-E	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**95**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29A-EE	3/19/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.26	--	--	--	--	--	--	--	--	--	--	--	--
MW-29A-S	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**12**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29A-W	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**48**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29A-WW	3/19/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**18**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29B	2/3/2009	0 - 2	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.1	5.79	7.10	< 4.1	< 81	< 81	< 81	27.6 J	60.3	**63.2**	**103**	36.2	33.2	69.9	**10.6**	135	< 81	43	< 81	< 81	40.9 J	97.3
MW-29B-N	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.2	--	--	--	--	--	--	--	--	--	--	--	--
MW-29B-E	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.3	--	--	--	--	--	--	--	--	--	--	--	--
MW-29B-W	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**71**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29B-WW	3/19/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**120**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29B-W15	4/2/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**39**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29B-W15-S	4/2/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**64**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29B-W15-N	4/10/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**40**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29B-W20	4/10/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**210**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29B-W20-N	4/10/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**33**	--	--	--	--	--	--	--	--	--	--	--	--
MW-29B-W20-S	4/10/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**21**	--	--	--	--	--	--	--	--	--	--	--	--
MW-30A	10/12/2009	0 - 2	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.39	< 0.20	< 0.20	< 0.39	< 0.31	< 0.31	< 0.31	< 0.31	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.31	< 0.31	< 0.031	< 0.31	< 0.31	< 0.31	< 0.31
MW-30B	10/14/2009	0 - 2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.43	< 0.21	< 0.21	< 0.43	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	0.0204 J	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-30C	10/15/2009	0 - 2	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 1.7	0.433 J	0.528 J	< 1.7	< 0.33	< 0.33	0.8660	0.849	5.5	6.97	14.2	3.86	4.46	6.53	0.799	6.98	< 0.33	5.74	0.234 J	0.322 J	2.9	6.96
MW-31A	10/19/2009	0 - 2	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20	< 0.20	< 0.40	< 0.32	< 0.32	< 0.32	< 0.32	0.0453	0.0603	0.0742	0.0308 J	0.0233 J	0.0577	< 0.032	0.0745 J	< 0.32	0.0325	< 0.32	< 0.32	< 0.32	0.0891 J
MW-31B	10/20/2009	0 - 2	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.36	< 0.18	< 0.18	< 0.36	< 0.29	< 0.29	< 0.29	< 0.29	< 0.029	< 0.029	< 0.029	< 0.029	< 0.029	< 0.029	< 0.029	< 0.29	< 0.29	< 0.029	< 0.29	< 0.29	< 0.29	< 0.29
MW-31C	10/26/2009	0 - 2	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20	< 0.20	< 0.40	< 0.32	< 0.32	< 0.32	< 0.32	0.129	0.174	0.266	0.0877	0.0878	0.239	0.0161 J	0.473	< 0.32	0.1	< 0.32	< 0.32	0.279 J	0.451
MW-32A	10/27/2009	0 - 2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.41	< 0.21	< 0.21	< 0.41	< 0.33	< 0.33	< 0.33	< 0.33	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.33	< 0.33	< 0.033	< 0.33	< 0.33	< 0.33	< 0.33
MW-32B	4/9/2012	0 - 2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.21	< 0.21	< 0.42	<0.33	<0.17	<0.17	<0.17	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	<0.17	<0.17	<0.033	<0.17	<0.17	<0.17	<0.17
MW-33A	11/2/2009	0 - 2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.21	< 0.21	< 0.42	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-33B	11/5/2009	0 - 2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.43	< 0.21	< 0.21	< 0.43	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-33C	11/9/2009	0 - 2	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.44	< 0.22	< 0.22	< 0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.35	< 0.35	< 0.035	< 0.35	< 0.35	< 0.35	< 0.35

Table 7.
Surface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID	Sample Date	Depth Interval	2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Chemical Name			2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			6,120	9,800 *	10,000	10,000	10,000	1,922.89	10,000	690 *	980 *	4,142.86	483.33	10,000	2,800 *	10,000	79.45	7.94	79.45	***	794.52	7,945.21	7.95	10,000	10,000	79.45	1,600 *	10,000	1,200 *	10,000
MW-34A	11/18/2009	0 - 2	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.41	0.292	< 0.20	< 0.41	< 1.6	< 1.6	< 1.6	< 1.6	1.13	1.38	2.49	1.09	0.732	1.43	0.264	2	< 1.6	1.28	< 1.6	< 1.6	< 1.6	1.71
MW-33A	11/2/2009	0 - 2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.21	< 0.21	< 0.42	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-33B	11/5/2009	0 - 2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.43	< 0.21	< 0.21	< 0.43	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-33C	11/9/2009	0 - 2	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.44	< 0.22	< 0.22	< 0.44	< 0.35	< 0.35	< 0.35	< 0.35	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.35	< 0.35	< 0.035	< 0.35	< 0.35	< 0.35	< 0.35
MW-35A	2/8/2010	0 - 2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	< 0.42	< 0.21	< 0.21	< 0.42	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-35B/C	2/8/2010	0 - 2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	< 0.43	< 0.21	< 0.21	< 0.43	< 0.34	< 0.34	< 0.34	< 0.34	0.0922	0.129	0.187	0.0456	0.0632	0.117	< 0.034	< 0.34	< 0.34	0.056	< 0.34	< 0.34	< 0.34	< 0.34
MW-36A/B	2/11/2010	0 - 2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	< 0.41	< 0.21	< 0.21	< 0.41	< 0.33	< 0.33	< 0.33	< 0.33	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	< 0.33	< 0.33	<0.033	< 0.33	< 0.33	< 0.33	< 0.33
MW-36C	2/15/2010	0 - 2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	< 0.42	< 0.21	< 0.21	< 0.42	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	<0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-37A/B	2/17/2010	0 - 2	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	< 0.43	<0.22	<0.22	< 0.43	<0.87	<0.87	<0.87	<0.87	1.73	2.59	2.42	1.33	0.879	1.93	0.322	1.81	<0.87	1.4	<0.87	<0.87	<0.87	2.38
MW-38A	3/22/2010	0 - 2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	< 0.41	< 0.21	< 0.21	< 0.41	< 0.33	< 0.33	< 0.33	< 0.33	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	< 0.33	< 0.33	<0.033	< 0.33	< 0.33	< 0.33	< 0.33
MW-38B	3/23/2010	0 - 2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<0.20	<0.20	<0.40	<0.32	<0.32	<0.32	<0.32	<0.032	<0.032	0.0331	<0.032	<0.032	<0.032	<0.032	<0.32	<0.32	<0.032	<0.32	<0.32	<0.32	<0.32
MW-39A	3/23/2010	0 - 2	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.39	<0.19	<0.19	<0.39	<0.31	<0.31	<0.31	<0.31	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.31	<0.31	<0.031	<0.31	<0.31	<0.31	<0.31
MW-39B	3/23/2010	0 - 2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.39	<0.20	<0.20	<0.39	<0.32	<0.32	<0.32	<0.32	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.32	<0.32	<0.032	<0.32	<0.32	<0.32	<0.32
MW-40A	4/2/2010	0 - 2	<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	<1.6	<0.79	<0.79	<1.6	<0.79	1.03	2.99	2.2	20.3	23.8	31.4	9.58	11	21.6	3.15	29.7	1.78	13	<0.79	<0.79	4.6	--
MW-40B/C	4/6/2010	0 - 2	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.84	1.05	<0.42	<0.84	<17	<17	<17	<17	19.9	20.9	33.1	15.3	10.4	20.8	4.34	23.9	<17	18.6	<17	<17	<17	20.5
MW-41A	11/2/2010	0 - 2	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.30	<0.15	<0.15	<0.15	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.15	<0.15	<0.030	<0.15	<0.15	<0.15	<0.15
MW-42A	11/3/2010	0 - 2	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.38	<0.30	<0.15	<0.15	<0.15	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.15	<0.15	<0.030	<0.15	<0.15	<0.15	<0.15
MW-42B	11/3/2010	0 - 2	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.38	<0.30	<0.15	<0.15	<0.15	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.15	<0.15	<0.030	<0.15	<0.15	<0.15	<0.15
MW-43A	11/9/2010	0 - 2	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.36	<0.29	<0.14	<0.14	<0.14	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.14	<0.14	<0.029	<0.14	<0.14	<0.14	<0.14
MW-44A	11/11/2010	0 - 2	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.38	<0.31	<0.15	<0.15	<0.15	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.15	<0.15	<0.031	<0.15	<0.15	<0.15	<0.15
MW-45A/B	11/12/2010	0 - 2	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.39	<0.31	<0.16	<0.16	<0.16	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.16	<0.16	<0.031	<0.16	<0.16	<0.16	<0.16
MW-45C	11/17/2010	0 - 2	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.39	<0.31	<0.15	<0.15	<0.15	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.15	<0.15	<0.031	<0.15	<0.15	<0.15	<0.15
MW-46A	11/18/2010	0 - 2	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.35	<0.28	<0.14	<0.14	<0.14	0.328	0.493	0.556	0.287	0.164	0.379	0.0558	0.353	<0.14	0.293	<0.14	<0.14	<0.14	0.443
MW-47A	11/19/2010	0 - 2	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.36	<0.29	<0.15	<0.15	<0.15	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.15	<0.15	<0.029	<0.15	<0.15	<0.15	<0.15
MW-48	1/4/2011	0 - 2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<0.32	<0.16	<0.16	<0.16	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.16	<0.16	<0.032	<0.16	<0.16	<0.16	<0.16
MW-49A	7/26/2011	0 - 2	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.38	<0.31	<0.15	<0.15	<0.15	<0.031	<0.031	0.0423	<0.031	<0.031	<0.031	<0.031	<0.15	<0.15	<0.031	<0.15	<0.15	<0.15	<0.15
MW-49C	7/28/2011	0 - 2	<0.19	<0.19	<0.19	<0.31	<0.19	<0.19	<0.19	<0.19	<0.19	<0.38	<0.31	<0.15	<0.15	<0.15	0.282	0.666	1.21	0.456	0.367	0.417	0.105	0.242	<0.15	0.582	<0.15	<0.15	<0.15	0.48
MW-50A	8/1/2011	0 - 2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<0.32	<0.16	<0.16	<0.16	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.16	<0.16	<0.032	<0.16	<0.16	<0.16	<0.16
MW-51A	8/4/2011	0 - 2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.41	<0.33	<0.16	<0.16	<0.16	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.16	<0.16	<0.033	<0.16	<0.16	<0.16	<0.16
MW-52A	8/10/2011	0 - 2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.41	<0.32	<0.16	<0.16	<0.16	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.16	<0.16	<0.032	<0.16	<0.16	<0.16	<0.16
MW-54A	4/11/2012	0 - 2	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	<0.47	< 0.37	<0.19	<0.19	<0.19	< 0.037	< 0.037	< 0.037	< 0.037	< 0.037	< 0.037	< 0.037	<0.19	<0.19	< 0.037	<0.19	<0.19	<0.19	<0.19
MW-55A	4/12/2012	0 - 2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<0.32	<0.16	<0.16	<0.16	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.16	<0.16	<0.032	<0.16	<0.16	<0.16	<0.16
MW-56A	4/16/2012	0 - 2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	<0.41	<0.33	<0.16	<0.16	<0.16	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.16	<0.16	<0.033	<0.16	<0.16	<0.16	<0.16
RW-1	10/29/2009	0 - 2	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 8.1	20.3	5.18	< 8.1	< 16	5.39 J	13.9 J	173	**103**	**129**	**184**	46.4	63.5	169	**16**	137	14.3 J	59.7	4.79 J	10.8 J	39.1	142
RW-1-N	2/17/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.8	--	--	--	--	--	--	--	--	--	--	--	--
RW-1-E	2/17/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.7	--	--	--	--	--	--	--	--	--	--	--	--
RW-1-S	2/17/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.2**	--	--	--	--	--	--	--	--	--	--	--	--
RW-1-W	2/17/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**8**	--	--	--	--	--	--	--	--	--	--	--	--
RW-2	11/10/2009	0 - 2	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.45	0.408	< 0.23	0.504	< 0.36	< 0.36	< 0.36	0.531	2.5	3.05	4.33	1.25	1.53	3.4	0.394	6.33	< 0.36	1.64	< 0.36	< 0.36	2.98	5.01
RW-3	11/11/2009	0 - 2	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.46	0.243	< 0.23	< 0.46	< 0.37	< 0.37	< 0.37	< 0.37	1.71	2.26	3.19	1.17	1.12	2.38	0.269	3.96	< 0.37	1.43	< 0.37	< 0.37	1.49	3.17
RW-4	11/13/2009	0 - 2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.41	< 0.21	< 0.21	< 0.41	< 0.33	< 0.33	< 0.33	< 0.33	0.15	0.199	0.198	0.13	0.0722	0.192	< 0.033	< 0.33	< 0.33	0.119	< 0.33	< 0.33	< 0.33	< 0.33
RW-5	11/16/2009	0 - 2	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.43	< 0.22	< 0.22	< 0.43	< 0.35	< 0.35	< 0.35	< 0.35	0.164	0.231	0.236	0.162	0.0838	0.204	< 0.035	< 0.35	< 0.35	0.15	< 0.35	< 0.35	< 0.35	< 0.35
RW-6	3/31/2010	0 - 2	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	<0.45	< 0.22	< 0.22	<0.45	< 0.36	< 0.36	< 0.36	< 0.36	0.404	0.499	0.573	0.237	0.19	0.41	0.0566	0.712	< 0.36	0.282	< 0.36	< 0.36	0.37	0.732
RW-7	11/1/2010	0 - 2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	<0.42	<0.34	<0.17	<0.17	<0.17	0.269	0.319	0.65	0.248	0.206	0.38	0.0495	0.485	<0.17	0.309	<0.17	<0.17	<0.17	0.461
RW-8	4/18/2012	0 - 2	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	0.291	< 0.22	<0.45	<0.36	<0.18	0.682	0.718	3.55	4.13	5.64	2.13	2.15	4.5	0.932	5.3	<0.18	3.21	<0.18	<0.18	1.07	4.95
N1	8/19/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .37	< .18	< .18	< .37	< .92	< .18	< .18	< .18	< .18	.0431	.0994	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18
N2	8/19/2003	0 - 2	< .22	< .22	< .22	< .22	< .22	< .22	< .44	.148	.285	< .44	< 1.1	.143	.444	.358	2.39	3.93	9.08	3.98	2.57	3.63	0.84	3.41	.0519	4.65	.122	.434	.983	4.99
N3	8/19/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .37	< .18	< .18	< .37	< .92	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18
N4	8/19/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .39	< .2	< .2	< .39	< .98	< .2	< .2	< .2	< .2	< .2	.0499	< .2	< .2	< .2	< .2	.0398	< .2	< .2	< .2	< .2	< .2	< .2
N5	8/19/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .39	< .19	< .19	< .39	< .97	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
N6	8/19/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .36	.105	.0966	< .36	< .89	< .18	.332	.196	.712	1.05	1.5	.804	.952	.956	.297	1.4	< .18	0.951	0.0906	.051	.645	.965
N7	8/19/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .37	< .19	.0473	< .37	< .93	< .19	.0462	< .19	.0729	.0887	.141	< .19	.096	.103	< .19	.151	< .19	.0829	.0493	< .19	.17	.108
N8	8/19/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .37	.0987	.0411	< .37	< .94	< .19	.226	.115	.309	.43	.737	.378	.445	.536	.122	1.08	< .19	.42	.0579	< .19	.427	.696
P1	8/19/2003	0 - 2	< .75	< .75	< .75	< .75	< .75	< .75	< 1.5	.23	.401	< 1.5	< 3.7	< .75	.485	.459	2.45	3.27	6.51	2.4	1.97	2.15	.597	4.36	< .75	2.78	.332	.362	1.97	5.46
P2	8/19/2003	0 - 2	< 7.7	< 7.7	< 7.7	< 7.7	< 7.7	< 7.7	< 15	1.94	1.73	< 15	< 38	1.82	9.79	15.8	**88.6**	**75.4**	**113**	45.2	37.1	82.7	**14**	129	2.58	50.7	< 7.7	< 7.7	17.7	135
P2-N	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.1	--	--	--	--	--	--	--	--	--	--	--	--
P2-E	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.46	--	--	--	--	--	--	--	--	--	--	--	--
P2-S	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3	--	--	--	--	--	--	--	--	--	--	--	--
P2-W	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.5	--	--	--	--	--	--	--	--	--	--	--	--

ARCADIS Design & Consultancy for natural and built assets

Table 7.
Surface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID	Sample Date	Depth Interval	2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Chemical Name																														
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			6,120	9,800 *	10,000	10,000	10,000	1,922.89	10,000	690 *	980 *	4,142.86	483.33	10,000	2,800 *	10,000	79.45	7.94	79.45	***	794.52	7,945.21	7.95	10,000	10,000	79.45	1,600 *	10,000	1,200 *	10,000
P3	8/19/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .35	.0514	.0982	< .35	< .89	< .18	.223	.17	1.27	1.19	1.91	.869	.629	1.18	.21	1.74	< .18	1.01	.13	.0878	.454	1.94
P4	8/19/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .35	.0566	.291	< .35	< .88	.0404	.107	.167	.63	.543	0.893	.574	.273	.725	.142	1.05	.0412	.566	.456	.362	1.38	1.1
P5	8/19/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .39	.22	.501	< .39	< .97	.0519	.929	.596	1.38	1.71	2.73	1.28	1.28	1.65	.461	2.48	< .19	1.43	.542	.367	2.22	1.76
P6	8/19/2003	0 - 2	< .4	< .4	< .4	< .4	< .4	< .4	< .8	.487	.307	< .8	< 2	.0844	1.73	1.07	3.14	4.04	5.9	2.82	3.42	4.03	1	6.18	.0897	3.38	.281	.383	2.1	4.58
P7	8/19/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .39	.346	.204	< .39	< .98	.0448	.353	.296	.623	0.753	1.2	.577	.826	1.12	.198	2.6	< .2	.66	.231	.247	1.35	1.52
P8	8/19/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .42	.084	.196	< .42	< 1.1	< .21	.182	.134	.341	.392	.592	.295	.307	.438	.112	.686	< .21	.339	.642	.331	.655	.489
Q1	8/19/2003	0 - 2	< .38	< .38	< .38	< .38	< .38	< .38	< .76	.313	.249	< .76	< 1.9	< .38	1.13	.721	2.11	2.86	4.13	1.96	2.56	2.78	0.744	3.85	< .38	2.36	.234	.228	1.4	2.95
Q2	8/19/2003	0 - 2	< .39	< .39	< .39	< .39	< .39	< .39	< .78	.968	.955	< .78	< 2	.112	1.8	1.49	3.32	3.85	6.25	2.82	3	4.39	1.06	7.84	.0992	3.29	1.26	1.13	3.62	5.52
Q3	8/19/2003	0 - 2	< .2	< .2	< .2	< .2	< .2	< .2	< .41	.362	.356	< .41	< 1	.095	.788	.719	4.42	5.15	9.31	4.97	2.79	5.3	1.13	6.62	.0878	4.25	.228	.398	2.29	6.77
Q4	8/19/2003	0 - 2	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 3.6	< 1.8	< 1.8	< 3.6	< 9	< 1.8	< 1.8	< 1.8	.401	< 1.8	.658	< 1.8	< 1.8	.502	< 1.8	.801	< 1.8	< 1.8	< 1.8	< 1.8	.689	.833
Q5	8/19/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .35	< .18	.0378	< .35	< .88	< .18	.0615	.0449	.245	.336	.682	.26	.203	.232	< .18	.397	< .18	.29	.0823	.0432	.18	.412
Q6	8/19/2003	0 - 2	< .18	< .18	< .18	< .18	< .18	< .18	< .36	< .18	< .18	< .36	< .91	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18
Q7	8/19/2003	0 - 2	< 22	< 22	< 22	< 22	< 22	< 22	< 45	< 22	13.1	< 45	< 110	8.05	11.1	9.75	**120**	**52.9**	**223**	43.2	75.6	**178**	**11.6**	404	< 22	57.7	5.83	21.5	35.8	320
Q7-N	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**14**	--	--	--	--	--	--	--	--	--	--	--	--
Q7-E	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**12**	--	--	--	--	--	--	--	--	--	--	--	--
Q7-S	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**28**	--	--	--	--	--	--	--	--	--	--	--	--
Q7-W	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**19**	--	--	--	--	--	--	--	--	--	--	--	--
Q8	8/19/2003	0 - 2	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .94	< .19	< .19	< .19	< .19	< .19	.0655	< .19	< .19	< .19	< .19	.0411	< .19	< .19	< .19	< .19	< .19	< .19
S1	9/25/2000	0 - 2	NA	NA	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< 2.2	< .43	.5	.28	4.3	5.5	9.1	3.8	4	5.2	< .43	4.5	< .43	4.2	< .43	< .43	.73	4.9
S2	9/25/2000	0 - 2	NA	NA	< .46	< .46	< .46	< .46	< .46	< .46	< .46	< .46	< 2.4	< .46	.56	.33	6.2	6.2	11	4.1	3.1	6	< .46	6	< .46	4.5	< .46	< .46	.71	8.5
S3	9/25/2000	0 - 2	NA	NA	< .42	< .42	< .42	< .42	< .42	.25	< .42	< .42	< 2.2	< .42	.23	.52	3	3.8	5.6	2.8	4.2	3.9	0.91	4	< .42	3.3	< .42	< .42	2	5.2
S4	9/25/2000	0 - 2	NA	NA	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< 2.3	< .44	< .44	< .44	< .44	.24	.34	< .44	.22	.3	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44
S6	9/25/2000	0 - 2	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	0.99	1.1	1.3	.8	1	1.4	< .42	2	< .42	.88	< .42	< .42	.84	1.9
S7	9/25/2000	0 - 2	NA	NA	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< 2.5	< .48	< .48	< .48	.55	.6	.74	.42	.54	.58	< .48	.98	< .48	.49	< .48	< .48	< .48	.94
S8	9/25/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	.061	< .41	< .41	< 2.1	< .41	.4	< .41	2.7	3.4	5.4	2.6	2.3	3.1	0.86	3.3	< .41	2.8	< .41	< .41	.56	3.6
S9	9/29/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	< .41	< .41	.19	< .41	.15	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
S10	9/29/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	.72	0.92	1.1	.66	1.5	1.1	< .41	1.4	< .41	.58	< .41	< .41	.32	1.3
S11	9/29/2000	0 - 2	NA	NA	< .41	< .41	< .41	< .41	< .41	.21	< .41	.2	< 2.1	< .41	.41	.46	4.7	< .41	5.5	3	4.6	5.4	< .41	6.3	< .41	3.1	< .41	< .41	1.4	6.1
S12	9/29/2000	0 - 2	NA	NA	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< 2	< .38	< .38	.26	1.5	1.4	1.6	.69	1.3	1.5	< .38	2.6	< .38	.59	< .38	< .38	.86	2.3
S13	9/29/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	.49	.57	.5	.32	.65	.56	< .4	.73	< .4	.28	< .4	< .4	< .4	.69
S14	8/8/2003	0 - 2	< .21	< .21	< .21	< .21	< .21	< .21	< .41	.0917	< .21	< .41	< 1	< .21	.117	.374	0.977	0.812	1.13	.378	.405	.912	.111	1.78	< .21	.48	< .21	< .21	.368	1.39
S14	9/29/2000	0 - 2	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	.81	1.3	8.7	**9.7**	12	4.8	8.2	12	< .4	8.6	< .4	5.1	< .4	< .4	1.5	14
S14E	8/8/2003	0 - 2	< 7.7	< 7.7	< 7.7	< 7.7	< 7.7	< 7.7	< 15	606	67.1	< 15	< 38	31.5	49.1	1890	**133**	**120**	**140**	58.2	85.4	254	**23.7**	420	165	72.5	50.6	45.4	239	253
S14N	8/8/2003	0 - 2	< 21	< 21	< 21	< 21	< 21	< 21	< 41	31.9	7.25	< 41	< 100	5.13	37.3	124	**215**	**183**	**265**	117	88.1	218	**34.3**	462	16.7	**145**	< 21	5.15	149	348
S14W	8/8/2003	0 - 2	< 2	< 2	< 2	< 2	< 2	< 2	< 4.1	1.3	.499	< 4.1	< 10	< 2	1.82	2.19	7.4	**8.16**	13.3	6.52	4.49	9.62	1.54	16.2	< 2	7.57	< 2	.574	6.68	12.7
S15	5/6/2004	0 - .5	<1	<1	<1	<1	<1	<1	< 2	1.01	.617	< 2	< 5	<1	1.05	1.17	9.92	**9.58**	20.9	7.62	6.57	14.8	1.94	18.3	<1	9.05	.312	.474	5	16.6
S16	5/6/2004	0 - .5	< .82	< .82	< .82	< .82	< .82	< .82	< 1.6	.635	.24	< 1.6	< 4.1	< .82	.992	.716	5.7	6.4	13	5.11	4.14	8.16	1.27	10.5	< .82	5.87	< .82	.209	2.41	10.7
S17	5/6/2004	0 - .5	< .84	< .84	< .84	< .84	< .84	< .84	< 1.7	.404	.373	< 1.7	< 4.2	< .84	.575	.488	4.63	5.64	12.2	3.96	3.55	6.44	1.11	6.43	< .84	4.68	.372	.34	2.38	7.64
S18	5/6/2004	0 - .5	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 8.9	3.77	4.03	< 8.9	< 22	1.23	11.3	18.5	**83.2**	**84.1**	**153**	72.9	45.7	101	**19.8**	140	1.27	78.1	1.76	3.41	25.3	143
S18-E	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.54	--	--	--	--	--	--	--	--	--	--	--	--
S18-S	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**59**	--	--	--	--	--	--	--	--	--	--	--	--
S18-W	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**19**	--	--	--	--	--	--	--	--	--	--	--	--
S19	5/6/2004	0 - .5	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.1	.843	< 2.1	< 4.1	< 10	< 2.1	1.71	1.33	14.6	**15**	26.9	11.1	8.69	18.1	2.64	28	< 2.1	12.7	< 2.1	< 2.1	3.22	27.6
S20	5/6/2004	0 - .5	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	< 15	52.3	10.9	< 15	< 37	5.39	44.8	339	**496**	**357**	**506**	153	114	558	**61.4**	850	27.6	**253**	8.05	10.1	112	792
S20	5/6/2004	0 - .5	< 7.4	< 7.4	< 7.4	< 7.4	< 7.4	< 7.4	< 15	63.9	15.3	< 15	<37	6.82	42.4	320	**441**	**316**	**487**	146	101	481	**71.7**	773	31	**185**	10.9	17.1	149	686
S21	5/6/2004	0 - .5	< .93	< .93	< .93	< .93	< .93	< .93	< 1.9	.928	.841	< 1.9	< 4.7	.202	1.22	1.74	9.54	**9.28**	15.1	7.37	4.72	9.97	1.85	16.4	.741	8.16	.506	1.39	7.6	14.7
S22	5/6/2004	0 - .5	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 3.6	7.88	13	< 3.6	134	2.29	6.1	19.6	56.9	**41.3**	74.4	38.1	18.7	58.6	**12.4**	138	3.11	42.9	7.22	15.4	84.2	115
S23	5/6/2004	0 - .5	< .85	< .85	< .85	< .85	< .85	< .85	< 1.7	.707	.835	< 1.7	< 4.3	.187	1.34	1.68	6.66	7.35	13	8.18	4.27	7.81	2.01	12	< .85	9.17	.405	.725	5.76	11.5
S24	5/6/2004	0 - .5	< .74	< .74	< .74	< .74	< .74	< .74	< 1.5	.555	.868	< 1.5	< 3.7	< .74	.959	1.24	5.48	5.95	12.4	6.63	3.81	6.88	1.64	9.92	< .74	7.93	.42	.624	5.48	8.43
S25	5/6/2004	0 - .5	< .73	< .73	< .73	< .73	< .73	< .73	< 1.5	.693	.452	< 1.5	< 3.6	.212	.979	1.07	5.17	6.98	11.5	7.83	3.42	6.71	1.8	8.12	.163	8.76	.261	.455	3.61	7.89
S26	5/6/2004	0 - .5	< .2	< .2	< .2	< .2	< .2	< .2	< .4	.259	.115	< .4	< .99	< .2	.545	.368	2.46	3.35	6.29	3.53	1.78	3.51	1.01	3.52	< .2	3.95	.102	.104	.872	3.85
S27	5/6/2004	0 - .5	< .91	< .91	< .91	< .91	< .91	< .91	< 1.8	.642	.67	< 1.8	< 4.6	< .91	1.41	1.31	7.01	7.8	15.3	8.42	5.12	10.4	2.19	12.4	< .91	9.87	.343	.547	4.67	11.7
S28	5/6/2004	0 - .5	< .89	< .89	< .89	< .89	< .89	< .89	< 1.8	.55	.362	< 1.8	< 4.4	< .89	1.48	1.5	9.92	**9.86**	16.3	8.64	5.32	11.2	2.62	14.3	< .89	9.85	.248	.425	2.72	16.1
S29	5/6/2004	0 - .5	< .21	< .21	< .21	< .21	< .21	< .21	< .42	.0844	.359	< .42	< 1.1	< .21	.113	.186	.717	.583	.975	.643	.3	.807	.197	1.02	.0588	.64	.516	.358	1.56	1.19
S30	5/7/2004	0 - .5	< .46	< .46	< .46	< .46	< .46	< .46	< .91	.641	.136	< .91	< .23	< .46	2.09	1.73	3.42	4.73	8.55	4.43	4.2	5.33	1.11	5.03	< .46	4.86	< .46	.122	.92	5.49
S30	5/7/2004	0 - .5	< .24	< .24	< .24	< .24	< .24	< .24	< .49	.346	.0978	< .49	.731	< .24	1.89	1.4	3.76	4.79	7.51	4.34	5.79	5.44	1.55	5.19	< .24	4.56	.058	.0967	.771	5.88
S31	5/7/2004	0 - .5	< .2	< .2	< .2	< .2	< .2	< .2	< .41	.214	.129	< .41	1.35	< .2	1.33	.933	1.78	2.28	4.08	2.76	3.23	3.12	.901	3.5	< .2	4.25	.0605	.108	.762	4.19
S32	5/7/2004	0 - .5	< .95	< .95	< .95	< .95	< .95	< .95	< 1.9	.398	< .95	< 1.9	< 4.8	< .95	1.37	.99	10.4	**11.2**	21.6	7.09	7.01	13.1	1.79	16.9	< .95	8.77	.301	.268	2.21	16.6
S33	5/7/2004	0 - .5	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 2.5	2.3	1.33	< 2.5	< 6.3	.339	2.78	3.41	16.4	**20.3**	46.8	16.2	11.3	21.4	4.64	27.5	.307	19.7	.791	1.29	8.07	29.5

Table 7.
Surface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID	Sample Date	Depth Interval	2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenzo (a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Chemical Name																														
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			6,120	9,800 *	10,000	10,000	10,000	1,922.89	10,000	690 *	980 *	4,142.86	483.33	10,000	2,800 *	10,000	79.45	7.94	79.45	***	794.52	7,945.21	7.95	10,000	10,000	79.45	1,600 *	10,000	1,200 *	10,000
S34	5/7/2004	0 - .5	< .18	< .18	< .18	< .18	< .18	< .18	< .37	.108	.0527	< .37	< .92	< .18	.54	.401	1.2	1.44	2.05	1.11	1.16	1.69	.322	1.92	< .18	1.2	< .18	.0444	.38	1.94
S35	5/7/2004	0 - .5	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.2	2.41	.711	< 4.2	< 10	.888	10.6	9.7	36.2	**34.4**	44.5	18.2	24.5	38.1	6.28	67.7	.934	21.6	.42	1.05	10.6	51.7
S35-N	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.3	--	--	--	--	--	--	--	--	--	--	--	--
S35-E	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.9	--	--	--	--	--	--	--	--	--	--	--	--
S35-S	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.8	--	--	--	--	--	--	--	--	--	--	--	--
S35-W	2/27/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.1	--	--	--	--	--	--	--	--	--	--	--	--
S36	5/7/2004	0 - .5	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 3.9	3.06	.581	< 3.9	< 9.7	< 1.9	15.5	13.3	41.8	**44.4**	73.8	26.7	34.2	51.5	**9.48**	51.1	.676	32.1	< 1.9	.433	6.87	58.2
S37	5/7/2004	0 - .5	< .81	< .81	< .81	< .81	< .81	< .81	< 1.6	.358	.254	< 1.6	< 4.1	< .81	2.39	1.37	6.89	**9.95**	15.6	11.2	4.82	8.54	2.95	7.87	< .81	11.5	.235	.29	1.81	9.73
S38	5/7/2004	0 - .5	< .25	< .25	< .25	< .25	< .25	< .25	< .5	.185	< .25	< .5	1.09	< .25	.568	.402	2.02	2.42	4.52	3.37	1.4	3.12	.741	2.87	< .25	3.35	< .25	< .25	.434	3.34
S39	5/7/2004	0 - .5	< .19	< .19	< .19	< .19	< .19	< .19	< .38	.204	.0974	< .38	< .95	< .19	.506	.485	1.44	2.11	3.52	2.39	1.12	1.92	.587	1.63	.0437	2.76	.106	.0858	.561	2.08
S40	5/7/2004	0 - .5	< .43	< .43	< .43	< .43	< .43	< .43	< .86	.415	.26	< .86	.967	.161	.969	1.62	3.55	3.83	6.11	4.97	1.86	4.31	1.24	5.86	.194	5.59	.124	.284	1.92	5.72
S41	5/7/2004	0 - .5	< .22	< .22	< .22	< .22	< .22	< .22	< .43	.11	.0738	< .43	< 1.1	.0785	.497	.422	2.65	3.36	4.75	3.18	1.39	2.86	.831	3.21	.0809	3.55	.0445	.106	.76	3.73
S42	5/7/2004	0 - .5	< .22	< .22	< .22	< .22	< .22	< .22	< .44	.137	.0593	< .44	< 1.1	.048	.457	.567	1.23	1.5	1.83	.913	1.18	1.7	.275	1.72	< .22	1.01	< .22	.0598	.533	1.62
S43	5/7/2004	0 - .5	< .88	< .88	< .88	< .88	< .88	< .88	< 1.8	1.14	.357	< 1.8	< 4.4	< .88	2.9	3.36	9.21	7.87	11.6	4.79	7.34	11.2	1.56	19.8	.269	5.91	.225	.293	5.78	15.3
S44	5/7/2004	0 - .5	< 5.1	< 5.1	< 5.1	< 5.1	< 5.1	< 5.1	< 10	2.49	5.09	< 10	< 25	3.22	13.5	11	34.3	**54.4**	**104**	35	49.7	51.7	**11**	47.6	1.26	45.8	1.87	5.25	15.9	52.4
S44-N	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.8	--	--	--	--	--	--	--	--	--	--	--	--
S44-E	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.2	--	--	--	--	--	--	--	--	--	--	--	--
S44-S	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.68	--	--	--	--	--	--	--	--	--	--	--	--
S44-S	2/26/2013	0 - 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.3	--	--	--	--	--	--	--	--	--	--	--	--
S45	5/7/2004	0 - .5	< .2	< .2	< .2	< .2	< .2	< .2	< .4	.187	.11	< .4	< 1	.0488	1.56	1.1	3.62	4.23	6.12	3.87	4.71	4.62	1.26	4.08	.0442	4.85	.0848	.107	.727	4.82
S46	5/7/2004	0 - .5	< .21	< .21	< .21	< .21	< .21	< .21	< .42	.155	.121	< .42	< 1	< .21	.301	.323	1.74	1.9	3.65	1.97	1.08	2.38	.527	3.02	.0445	2.35	.0699	.0712	1.1	3.13
S47	5/7/2004	0 - .5	< .21	< .21	< .21	< .21	< .21	< .21	< .43	.299	.199	< .43	< 1.1	.0653	1.44	1.09	2.45	2.91	5.31	2.57	2.96	3.57	.896	4.17	.0575	4.22	.0991	.138	1.74	4.21
S48	5/7/2004	0 - .5	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.1	2.03	1.37	< 4.1	< 10	.815	8.31	7.28	12.4	**16.7**	21.7	16.9	12.4	15.7	5	25.3	.535	19	.523	1.01	9.59	21.4
S49	5/7/2004	0 - .5	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	<2.1	< 4.2	4.44	.895	< 4.2	< 11	2.79	.658	7.49	40.6	**50.4**	61.5	44.2	17.8	39.9	**10.3**	59.4	1.71	52	< 2.1	< 2.1	24.1	61.4
S50	5/7/2004	0 - .5	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 2.1	.954	.808	< 2.1	< 5.3	.263	5.13	4.96	6.82	**12.2**	17.2	12.2	9.99	9.04	3.61	10.4	< 1.1	13.1	.328	.668	4.52	9.6
S51	5/7/2004	0 - .5	< 5.5	< 5.5	< 5.5	< 5.5	< 5.5	< 5.5	< 11	1.49	< 5.5	< 11	< 28	< 5.5	5.57	3.7	9.66	**12.9**	17.9	9.5	13.3	13.7	< 5.5	17.8	< 5.5	10.7	< 5.5	< 5.5	5.92	15.5
S52	5/7/2004	0 - .5	< .4	< .4	< .4	< .4	< .4	< .4	< .8	.676	.369	< .8	< 2	.0839	2.03	1.6	3.18	4.07	6.71	3.2	3.54	4.52	.989	6.51	< .4	3.68	.222	.317	2.49	5.27
S53	5/7/2004	0 - .5	< 1	< 1	< 1	< 1	< 1	< 1	< 2.1	1.27	1.26	< 2.1	< 5.2	.359	4.21	3.93	8.07	**9.47**	13.1	9.34	8.48	9.64	1.95	18.1	.225	9.92	.533	.95	8.56	14.9
S54	5/7/2004	0 - .5	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 2.2	1.85	1.19	< 2.2	< 5.6	.552	7.55	7.01	10.9	**16**	26.4	15.6	11.9	15	4.22	20.5	.391	18	.47	1.15	6.45	18.7
VAT1	8/8/2003	0 - 2	< .83	< .83	< .83	< .83	< .83	< .83	< 1.7	.529	.196	< 1.7	< 4.2	< .83	.934	1.05	6.21	6.3	9.69	4.02	3.12	7.07	1.1	11.5	.24	4.76	< .83	.171	4.11	9.36
VAT2	8/8/2003	0 - 2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.2	< 2.1	< 2.1	< 4.2	< 10	< 2.1	1.6	.989	5.8	**8.09**	10.9	5.19	3.29	6.43	1.33	6.54	< 2.1	5.83	< 2.1	< 2.1	1.28	6.91
VAT3	8/8/2003	0 - 2	< .79	< .79	< .79	< .79	< .79	< .79	< 1.6	.161	< .79	< 1.6	< 4	< .79	1.17	.848	5.14	6.71	7.65	4.77	2.39	5.65	1.16	6.02	< .79	4.91	< .79	< .79	1.05	7.58
WALL1	8/5/2003	0 - 2	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 3.6	1.37	.376	< 3.6	< 9.1	< 1.8	6.47	4.03	17.2	**18**	24.6	10.9	15.1	20.3	4.04	35.6	< 1.8	12.9	< 1.8	< 1.8	6.66	26.3
WALL2	8/5/2003	0 - 2	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 2.7	.698	.306	< 2.7	< 6.8	< 1.4	4.23	2.82	10.4	**11.5**	15.5	7.25	9.41	12	2.82	18.6	< 1.4	8.76	< 1.4	.37	3	14.8
WALL3	8/5/2003	0 - 2	< .96	< .96	< .96	< .96	< .96	< .96	< 1.9	.474	.629	< 1.9	< 4.8	.402	2.1	4.28	7.9	7.67	8.05	3.87	6.43	9.45	1.63	14.1	.557	4.72	< .96	.625	3.3	8.87

Notes:

BOLD Exceeds Tier II Non-residential Cleanup Goal

* Cleanup goals with an asterisk are taken form the January 31, 2006 IDEM RISC Technical Guide Appendix 1, since the Constituents did not have cleanup goals in the 1996 VRP Guidance Manual

*** Benzo(g,h,i)perylene does not have a cleanup goal in the 1996 VRP Guidance Manual or in the current IDEM RISC Technical Guide Appendix 1, dated January 26, 2006.

Soil boring location has been excavated

Table 8.
SubSurface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i)Perylene	Benzo(k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			15.12	25 *	375.93	427.24	658.78	30.65	10,000	20 *	65 *	1406.3	24.947	10,000	180 *	10,000	103.88	69.9	354.98	***	3759.1	10,000	69.86	10,000	10,000	629.2	42 *	10,000	170 *	10,000
Location ID	Sample Date	Depth Interval																												
Area-J-CS-1	1/20/2012	5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.41	<0.32	<0.16	<0.16	<0.16	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.16	<0.16	<0.032	0.651	0.191	<0.16	<0.16
Area-J-CS-2	1/20/2012	5	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.41	<0.33	0.345	<0.17	0.203	0.238	0.634	0.676	0.335	0.352	0.388	0.0953	0.577	0.339	0.491	<0.17	<0.17	0.877	0.383
Area-J-CS-3	1/20/2012	5	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**20.2**	44.6	<4.2	<21	55.4	<10	32.6	26.9	17.6	20.9	9.21	13.3	24.9	2.7	101	65.2	10.8	**47.3**	142	**183**	84.4
Area-J-CS-4	1/31/2012	5	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	**44.4**	**132**	<17	<17	125	8.83	85.7	53.3	27.9	27.4	10.4	20.9	46.4	2.96	207	150	15.9	**122**	594	**565**	137
Area-J-CS-5	1/31/2012	5	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.41	<0.33	<0.17	<0.17	<0.17	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.17	<0.17	<0.033	<0.17	<0.17	<0.17	<0.17
Area-J-CS-6	2/1/2012	5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.41	<0.33	<0.16	<0.16	<0.16	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.16	<0.16	<0.033	<0.16	<0.16	<0.16	<0.16
Area-J-CS-7	2/2/2012	5	<3.9	<3.9	<3.9	<3.9	<3.9	<3.9	<3.9	14.6	36.8	<7.7	<1.5	42.6	2.44	20.7	21	10.9	11.2	4.14	6.93	17.9	0.943	79.2	48.1	6.48	26.3	78.3	135	53.2
Area-J-CS-8	2/3/2012	5	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	0.531	1.34	<0.42	<0.33	2	<0.17	0.429	0.118	0.112	0.101	0.0718	0.0865	0.119	<0.033	1.01	1.69	0.0868	2.63	9.07	3.88	0.628
Area-K-CS-1	12/19/2011	2	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.45	<0.36	<0.18	<0.18	<0.18	0.0401	0.0405	0.0562	<0.036	0.0408	0.0454	<0.036	<0.18	<0.18	<0.036	<0.18	<0.18	<0.18	<0.18
Area-K-CS-2	12/19/2011	2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<0.32	<0.16	<0.16	<0.16	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.16	<0.16	<0.032	<0.16	<0.16	<0.16	<0.16
Area-K-CS-3	12/19/2011	2	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.39	<0.31	<0.16	<0.16	<0.16	0.0331	0.0445	0.0474	<0.031	0.0343	0.0389	<0.031	<0.16	<0.16	0.0325	<0.16	<0.16	<0.16	<0.16
Area-K-CS-4	12/19/2011	2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.42	<0.33	<0.17	<0.17	<0.17	0.409	0.531	0.582	0.331	0.395	0.431	0.0524	0.573	<0.17	0.42	<0.17	<0.17	<0.17	0.531
Area-K-CS-5	12/19/2011	2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<0.32	<0.16	<0.16	<0.16	0.198	0.219	0.223	0.117	0.177	0.215	<0.032	0.286	<0.16	0.149	<0.16	<0.16	<0.16	<0.16
Area-K-CS-6	12/19/2011	2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<0.32	<0.16	<0.16	<0.16	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.16	<0.16	<0.032	<0.16	<0.16	<0.16	<0.16
Area-L-CS-1	12/15/2011	2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.41	<0.33	<0.17	<0.17	<0.17	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.17	<0.17	<0.033	<0.17	<0.17	<0.17	<0.17
Area-L-CS-2	12/15/2011	2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.43	<0.34	<0.17	<0.17	<0.17	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.17	<0.17	<0.034	<0.17	<0.17	<0.17	<0.17
Area-L-CS-3	12/15/2011	2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.43	<0.34	<0.17	<0.17	<0.17	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.17	<0.17	<0.034	<0.17	<0.17	<0.17	<0.17
Area-L-CS-4	12/15/2011	2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<0.32	<0.16	<0.16	<0.16	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.16	<0.16	<0.032	<0.16	<0.16	<0.16	<0.16
Area-L-CS-5	12/15/2011	2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.41	<0.33	<0.16	<0.16	<0.16	0.0369	<0.033	0.0375	<0.033	0.0343	0.0452	<0.033	<0.16	<0.16	<0.033	<0.16	<0.16	<0.16	<0.16
Area-M-CS-1	1/12/2012	5	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.43	<0.34	<0.17	0.809	0.658	4.4	4.12	6.27	2.51	2.76	5	0.691	4.81	<0.17	3.09	<0.17	<0.17	0.528	5.29
Area-M-CS-2	1/12/2012	5	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	0.322	<0.21	<0.42	<0.34	0.215	0.971	1.85	8.09	5.57	6.77	3	3.12	7.43	0.669	22	0.326	3.71	<0.17	<0.17	4.54	16.9
Area-M-CS-3	1/12/2012	5	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.41	<0.33	0.204	0.384	0.5	2.22	1.91	2.34	1.08	1.38	2.28	0.323	3.3	<0.16	1.28	<0.16	<0.16	0.664	3.14
Area-M-CS-4	1/13/2012	5	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	3.3	8.34	<0.83	<0.33	9.05	1.4	5.57	6.12	3.7	3.97	1.12	2.24	4.32	0.397	19.9	11	1.53	4.39	6.58	30.1	14.7
Area-M-CS-5	1/13/2012	5	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.44	<0.35	<0.17	<0.17	<0.17	0.342	0.35	0.469	0.164	0.26	0.361	0.0526	0.579	<0.17	0.201	<0.17	<0.17	<0.17	0.614
Area-N-CS-1	1/12/2012	2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.43	<0.34	<0.17	2.3	0.94	4.4	9.23	6.46	6.72	2.64	5.57	0.958	2.63	<0.17	5.84	0.87	<0.17	0.551	3.91
Area-N-CS-2	1/12/2012	2	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.43	<0.35	<0.17	2.62	1.17	5.86	8.15	4.99	2.51	2.17	7.03	0.767	4.31	0.363	2.72	0.713	<0.17	0.919	8.47
Area-N-CS-3	1/13/2012	2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.42	<0.34	<0.17	1.99	1.11	6.54	8.78	7.58	2.35	2.53	6.4	0.804	6.01	0.251	2.93	0.439	<0.17	0.691	8.03
Area-O-CS-1	1/18/2012	2	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<1.6	9.25	0.416	2.19	2.18	14.7	15.5	18.8	7.8	13.8	25.4	2.57	20.4	0.472	12.5	<0.41	<0.41	3.33	23.9
Area-O-CS-2	1/18/2012	2	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<1.8	3.56	<0.45	1.88	2.21	8.49	8.66	12.2	6.02	6.11	10.5	1.87	15.4	<0.45	9.5	0.45	0.7	5.59	13.4
Area-O-CS-3	1/18/2012	2	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	2.35	0.736	<0.42	1.33	0.323	2.52	8.77	7.01	11.6	13.7	8.72	3.12	9.53	2.21	11.3	0.645	12.8	0.425	0.802	3.31	9.74
Area-P-CS-1	1/17/2012	5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<0.32	0.264	0.389	0.335	2.16	2.18	2.5	0.857	1.34	1.58	0.257	3.43	0.228	1.1	<0.16	<0.16	0.706	3.58
Area-P-CS-2	1/17/2012	5	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.44	<0.36	<0.18	<0.18	<0.18	0.0625	0.0925	0.0829	0.0597	0.0606	0.0716	<0.036	<0.18	<0.18	0.0585	<0.18	<0.18	<0.18	<0.18
Area-P-CS-3	1/17/2012	5	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	8.59	1.1	<1.8	<0.37	0.215	1.97	26.9	14	11	14.1	2.85	3.22	20.9	1.58	29.4	2.19	7.44	0.516	0.552	10.3	25.4
Area-P-CS-4	1/19/2012	5	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.37	2.33	<0.15	<0.15	0.211	0.513	0.612	0.799	0.464	0.514	0.596	0.103	0.903	<0.15	0.633	<0.15	<0.15	0.248	0.742
Area-P-CS-5	1/18/2012	5	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.41	<0.33	<0.16	<0.16	<0.16	0.765	0.685	0.828	0.338	0.535	0.793	0.0848	1.39	<0.16	0.493	<0.37	<0.37	1.32	1.11
Area-P-CS-6	1/18/2012	5	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	<1.5	<0.73	<0.37	2.72	4.36	13.5	62.4	88.8	33	6.89	46.5	12	2.03	0.513	48.2	<0.37	<0.37	1.06	4.67
A1	4/3/2000	4 - 5	NA	NA	.045	.077	< .4	< .4	< .4	3.8	9.7	< .4	.28	9	1.7	5.4	5.2	2.6	3.1	1.1	2.2	4.2	.51	23	12	1.3	11	29	41	16
A2	4/3/2000	4 - 5	NA	NA	< .35	< .35	< .35	< .35	.43	.094	.12	.12	.21	.18	.13	.26	.18	.2	.22	.51	.17	.21	.16	.5	.21	.54	.039	.25	.58	.46
A3	4/3/2000	3 - 4.5	NA	NA	< .39	< .39	< .39	< .39	.092	.2	.29	.057	< 2	.32	.089	.43	.46	.39	.41	.26	.36	.47	.12	.98	.35	.28	< .39	.088	.41	.81
A4	8/8/2003	2 - 4	< 4.4	1.14	< 4.4	< 4.4	< 4.4	< 4.4	< 8.8	4.54	4.45	< 8.8	< 22	6.15	10.1	18.4	33.1	38.2	42.4	19.6	33.5	36.5	7.99	55.2	6.32	24.6	8.44	51.2	21.2	44.2
A4	4/3/2000	5 - 6	NA	NA	< 2.4	< 2.4	< 2.4	< 2.4	< 2.4	**86**	**130**	< 2.4	2.5	230	24	270	**210**	**160**	130	44	140	260	26	610	220	65	46	70	**530**	430
A4E	8/8/2003	5 - 6	< 97	< 97	< 97	< 97	< 97	< 97	< 190	**574**	**1660**	< 190	**< 490**	1880	580	1010	**867**	**575**	**565**	200	492	761	66.5	2820	2060	257	**2280**	7010	**4820**	1890
A4N	8/5/2003	4 - 5	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 16	8.89	12.2	< 16	**< 41**	14.2	5.23	27.8	31.4	47.8	65.8	22.6	21.3	43.9	6.09	46.3	15.9	28.2	15.8	46.9	43	40
A4S	8/8/2003	4 - 5	**< 100**	**< 100**	< 100	< 100	< 100	**< 100**	< 200	**1060**	**1120**	< 200	**< 510**	1300	200	2460	**545**	**344**	311	116	276	686	< 100	1980	1500	153	**1870**	**12400**	**3910**	1210
A4W	8/8/2003	3 - 4	< 16	< 16	< 16	< 16	< 16	< 16	< 32	74.8	**69.2**	< 32	**< 80**	72	11.3	231	36.3	35.3	36.2	16.3	26.8	83.8	< 16	114	92.2	20.6	**48.9**	172	**202**	72.1
A5	4/3/2000	4 - 4.5	NA	NA	< .38	< .38	< .38	< .38	< .38	.25	.38	.062	< 2	.32	.24	1	1.3	1.3	1.5	.7	1.2	1.6	.34	2.8	.43	.83	< .38	.066	.8	2.5
A6	4/3/2000	3 - 4.5	NA	NA	< .36	< .36	< .36	< .36	< .36	.1	.14	.056	< 1.9	.16	.083	.44	.52	.48	.46	.24	.43	.67	.12	1.1	.19	.27	.037	.04	.74	.94
A7	4/3/2000	4 - 6	NA	NA	.048	< .42	< .42	< .42	< .42	3.1	2.5	.066	< 2.2	2.8	.34	8.6	1.6	1	.98	.74	1.1	1.9	.3	6.9	3.8	.81	1.2	3.1	13	4.7
A8	4/3/2000	4 - 6	NA	NA	< .42	< .42	< .42	< .42	< .42	.064	.17	.06	< 2.2	.51	.031	.14	.091	.12	.076	.23	.075	.092	.07	.37	.49	.24	< .42	.077	.39	.27
A9	4/3/2000	5 - 6	NA	NA	< .42	< .42	< .42	< .42	< .42	.42	.21	.27	< 2.1	.25	< .42	1.2	.3	.27	.24	.17	.3	.39	.088	.8	.22	.18	.097	.25	.35	.75
A10	4/3/2000	6 - 7	NA	NA	< 42	< 42	< 42	< 42	< 42	430	63	< 42	**< 220**	18	4.6	840	31	25	22	13	25	65	5.3	100	160	16	37	44	**260**	75
A10N	8/7/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .41	< .2	.086	< .41	< 1	.0937	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	.0641	< .2	.0544	.223	.198	< .2
A10S	8/7/2003	5 - 7	< 4	< 4	< 4	< 4	< 4	< 4	< 8	21.8	52	< 8	< 20	56	5.82	41.6	18.6	8.96	10.3	2.94	7.75	17.4	< 4	117	65.9	3.88	**69.1**	146	**207**	58.8
A11	4/3/2000	4 - 6	NA	NA	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< 2.2	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43
A12	4/3/2000	4 - 6	NA	NA	< .41	< .41	< .41	< .41	< .41	1	.61	< .41	< 2.1	.42	< .41	.28	.047	< .41	< .41	< .41	< .41	.05	< .41	.55	.93	< .41	.12	.79	1.5	.38
A13	4/3/2000	8 - 10	NA	NA	< .43	< .43	< .43	< .43	< .43	< .43	< .43	.2	< 2.2	< .43	.038	.045	.15	.19	.23	.21	.2	.2	.08	.2	< .43	.2	< .43	< .43	.072	.18
A14	8/5/2003	5 - 6	< .22	< .22	< .22	< .22	< .22	< .22	< .44	10.6	4.07	< .44	< 1.1	3.89	.624	28.4	1.88	1.26	1.34	.599	1.04	2.52	.212	9.34	7.58	.718	1.72	6.76	17.5	4.71
A15	8/5/2003	6 - 8	< .22	.0662	< .22	< .22	< .22	< .22	< .45	6.27	5.37	< .45	< 1.1	5.43	.867	4.81	2.33	2.02	2.4	1.19	1.46	2.78	.413	9.56	8.52	1.42	2.62	20	18.1	5.22
A16	8/5/2003	5 - 6	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.2	**69.7**	**77.9**	< 4.2	< 10	101	5.89	178	29.6	14.1	20.5	4.68	7.04	28.9	1.3	167	109	5.86	**47.3**	221	**312**	93.9
B1	4/4/2000	2 - 3	NA	NA	< .45	< .45	< .45	< .45	< .45	2.8	2	< .45	< 2.3	.43	3.9	5.5	19	14	23	11	9.9	24	.87	36	.72	12	1.1	2.3	12	29
B1E	8/7/2003	6 - 8	< 42	< 42	< 42	< 42	< 42	< 42	< 83	**75.6**	201	< 83	**< 210**	209	39.5	150	56.2	32.1	32.7	< 42	25.8	57.7	< 42	265	227	< 42	**253**	743	**509**	152
B1S	8/7/2003	5 - 6	< .21	< .21	< .21	< .21	< .21	< .21	< .42	.104	.448	< .42	< 1	.198	.106	.215	.257	.248	.342	.168	.282	.319	< .21	.742	.191	.199	.309	1.05	1.34	.5
B2	4/4/2000	6 - 7	NA	NA	< .48	< .48	< .48	< .48	< .48	3.3	8.9	.36	< 2.4	10	< .48	8.6	3.7	2	1.7	.79	1.5	3.5	.4	13	11	.86	.48	1.8	30	9.7
B3	4/4/2000	4 - 6	NA	NA	< .4	< .4	< .4	< .4	< .4	1.2	3.8	< .4	< 2	4.2	.46	2.1	2	1.2	1	.93	1	1.7	.41	8.8	4.6	.98	3	6.9	17	6
B3	8/7/2003	6 - 8	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 8.5	13.4	33.6	< 8.5	< 21	36.7	4.99	28	9.35	5.36	4.75	1.77	4.26	10.6	< 4.2	48.7	40.1	2.42	37	100	90.9	26.7

Table 8.
SubSurface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i)Perylene	Benzo(k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			15.12	25 *	375.93	427.24	658.78	30.65	10,000	20 *	65 *	1406.3	24.947	10,000	180 *	10,000	103.88	69.9	354.98	***	3759.1	10,000	69.86	10,000	10,000	629.2	42 *	10,000	170 *	10,000
Location ID	Sample Date	Depth Interval																												
B3S	8/7/2003	7 - 8	< 4.6	< 4.6	< 4.6	< 4.6	< 4.6	< 4.6	< 9.2	19.5	28.1	< 9.2	< 23	32.9	6.47	55.8	15.5	12.7	14.5	6.29	11.6	19.5	< 4.6	65.9	38	7.75	25.5	68.1	90.8	38.1
B3W	8/7/2003	4 - 6	< 130	< 130	< 130	< 130	< 130	< 130	< 260	**867**	**999**	< 260	**< 650**	937	209	1990	**290**	**161**	164	64.9	136	356	< 130	1390	1230	81.5	**1260**	**4000**	**2800**	771
B8	4/3/2000	2 - 3	NA	NA	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	.64	.35	< 2.2	19	.44	7	5	25	30	23	18	19	32	7.6	31	1	20	.3	.39	4.4	39
B9	4/4/2000	4 - 6	NA	NA	< .41	< .41	< .41	< .41	< .41	.28	< .41	< .41	< 2.1	< .41	< .41	.53	< .41	.23	< .41	< .41	< .41	< .41	< .41	< .41	.23	< .41	< .41	< .41	< .41	< .41
B9	8/7/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .41	.293	.0569	< .41	< 1	.0454	< .2	.14	< .2	< .2	< .2	< .2	< .2	< .2	< .2	.201	.971	< .2	< .2	< .2	.0885	.113
B9E	8/7/2003	5 - 6	< .21	< .21	< .21	< .21	< .21	< .21	< .42	.0923	.196	< .42	< 1.1	.304	< .21	.116	.103	.056	.0543	< .21	.0538	.0923	< .21	.528	.388	< .21	.0769	.133	.897	.315
B9N	8/7/2003	4 - 5	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .95	< .19	< .19	< .19	.0444	.0601	.0979	< .19	.0574	.0602	< .19	.106	< .19	< .19	< .19	< .19	< .19	.0801
B9S	8/7/2003	6 - 7	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 4.2	< 8.5	9.72	53.5	< 8.5	< 21	64.8	3.25	19.3	16.5	9.33	9.26	2.79	8.13	12.9	< 4.2	75.8	60	4.1	**53.5**	120	142	47.2
B9W	8/7/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .41	< .2	< .2	< .41	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
B10	8/5/2003	4 - 6	< 7.8	< 7.8	< 7.8	< 7.8	< 7.8	< 7.8	< 16	26.6	42.8	< 16	**< 39**	47	7.32	78.6	50	44.7	63.7	17.5	22.4	54.6	5.49	131	68.1	21.6	32	54.4	**187**	93.3
B10	4/4/2000	4 - 6	NA	NA	< .39	< .39	< .39	< .39	< .39	.029	< .39	.064	< 2	< .39	.13	.049	< .39	.25	.15	.48	.13	< .39	.17	.043	< .39	.48	< .39	< .39	< .39	.075
B10S	8/7/2003	3 - 5	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< 1	< .21	< .21	< .21	< .21	< .21	.0564	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
B10W	8/5/2003	3 - 4.5	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.1	9.21	45.9	< 4.1	< 10	49.2	1.98	28.3	21.6	12.8	16.8	4.31	5.68	18.3	1.54	80.9	64.2	5.28	30.3	80.5	**180**	50
B12	4/4/2000	4 - 6	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	.24	< .41	.022	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
B13	4/3/2000	6 - 7	NA	NA	< .42	< .42	< .42	< .42	< .42	.034	< .42	.093	< 2.2	< .42	.042	.066	.06	.058	.059	.12	.05	.068	< .42	.11	< .42	.11	< .42	< .42	.12	.099
C1	4/4/2000	4 - 6	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
C2	4/5/2000	6 - 7	NA	NA	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	45	200	< 8.7	< 45	230	10	150	**120**	**70**	76	28	50	130	13	500	260	28	**84**	200	840	390
C4	4/5/2000	4 - 5	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	.43	< .41
C5	4/5/2000	4 - 6	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42
C6	4/5/2000	5 - 7	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4
C7	4/5/2000	7 - 8	NA	NA	< .43	< .43	< .43	< .43	< .43	.3	.89	.073	< 2.2	1	.033	.38	.96	.73	1.3	.39	.87	1.4	.17	4	1.1	.54	< .43	.15	3.5	3
C8	4/5/2000	5 - 7	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	.052	.074	.12	.062	.12	.09	< .41	.056	< .41	< .41	< .41	< .41	.023	< .41
D1	4/5/2000	5 - 7	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
D2	4/5/2000	5 - 7	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	.1	< 2.1	< .4	< .4	< .4	.18	.2	.33	.16	.21	.27	< .4	.3	< .4	.19	< .4	< .4	.055	.3
D3	4/5/2000	5 - 7	NA	NA	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< 2	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	.094	< .38
D4	4/5/2000	6 - 7	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.1	< .42	< .42	< .42	.36	.3	.42	< .42	< .42	.4	< .42	.9	< .42	< .42	< .42	< .42	.33	.71
D5	4/5/2000	6 - 8	NA	NA	< .39	< .39	< .39	< .39	< .39	< .39	< .39	.11	< 2	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39
D6	4/5/2000	7 - 8	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
D7	4/5/2000	2 - 4	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	.38	.52	.35	.3	.2	.47	< .4	.48	< .4	.26	< .4	< .4	.35	.6
D8	4/5/2000	2 - 4	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	.32	< .42
D9	8/6/2003	3.5 - 5.5	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< 1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
D10	8/6/2003	4 - 6	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 18	34.5	64.7	< 18	< 45	83.4	6.85	105	39.2	24.3	24.3	7.07	21.4	56.2	< 9.1	138	95.4	10.8	**59**	152	254	91.8
E1	4/6/2000	4 - 6	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42
E2	4/4/2000	4 - 6	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	.034	.035	.045	.052	.052	.16	.039	.036	.07	.086	< .42	.12	< .42	< .42	.069	.087
E2E	8/6/2003	4.5 - 5	< .22	< .22	< .22	< .22	< .22	< .22	< .43	.0642	.222	< .43	< 1.1	1.81	< .22	.629	.124	.102	.117	< .22	< .22	.104	< .22	1.52	2.47	< .22	.0615	.276	3.64	.867
E2S	8/6/2003	4 - 4.5	< .21	< .21	< .21	< .21	< .21	< .21	< .43	.0576	.045	< .43	< 1.1	.0981	< .21	< .21	< .21	< .21	.0472	< .21	< .21	< .21	< .21	< .21	< .21	< .21	.136	2.12	< .21	< .21
E3	4/5/2000	2 - 3	NA	NA	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< 2	< .38	.48	.76	4.5	2.8	4	1.5	3.1	4.9	.78	10	< .38	1.6	< .38	< .38	1.2	9.2
E4	4/5/2000	2 - 3.5	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42
E4W	8/6/2003	4 - 4	< 40	**< 40**	< 40	< 40	< 40	< 40	< 79	17.6	148	< 79	**< 200**	233	21.5	89.4	**133**	**80.1**	87.1	29.1	69.5	98.7	< 40	568	248	36.5	**52.7**	94.8	702	351
E5	4/5/2000	4 - 6	NA	NA	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< 2.4	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47	< .47
E6	4/5/2000	4 - 6	NA	NA	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< 2.3	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44
E7	4/5/2000	4 - 6	NA	NA	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< 2.3	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45	< .45
E8	4/5/2000	4 - 6	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
E9	8/6/2003	4 - 6	< 36	**< 36**	< 36	< 36	< 36	< 36	< 73	24.6	117	< 73	**< 180**	156	12	68	62.1	37.2	37.9	< 36	35.3	50.8	< 36	280	173	19	110	297	472	164
F1	4/6/2000	4 - 6	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
F2	4/6/2000	4 - 6	NA	NA	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< 2	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39
F3	4/6/2000	5 - 7	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
F4	4/6/2000	4 - 6	NA	NA	< .42	< .42	< .42	< .42	< .42	.03	< .42	.12	< 2.2	.047	< .42	< .42	.27	.16	.19	.18	.23	.34	< .42	.22	< .42	.15	< .42	< .42	.044	.17
F5	4/6/2000	4.5 - 6.5	NA	NA	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< 2	< .39	< .39	< .39	.21	< .39	< .39	< .39	< .39	.26	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39
F6	4/6/2000	3 - 5	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4
F7	4/4/2000	4 - 6	NA	NA	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< 2	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39
F8	4/6/2000	4 - 6	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42
G1	4/6/2000	4 - 6	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	.36	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42
G2	4/6/2000	2 - 4	NA	NA	< 2.4	< 2.4	< 2.4	< 2.4	< 2.4	6	36	.4	< 12	58	1.1	16	16	8	8.8	2.2	6.8	14	1	77	44	2.8	19	64	160	54
G3	4/6/2000	4 - 6	NA	NA	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< 2	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39
G4	4/6/2000	4 - 6	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.1	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42
G5	4/6/2000	3.5 - 5.5	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	.12	< 2.1	< .41	< .41	< .41	.041	.044	.046	.048	< .41	.049	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
G6	4/4/2000	3 - 5	NA	NA	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< .39	< 2	< .39	< .39	< .39	< .39	.48	.53	.36	.27	< .39	< .39	< .39	< .39	.37	< .39	< .39	< .39	< .39
G7	4/4/2000	3 - 5	NA	NA	< .39	< .39	< .39	< .39	< .39	.57	.22	< .39	< 2	.32	< .39	.99	.37	.31	.3	.2	< .39	.36	< .39	1.4	2.2	.21	< .39	< .39	.54	1.8
G7E	8/5/2003	4.5	< 2	< 2	< 2	< 2	< 2	< 2	< 3.9	.652	12.4	< 3.9	< 9.8	17.7	2.15	8.55	9.86	6.16	6.25	2.75	4.29	9.41	1.08	46	29.9	3.43	< 2	< 2	38.7	25.2
G8	4/6/2000	4 - 6	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4
H1	4/6/2000	4 - 6	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	.071	< 2.1	< .41	< .41	< .41	.029	< .41	.031	< .41	< .41	.035	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
H2	4/6/2000	2 - 4	NA	NA	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< 2.2	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43
H3	4/6/2000	4 - 6	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4
H4	4/6/2000	6 - 8	NA	NA	< .38	< .38	< .38	< .38	< .38	< .38	< .38	.095	< 2	< .38	< .38	< .38	.026	< .38	.031	< .38	< .38	.03	< .38	< .38	< .38	< .38	< .38	< .38	< .38	< .38
H5	4/6/2000	2 - 4	NA	NA	< 4	< 4	< 4	< 4	< 4	40	**190**	< 4	< 21	200	32	66	69	41	42	18	40	70	9.6	260	250	20	**160**	450	**640**	190

Table 8.
SubSurface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i)Perylene	Benzo(k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			15.12	25 *	375.93	427.24	658.78	30.65	10,000	20 *	65 *	1406.3	24.947	10,000	180 *	10,000	103.88	69.9	354.98	***	3759.1	10,000	69.86	10,000	10,000	629.2	42 *	10,000	170 *	10,000
Location ID	Sample Date	Depth Interval																												
H6	4/11/2000	5 - 7	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4
H7	4/11/2000	4 - 6	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< 2.1	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41	< .41
H8	4/6/2000	5 - 7	NA	NA	< .39	< .39	< .39	< .39	< .39	.039	< .39	< .39	< 2	< .39	< .39	< .39	1.5	1.6	2.1	1	1.7	1.9	.44	1.8	< .39	1.2	< .39	< .39	.27	1.8
I1	4/11/2000	7.5 - 9.5	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42
I2	4/11/2000	5.5 - 7.5	NA	NA	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< 2.2	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44	< .44
I3	4/11/2000	6.5 - 8.5	NA	NA	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< 2.2	< .42	< .42	< .42	< .42	< .42	.22	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42	< .42
I4	4/11/2000	6 - 8	NA	NA	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< 2.4	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48	< .48
I5	4/11/2000	6 - 8	NA	NA	< .41	< .41	< .41	< .41	< .41	.23	1	< .41	< 2.1	1.5	< .41	.46	.61	.28	.34	.14	.22	.6	.064	3.4	1	.13	< .41	.21	4.1	2.4
I6	4/11/2000	7 - 9	NA	NA	< .41	< .41	< .41	< .41	< .41	< .41	.22	.5	< 2.1	.23	.76	.64	4.8	3.8	4.4	2	3.3	4.9	.96	7.8	.38	2.3	< .41	< .41	2.8	6.7
I7	4/11/2000	7 - 9	NA	NA	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< 2.2	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43	< .43
I8	4/11/2000	6 - 8	NA	NA	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< 2.1	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4
J1	8/20/2003	6 - 8	< 4	< 4	< 4	< 4	< 4	< 4	< 8	13.1	**71.5**	< 8	< 20	79	9.66	37.2	36.3	23.4	22.1	8.44	19.2	28.9	2.32	145	86.8	10.1	4.87	127	242	80.5
J2	8/20/2003	4 - 6	< .2	< .2	< .2	< .2	< .2	< .2	< .39	.165	.0611	< .39	< .98	.0525	.0677	.412	.202	.171	.238	.11	.146	.287	< .2	.843	.0979	.126	< .2	.0897	.401	.469
J3	8/20/2003	4 - 6	< .78	< .78	< .78	< .78	< .78	< .78	< 1.6	1.63	5.46	< 1.6	< 3.9	8.41	.403	3.55	2.93	1.63	1.78	.594	1.22	2.58	< .78	14.9	8.95	.734	1.99	.713	24	8.69
J4	8/21/2003	3.5 - 5.5	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 4.6	< 2.3	19.1	< 4.6	< 12	27.7	.992	11.3	16.1	10.1	13.3	3.71	4.98	11.2	< 2.3	73.6	31.1	4.62	< 2.3	< 2.3	112	43.5
J5	8/21/2003	4 - 6	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	.0639	.0774	.113	< .2	.0416	.0726	< .2	.119	< .2	< .2	< .2	< .2	.0509	.0858
J6	8/21/2003	9 - 11	< .18	< .18	< .18	< .18	< .18	< .18	< .37	< .18	< .18	< .37	< .92	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18
J7	8/21/2003	9 - 11	< .22	< .22	< .22	< .22	< .22	< .22	< .44	< .22	< .22	< .44	< 1.1	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22
J8	8/21/2003	7 - 9	< .2	< .2	< .2	< .2	< .2	< .2	< .41	< .2	< .2	< .41	< 1	< .2	.107	.105	.39	.511	.638	.356	.408	.457	.0812	.813	< .2	.413	< .2	< .2	.272	.566
J9	8/21/2003	4 - 6	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< 1	< .21	< .21	< .21	.123	.264	.372	.122	.123	.148	< .21	.0876	< .21	.167	< .21	< .21	.0474	< .21
J10	8/20/2003	4 - 6	< .2	< .2	< .2	< .2	< .2	< .2	< .39	.919	1.88	< .39	< .99	2.32	.185	1.3	1.03	.654	.631	.258	.558	1.09	.088	4.33	2.57	.302	.286	2	7.73	2.53
J11	8/21/2003	2 - 4	< .21	< .21	< .21	< .21	< .21	< .21	< .41	< .21	< .21	< .41	< 1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
K1	8/21/2003	7 - 9	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< 1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
K2	8/21/2003	6 - 8	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .95	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
K3	8/21/2003	4 - 6	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .96	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
K4	8/21/2003	8 - 10	< .27	< .27	< .27	< .27	< .27	< .27	< .54	< .27	< .27	< .54	< 1.4	< .27	< .27	< .27	< .27	< .27	< .27	< .27	< .27	< .27	< .27	< .27	< .27	< .27	< .27	< .27	< .27	< .27
K5	8/21/2003	3 - 5	< .2	< .2	< .2	< .2	< .2	< .2	< .4	2.14	12.7	< .4	< 1	13.5	1.11	6.11	7.73	4.06	5.42	1.83	1.7	6.73	.468	33.8	15.2	2.25	< .2	.1	40.7	21.5
K7	8/21/2003	5 - 7	< .21	< .21	< .21	< .21	< .21	< .21	< .43	< .21	< .21	< .43	< 1.1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
K8	8/21/2003	5 - 7	< .22	< .22	< .22	< .22	< .22	< .22	< .45	< .22	< .22	< .45	< 1.1	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22
K9	8/20/2003	4.5 - 6.5	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
L1	8/20/2003	4 - 5	< .19	< .19	< .19	< .19	< .19	< .19	< .39	< .19	< .19	< .39	< .97	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
L2	8/20/2003	3 - 4	< .2	< .2	< .2	< .2	< .2	< .2	< .39	< .2	< .2	< .39	< .98	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
L3	8/20/2003	4 - 6	< .18	< .18	< .18	< .18	< .18	< .18	< .37	< .18	< .18	< .37	< .92	< .18	< .18	< .18	.0416	.0573	.0517	< .18	< .18	.041	< .18	.0642	< .18	< .18	< .18	< .18	< .18	< .18
L4	8/20/2003	5 - 7	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 9.6	6.92	32	< 9.6	< 24	34.5	2.51	11	14.7	8.7	8.98	3.11	6.68	12.6	< 4.8	68.8	36.5	3.85	23.7	62.2	110	38.6
L5	8/20/2003	4 - 6	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 3.5	1.33	6.41	< 3.5	< 8.6	6.62	.391	2.27	3.98	2.74	4.23	1.35	1.49	3.49	< 1.7	16.6	7.34	1.6	4.92	9.67	26.8	10.6
L6	8/21/2003	6 - 8	< .19	< .19	< .19	< .19	< .19	< .19	< .39	< .19	< .19	< .39	< .96	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
L7	8/21/2003	6 - 8	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< .99	< .2	< .2	< .2	.0666	.0557	.0791	< .2	.0673	.0652	< .2	.116	< .2	< .2	< .2	< .2	< .2	.0831
L8	8/21/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .39	< .2	< .2	< .39	< .98	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	.0683	< .2	< .2	< .2
L9	8/21/2003	5 - 7	< .18	< .18	< .18	< .18	< .18	< .18	< .37	< .18	< .18	< .37	< .92	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18	< .18
L10	8/21/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
L11	8/21/2003	5 - 7	< .21	< .21	< .21	< .21	< .21	< .21	< .41	< .21	< .21	< .41	< 1	< .21	< .21	< .21	< .21	< .21	.0514	< .21	< .21	< .21	< .21	.048	< .21	< .21	< .21	< .21	< .21	< .21
L12	8/21/2003	6 - 8	< .19	< .19	< .19	< .19	< .19	< .19	< .39	< .19	< .19	< .39	< .97	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
L13	8/21/2003	8 - 10	< .18	< .18	< .18	< .18	< .18	< .18	< .37	< .18	< .18	< .37	< .91	< .18	< .18	< .18	< .18	< .18	.0477	< .18	< .18	< .18	< .18	.0493	< .18	< .18	< .18	< .18	< .18	< .18
LAGOON A1	8/8/2003	8 - 10	< .21	< .21	< .21	< .21	< .21	< .21	< .41	< .21	< .21	< .41	< 1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
LAGOON A2	8/8/2003	10 - 11	< 8.8	< 8.8	< 8.8	< 8.8	< 8.8	< 8.8	< 18	5.28	24.1	< 18	< 44	31.8	< 8.8	8.67	11.4	5.83	8.02	< 8.8	2.67	7.95	< 8.8	52.5	30	< 8.8	25.8	106	92.3	30.8
LAGOON A3	8/8/2003	8 - 10	< .22	< .22	< .22	< .22	< .22	< .22	< .44	< .22	< .22	< .44	< 1.1	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	.187	< .22	< .22	< .22	< .22	< .22	.121
LAGOON B1	8/8/2003	8 - 8.5	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< 1	.0596	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	.0815	< .21	< .21	< .21	< .21	< .21	< .21
LAGOON B2	8/8/2003	6.5 - 8.5	< .22	< .22	< .22	< .22	< .22	< .22	< .45	< .22	< .22	< .45	< 1.1	< .22	.153	.206	.13	.0916	.111	< .22	.082	.141	< .22	.5	.145	< .22	< .22	< .22	< .22	.357
LAGOON B3	8/8/2003	6 - 8	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	.0623	< .2	< .2	< .2	< .2	< .2	< .2
M1	8/20/2003	8 - 10	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .94	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
M2	8/20/2003	6 - 8	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< .99	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
M3	8/20/2003	6 - 8	< .19	< .19	< .19	< .19	< .19	< .19	< .39	< .19	< .19	< .39	< .97	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
M4	8/20/2003	4 - 6	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	.0577	< .2	< .2	.0487	< .2	.0559	< .2	< .2	< .2	< .2	< .2	< .2
M5	8/20/2003	5 - 7	< .22	< .22	< .22	< .22	< .22	< .22	< .45	< .22	< .22	< .45	< 1.1	< .22	< .22	< .22	.0688	.0682	.106	< .22	.0813	.0852	< .22	.146	< .22	< .22	< .22	< .22	.0779	.115
M6	8/20/2003	6 - 8	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .95	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
M7	8/20/2003	6 - 8	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .95	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
M8	8/20/2003	8 - 10	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .95	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
M9	8/21/2003	6 - 8	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .95	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
MW-14S	7/30/2003	1 - 4	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .94	< .19	.0408	.0999	.155	.151	.239	.129	.0841	.182	< .19	.259	< .19	.15	< .19	< .19	.114	.194
MW-14D	7/30/2003	2 - 4	< .2	< .2	< .2	< .2	< .2	< .2	< .4	.0921	.0461	< .4	< .99	< .2	.212	.365	.706	.764	1.21	.705	.385	.846	.181	1.05	.044	.811	< .2	.0642	.337	.884
MW-14D	7/30/2003	4 - 5	< .19	< .19	< .19	< .19	< .19	< .19	< .39	.0902	.0846	< .39	< .97	.095	.0703	.448	.517	.64	.661	.449	.238	.59	.0937	.878	.118	.499	.0804	.14	.535	.931
MW-14D	7/30/2003	5 - 5.75	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 3.8	15.7	91.2	< 3.8	< 9.6	111	3.62	25.5	25.3	12.7	15.8	6.09	6	20.6	1.76	130	103	7.39	**91.7**	248	271	85.6
MW-15S	7/31/2003	2 - 4	< .21	.0714	< .21	< .21	< .21	< .21	< .42	.601	1.26	< .42	< 1.1	1.42	< .21	.388	.205	.141	.204	< .21	.0754	.236	< .21	.765	1.06	.0903	1.79	2.89	1.75	.472
MW-15S	7/31/2003	4 - 5	< .2	.0717	< .2	< .2	< .2	< .2	< .41	.284	.392	< .41	< 1	.568	< .2	.693	.382	.241	.362	.105	.129	.663	< .2	1.22	.423	.126	.472	1.62	.887	.801
MW-15S	7/31/2003	5 - 6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 3.8	15.2	19	< 3.8	< 9.6	22.6	2.86	9.07	7.38	3.71	4.87	1.35	1.84	6.05	< 1.9	31.4	26.7	1.7	21.6	96.8	68.1	21.2
MW-15D	7/31/2003	2 - 4	< .87	< .87	< .87	< .87	< .87	< .87	< 1.7	2.2	5.43	< 1.7	< 4.3	6.71	.258	3.06	2.07	1.02	1.4	.368	.523	2.24	< .87	9.23	6.95	.475	5.5	17.5	18.3	6.12

Table 8.
SubSurface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Chemical Name			2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i)Perylene	Benzo(k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			15.12	25 *	375.93	427.24	658.78	30.65	10,000	20 *	65 *	1406.3	24.947	10,000	180 *	10,000	103.88	69.9	354.98	***	3759.1	10,000	69.86	10,000	10,000	629.2	42 *	10,000	170 *	10,000
Location ID	Sample Date	Depth Interval																												
MW-15D	7/31/2003	4 - 5	< .21	.111	< .21	< .21	< .21	< .21	< .43	.901	1.49	< .43	< 1.1	1.91	.0585	1.07	.604	.301	.414	.107	.165	1.39	< .21	2.28	1.39	.129	.825	6.75	2.88	1.56
MW-15D	7/31/2003	5 - 6	< 1.9	.514	< 1.9	< 1.9	< 1.9	< 1.9	< 3.8	19.1	35.7	< 3.8	< 9.4	42.8	3.58	42	13.5	5.98	8.52	1.8	2.81	16.5	< 1.9	63.3	46.6	2.35	**43.7**	151	127	41
MW-16S	7/31/2003	2 - 4	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1	< 4.1	33.7	79.9	< 4.1	< 10	87.6	7.96	71	20.1	9.61	12.5	3.82	4.46	19.3	1.07	92.7	92.1	4.72	**82.3**	271	202	59.9
MW-16S	7/31/2003	4 - 6	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 16	12	49.3	< 16	< 41	53.8	7.02	19.4	11.8	6.34	6.54	< 8.2	5.56	12.2	< 8.2	62.3	54.5	< 8.2	**52.2**	153	123	37.4
MW-16D	7/31/2003	2 - 4	< .21	< .21	< .21	< .21	< .21	< .21	< .42	1.65	.958	< .42	< 1	.561	< .21	.0996	< .21	< .21	< .21	< .21	< .21	< .21	< .21	.19	1.24	< .21	< .21	.29	1.25	.0983
MW-16D	7/31/2003	4 - 6	< .21	< .21	< .21	< .21	< .21	< .21	< .41	.655	.808	< .41	< 1	.682	< .21	.131	< .21	< .21	< .21	< .21	< .21	< .21	< .21	.175	.918	< .21	< .21	.0557	1.48	< .21
MW-17S	7/31/2003	2 - 4	< .22	< .22	< .22	< .22	< .22	< .22	<.44	< .22	< .22	<.44	<1.1	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22
MW-17S	7/31/2003	4 - 6	<.19	<.19	<.19	<.19	<.19	<.19	<.37	<.19	<.19	<.37	<.93	<.19	<.19	<.19	<.19	<.19	<.19	<.19	<.19	<.19	<.19	<.19	<.19	<.19	<.19	<.19	<.19	<.19
MW-17D	7/31/2003	4 - 8	< .22	< .22	< .22	< .22	< .22	< .22	<.44	< .22	< .22	<.44	<1.1	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22
MW-18S	8/1/2003	4 - 6	< .21	< .21	< .21	< .21	< .21	< .21	< .43	< .21	< .21	< .43	< 1.1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
MW-18D	8/1/2003	2 - 4	< .21	< .21	< .21	< .21	< .21	< .21	< .41	< .21	< .21	< .41	< 1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
MW-19S	8/1/2003	2 - 4	< .2	< .2	< .2	< .2	< .2	< .2	< .39	< .2	< .2	< .39	< .98	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
MW-19D	8/1/2003	2 - 4	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	1.02	.487	2.53	3.86	4.83	1.79	2.05	3.01	.682	1.27	.0709	2.37	< .2	< .2	.183	1.23
MW-20S	10/24/2003	2 - 4	< .2	< .2	< .2	< .2	< .2	< .2	< .41	< .2	< .2	< .41	< 1	< .2	.195	.0994	.508	.72	.688	.531	.226	.59	.121	.501	< .2	.471	< .2	.0523	.185	.869
MW-20D	10/27/2003	3 - 5	<.21	<.21	<.21	<.21	<.21	<.21	<.41	0.0432	<.41	<.41	<1	<.21	0.149	0.112	0.573	0.842	0.901	0.724	0.276	0.686	0.141	0.773	<.21	0.672	<.21	<.0621	0.355	0.953
MW-21S	10/24/2003	2 - 4	< .22	< .22	< .22	< .22	< .22	< .22	< .44	< .22	.0556	.243	< 1.1	.0764	1.05	.385	1.53	3.29	2.43	2.54	.637	1.89	.552	1.09	< .22	2.16	.198	.182	.584	2.03
MW-21D	10/27/2003	2 - 4	<.21	<.21	<.21	<.21	<.21	<.21	<.41	0.0432	<.21	<.41	<1	<.21	.149 J	.112 J	0.573	0.842	0.901	0.724	0.276	0.686	0.141	0.773	<.21	0.672	<.21	0.0621	0.355	0.953
MW-23D	10/23/2003	2 - 4	< .22	< .22	< .22	< .22	< .22	< .22	< .45	.181	.0477	.612	< 1.1	.0693	.101	.236	1.44	1.81	2.7	1.85	.816	1.92	.339	3.03	.0809	1.89	< .22	< .22	1.3	3.05
MW-27A	8/5/2008	4 - 6	< .21	< .21	< .21	< .21	< .21	< .21	< .43	< .21	< .21	< .43	< .34	< .34	0.101	0.0744	0.548	0.635	0.836	0.344	0.21	0.521	0.0871	0.699	< .34	0.352	< .34	< .34	0.183	0.925
MW-27B	8/8/2008	2 - 4	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< .33	< .33	< .33	< .33	0.128	0.163	0.155	0.0954	0.0528	0.134	0.0187	0.144	< .33	0.0874	< .33	< .33	0.0462	0.212
MW-28A	1/5/2009	6 - 8	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< .33	< .33	< .33	< .33	< .033	0.0188	0.029	< .033	< .033	0.0205	< .033	< .33	< .33	< .033	< .33	< .33	< .33	< .33
MW-28B	1/12/2009	5 - 6	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< .34	< .34	< .34	< .34	0.0198	0.0299	0.0401	0.0212	< .034	0.0232	< .034	< .34	< .34	0.0207	< .34	< .34	< .34	< .34
MW-28C	1/14/2009	9 - 10	< .18	< .18	< .18	< .18	< .18	< .18	< .37	< .18	< .18	< .37	< .30	< .30	< .30	< .30	< .030	< .030	< .030	< .030	< .030	< .030	< .030	< .30	< .30	< .030	< .30	< .30	< .30	< .30
MW-29A	1/22/2009	6 - 8	< 5.1	< 5.1	< 5.1	< 5.1	< 5.1	< 5.1	< 10	12.7	50.1	< 10	< 8.2	61.9	2.58 J	28.8	11.4	4.67	6.91	1.32	2.25	11.1	0.471 J	62.3	65.8	1.7	**45**	93.7	132	37.4
MW-29B	2/3/2009	2 - 4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**30.8**	**181**	< 21	< 33	181	8.46 J	64.8	44	19.1	30	4.52	10.2	41.9	1.60 J	230	173	6	134	298	**453**	145
MW-30A	10/12/2009	4 - 6	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.38	< 0.19	< 0.19	< 0.38	< 0.30	< 0.30	< 0.30	< 0.30	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.30	< 0.30	< 0.030	< 0.30	< 0.30	< 0.30	< 0.30
MW-30B	10/14/2009	4 - 6	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.43	< 0.21	< 0.21	< 0.43	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-30C	10/15/2009	4 - 6	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20	< 0.20	< 0.40	< 0.32	< 0.32	< 0.32	< 0.32	0.0257 J	0.0323	0.0612	0.0182 J	0.0208 J	0.0322	< 0.032	0.0474 J	< 0.32	0.0246 J	< 0.32	< 0.32	< 0.32	0.0420 J
MW-31A	10/19/2009	4 - 6	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.21	< 0.21	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.33	< 0.33	< 0.033	< 0.33	< 0.33	< 0.33	< 0.33
MW-31B	10/20/2009	2 - 4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.41	< 0.21	< 0.21	< 0.41	< 0.33	< 0.33	< 0.33	< 0.33	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.33	< 0.33	< 0.033	< 0.33	< 0.33	< 0.33	< 0.33
MW-31C	10/26/2009	2 - 4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.21	< 0.21	< 0.42	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	0.0184 J	0.0249 J	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-32A	10/27/2009	2 - 4	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.44	< 0.22	< 0.22	< 0.44	< 0.35	< 0.35	< 0.35	< 0.35	0.0241 J	0.0326 J	0.00214 J	< 0.035	< 0.035	< 0.035	< 0.035	< 0.35	< 0.35	0.0192 J	< 0.35	< 0.35	< 0.35	< 0.35
MW-32B	4/9/2012	6 - 8	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.34	<0.17	<0.17	<0.17	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	<0.17	<0.17	< 0.034	<0.17	<0.17	<0.17	<0.17
MW-33A	11/2/2009	4 - 5	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.41	< 0.21	< 0.21	< 0.41	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-33B	11/5/2009	2 - 4	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.39	< 0.20	< 0.20	< 0.39	< 0.32	< 0.32	< 0.32	< 0.32	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.32	< 0.32	< 0.032	< 0.32	< 0.32	< 0.32	< 0.32
MW-33C	11/9/2009	8 - 10	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.45	< 0.23	< 0.23	< 0.45	< 0.36	< 0.36	< 0.36	< 0.36	< 0.036	< 0.036	< 0.036	< 0.036	< 0.036	< 0.036	< 0.036	< 0.36	< 0.36	< 0.036	< 0.36	< 0.36	< 0.36	< 0.36
MW-34A	11/18/2009	2 - 4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.21	< 0.21	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.033	< 0.033	0.0421	< 0.033	< 0.033	< 0.033	< 0.033	< 0.33	< 0.33	< 0.033	< 0.33	< 0.33	< 0.33	< 0.33
MW-35A	2/8/2010	3 - 5	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.41	< 0.21	< 0.21	<0.41	< 0.33	< 0.33	< 0.33	< 0.33	0.111	0.157	0.221	0.0652	0.0682	0.142	< 0.033	< 0.33	< 0.33	0.0826	< 0.33	< 0.33	< 0.33	< 0.33
MW-35B/C	2/8/2010	2 - 4	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20	< 0.20	< 0.40	< 0.32	< 0.32	< 0.32	< 0.32	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.32	< 0.32	< 0.032	< 0.32	< 0.32	< 0.32	< 0.32
MW-36A/B	2/11/2010	8 - 10	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.47	<0.24	<0.24	<0.47	<0.38	<0.38	<0.38	<0.38	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.38	<0.38	<0.038	<0.38	<0.38	<0.38	<0.38
MW-36C	2/15/2010	7 - 9	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.44	< 0.22	< 0.22	< 0.44	<0.35	<0.35	<0.35	<0.35	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.35	<0.35	<0.035	<0.35	<0.35	<0.35	<0.35
MW-37A/B	2/17/2010	5 - 7	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.43	< 0.22	< 0.22	< 0.43	<0.35	<0.35	<0.35	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.35	<0.35	<0.035	<0.35	<0.35	<0.35	<0.35	<0.35
MW-38A	3/22/2010	8 - 10	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.41	< 0.20	< 0.20	< 0.41	< 0.33	< 0.33	< 0.33	< 0.33	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.33	< 0.33	< 0.033	< 0.33	< 0.33	< 0.33	< 0.33
MW-38B	3/23/2010	8 - 10	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20	< 0.20	< 0.40	< 0.32	< 0.32	< 0.32	< 0.32	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.32	< 0.32	< 0.032	< 0.32	< 0.32	< 0.32	< 0.32
MW-39A	3/30/2010	8 - 10	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.21	< 0.21	< 0.42	< 0.33	< 0.33	< 0.33	< 0.33	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.33	< 0.33	< 0.033	< 0.33	< 0.33	< 0.33	< 0.33
MW-39B	3/30/2010	8 - 10	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.21	< 0.21	< 0.42	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
MW-40A	4/2/2010	2 - 4	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.41	< 0.20	< 0.20	< 0.41	< 0.33	< 0.33	< 0.33	< 0.33	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.33	< 0.33	< 0.033	< 0.33	< 0.33	< 0.33	< 0.33
MW-40B/C	4/6/2010	2 - 4	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.41	< 0.20	< 0.20	< 0.41	<0.81	<0.81	<0.81	<0.81	0.813	0.922	1.4	0.642	0.397	0.821	0.188	0.977	<0.81	0.765	<0.81	1.12	0.081	0.869
MW-41A	11/2/2010	12 - 14	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.33	<0.17	<0.17	<0.17	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.17	<0.17	<0.033	<0.17	<0.17	<0.17	<0.17
MW-42A	11/3/2010	8 - 10	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.39	<0.31	<0.16	<0.16	<0.16	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.16	<0.16	<0.031	<0.16	<0.16	<0.16	<0.16
MW-42B	11/5/2010	8 - 10	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40	< 0.32	<0.16	<0.16	<0.16	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	<0.16	<0.16	< 0.032	<0.16	<0.16	<0.16	<0.16
MW-43A	11/9/2010	2 - 4	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.37	<0.29	<0.15	<0.15	<0.15	0.0871	0.137	0.177	0.0887	0.0523	0.114	<0.029	<0.15	<0.15	0.107	<0.15	<0.15	<0.15	<0.15
MW-44A	11/11/2010	2 - 4	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.39	<0.31	<0.16	<0.16	<0.16	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.16	<0.16	<0.031	<0.16	<0.16	<0.16	<0.16
MW-45A/B	11/12/2010	6 - 8	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.41	< 0.33	<0.16	<0.16	<0.16	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	<0.16	<0.16	< 0.033	<0.16	<0.16	<0.16	<0.16
MW-45C	11/17/2010	6 - 8	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40	< 0.32	<0.16	<0.16	<0.16	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	<0.16	<0.16	< 0.032	<0.16	<0.16	<0.16	<0.16
MW-46A	11/18/2010	6 - 8	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.37	<0.30	<0.15	<0.15	<0.15	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.15	<0.15	<0.030	<0.15	<0.15	<0.15	<0.15
MW-47A	11/19/2010	4 - 5	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.37	<0.30	<0.15	<0.15	<0.15	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.15	<0.15	<0.030	<0.15	<0.15	<0.15	<0.15
MW-48	1/4/2011	18 - 20	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.42	< 0.34	<0.17	<0.17	<0.17	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	<0.17	<0.17	< 0.034	<0.17	<0.17	<0.17	<0.17
MW-49A	7/26/2011	8 - 10	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.38	<0.30	<0.15	<0.15	<0.15	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.15	<0.15	<0.030	<0.15	<0.15	<0.15	<0.15
MW-49C	7/28/2011	8 - 10	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.38	<0.31	<0.15	<0.15	<0.15	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.15	<0.15	<0.031	<0.15	<0.15	<0.15	<0.15
MW-50A	8/1/2011	8 - 9	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.47	<0.37	<0.19	<0.19	<0.19	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.19	<0.19	<0.037	<0.19	<0.19	<0.19	<0.19
MW-51A	8/4/2011	8 - 10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40	<0.32	<0.16	<0.16	<0.16	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.16	<0.16	<0.032	<0.16	<0.16	<0.16	<0.16
MW-54A	4/11/2012	5 - 6.5	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.44	< 0.35	<0.18	<0.18	<0.18	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.18	<0.18	<0.035	<0.18	<0.18	<0.18	<0.18
MW-55A	4/12/2012	4 - 5	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	0.362	0.378	< 0.42	<0.34	0.432	0.355	1.47	2.37	2.24	2.94	0.874	1.74	2.67	0.55	4.31	0.63	1.16	0.367	0.57	2.82	3.86
MW-56A	4/16/2012	5 - 6.5	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	<0.42	<0.34	<0.17	<0.17	<0.17	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.17	<0.17	<0.034	<0.17	<0.17	<0.17	<0.17
RW-1	10/29/2009	2 - 4	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 3.3	11.9	8.52	< 3.3	< 16	< 16	< 16	13.7 J	19	21.3	31.7	9.5	10.7	23.3	2.57	30.3	4.53 J	11.7	< 16	6.86 J	13.6 J	27.5

Table 8.
SubSurface Soil SVOC Results
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

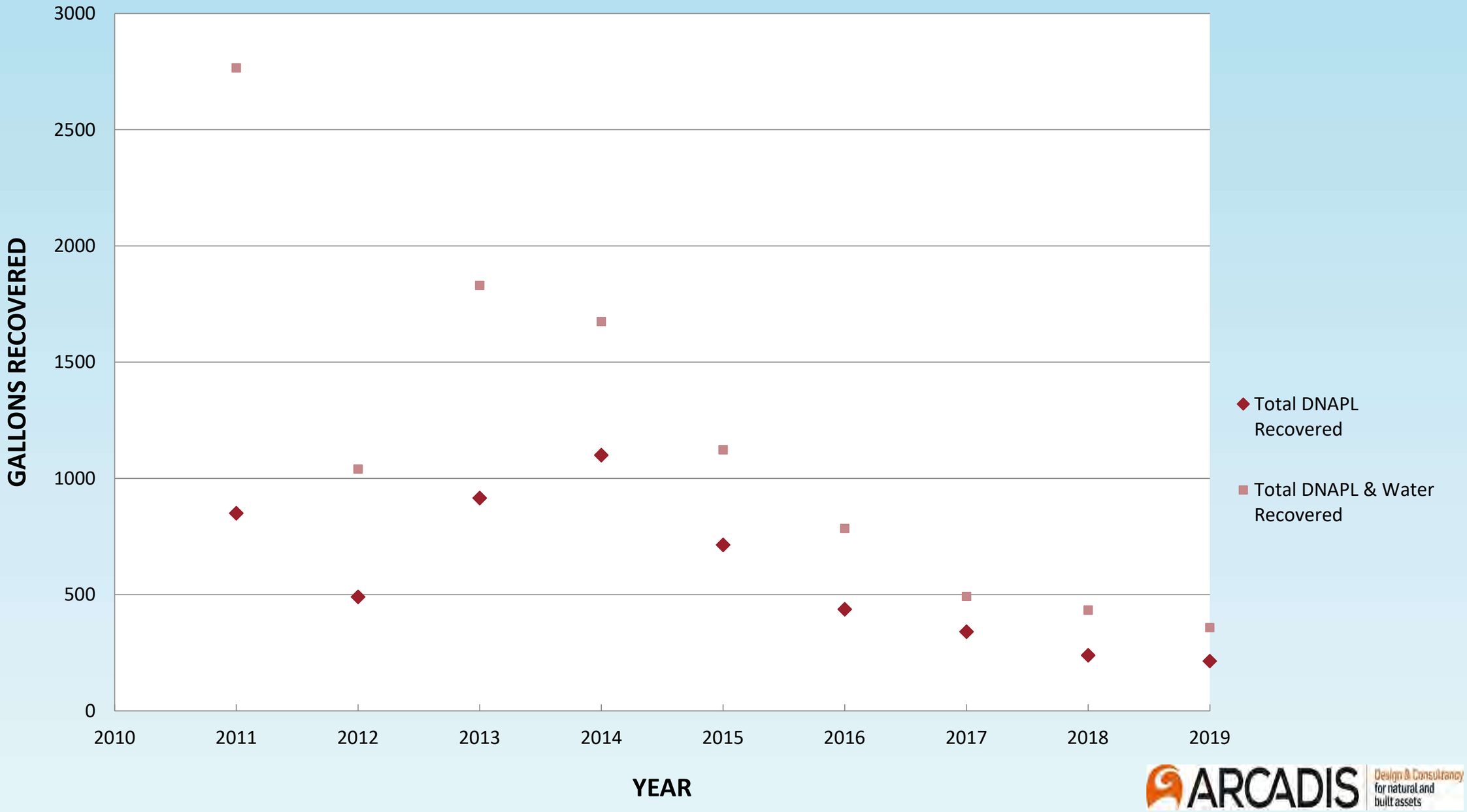
Chemical Name			2,4-Dichlorophenol	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Butyl Benzyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i)Perylene	Benzo(k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier II Non-Residential			15.12	25 *	375.93	427.24	658.78	30.65	10,000	20 *	65 *	1406.3	24.947	10,000	180 *	10,000	103.88	69.9	354.98	***	3759.1	10,000	69.86	10,000	10,000	629.2	42 *	10,000	170 *	10,000
Location ID	Sample Date	Depth Interval																												
RW-4	11/13/2009	2 - 4	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.43	< 0.21	< 0.21	< 0.43	< 0.34	< 0.34	< 0.34	< 0.34	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.034	< 0.34	< 0.34	< 0.034	< 0.34	< 0.34	< 0.34	< 0.34
RW-5	11/16/2009	2 - 4	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.40	< 0.20	< 0.20	< 0.40	< 0.32	< 0.32	< 0.32	< 0.32	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.32	< 0.32	< 0.032	< 0.32	< 0.32	< 0.32	< 0.32
RW-6	3/31/2010	2 - 4	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.44	< 0.22	< 0.22	< 0.44	<0.36	<0.36	<0.36	<0.36	0.24	0.378	0.359	0.161	0.112	0.263	0.0392	<0.36	<0.36	0.185	<0.36	<0.36	<0.36	0.365
RW-7	11/1/2010	6 - 8	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.38	<0.30	<0.15	<0.15	<0.15	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.15	<0.15	<0.030	<0.15	<0.15	<0.15	<0.15
RW-8	4/18/2012	4.5 - 5.5	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	<0.42	<0.34	<0.17	<0.17	<0.17	0.0416	0.047	0.0671	<0.034	0.0411	0.0537	<0.034	<0.17	<0.17	0.0366	<0.17	<0.17	<0.17	<0.17
N1	8/19/2003	4 - 6	< .21	< .21	< .21	< .21	< .21	< .21	< .41	< .21	< .21	< .41	< 1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
N2	8/19/2003	6 - 8	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .96	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
N3	8/19/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
N4	8/19/2003	6 - 8	< .21	< .21	< .21	< .21	< .21	< .21	< .43	< .21	< .21	< .43	< 1.1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
N5	8/19/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
N6	8/19/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
N7	8/19/2003	6 - 8	< .21	< .21	< .21	< .21	< .21	< .21	< .43	< .21	< .21	< .43	< 1.1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
N8	8/19/2003	5 - 7	< .23	< .23	< .23	< .23	< .23	< .23	< .46	< .23	< .23	< .46	< 1.1	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23
P1	8/19/2003	4 - 6	< .21	< .21	< .21	< .21	< .21	< .21	< .41	< .21	< .21	< .41	< 1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
P2	8/19/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	.0847	.0798	.121	< .2	.0432	.0647	< .2	.132	< .2	< .2	< .2	< .2	< .2	.143
P3	8/19/2003	5 - 7	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< 1.1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
P4	8/19/2003	4 - 6	< .2	< .2	< .2	< .2	< .2	< .2	< .39	< .2	< .2	< .39	< .98	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	.0543	< .2	< .2	< .2	< .2	< .2	< .2
P5	8/19/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< 1	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
P6	8/19/2003	4 - 6	< .23	< .23	< .23	< .23	< .23	< .23	< .45	< .23	< .23	< .45	< 1.1	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23	< .23
P7	8/19/2003	4 - 6	< .22	< .22	< .22	< .22	< .22	< .22	< .43	< .22	< .22	< .43	< 1.1	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22
P8	8/19/2003	4 - 6	< .21	< .21	< .21	< .21	< .21	< .21	< .41	< .21	< .21	< .41	< 1	< .21	< .21	< .21	.116	.119	.142	< .21	.137	.129	< .21	.242	< .21	.0981	< .21	< .21	.0528	.197
Q1	8/19/2003	3 - 5	< .21	< .21	< .21	< .21	< .21	< .21	< .42	< .21	< .21	< .42	< 1.1	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21
Q2	8/19/2003	5 - 7	< .22	< .22	< .22	< .22	< .22	< .22	< .45	< .22	< .22	< .45	< 1.1	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22	< .22
Q3	8/19/2003	5 - 7	< .24	< .24	< .24	< .24	< .24	< .24	< .47	< .24	< .24	< .47	< 1.2	< .24	< .24	< .24	.0926	.0765	.122	< .24	< .24	.102	< .24	.217	< .24	< .24	< .24	< .24	< .24	.179
Q4	8/19/2003	4 - 6	< 75	< 75	< 75	< 75	< 75	< 75	< 150	310	**215**	< 150	**< 370**	288	89.1	1410	**1530**	**930**	**1470**	436	530	1450	**118**	4080	481	531	34.7	29	**2220**	3520
Q5	8/19/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	< .2	< .4	< .99	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2	< .2
Q6	8/19/2003	5 - 7	< .19	< .19	< .19	< .19	< .19	< .19	< .38	< .19	< .19	< .38	< .96	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19	< .19
Q7	8/19/2003	5 - 7	< .21	< .21	< .21	< .21	< .21	< .21	< .42	.17	< .21	< .42	< 1.1	1.02	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	< .21	.217	.381	< .21	.329	< .21	.815	.141
Q8	8/19/2003	5 - 7	< .2	< .2	< .2	< .2	< .2	< .2	< .4	< .2	.0415	< .4	< 1	.0814	< .2	< .2	.0675	< .2	< .2	< .2	< .2	.0405	< .2	.363	.0734	< .2	< .2	< .2	.338	.274
VAT1	8/8/2003	4 - 6	< .85	< .85	< .85	< .85	< .85	< .85	< 1.7	< .85	< .85	< 1.7	< 4.2	.229	.578	.711	3.44	4.17	4.83	2.63	1.66	3.78	.602	4.58	< .85	2.72	< .85	< .85	.868	5.13
VAT2	8/8/2003	2 - 4	< .22	< .22	< .22	< .22	< .22	< .22	< .45	< .22	< .22	< .45	< 1.1	< .22	.44	.314	2.07	2.51	2.49	1.63	.748	2.19	.388	2.16	< .22	1.56	< .22	< .22	.333	2.86
VAT3	8/8/2003	4 - 5	< .23	< .23	< .23	< .23	< .23	< .23	< .45	< .23	< .23	< .45	< 1.1	< .23	.167	.0941	.513	.818	.816	.598	.274	.633	.149	.806	< .23	.616	< .23	< .23	.148	.756
WALL1	8/5/2003	2.5 - 4.5	< 16	< 16	< 16	< 16	< 16	< 16	< 32	< 16	36.9	< 32	< 79	82.1	13.6	33.5	49.8	34.5	39.2	16.2	27.1	38.6	< 16	243	115	19.2	< 16	< 16	248	129
WALL2	8/5/2003	3 - 5	< .22	< .22	< .22	< .22	< .22	< .22	< .45	< .22	< .22	< .45	< 1.1	< .22	< .22	< .22	.0748	.0611	.0751	< .22	.0565	.0839	< .22	.222	.0512	< .22	< .22	< .22	.148	.137
WALL3	8/5/2003	3 - 5	< .2	< .2	< .2	< .2	< .2	< .2	< .4	.125	.14	< .4	< 1	.098	.353	1.76	1.98	1.62	1.85	.787	1.23	2.42	.328	3.53	.149	.948	.0435	.199	.589	2.21

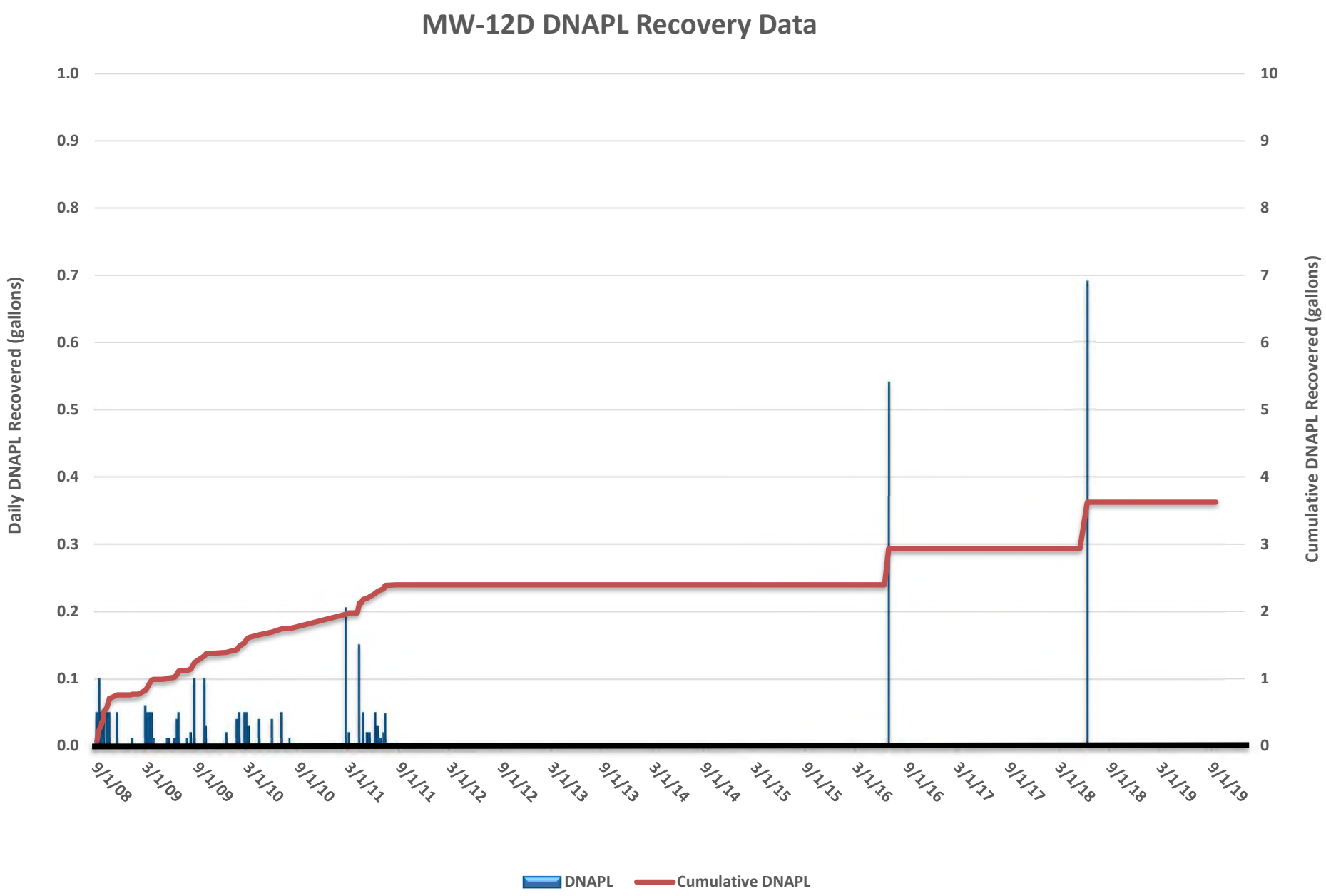
Bold Exceeds Tier II Non-residential (Industrial) Cleanup Goal
***** Cleanup goals are based on the updated IDEM RISC Technical Guide: Appendix 1, Commercial/Industrial Closure Levels, dated January 31, 2006
******* Benzo(g,h,i)perylene does not have a cleanup goal in the 1996 VRP Guidance Manual or in the current IDEM RISC Technical Guide Appendix 1, dated January 26, 2006.
Soil boring location has been excavated

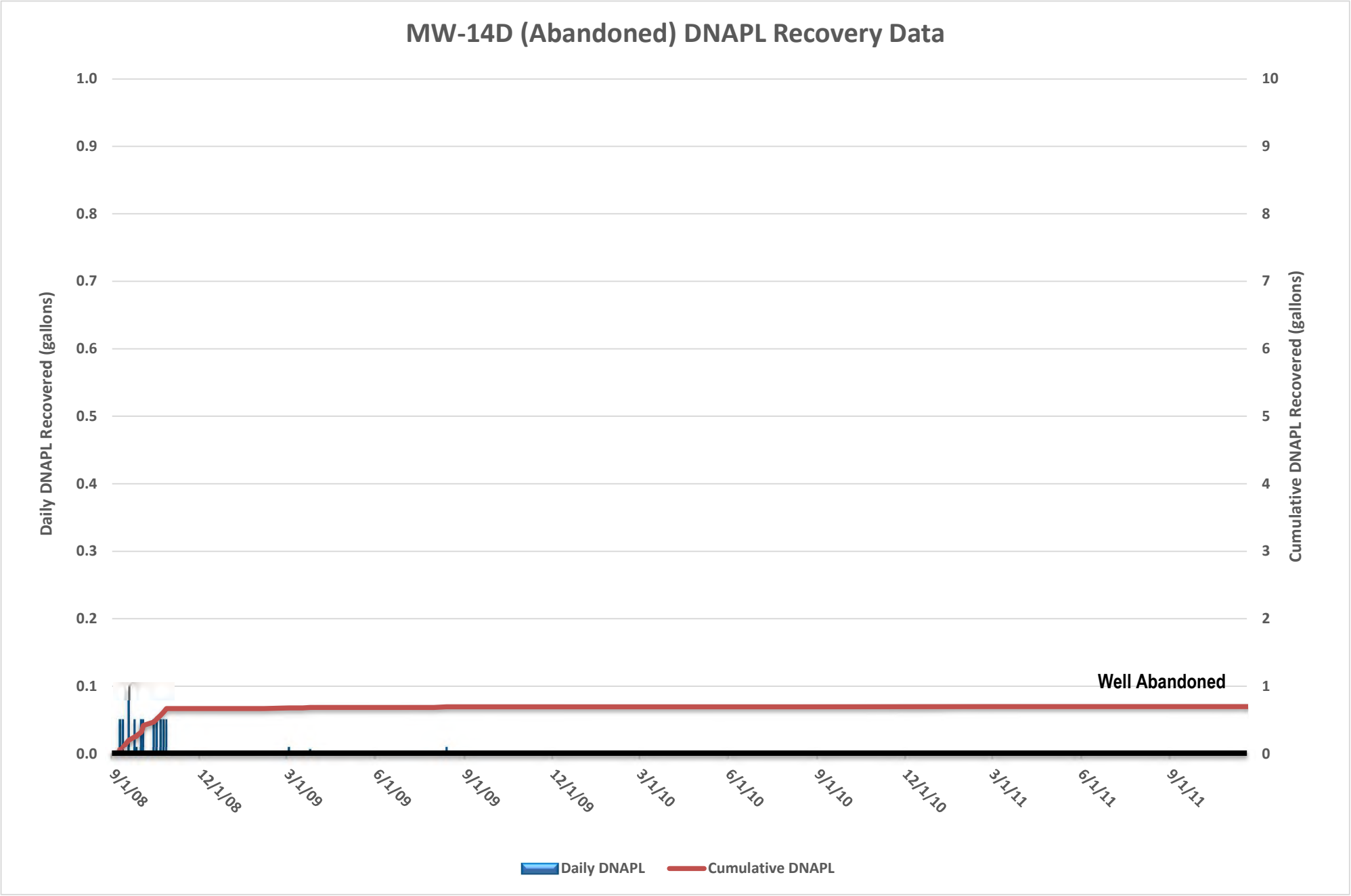
Table 9

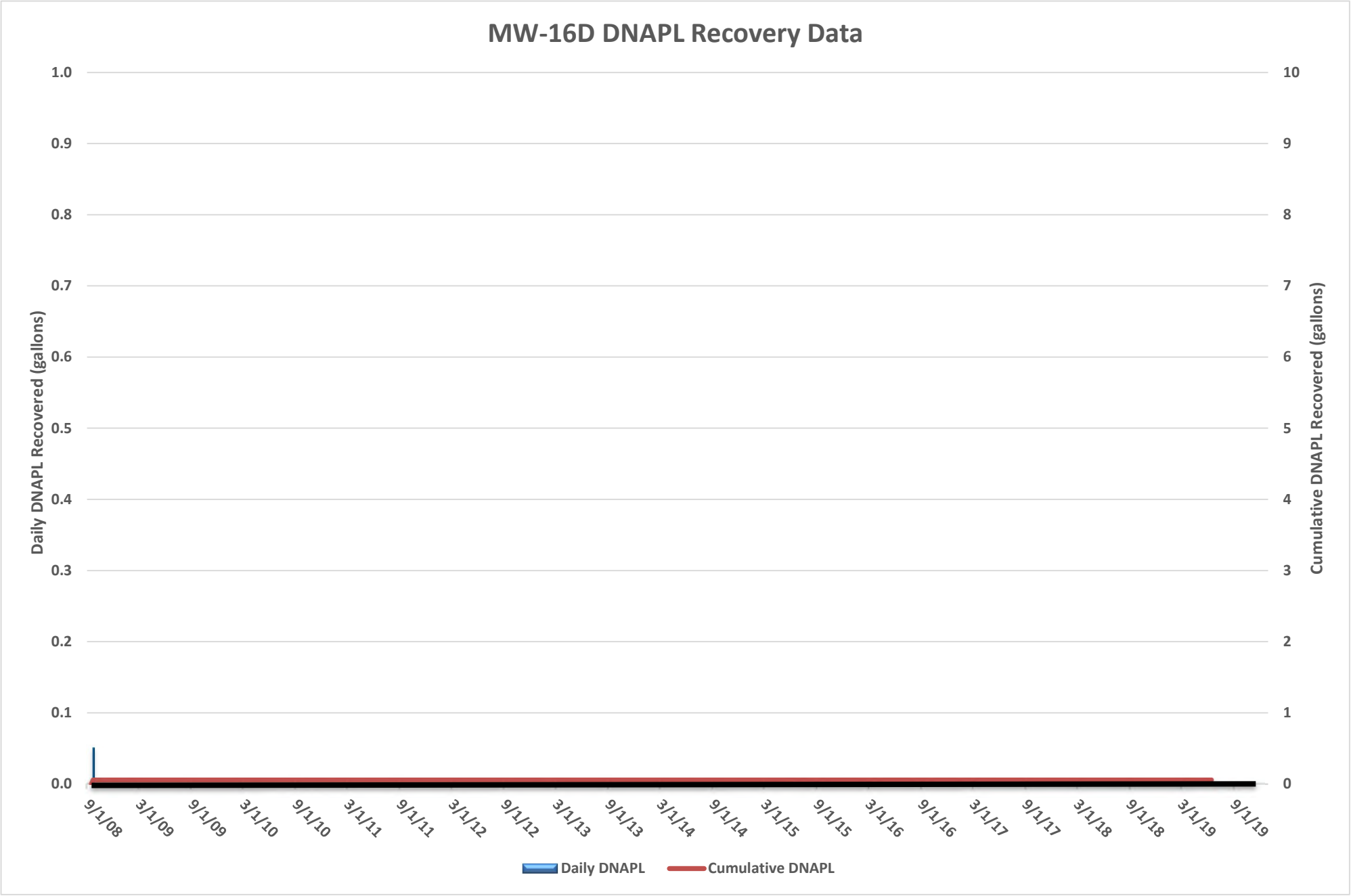
DNAPL Recovery Trend Graphs and Tabulated Data

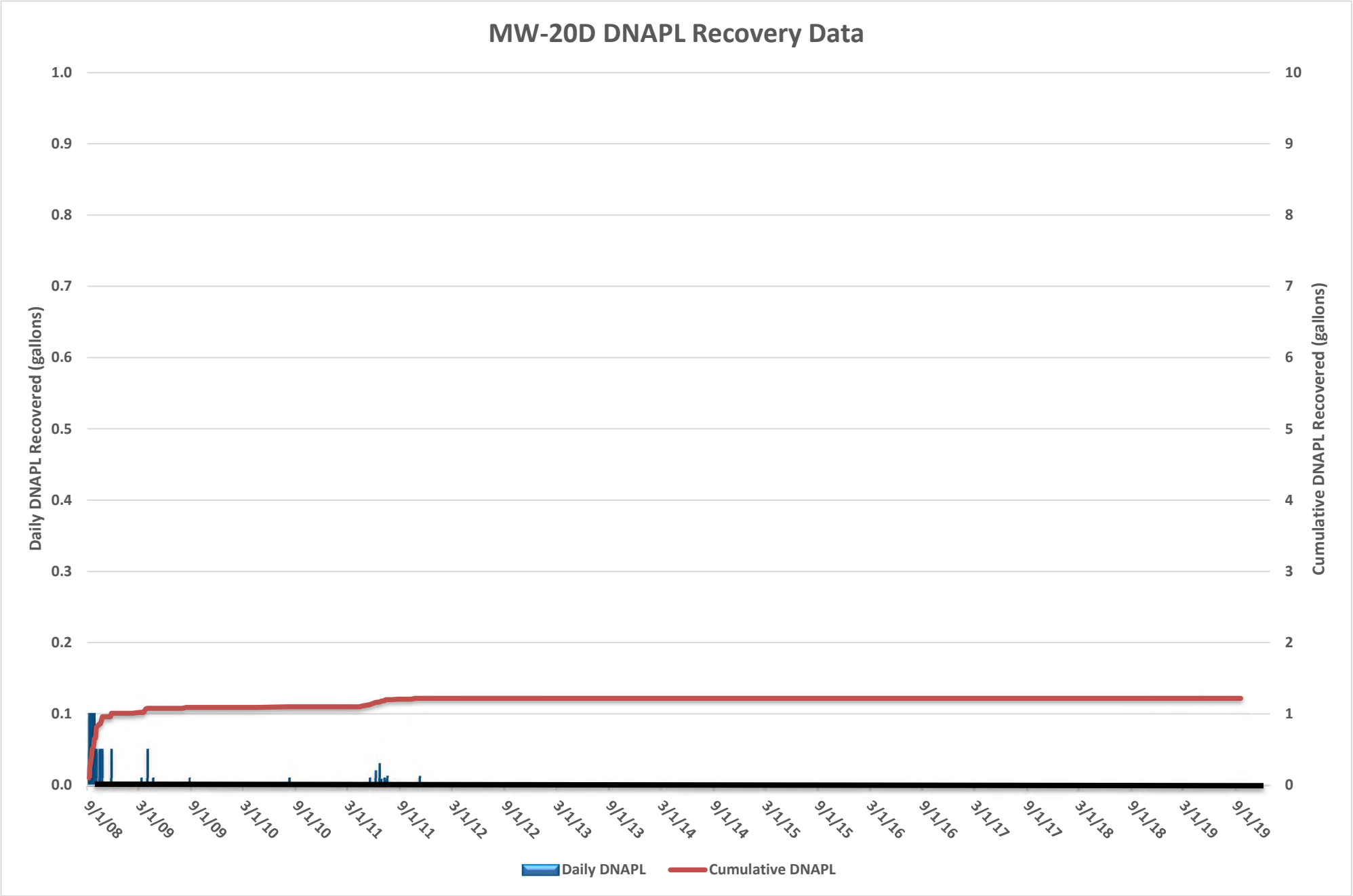
TOTAL DNAPL RECOVERED BY YEAR

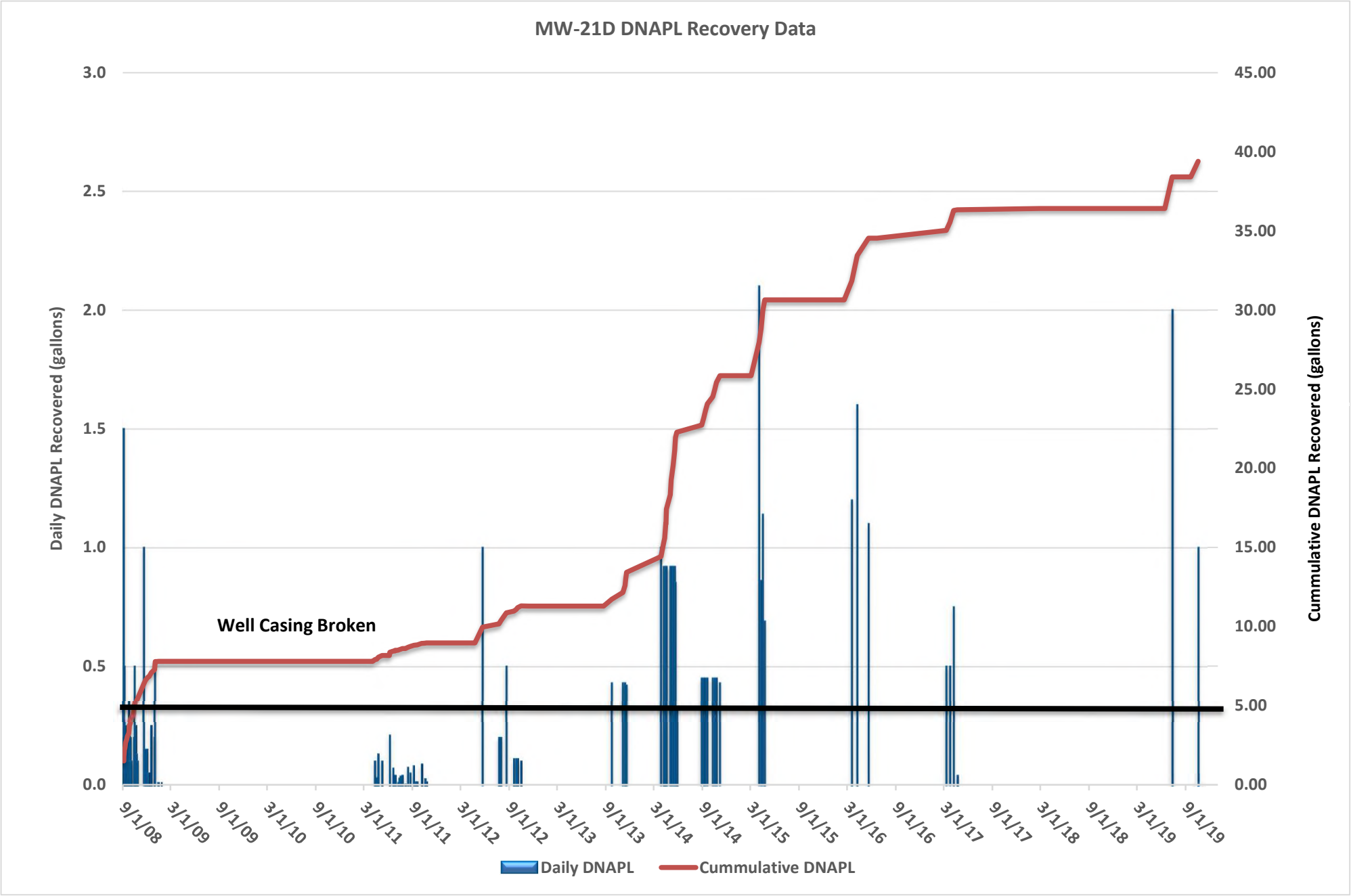


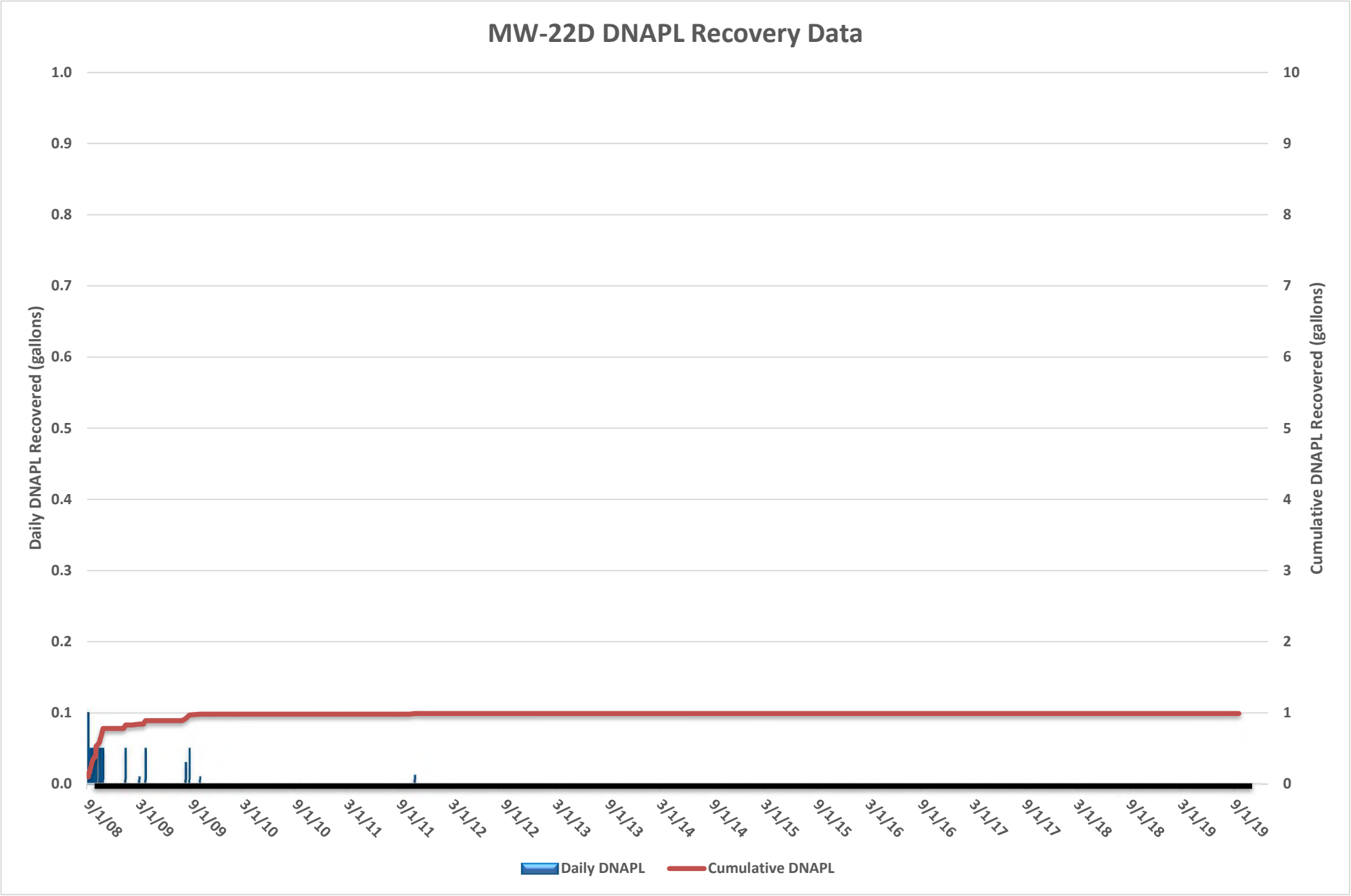

MW-12D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
9/1/08
3/1/09
9/1/09
3/1/10
9/1/10
3/1/11
9/1/11
3/1/12
9/1/12
3/1/13
9/1/13
3/1/14
9/1/14
3/1/15
9/1/15
3/1/16
9/1/16
3/1/17
9/1/17
3/1/18
9/1/18
3/1/19
9/1/19
DNAPL
Cumulative DNAPL

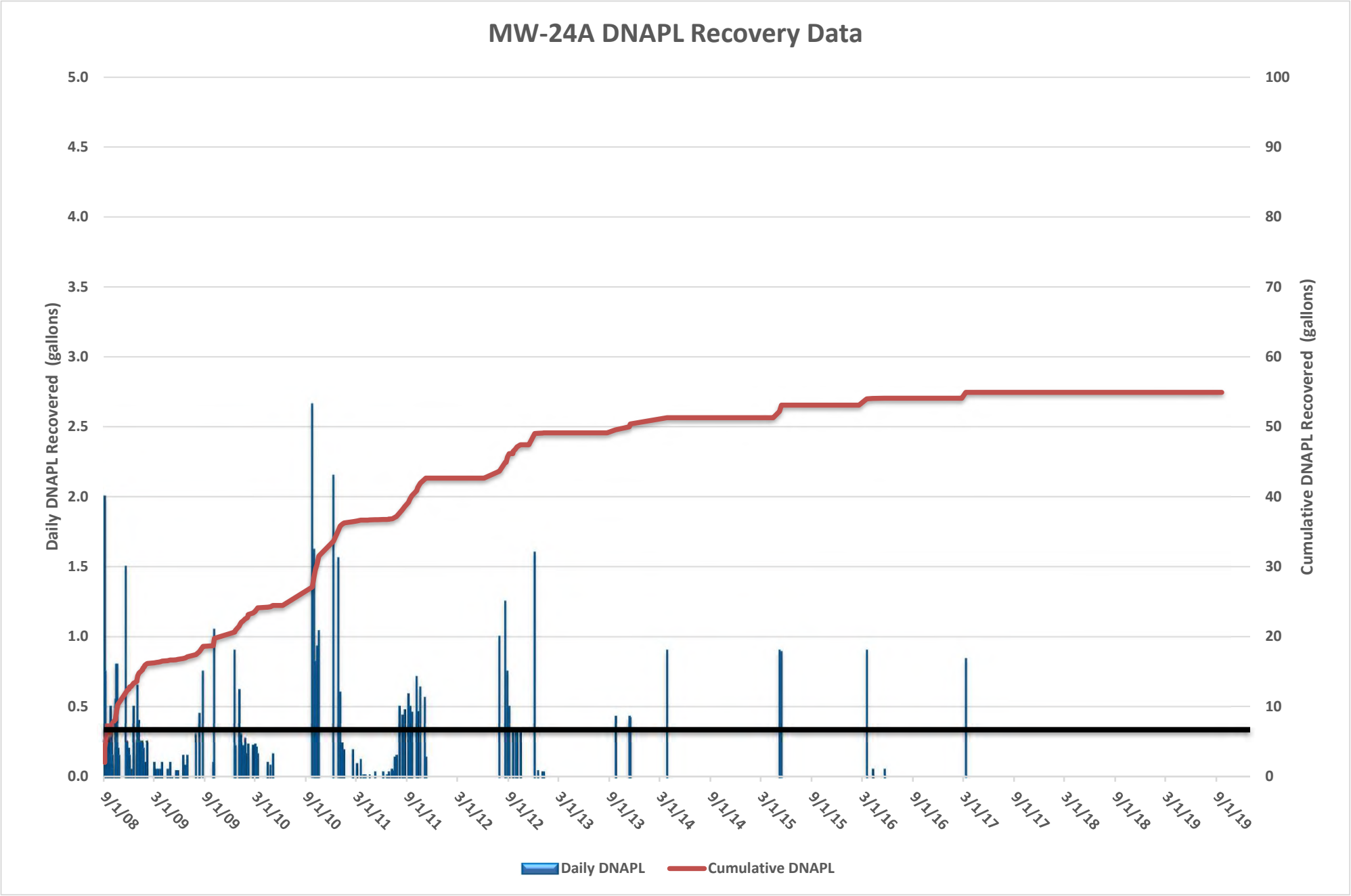

MW-14D (Abandoned) DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
Well Abandoned
9/1/08
12/1/08
3/1/09
6/1/09
9/1/09
12/1/09
3/1/10
6/1/10
9/1/10
12/1/10
3/1/11
6/1/11
9/1/11
Daily DNAPL
Cumulative DNAPL

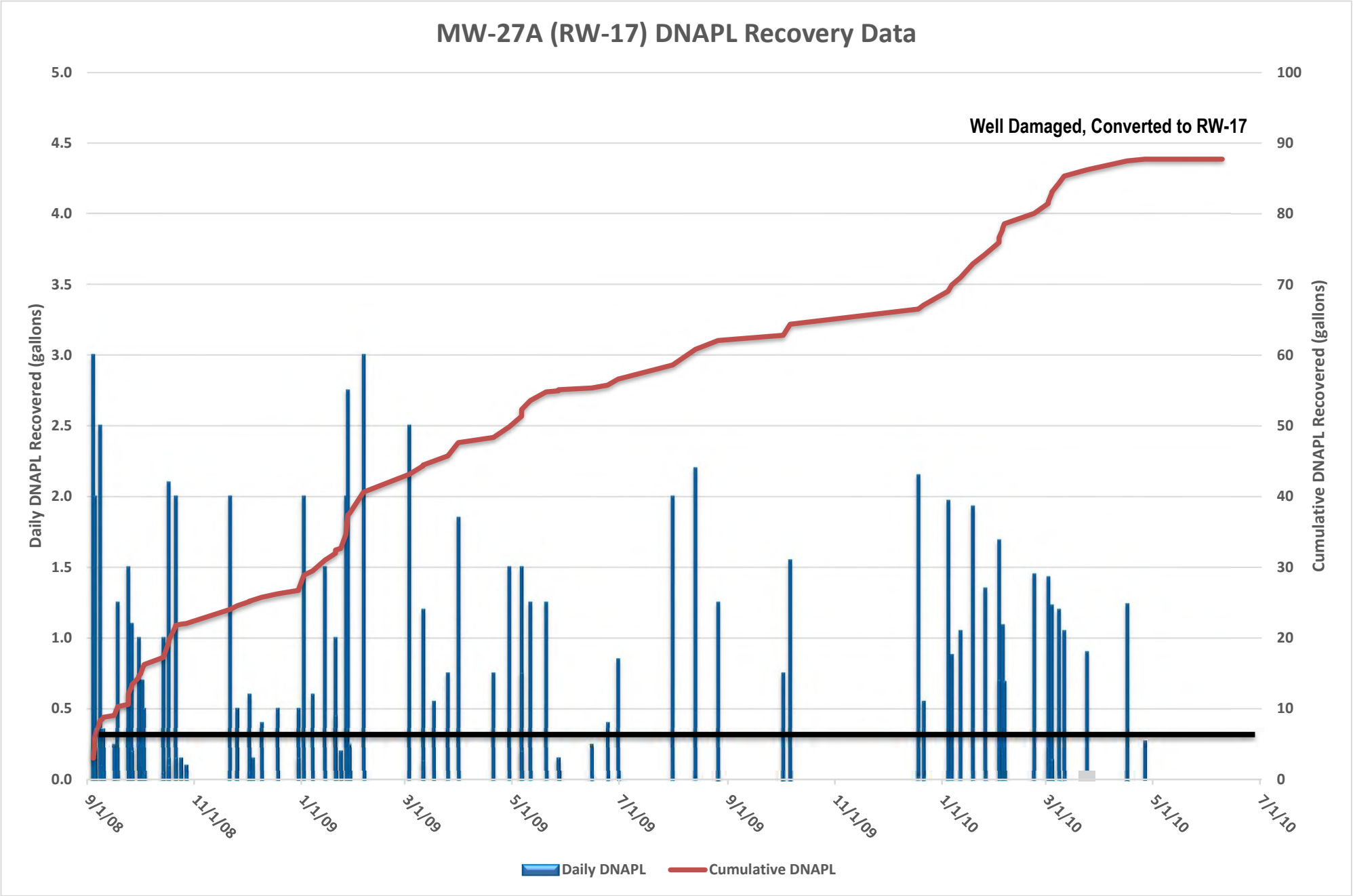

MW-16D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
9/1/08
3/1/09
9/1/09
3/1/10
9/1/10
3/1/11
9/1/11
3/1/12
9/1/12
3/1/13
9/1/13
3/1/14
9/1/14
3/1/15
9/1/15
3/1/16
9/1/16
3/1/17
9/1/17
3/1/18
9/1/18
3/1/19
9/1/19
Daily DNAPL
Cumulative DNAPL

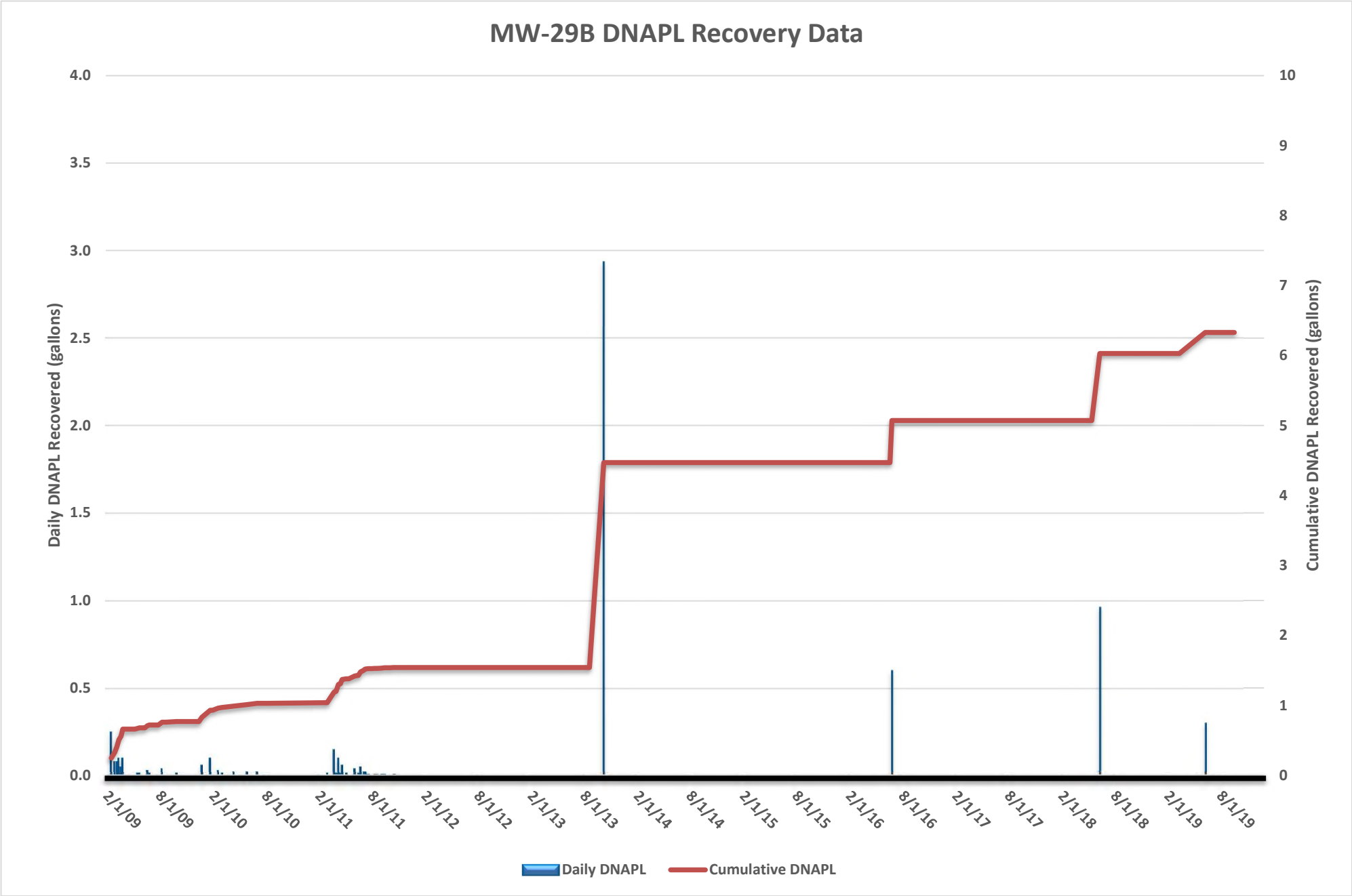

MW-20D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
9/1/08
3/1/09
9/1/09
3/1/10
9/1/10
3/1/11
9/1/11
3/1/12
9/1/12
3/1/13
9/1/13
3/1/14
9/1/14
3/1/15
9/1/15
3/1/16
9/1/16
3/1/17
9/1/17
3/1/18
9/1/18
3/1/19
9/1/19
Daily DNAPL
Cumulative DNAPL

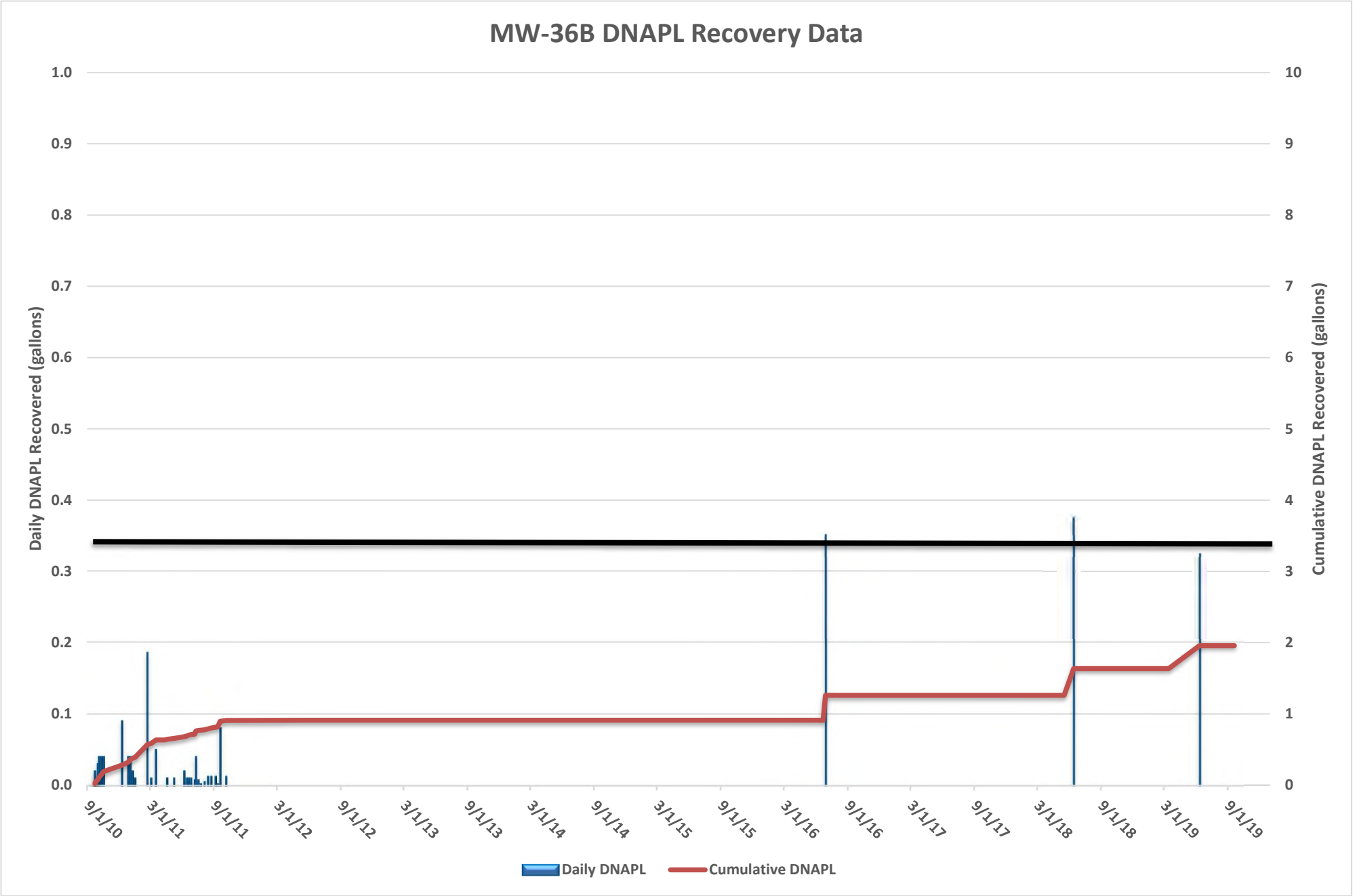

MW-21D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cummulative DNAPL Recovered (gallons)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Well Casing Broken
9/1/08
3/1/09
9/1/09
3/1/10
9/1/10
3/1/11
9/1/11
3/1/12
9/1/12
3/1/13
9/1/13
3/1/14
9/1/14
3/1/15
9/1/15
3/1/16
9/1/16
3/1/17
9/1/17
3/1/18
9/1/18
3/1/19
9/1/19
Daily DNAPL
Cummulative DNAPL

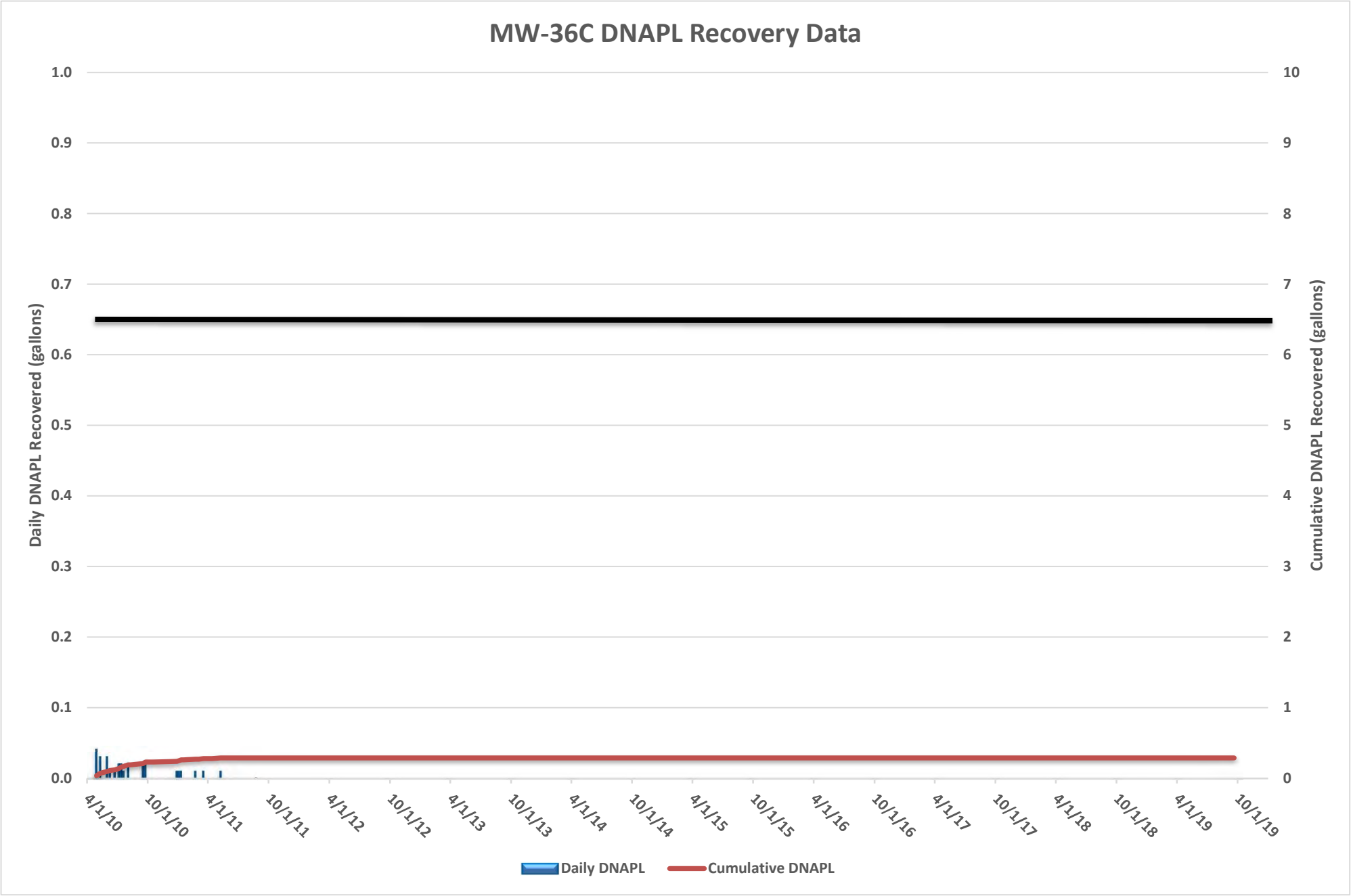

MW-22D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
9/1/08
3/1/09
9/1/09
3/1/10
9/1/10
3/1/11
9/1/11
3/1/12
9/1/12
3/1/13
9/1/13
3/1/14
9/1/14
3/1/15
9/1/15
3/1/16
9/1/16
3/1/17
9/1/17
3/1/18
9/1/18
3/1/19
9/1/19
Daily DNAPL
Cumulative DNAPL

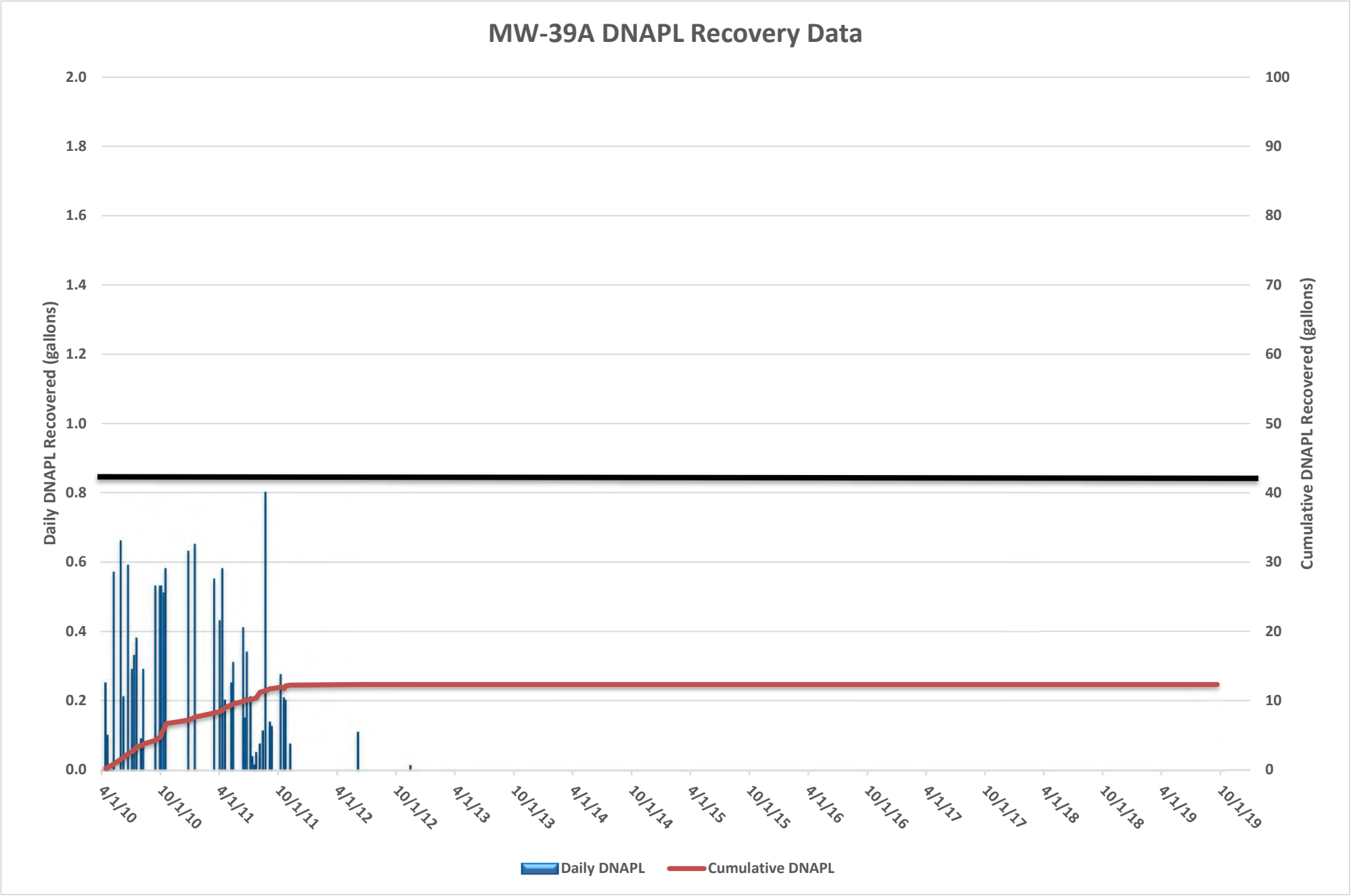

MW-24A DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
100
90
80
70
60
50
40
30
20
10
0
9/1/08
3/1/09
9/1/09
3/1/10
9/1/10
3/1/11
9/1/11
3/1/12
9/1/12
3/1/13
9/1/13
3/1/14
9/1/14
3/1/15
9/1/15
3/1/16
9/1/16
3/1/17
9/1/17
3/1/18
9/1/18
3/1/19
9/1/19
Daily DNAPL
Cumulative DNAPL

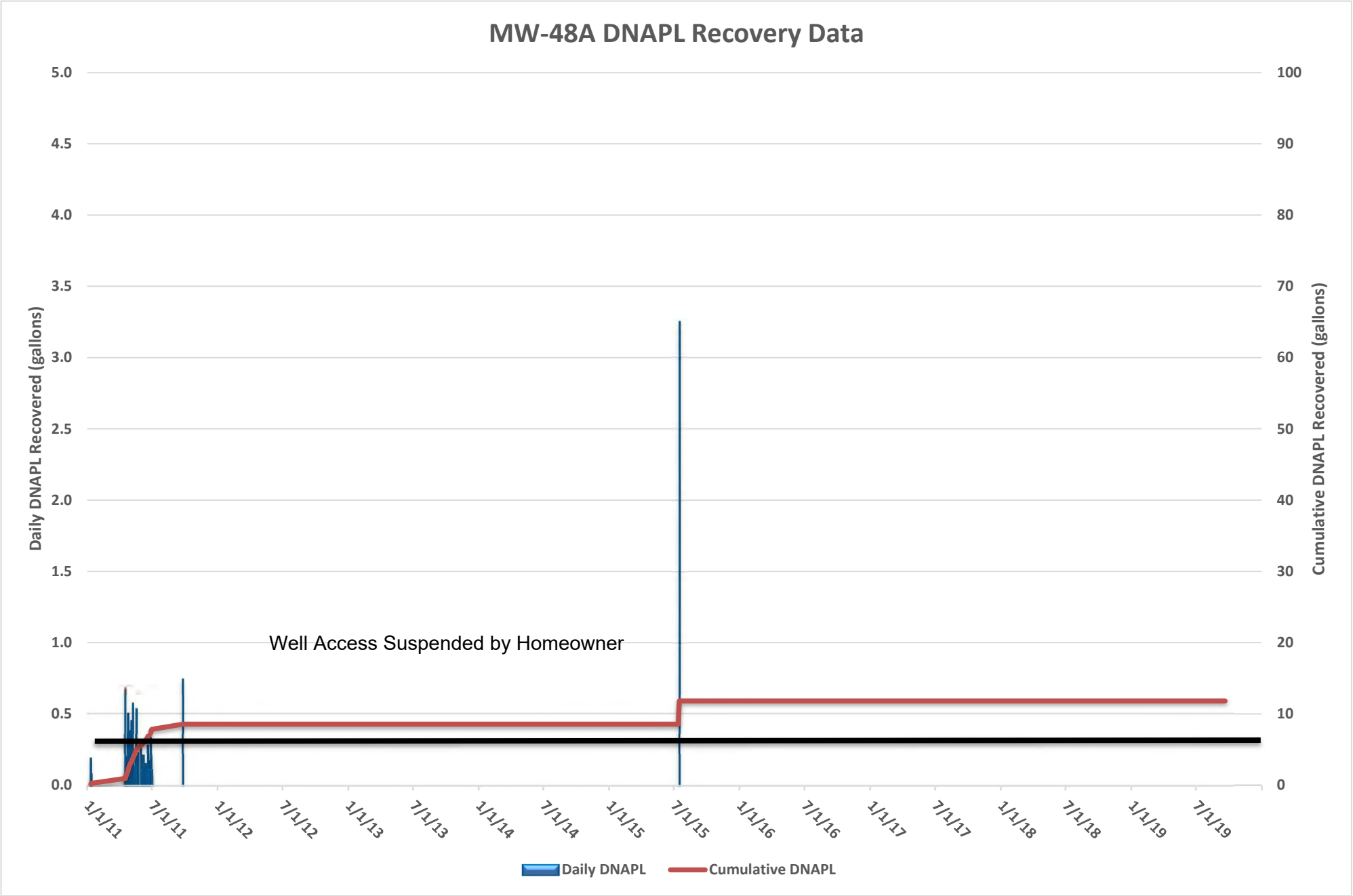

MW-27A (RW-17) DNAPL Recovery Data
Well Damaged, Converted to RW-17
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
100
90
80
70
60
50
40
30
20
10
0
9/1/08
11/1/08
1/1/09
3/1/09
5/1/09
7/1/09
9/1/09
11/1/09
1/1/10
3/1/10
5/1/10
7/1/10
Daily DNAPL
Cumulative DNAPL

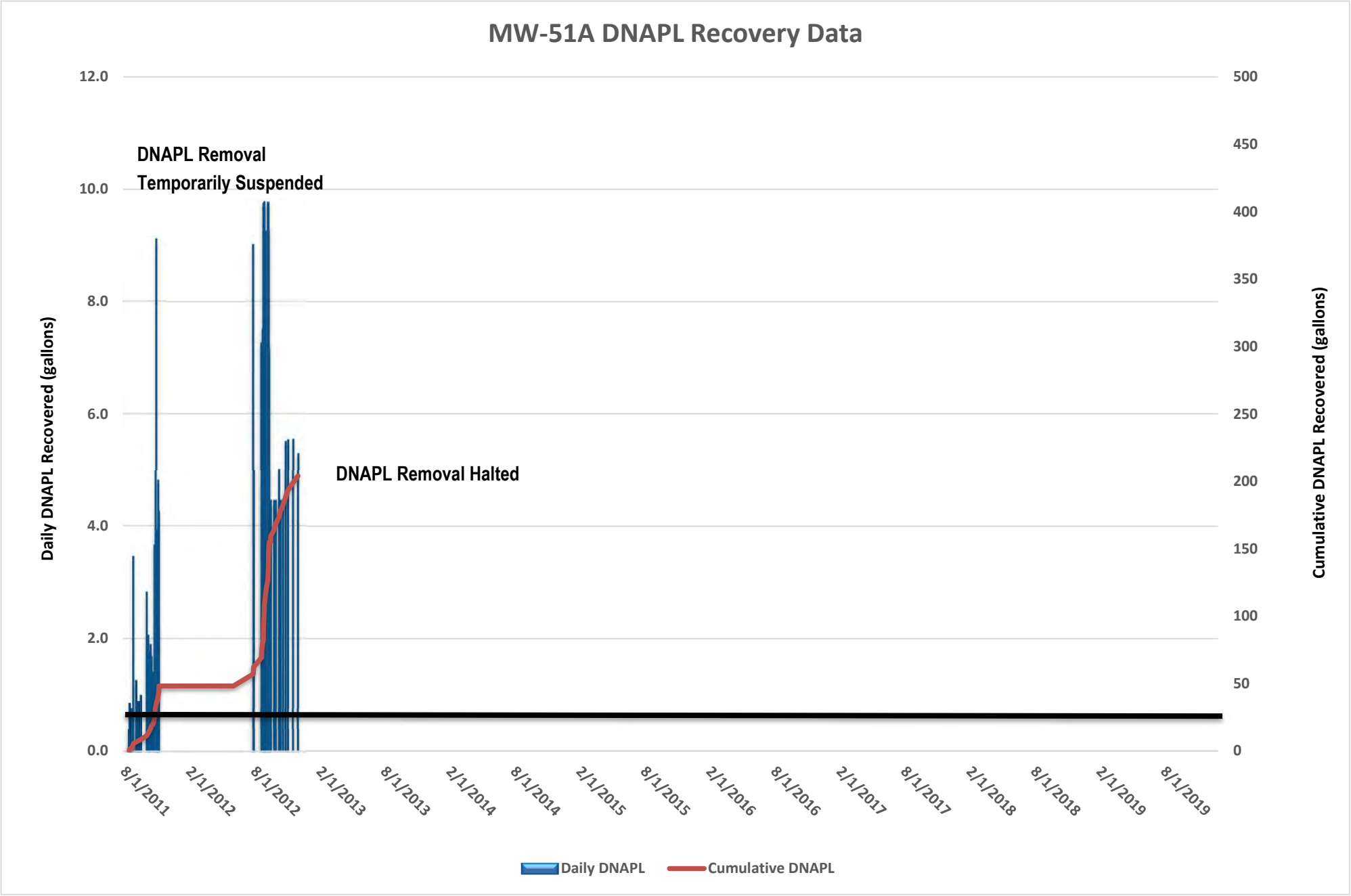

MW-29B DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10
9
8
7
6
5
4
3
2
1
0
2/1/09
8/1/09
2/1/10
8/1/10
2/1/11
8/1/11
2/1/12
8/1/12
2/1/13
8/1/13
2/1/14
8/1/14
2/1/15
8/1/15
2/1/16
8/1/16
2/1/17
8/1/17
2/1/18
8/1/18
2/1/19
8/1/19
Daily DNAPL
Cumulative DNAPL

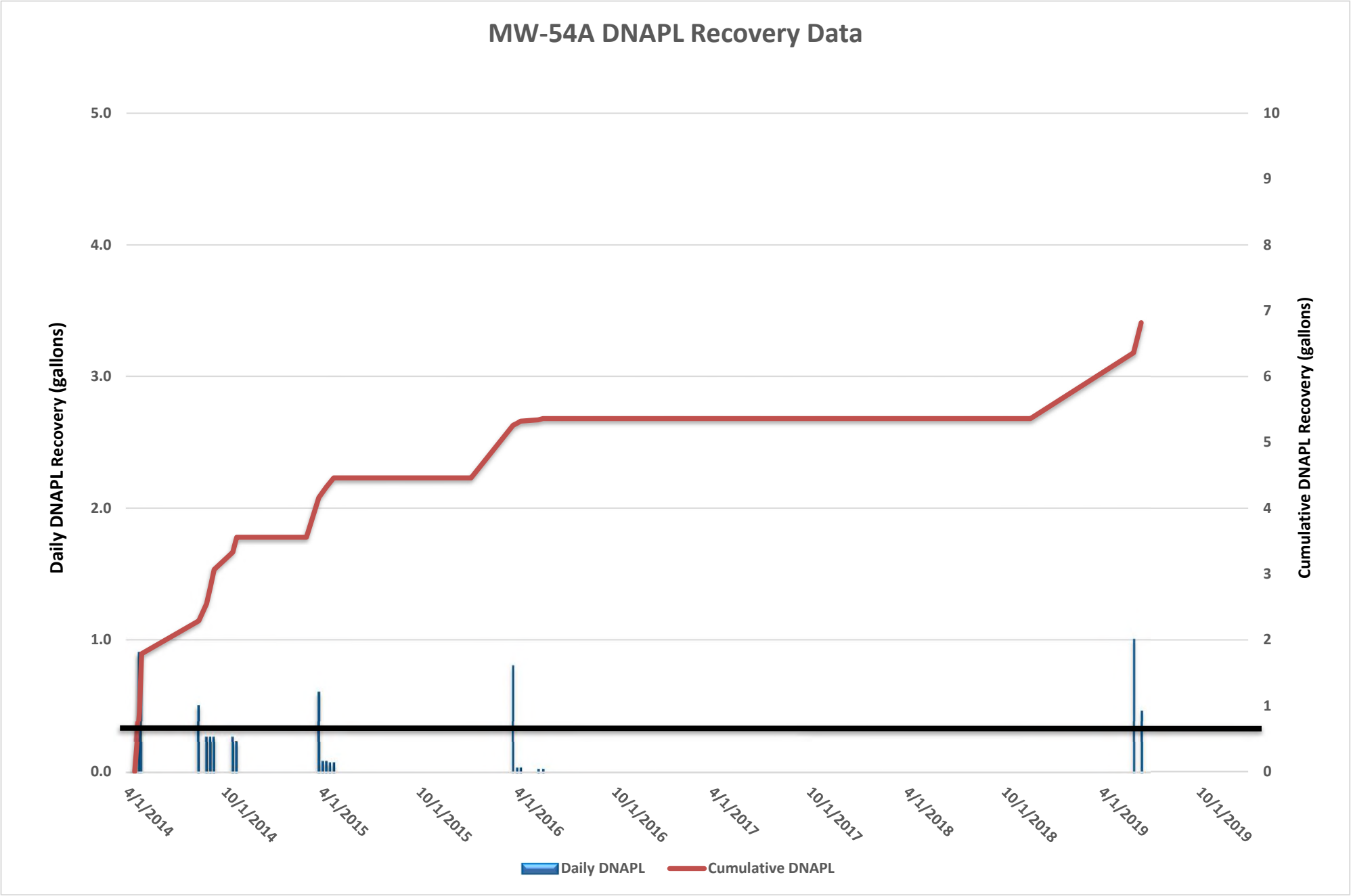

MW-36B DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
9/1/10
3/1/11
9/1/11
3/1/12
9/1/12
3/1/13
9/1/13
3/1/14
9/1/14
3/1/15
9/1/15
3/1/16
9/1/16
3/1/17
9/1/17
3/1/18
9/1/18
3/1/19
9/1/19
Daily DNAPL
Cumulative DNAPL

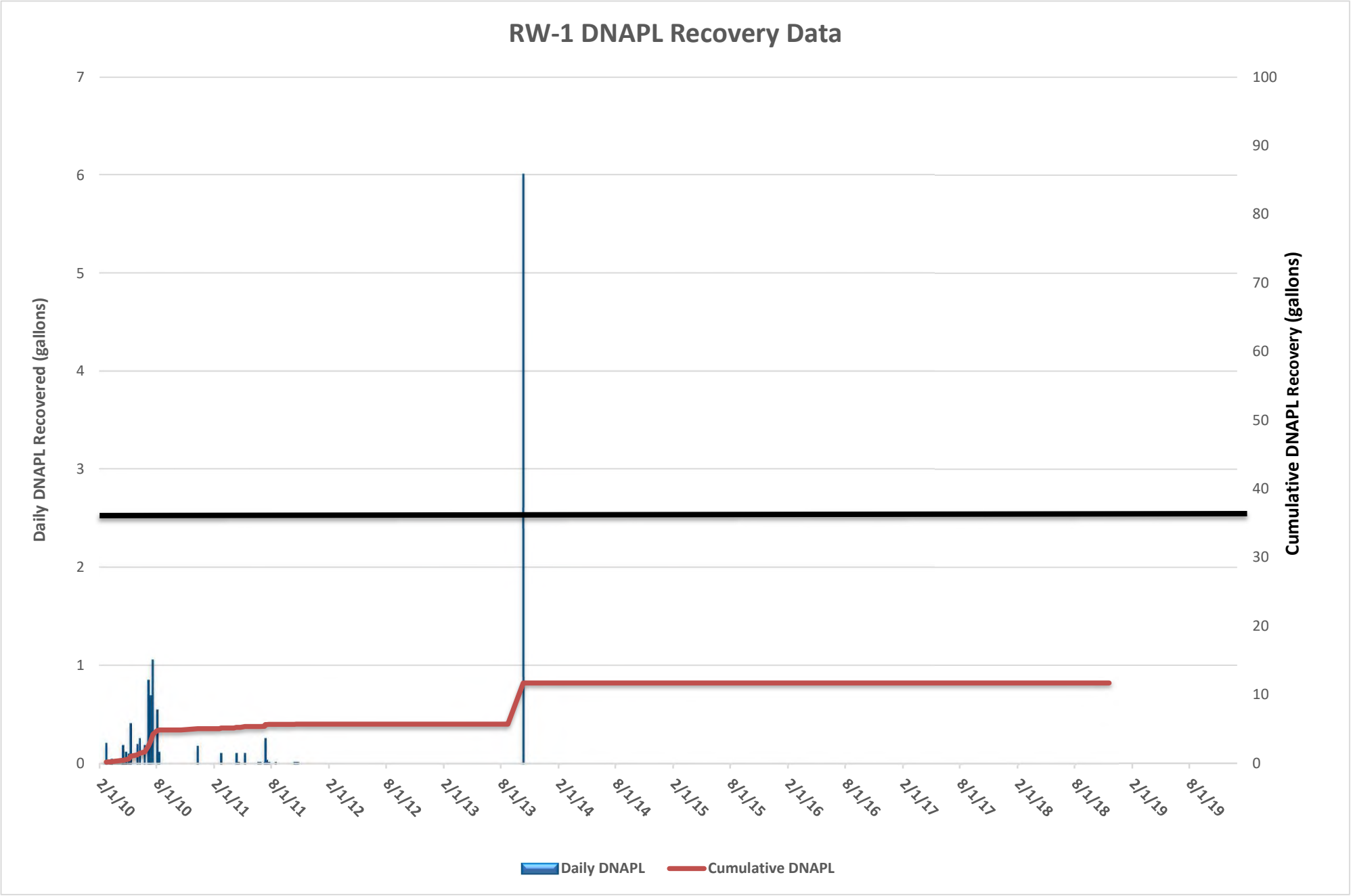

MW-36C DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
4/1/10
10/1/10
4/1/11
10/1/11
4/1/12
10/1/12
4/1/13
10/1/13
4/1/14
10/1/14
4/1/15
10/1/15
4/1/16
10/1/16
4/1/17
10/1/17
4/1/18
10/1/18
4/1/19
10/1/19
Daily DNAPL
Cumulative DNAPL

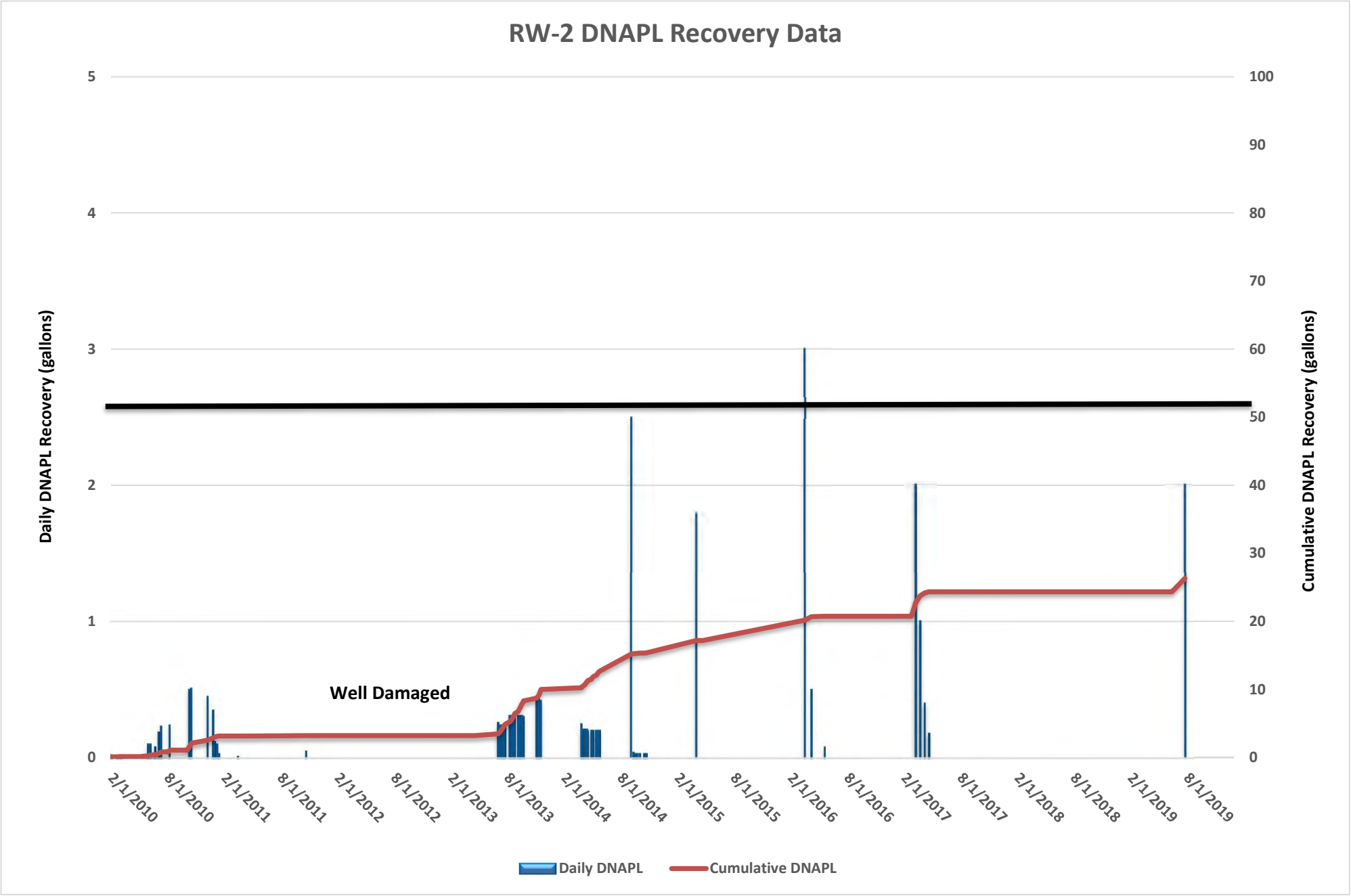

MW-39A DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
100
90
80
70
60
50
40
30
20
10
0
4/1/10
10/1/10
4/1/11
10/1/11
4/1/12
10/1/12
4/1/13
10/1/13
4/1/14
10/1/14
4/1/15
10/1/15
4/1/16
10/1/16
4/1/17
10/1/17
4/1/18
10/1/18
4/1/19
10/1/19
Daily DNAPL
Cumulative DNAPL

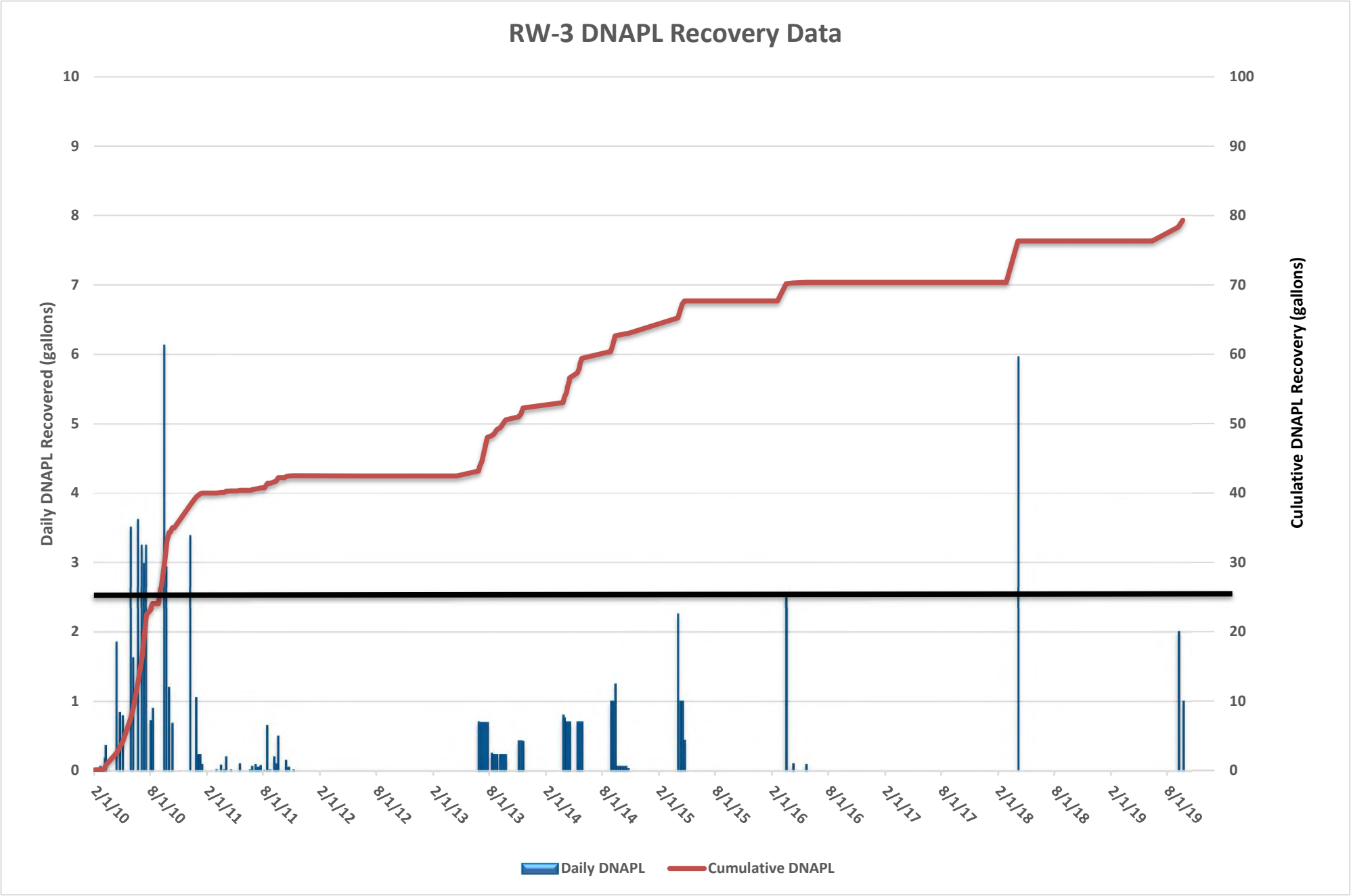

MW-48A DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
100
90
80
70
60
50
40
30
20
10
0
Well Access Suspended by Homeowner
1/1/11
7/1/11
1/1/12
7/1/12
1/1/13
7/1/13
1/1/14
7/1/14
1/1/15
7/1/15
1/1/16
7/1/16
1/1/17
7/1/17
1/1/18
7/1/18
1/1/19
7/1/19
Daily DNAPL
Cumulative DNAPL

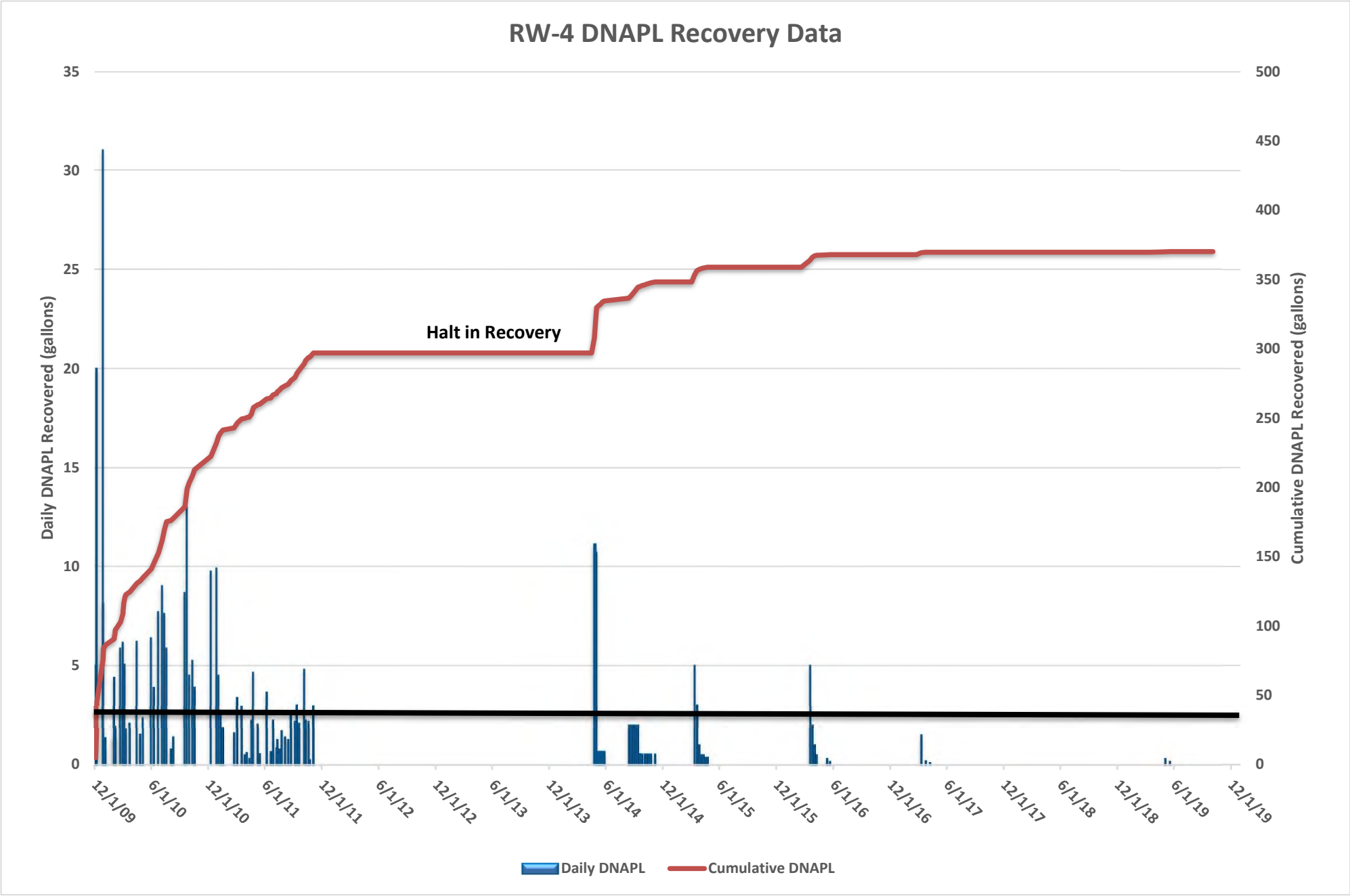

MW-51A DNAPL Recovery Data
DNAPL Removal
Temporarily Suspended
DNAPL Removal Halted
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
500
450
400
350
300
250
200
150
100
50
0
8/1/2011
2/1/2012
8/1/2012
2/1/2013
8/1/2013
2/1/2014
8/1/2014
2/1/2015
8/1/2015
2/1/2016
8/1/2016
2/1/2017
8/1/2017
2/1/2018
8/1/2018
2/1/2019
8/1/2019
Daily DNAPL
Cumulative DNAPL

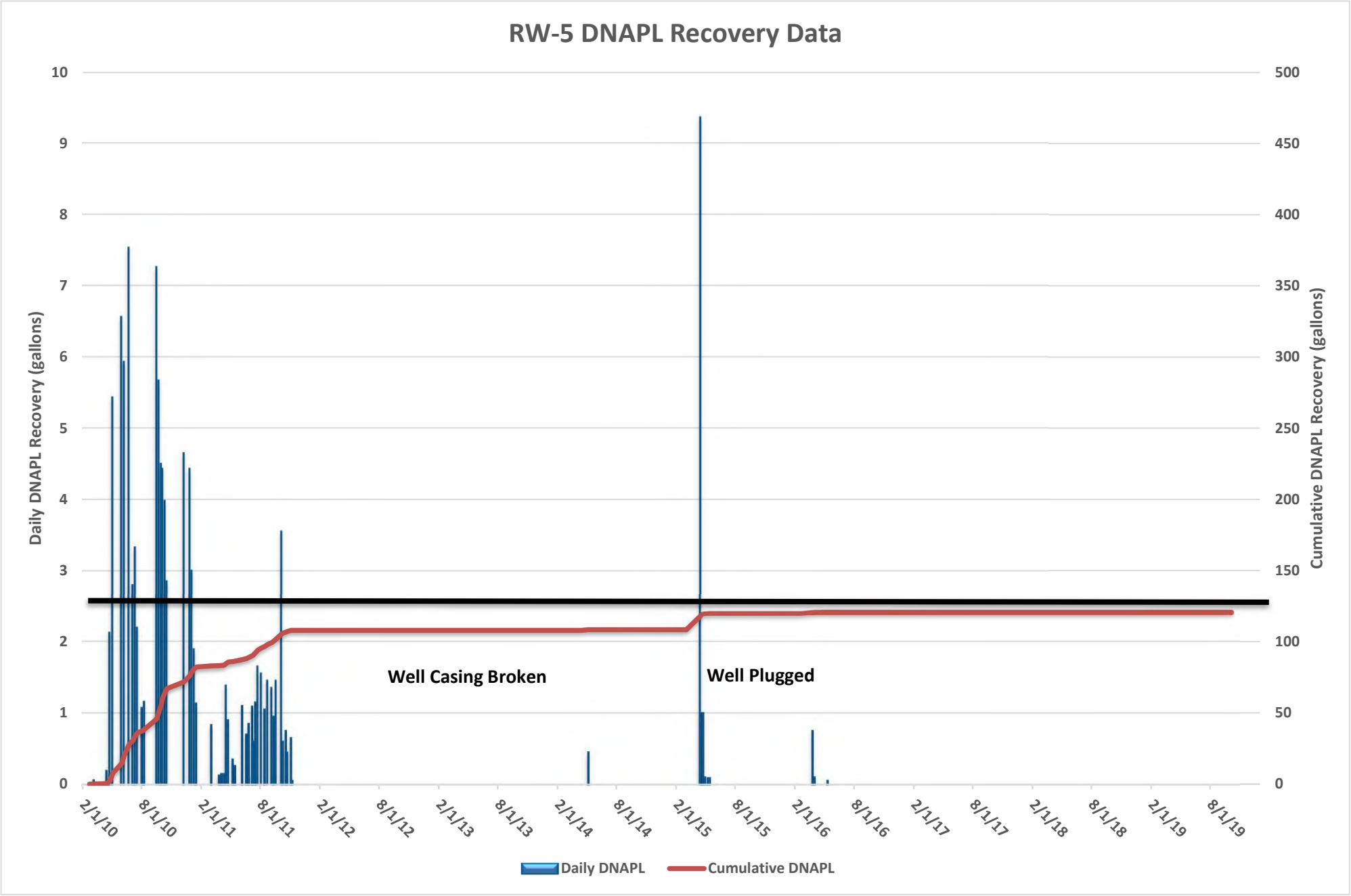

MW-54A DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
5.0
4.0
3.0
2.0
1.0
0.0
10
9
8
7
6
5
4
3
2
1
0
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
Daily DNAPL
Cumulative DNAPL

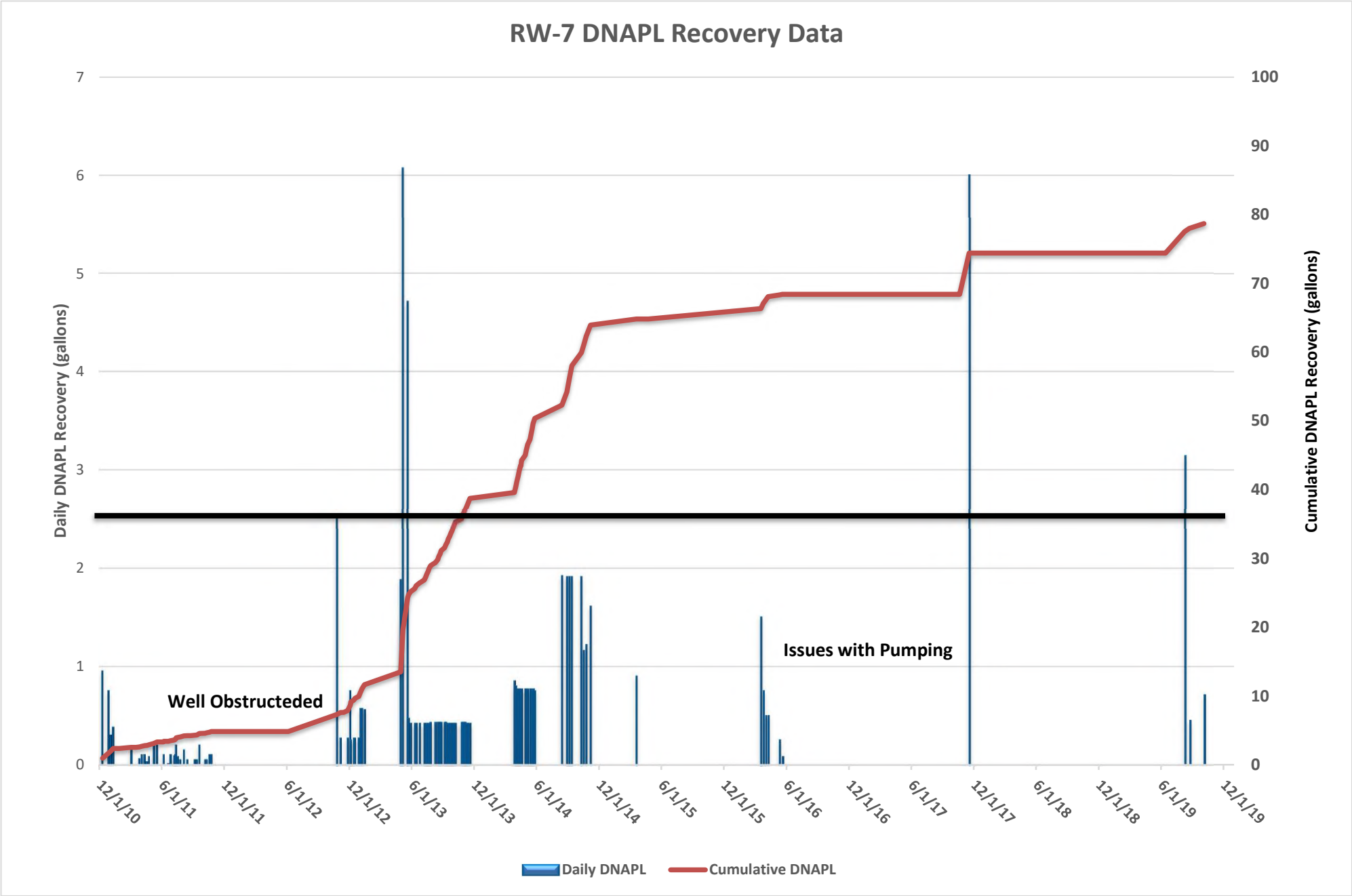

RW-1 DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovery (gallons)
0
1
2
3
4
5
6
7
0
10
20
30
40
50
60
70
80
90
100
2/1/10
8/1/10
2/1/11
8/1/11
2/1/12
8/1/12
2/1/13
8/1/13
2/1/14
8/1/14
2/1/15
8/1/15
2/1/16
8/1/16
2/1/17
8/1/17
2/1/18
8/1/18
2/1/19
8/1/19
Daily DNAPL
Cumulative DNAPL

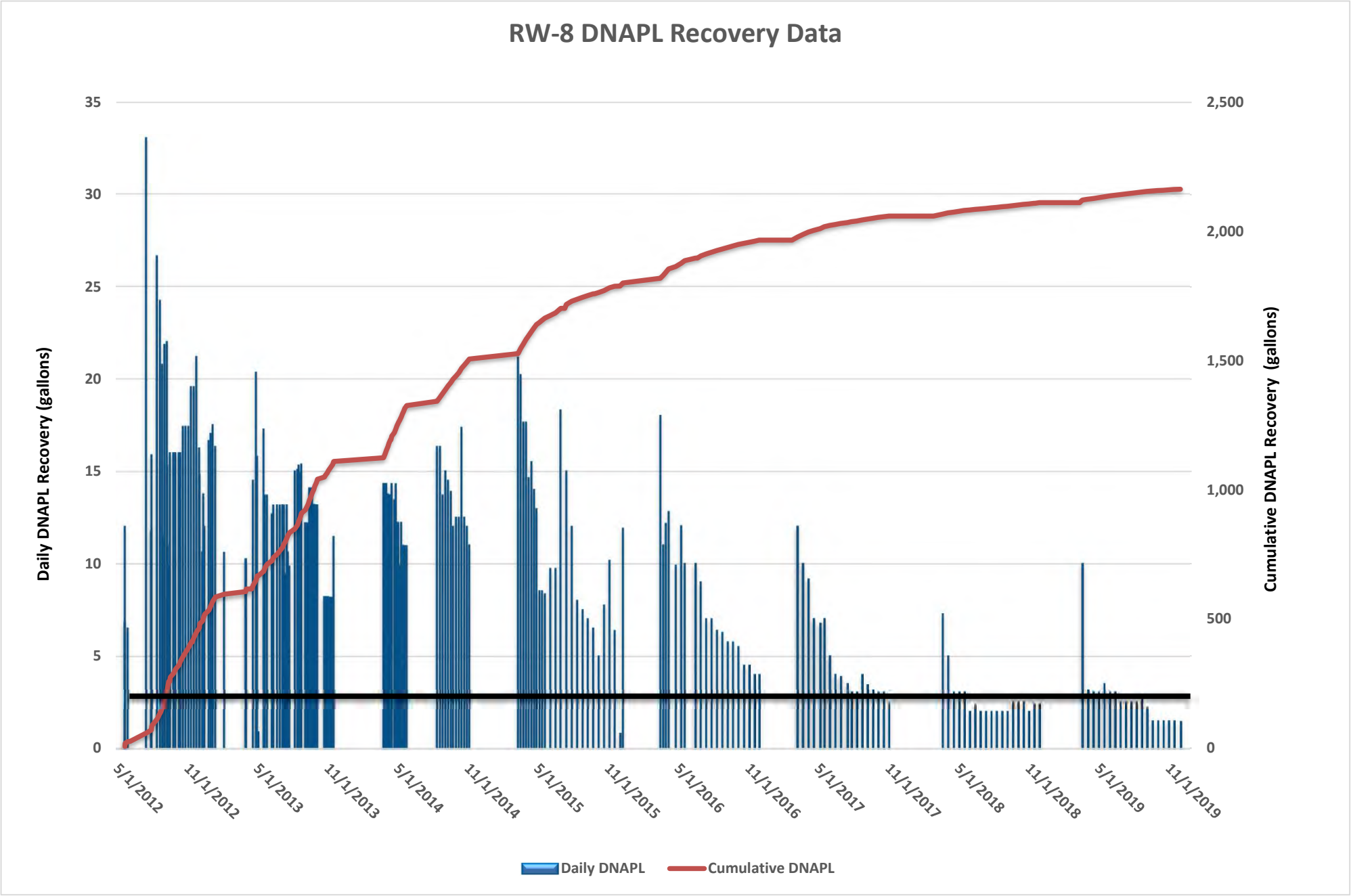

RW-2 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
5
4
3
2
1
0
100
90
80
70
60
50
40
30
20
10
0
Well Damaged
2/1/2010
8/1/2010
2/1/2011
8/1/2011
2/1/2012
8/1/2012
2/1/2013
8/1/2013
2/1/2014
8/1/2014
2/1/2015
8/1/2015
2/1/2016
8/1/2016
2/1/2017
8/1/2017
2/1/2018
8/1/2018
2/1/2019
8/1/2019
Daily DNAPL
Cumulative DNAPL

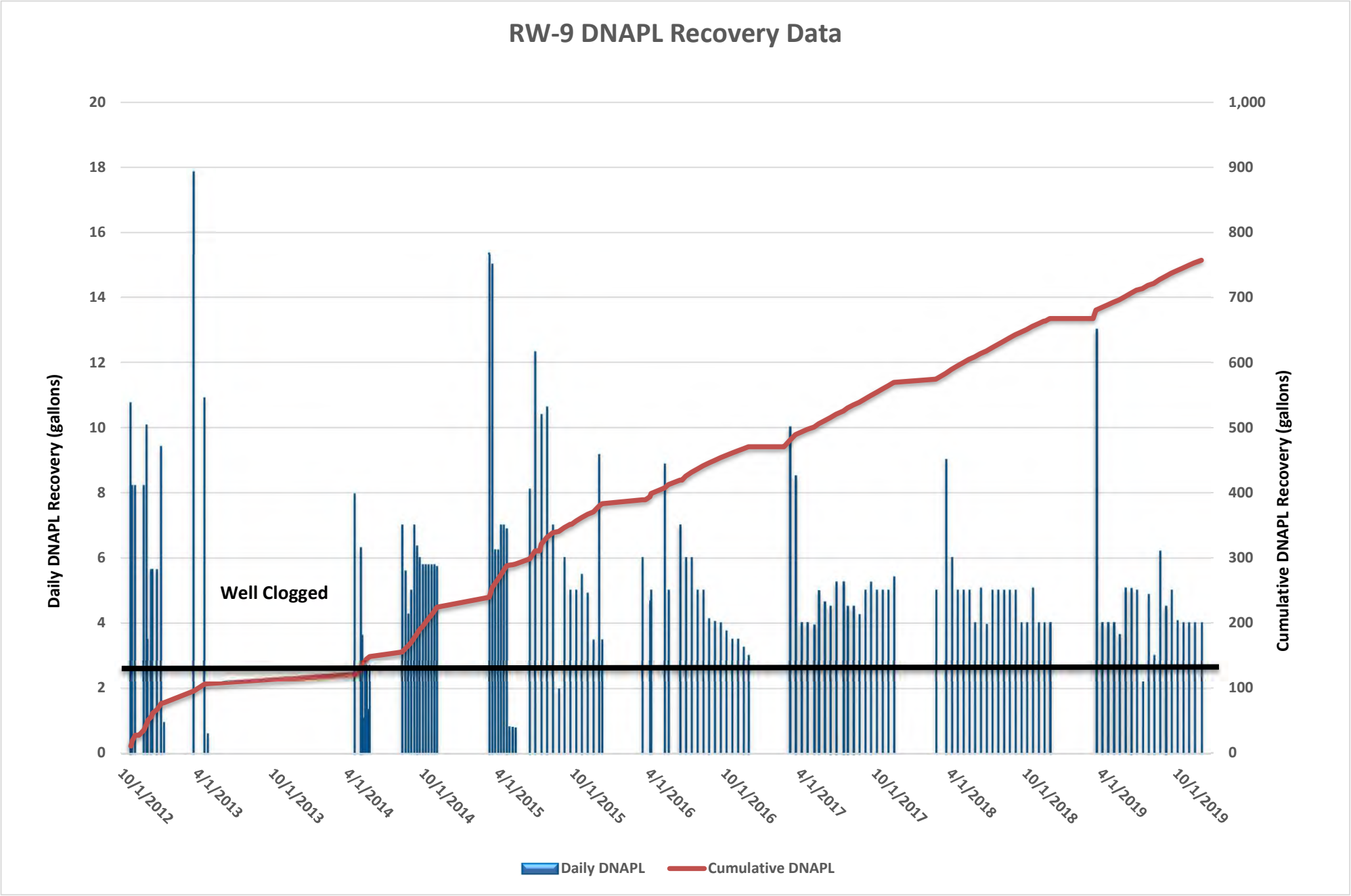

RW-3 DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cululative DNAPL Recovery (gallons)
0
1
2
3
4
5
6
7
8
9
10
0
10
20
30
40
50
60
70
80
90
100
2/1/10
8/1/10
2/1/11
8/1/11
2/1/12
8/1/12
2/1/13
8/1/13
2/1/14
8/1/14
2/1/15
8/1/15
2/1/16
8/1/16
2/1/17
8/1/17
2/1/18
8/1/18
2/1/19
8/1/19
Daily DNAPL
Cumulative DNAPL

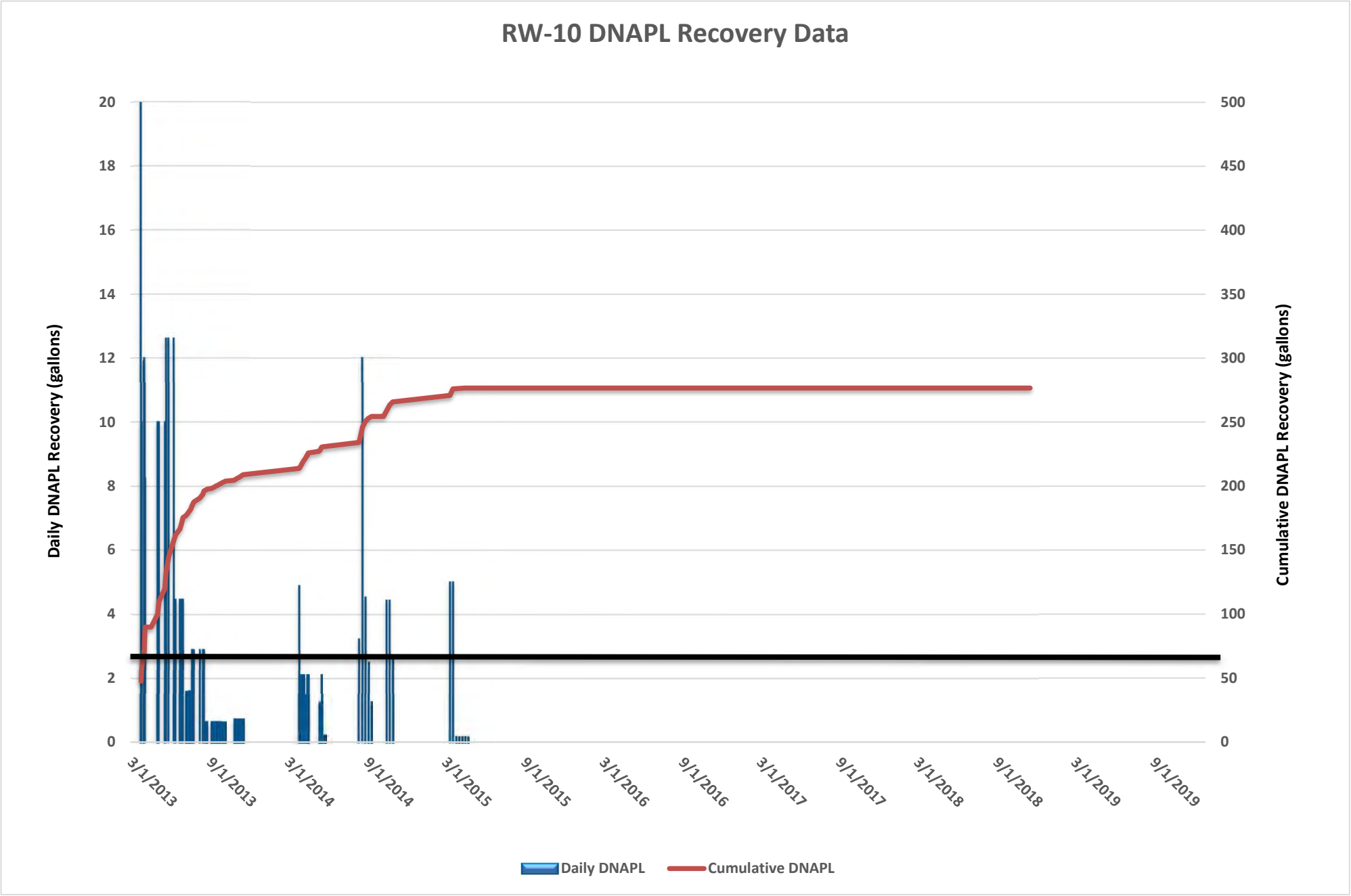

RW-4 DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
Halt in Recovery
35
30
25
20
15
10
5
0
500
450
400
350
300
250
200
150
100
50
0
12/1/09
6/1/10
12/1/10
6/1/11
12/1/11
6/1/12
12/1/12
6/1/13
12/1/13
6/1/14
12/1/14
6/1/15
12/1/15
6/1/16
12/1/16
6/1/17
12/1/17
6/1/18
12/1/18
6/1/19
12/1/19
Daily DNAPL
Cumulative DNAPL

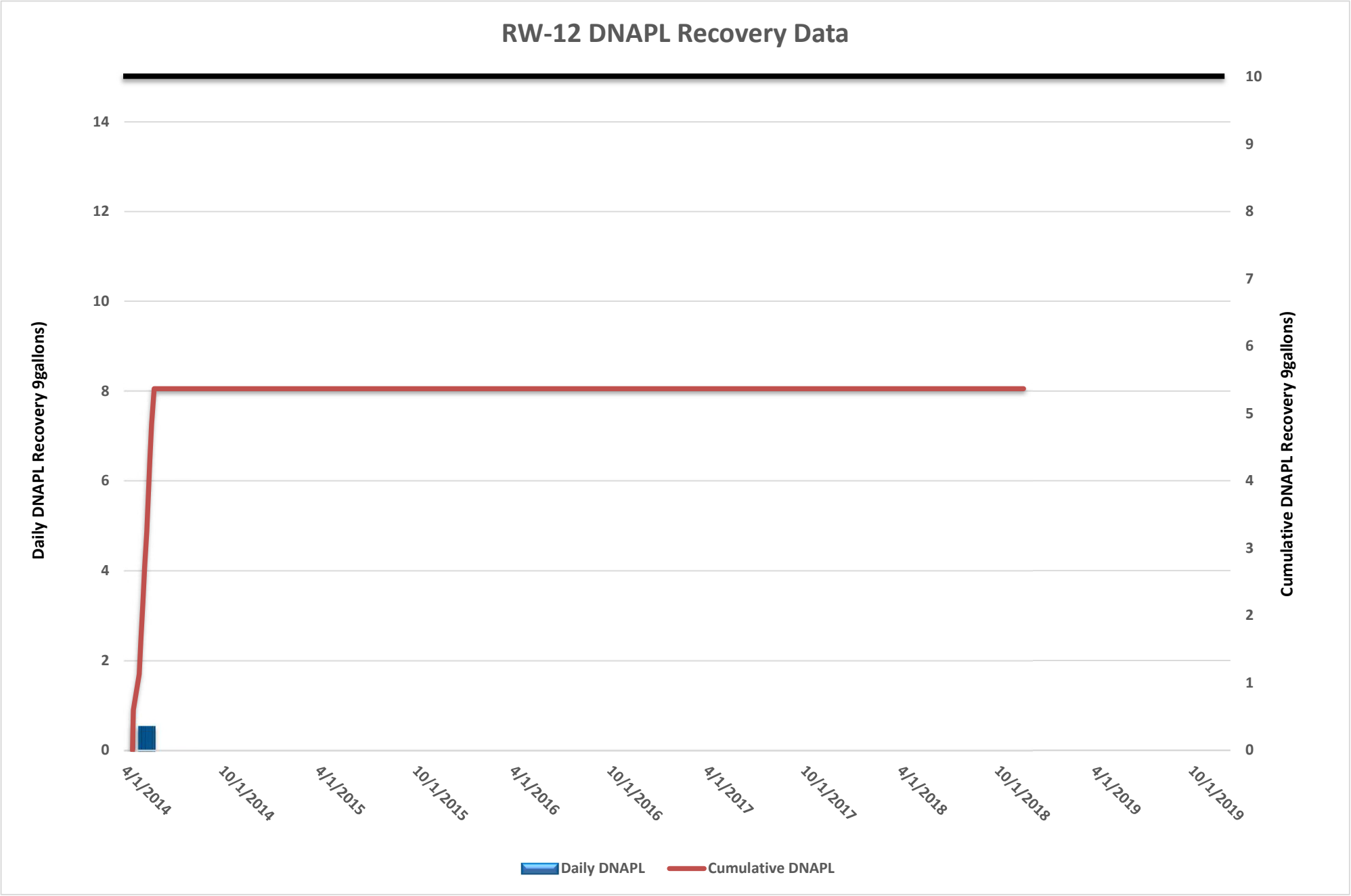

RW-5 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
0
1
2
3
4
5
6
7
8
9
10
0
50
100
150
200
250
300
350
400
450
500
Well Casing Broken
Well Plugged
2/1/10
8/1/10
2/1/11
8/1/11
2/1/12
8/1/12
2/1/13
8/1/13
2/1/14
8/1/14
2/1/15
8/1/15
2/1/16
8/1/16
2/1/17
8/1/17
2/1/18
8/1/18
2/1/19
8/1/19
Daily DNAPL
Cumulative DNAPL

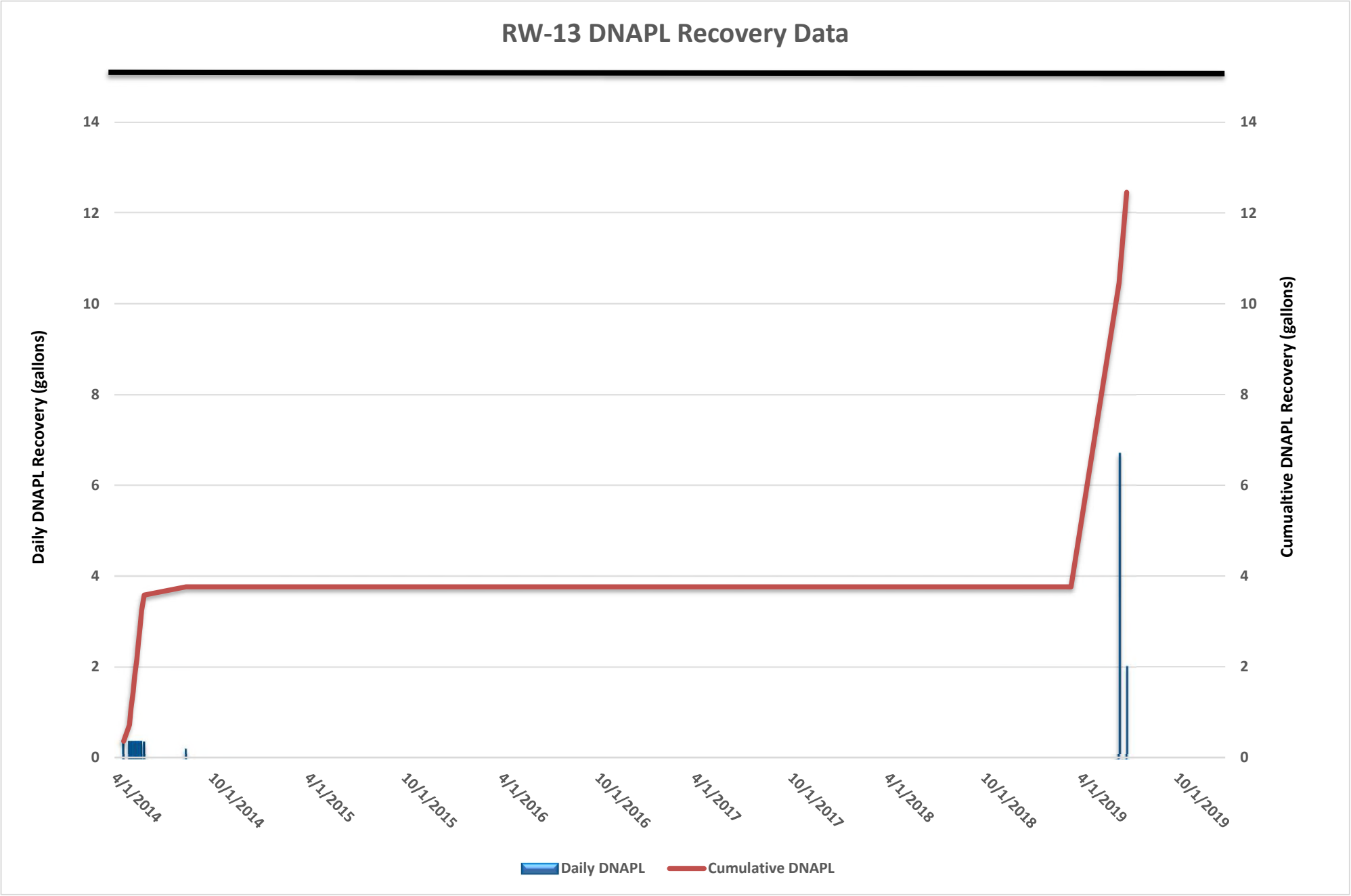

RW-7 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
0
1
2
3
4
5
6
7
0
10
20
30
40
50
60
70
80
90
100
Well Obstructeded
Issues with Pumping
12/1/10
6/1/11
12/1/11
6/1/12
12/1/12
6/1/13
12/1/13
6/1/14
12/1/14
6/1/15
12/1/15
6/1/16
12/1/16
6/1/17
12/1/17
6/1/18
12/1/18
6/1/19
12/1/19
Daily DNAPL
Cumulative DNAPL

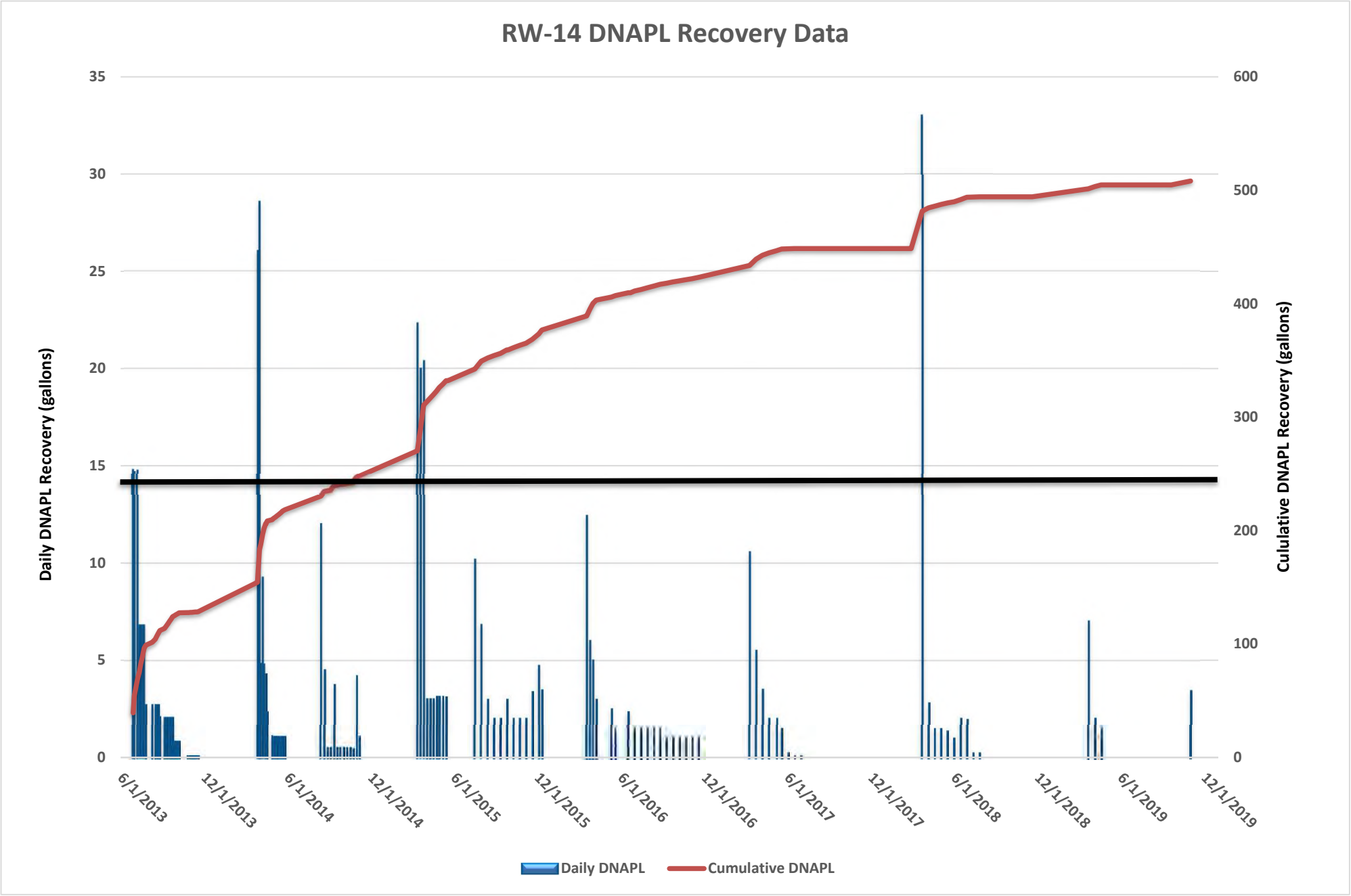

RW-8 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
35
30
25
20
15
10
5
0
2,500
2,000
1,500
1,000
500
0
5/1/2012
11/1/2012
5/1/2013
11/1/2013
5/1/2014
11/1/2014
5/1/2015
11/1/2015
5/1/2016
11/1/2016
5/1/2017
11/1/2017
5/1/2018
11/1/2018
5/1/2019
11/1/2019
Daily DNAPL
Cumulative DNAPL

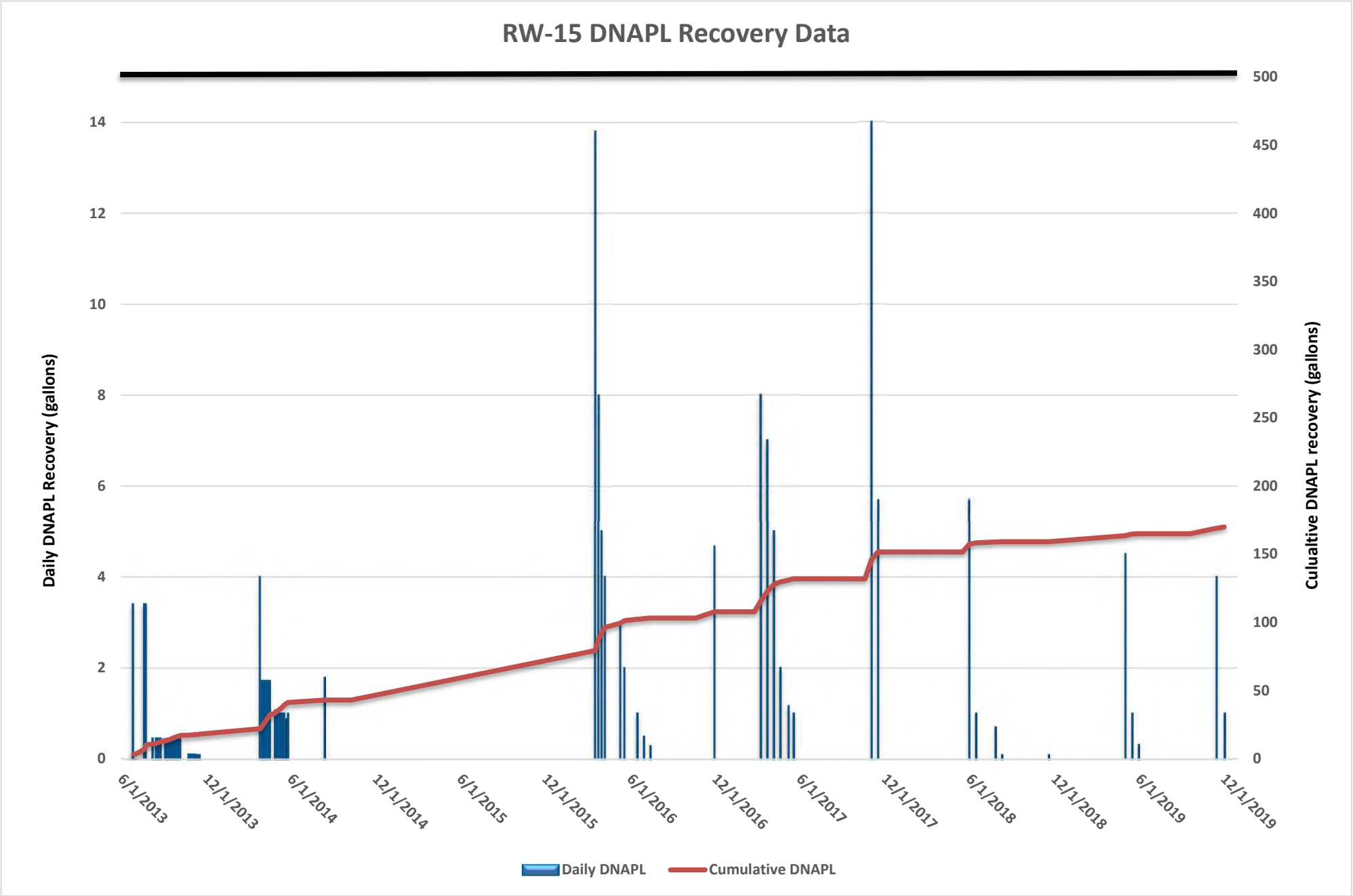

RW-9 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
Well Clogged
0
2
4
6
8
10
12
14
16
18
20
0
100
200
300
400
500
600
700
800
900
1,000
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
Daily DNAPL
Cumulative DNAPL

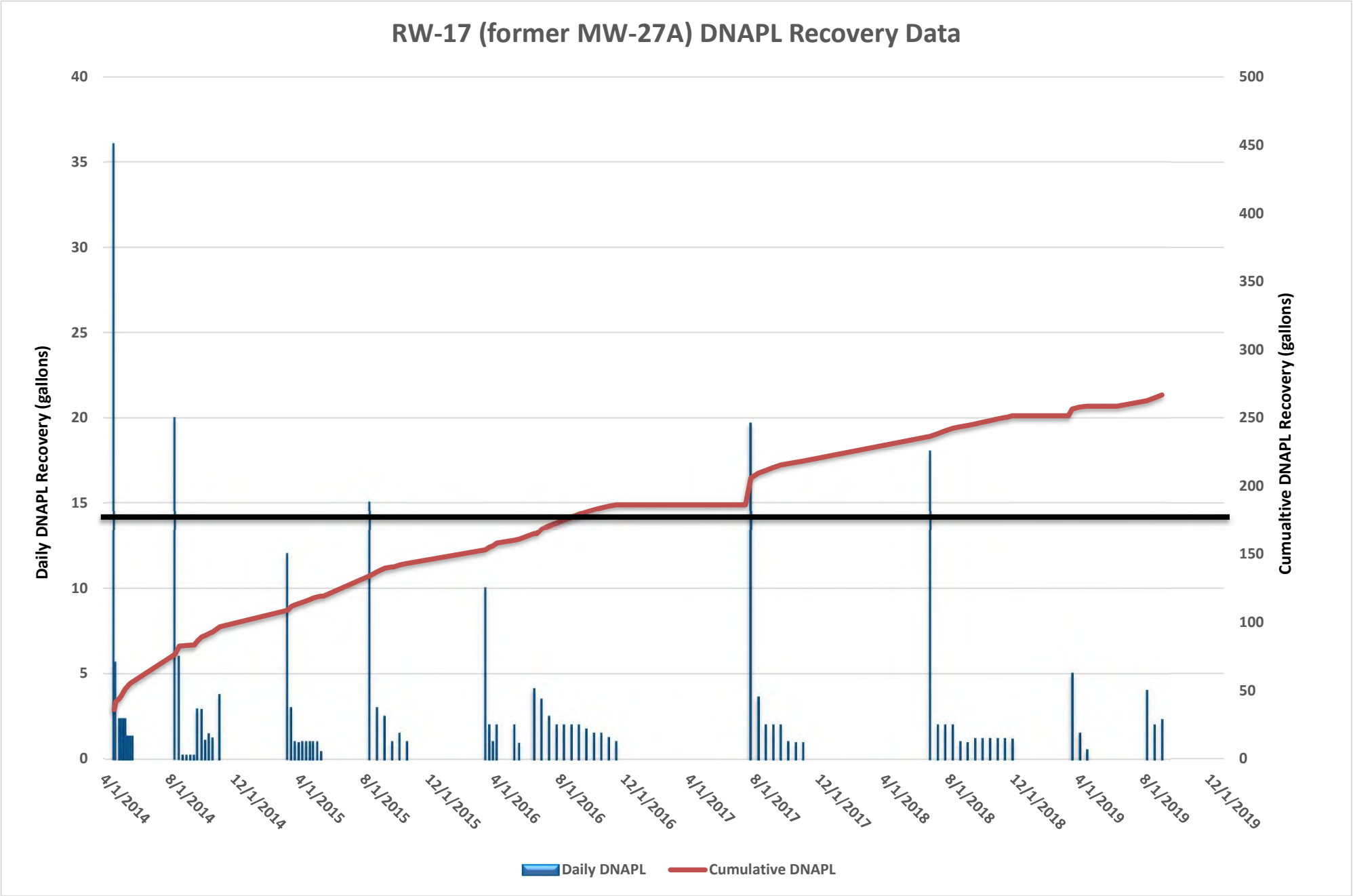

RW-10 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
20
18
16
14
12
10
8
6
4
2
0
500
450
400
350
300
250
200
150
100
50
0
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
Daily DNAPL
Cumulative DNAPL

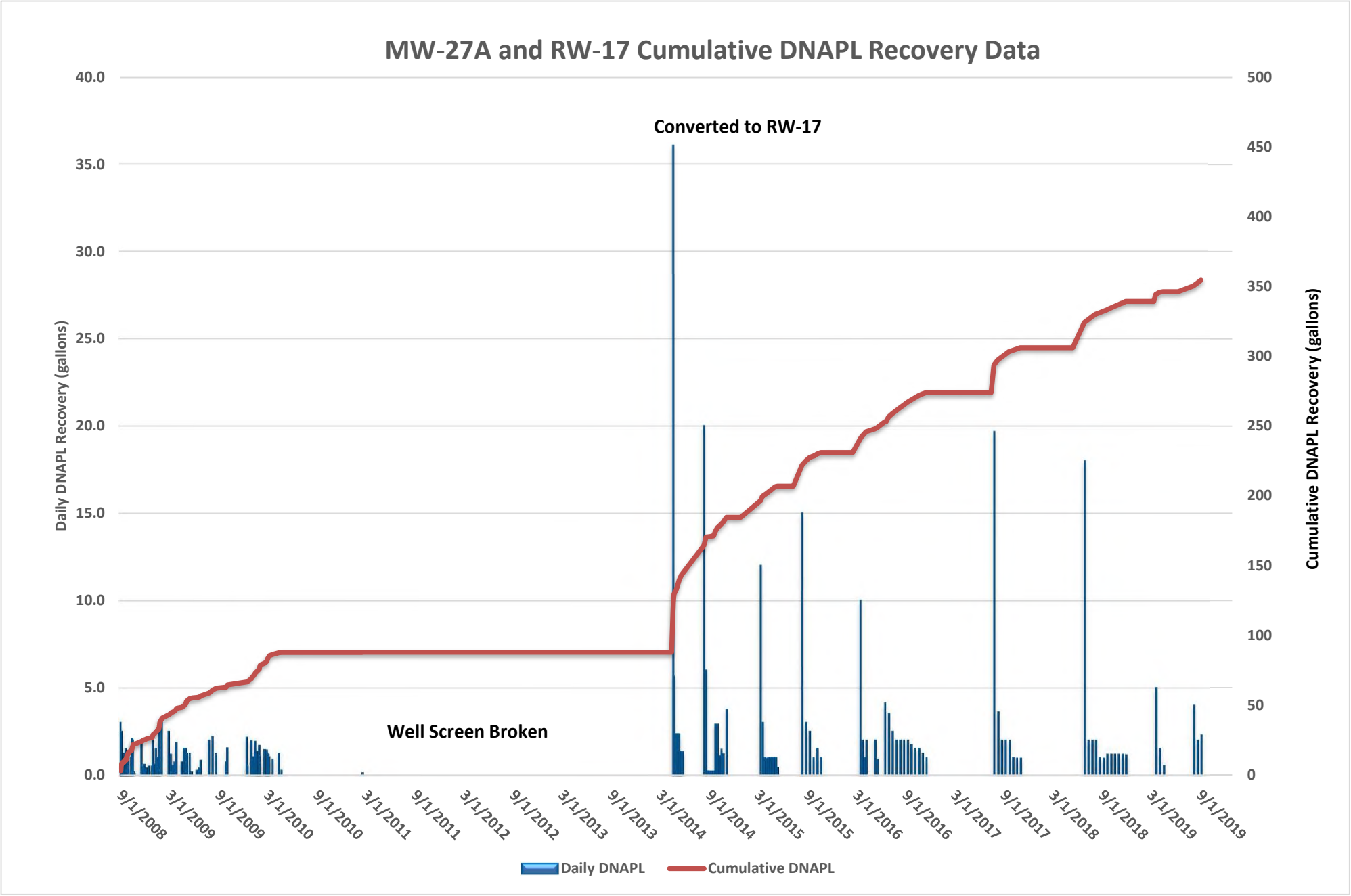

RW-12 DNAPL Recovery Data
Daily DNAPL Recovery 9gallons)
Cumulative DNAPL Recovery 9gallons)
0
2
4
6
8
10
12
14
0
1
2
3
4
5
6
7
8
9
10
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
Daily DNAPL
Cumulative DNAPL


RW-13 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumualtive DNAPL Recovery (gallons)
0
2
4
6
8
10
12
14
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
Daily DNAPL
Cumulative DNAPL


RW-14 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cululative DNAPL Recovery (gallons)
35
30
25
20
15
10
5
0
600
500
400
300
200
100
0
6/1/2013
12/1/2013
6/1/2014
12/1/2014
6/1/2015
12/1/2015
6/1/2016
12/1/2016
6/1/2017
12/1/2017
6/1/2018
12/1/2018
6/1/2019
12/1/2019
Daily DNAPL
Cumulative DNAPL


RW-15 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Culualtive DNAPL recovery (gallons)
0
2
4
6
8
10
12
14
0
50
100
150
200
250
300
350
400
450
500
6/1/2013
12/1/2013
6/1/2014
12/1/2014
6/1/2015
12/1/2015
6/1/2016
12/1/2016
6/1/2017
12/1/2017
6/1/2018
12/1/2018
6/1/2019
12/1/2019
Daily DNAPL
Cumulative DNAPL


RW-17 (former MW-27A) DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumualtive DNAPL Recovery (gallons)
0
5
10
15
20
25
30
35
40
0
50
100
150
200
250
300
350
400
450
500
4/1/2014
8/1/2014
12/1/2014
4/1/2015
8/1/2015
12/1/2015
4/1/2016
8/1/2016
12/1/2016
4/1/2017
8/1/2017
12/1/2017
4/1/2018
8/1/2018
12/1/2018
4/1/2019
8/1/2019
12/1/2019
Daily DNAPL
Cumulative DNAPL


MW-27A and RW-17 Cumulative DNAPL Recovery Data
Converted to RW-17
Well Screen Broken
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
500
450
400
350
300
250
200
150
100
50
0
9/1/2008
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
Daily DNAPL
Cumulative DNAPL

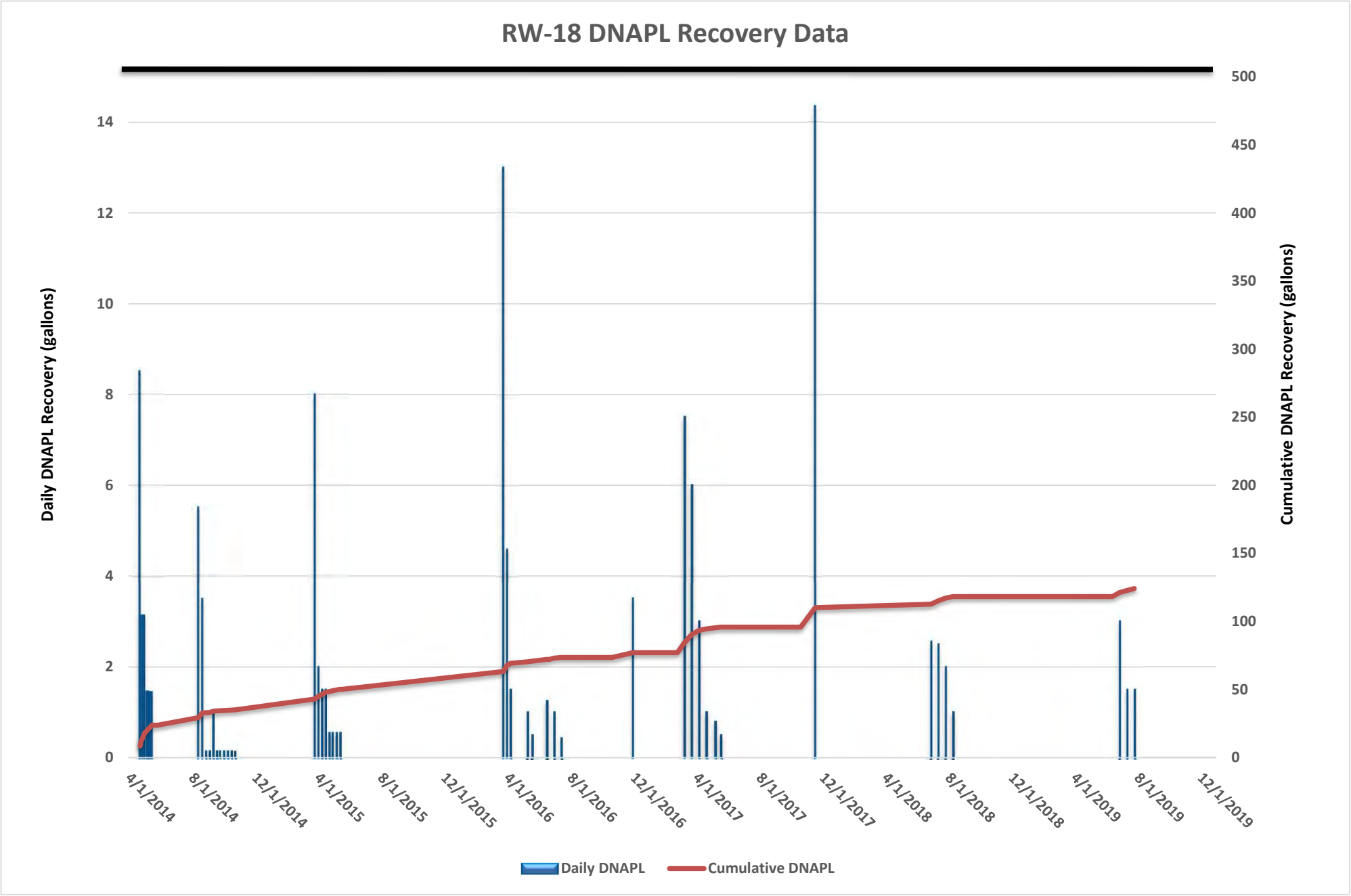

RW-18 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
0
2
4
6
8
10
12
14
0
50
100
150
200
250
300
350
400
450
500
4/1/2014
8/1/2014
12/1/2014
4/1/2015
8/1/2015
12/1/2015
4/1/2016
8/1/2016
12/1/2016
4/1/2017
8/1/2017
12/1/2017
4/1/2018
8/1/2018
12/1/2018
4/1/2019
8/1/2019
12/1/2019
Daily DNAPL
Cumulative DNAPL

Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
P-1	8/4/2000	--	--	OBS	--	--	--	DNAPL at bottom
P-1	11/13/2000	--	--	0.00	--	--	--	Clear water, sheen present, odor
P-1	2/1/2001	--	--	OBS	--	--	--	sheen present, brown, odor, globules seen in bailer
P-1	12/11/2001	--	--	0.00	--	--	--	Cloudy, sheen present, odor
* Well abandoned 08/2006 for construction								
MW-3S	8/4/2000	--	--	OBS	--	--	--	Clear water, odor, some DNAPL sheen present
MW-3S	11/13/2000	--	--	OBS	--	--	--	DNAPL on bottom of bailer
MW-3S	2/1/2001	--	--	0.33	--	--	--	DNAPL on bottom of bailer
MW-3S	12/11/2001	--	--	0.33	--	--	--	
MW-3S	8/11/2003	--	--	0.50	--	--	--	DNAPL on bottom of bailer
MW-3S	9/9/2004	--	--	0.00	--	--	--	Cloudy, sheen present, odor
* Well abandoned 08/2006 for construction								
MW-3D	8/4/2000	--	--	OBS	--	--	--	DNAPL at bottom of bailer, Clear water, odor
MW-3D	11/13/2000	--	--	0.00	--	--	--	Grey, sheen present, odor
MW-3D	2/1/2001	--	--	0.00	--	--	--	Clear water, odor, sheen present
MW-3D	12/11/2001	--	--	0.00	--	--	--	Clear water, odor
MW-3D	8/11/2003	--	--	0.16	--	--	--	DNAPL on bottom of bailer
MW-3D	9/9/2004	--	--	OBS	--	--	--	Cloudy, sheen present, strong odor, trace DNAPL in bailer
* Well abandoned 08/2006 for construction								
MW-12D	8/4/2000	--	--	NM	--	--	--	
MW-12D	11/13/2000	--	--	NM	--	--	--	
MW-12D	2/1/2001	--	--	NM	--	--	--	
MW-12D	6/21/2001	5.70	--	0.00	--	--	--	Cloudy, sheen present, odor
MW-12D	12/11/2001	5.52	--	OBS	--	--	--	DNAPL noted in well after purging 5 gallons of water
MW-12D	8/11/2003	6.12	--	0.00	--	--	--	Odor, DNAPL globules in bailer
MW-12D	10/29/2003	5.40	--	1.00	--	--	--	
MW-12D	2/17/2004	--	--	0.65	--	--	--	
MW-12D	9/9/2004	6.19	--	1.00	--	--	--	Clear water to yellow, sheen present present, odor
MW-12D	6/28/2007	--	--	NM	--	--	--	
MW-12D	7/5/2007	--	--	1.00	--	--	--	
MW-12D	7/24/2007	6.57	--	0.85	--	--	--	Red globules and sheen present in bailer
MW-12D	8/6/2007	--	--	1.50	--	--	--	

Notes:
fbtoc = feet below top of casing.
OBS = evidence of DNAPL observed but thickness not measured.
DTW = depth to water.
NB = not bailed
NM = not measured.

Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-12D	8/9/2007	--	--	NM	--	--	--	
MW-12D	10/15/2007	--	--	0.80	--	--	--	
MW-12D	10/17/2007	--	--	0.13	--	--	--	Clear water of DNAPL at 4.0 gal of purging; no drawdown in well
MW-12D	10/19/2007	--	--	0.05	--	--	--	
MW-12D	11/30/2007	6.04	--	0.04	--	--	--	
MW-12D	3/5/2008	4.43	--	0.20	--	--	--	Clear water, sheen present, odor remaining after 1.0 gal of DNAPL/water purged
MW-12D	4/10/2008	--	--	0.33	--	--	--	
MW-12D	9/9/2008	--	--	0.70	0.05	0.15	0.050	
MW-12D	9/12/2008	--	--	0.50	0.05	0.15	0.100	
MW-12D	9/12/2008	--	--	0.50	0.05	0.15	0.150	
MW-12D	9/18/2008	--	--	0.30	0.10	0.15	0.250	
MW-12D	9/24/2008	--	--	0.20	0.05	0.20	0.300	
MW-12D	9/26/2008	--	--	0.25	0.05	0.20	0.350	
MW-12D	9/30/2008	--	--	0.10	0.01	0.15	0.360	
MW-12D	10/1/2008	--	--	0.20	0.05	0.15	0.410	
MW-12D	10/2/2008	--	--	0.05	0.05	0.15	0.460	Recorded 0.05' DNAPL
MW-12D	10/3/2008	--	--	0.05	0.05	0.15	0.510	Recorded 0.05' DNAPL
MW-12D	10/14/2008	--	--	0.05	0.05	0.15	0.560	Recorded 0.05' DNAPL
MW-12D	10/17/2008	--	--	0.05	0.05	0.40	0.610	Recorded 0.05' DNAPL
MW-12D	10/21/2008	--	--	0.05	0.05	0.24	0.660	Recorded 0.05' DNAPL
MW-12D	10/24/2008	--	--	0.05	0.05	0.24	0.710	Recorded 0.05' DNAPL
MW-12D	10/28/2008	--	--	0.00	0.00	0.25	0.710	Trace DNAPL on outside of bailer
MW-12D	11/21/2008	--	--	0.05	0.05	0.24	0.760	Recorded 0.05' DNAPL
MW-12D	11/25/2008	--	--	0.00	0.00	0.25	0.760	Trace DNAPL on bailer
MW-12D	12/2/2008	--	--	0.00	0.00	0.25	0.760	Trace DNAPL on bailer
MW-12D	12/4/2008	--	--	0.00	0.00	0.25	0.760	Trace DNAPL on bailer
MW-12D	12/9/2008	--	--	0.00	0.00	0.25	0.760	Trace DNAPL staining on bailer
MW-12D	12/18/2008	--	--	0.00	0.00	0.25	0.760	Slight DNAPL staining on bailer on bottom of bailer
MW-12D	12/30/2008	--	--	0.00	0.00	0.25	0.760	Slight DNAPL staining on bailer on bottom of bailer
MW-12D	1/2/2009	5.54	--	0.00	0.00	0.25	0.760	Slight DNAPL staining on bailer on bottom of bailer
MW-12D	1/7/2009	--	--	0.00	0.00	0.25	0.760	Slight DNAPL staining on bailer on bottom of bailer, ~1.0' of dark grey water in bailer, globules in bailer
MW-12D	1/14/2009	--	--	0.01	0.01	0.24	0.770	DNAPL staining on bailer, globules on bottom of bailer
MW-12D	1/20/2009	--	--	0.00	0.00	0.25	0.770	DNAPL staining on bailer bottom
MW-12D	1/23/2009	--	--	0.01	0.00	0.24	0.770	Trace DNAPL staining on bailer
MW-12D	1/26/2009	--	--	0.01	0.00	0.24	0.770	DNAPL staining on bailer
MW-12D	1/27/2009	--	--	0.00	0.00	0.25	0.770	DNAPL staining on bailer

Notes:
fbtoc = feet below top of casing.
OBS = evidence of DNAPL observed but thickness not measured.
DTW = depth to water.
NB = not bailed
NM = not measured.

Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-12D	1/28/2009	--	--	0.00	0.00	0.25	0.770	DNAPL staining on bailer
MW-12D	2/5/2009	--	--	0.00	0.00	0.25	0.770	DNAPL staining on bailer
MW-12D	3/3/2009	5.43	--	0.30	0.06	0.44	0.830	
MW-12D	3/11/2009	5.58	5.64	0.12	0.05	0.45	0.880	
MW-12D	3/17/2009	5.96	6.07	0.18	0.05	0.70	0.930	
MW-12D	3/25/2009	4.81	4.87	0.30	0.05	0.70	0.980	
MW-12D	3/31/2009	5.18	5.25	0.10	0.01	0.49	0.990	
MW-12D	4/20/2009	5.13	5.22	0.01	0.00	0.50	0.990	
MW-12D	4/29/2009	5.46	5.52	0.05	0.00	0.50	0.990	
MW-12D	5/6/2009	5.59	5.62	0.10	0.00	0.50	0.991	
MW-12D	5/11/2009	5.53	5.59	0.00	0.00	0.25	0.991	DNAPL staining on bailer
MW-12D	5/20/2009	5.40	5.45	0.05	0.01	0.24	1.001	
MW-12D	5/27/2009	5.81	5.85	0.01	0.01	0.24	1.011	
MW-12D	6/15/2009	5.47	5.53	0.10	0.01	0.24	1.021	
MW-12D	6/24/2009	5.26	5.57	0.18	0.04	0.46	1.061	
MW-12D	6/30/2009	5.93	6.07	0.15	0.05	0.95	1.111	
MW-12D	7/31/2009	5.80	5.90	0.03	0.01	0.24	1.121	
MW-12D	8/13/2009	6.12	6.17	0.15	0.02	0.48	1.141	Light grey in color
MW-12D	8/26/2009	6.68	6.76	0.25	0.10	0.40	1.241	
MW-12D	10/2/2009	5.49	5.56	0.30	0.10	0.24	1.341	
MW-12D	10/6/2009	6.03	6.10	0.15	0.03	0.47	1.371	
MW-12D	12/18/2009	5.62	5.67	0.20	0.02	0.48	1.391	
MW-12D	1/26/2010	5.33	5.38	0.20	0.04	0.71	1.431	
MW-12D	2/3/2010	6.20	6.28	0.20	0.05	0.70	1.481	
MW-12D	2/22/2010	5.38	9.54	0.20	0.05	0.70	1.531	
MW-12D	3/1/2010	5.92	6.01	0.20	0.05	0.70	1.581	
MW-12D	3/9/2010	6.10	6.16	0.20	0.03	0.72	1.611	
MW-12D	4/16/2010	6.03	6.11	0.33	0.04	0.71	1.651	
MW-12D	6/1/2010	6.08	6.12	0.33	0.04	0.71	1.691	
MW-12D	7/6/2010	6.56	6.64	0.25	0.05	0.95	1.741	
MW-12D	8/3/2010	6.86	6.93	0.01	0.01	0.49	1.751	
MW-12D	8/10/2010	7.06	7.06	0.00	0.00	0.25	1.751	DNAPL staining on bailer
MW-12D	8/30/2010	7.21	--	0.05	--	NB	1.751	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-12D	2/18/2011	6.20	--	1.25	--	NB	1.751	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-12D	2/22/2011	4.73	--	1.81	0.21	0.55	1.956	
MW-12D	3/4/2011	5.28	--	0.20	0.02	0.48	1.976	
MW-12D	4/4/2011	4.59	--	0.00	0.00	0.25	1.976	DNAPL staining on bailer
MW-12D	4/12/2011	4.59	--	0.70	0.15	0.35	2.126	
MW-12D	4/19/2011	4.55	--	0.10	0.00	0.08	2.126	0.5' DNAPL on outside of bailer; Bottom at 19.92'
MW-12D	4/25/2011	4.12	--	0.50	0.05	0.45	2.176	
MW-12D	5/9/2011	5.50	--	0.25	0.02	0.23	2.196	

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Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-12D	5/18/2011	5.73	--	0.20	0.02	0.23	2.216	Bottom at 19.88'
MW-12D	6/6/2011	6.28	--	0.60	--	NB	2.216	Bottom at 19.88'; Measured for DNAPL with tape
MW-12D	6/7/2011	6.27	--	0.60	0.05	0.20	2.266	
MW-12D	6/16/2011	--	--	0.30	0.03	0.22	2.296	
MW-12D	6/20/2011	5.44	--	0.20	0.01	0.24	2.306	
MW-12D	6/27/2011	4.72	--	0.40	0.01	0.24	2.316	
MW-12D	7/8/2011	--	--	0.20	0.02	0.25	2.336	
MW-12D	7/13/2011	6.60	--	0.50	0.05	0.11	2.384	
MW-12D	7/18/2011	6.73	--	0.20	0.0025	0.2475	2.387	
MW-12D	7/25/2011	6.50	--	0.20	0.00	0.25	2.389	
MW-12D	8/5/2011	6.93	--	0.04	0.003	0.247	2.392	
MW-12D	8/24/2011	6.75	--	0.20	0.0025	0.2475	2.395	
MW-12D	10/6/2011	6.60	--	0.00	0.0000	0.2500	2.395	
MW-12D	11/8/2011	6.06	--	0.00	0.0000	0.2500	2.395	DNAPL staining on bailer
MW-12D	6/5/2012	--	--	1.15'	--	NB	2.395	Bottom at 20.02'
MW-12D	11/14/2012	--	--	1.20	--	NB	2.395	
MW-12D	1/9/2013	--	--	1.60	--	NB	2.395	Bottom at 20.00'
MW-12D	4/18/2013	--	--	1.80	--	NB	2.395	
MW-12D	8/23/2013	--	--	2.70	--	NB	2.395	Bottom at 20.00'
MW-12D	4/16/2014	--	--	3.20	0.0000	0.0000	2.395	Bottom at 20.0'
MW-12D	12/29/2014	--	--	3.20	0.0000	0.0000	2.395	Bottom at 20.40'
MW-12D	3/4/2015	--	--	3.40	0.0000	0.0000	2.395	Bottom at 20.40'
MW-12D	5/19/2015	--	--	2.50	0.0000	0.0000	2.395	Bottom at 20.20'
MW-12D	7/13/2015	--	--	3.70	0.0000	0.0000	2.395	
MW-12D	1/6/2016	--	--	3.25	0.0000	0.0000	2.395	Bottom at 20.20'
MW-12D	2/19/2016	--	--	3.75	0.0000	0.0000	2.395	Bottom at 20.20'
MW-12D	6/14/2016	--	--	3.20	0.0000	0.0000	2.395	Bottom at 20.25'
MW-12D	6/29/2016	--	--	--	0.5400	0.7100	2.935	Bail
MW-12D	9/9/2016	--	--	1.20	0.0000	0.0000	2.935	Bottom at 19.70'
MW-12D	10/21/2016	--	--	1.40	0.0000	0.0000	2.935	Bottom at 19.40'
MW-12D	12/2/2016	--	--	1.40	0.0000	0.0000	2.935	Bottom at 19.70'
MW-12D	2/24/2017	--	--	1.80	0.0000	0.0000	2.935	Bottom at 19.70'
MW-12D	4/21/2017	--	--	1.85	0.0000	0.0000	2.935	Bottom at 19.70'
MW-12D	7/21/2017	--	--	2.80	0.0000	0.0000	2.935	Bottom at 19.70'
MW-12D	10/20/2017	--	--	2.80	0.0000	0.0000	2.935	Bottom at 19.70'
MW-12D	2/27/2018	--	--	2.50	0.0000	0.0000	2.935	Bottom at 19.70'
MW-12D	5/18/2018	--	--	2.65	0.0000	0.0000	2.935	Bottom at 19.70'
MW-12D	6/14/2018	--	--	--	0.6900	0.5600	3.625	Bail
MW-12D	8/10/2018	--	--	0.10	0.0000	0.0000	3.625	Bottom at 19.70'
MW-12D	11/19/2018	--	--	0.05	0.0000	0.0000	3.625	Bottom at 17.20'; did not reach bottom
MW-12D	3/15/2019	--	--	0.05	0.0000	0.0000	3.625	Bottom at 17.20'; did not reach bottom
MW-12D	6/14/2019	--	--	0.10	0.0000	0.0000	3.625	Bottom at 17.00'; did not reach bottom
MW-12D	9/20/2019	--	--	0.30	0.0000	0.0000	3.625	Bottom at 17.00'; did not reach bottom

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CSX Transportation
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Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-14D	8/4/2000	--	--	NM	--	--	--	
MW-14D	11/13/2000	--	--	NM	--	--	--	
MW-14D	2/1/2001	--	--	NM	--	--	--	
MW-14D	6/21/2001	--	--	NM	--	--	--	
MW-14D	12/11/2001	--	--	NM	--	--	--	
MW-14D	8/11/2003	7.00	--	N OBS	--	--	--	Cloudy, odor
MW-14D	10/29/2003	6.20	--	NM	--	--	--	
MW-14D	2/17/2004	--	--	0.01	--	--	--	
MW-14D	9/9/2004	6.99	--	N OBS	--	--	--	Clear water, odor
MW-14D	6/28/2007	--	--	NM	--	--	--	
MW-14D	7/5/2007	--	--	0.79	--	--	--	
MW-14D	7/24/2007	5.73	--	0.01	--	--	--	Odor, slight black floculants seen in bailer
MW-14D	8/6/2007	--	--	0.05	--	--	--	
MW-14D	8/9/2007	--	--	NM	--	--	--	
MW-14D	10/15/2007	--	--	1.00	--	--	--	
MW-14D	10/17/2007	--	--	NM	--	--	--	
MW-14D	10/19/2007	--	--	0.50	--	--	--	Clear water of DNAPL after purging 3.0 gallons
MW-14D	11/30/2007	6.81	--	0.90	--	--	--	
MW-14D	3/5/2008	5.17	--	0.00	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-14D	4/10/2008	--	--	0.05	--	--	--	
MW-14D	9/9/2008	--	--	0.30	0.05	0.15	0.05	
MW-14D	9/12/2008	--	--	0.20	0.05	0.15	0.10	Water in bailer was pink in color due to tracer study
MW-14D	9/18/2008	--	--	0.20	0.10	0.15	0.20	
MW-14D	9/24/2008	--	--	0.15	0.05	>0.15	0.25	
MW-14D	9/26/2008	--	--	0.10	0.01	0.24	0.26	
MW-14D	9/26/2008	--	--	0.10	0.01	0.24	0.27	
MW-14D	10/1/2008	--	--	0.10	0.05	0.15	0.32	
MW-14D	10/2/2008	--	--	0.10	0.05	0.15	0.37	Water in bailer was pink in color due to tracer study
MW-14D	10/3/2008	--	--	0.10	0.05	0.15	0.42	Water in bailer was pink in color due to tracer study
MW-14D	10/14/2008	--	--	0.10	0.05	0.15	0.47	
MW-14D	10/17/2008	--	--	0.25	0.05	0.40	0.52	
MW-14D	10/21/2008	--	--	0.05	0.05	0.24	0.57	Recorded 0.05' DNAPL
MW-14D	10/24/2008	--	--	0.05	0.05	0.24	0.62	Recorded 0.05' DNAPL
MW-14D	10/27/2008	--	--	0.05	0.05	0.24	0.67	water in bailer was pink in color due to tracer study; recorded 0.05' DNAPL
MW-14D	11/21/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer, water color pinkish due to tracer study
MW-14D	11/25/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer, water color pinkish due to tracer study
MW-14D	12/2/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer, water color pinkish due to tracer study
MW-14D	12/4/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer, water color pinkish due to tracer study

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MW-14D	12/9/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer, water color pinkish due to tracer study
MW-14D	12/18/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer
MW-14D	12/30/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer
MW-14D	1/2/2009	6.09	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer
MW-14D	1/7/2009	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer
MW-14D	1/14/2009	--	--	0.00	0.00	0.25	0.67	DNAPL staining on bailer, few globules on bottom of bailer
MW-14D	1/20/2009	--	--	0.00	0.00	0.25	0.67	Slight DNAPL staining on bailer bottom
MW-14D	1/23/2009	--	--	0.00	0.00	0.25	0.67	DNAPL on bailer, odor
MW-14D	1/26/2009	--	--	0.01	0.00	0.25	0.67	DNAPL staining on bailer
MW-14D	1/27/2009	--	--	0.00	0.00	0.25	0.67	Slight DNAPL staining on outside of bailer
MW-14D	1/28/2009	--	--	0.00	0.00	0.25	0.67	DNAPL staining on bailer
MW-14D	2/5/2009	--	--	0.00	0.00	0.25	0.67	DNAPL staining on bailer
MW-14D	3/3/2009	6.15	--	0.05	0.01	0.49	0.68	
MW-14D	3/11/2009	6.02	7.24	0.00	0.00	0.25	0.68	Slight DNAPL staining on outside of bailer
MW-14D	3/17/2009	6.91	7.85	0.00	0.00	0.25	0.68	Slight DNAPL staining on outside of bailer
MW-14D	3/25/2009	5.49	7.81	0.05	0.01	0.75	0.69	
MW-14D	3/31/2009	5.75	6.82	0.00	0.00	0.25	0.69	DNAPL staining on bailer
MW-14D	4/20/2009	5.75	7.18	0.00	0.00	0.25	0.69	
MW-14D	4/29/2009	6.04	7.44	0.00	0.00	0.25	0.69	Slight DNAPL staining on bailer
MW-14D	5/6/2009	NM	7.82	0.00	0.00	0.25	0.69	Slight DNAPL staining on bailer, initial DTW recorded incorrectly
MW-14D	5/11/2009	6.11	7.51	0.00	0.00	0.25	0.69	
MW-14D	5/20/2009	5.99	7.35	0.00	0.00	0.25	0.69	DNAPL staining on bailer
MW-14D	5/27/2009	7.76	8.35	0.00	0.00	0.25	0.69	DNAPL staining on bailer
MW-14D	6/15/2009	6.01	7.45	0.00	0.00	0.25	0.69	DNAPL staining on bailer
MW-14D	6/24/2009	5.74	8.27	0.00	0.00	0.25	0.69	Slight DNAPL staining on bailer
MW-14D	6/30/3009	6.11	8.47	0.00	0.00	0.25	0.69	Slight DNAPL staining on bailer
MW-14D	7/31/2009	6.10	7.54	0.00	0.00	0.25	0.69	
MW-14D	8/13/2009	6.32	7.85	0.05	0.01	0.24	0.70	DNAPL staining on bailer
MW-14D	8/26/2009	7.31	8.70	0.01	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	10/2/2009	5.89	7.36	0.00	0.00	0.25	0.70	
MW-14D	10/6/2009	6.22	7.78	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	12/18/2009	6.11	7.51	0.00	0.00	0.25	0.70	DNAPL staining on bailer, few DNAPL globules present in bottom of bailer
MW-14D	1/26/2010	5.50	7.07	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	2/3/2010	6.33	7.82	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	3/1/2010	6.07	7.57	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	4/16/2010	6.01	7.60	0.00	0.00	0.25	0.70	DNAPL staining on bailer, few DNAPL globules present in bottom of bailer
MW-14D	8/3/2010	7.40	-	0.00	0.00	0.25	0.70	Silight DNAPL staining on bailer
MW-14D	8/10/2010	7.72	9.28	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	8/30/2010	8.09	--	0.00	--	NB	0.70	Recovery Program Temproaraily suspended; Measured for DNAPL with tape

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MW-14D	2/18/2011	6.55	--	0.00	--	NB	0.70	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-14D	2/22/2011	5.37	--	0.00	--	NB	0.70	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-14D	3/4/2011	5.94	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	3/28/2011	6.7	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	4/4/2011	6.89	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	4/12/2011	5.26	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	4/19/2011	5.24	--	0.00	0.00	0.08	0.70	DNAPL staining on bailer; Bottom at 20.05'
MW-14D	5/18/2011	6.18	--	0.00	--	NB	0.70	Bottom at 19.76'; Measured for DNAPL with tape
MW-14D	6/16/2011	--	--	0.00	--	NB	0.70	Measured for DNAPL with tape
MW-14D	6/27/2011	5.44	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	7/13/2011	7.18	--	0.00	0.00	0.08	0.70	DNAPL staining on bailer
MW-14D	7/18/2011	7.48	--	0.00	0.00	0.25	0.70	DNAPL globules in bailer
MW-14D	7/25/2011	7.33	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer and silt in bailer
MW-14D	8/4/2011	7.75	--	0.00	0.00	0.25	0.70	Slight DNAPL staining on bailer
MW-14D	8/24/2011	7.62	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	10/6/2011	7.36	--	0.00	0.00	0.25	0.70	Slight DNAPL staining on bailer
MW-14D	11/8/2011	6.45	--	0.00	0.00	0.25	0.70	Slight DNAPL staining on bailer
*Abandoned December 2010								
MW-15D	8/4/2000	NM	--	NM	--	--	--	
MW-15D	11/13/2000	NM	--	NM	--	--	--	
MW-15D	2/1/2001	NM	--	NM	--	--	--	
MW-15D	6/21/2001	NM	--	NM	--	--	--	Cloudy, odor
MW-15D	12/11/2001	NM	--	NM	--	--	--	
MW-15D	8/11/2003	6.46	--	0.00	--	--	--	
MW-15D	10/29/2003	5.04	--	OBS	--	--	--	Cloudy, odor
MW-15D	2/17/2004	NM	--	0.00	--	--	--	
MW-15D	9/9/2004	6.32	--	0.00	--	--	--	Odor, sheen present
MW-15D	6/28/2007	NM	--	NM	--	--	--	Trace DNAPL
MW-15D	7/24/2007	6.56	--	0.01	--	--	--	
MW-15D	8/6/2007	NM	--	0.01	--	--	--	Purged dry at 2.5 gal
MW-15D	8/9/2007	NM	--	NM	--	--	--	Not bailed
MW-15D	10/15/2007	NM	--	0.10	--	--	--	Purged dry @ 2.5 gal, well under pressure
MW-15D	10/17/2007	NM	--	0.00	--	--	--	
MW-15D	10/19/2007	NM	--	0.00	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-15D	11/30/2007	6.21	--	0.00	--	--	--	
MW-15D	3/5/2008	4.11	--	0.00	--	--	--	Recorded <0.01' DNAPL
MW-15D	4/10/2008	--	--	0.00	--	--	--	
MW-15D	9/24/2008	--	--	0.05	0.05	0.20	0.05	
MW-15D	9/26/2008	8.09	--	0.01	0.01	0.24	0.06	DNAPL staining on bailer bottom
MW-15D	9/30/2008	8.18	--	0.01	0.01	0.24	0.07	DNAPL staining on bailer bottom

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MW-15D	10/1/2008	--	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom. Globules on WLI probe-tip.
MW-15D	10/2/2008	8.24	--	OBS	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	10/3/2008	8.29	--	OBS	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	10/14/2008	8.18	--	OBS	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	10/17/2008	8.18	--	0.00	0.00	0.25	0.07	
MW-15D	10/21/2008	8.31	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	10/24/2008	8.20	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	10/27/2008	8.19	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	11/21/2008	6.27	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	11/25/2008	6.14	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	12/2/2008	5.88	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	12/4/2008	5.87	--	0.00	0.00	0.25	0.07	
MW-15D	12/9/2008	5.35	--	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer bottom
MW-15D	12/18/2008	5.25	--	0.00	0.00	0.25	0.07	DNAPL staining on bottom of bailer, some globules on inside of bailer
MW-15D	12/30/2008	4.53	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	1/2/2009	4.83	--	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer bottom
MW-15D	1/7/2009	4.84	--	0.00	0.00	0.25	0.07	
MW-15D	1/14/2009	4.94	--	0.00	0.00	0.25	0.07	DNAPL on bailer, odor
MW-15D	1/20/2009	5.67	--	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	1/23/2009	4.73	--	0.00	0.00	0.25	0.07	Slight DNAPL staining on inside of bailer
MW-15D	1/26/2009	5.94	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	1/27/2009	6.06'	--	0.01	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	1/28/2009	5.90'	--	0.01	0.00	0.25	0.07	
MW-15D	2/5/2009	5.52	--	0.00	0.00	0.25	0.07	Clear water
MW-15D	3/3/2009	5.12	--	0.00	0.00	0.25	0.07	Very Slight DNAPL staining on bailer
MW-15D	3/11/2009	5.26	6.80	0.00	0.00	0.25	0.07	
MW-15D	3/17/2009	5.95	7.15	0.00	0.00	0.25	0.07	
MW-15D	3/25/2009	5.02	7.93	0.00	0.00	0.50	0.07	
MW-15D	3/31/2009	4.87	6.37	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	4/20/2009	4.70	6.21	0.00	0.00	0.25	0.07	
MW-15D	4/29/2009	4.96	6.48	0.00	0.00	0.25	0.07	
MW-15D	5/6/2009	5.05	NM	0.00	0.00	0.25	0.07	
MW-15D	5/11/2009	5.02	6.47	0.00	0.00	0.25	0.07	
MW-15D	5/20/2009	4.81	6.31	0.00	0.00	0.25	0.07	
MW-15D	5/20/2009	5.14	6.64	0.00	0.00	0.25	0.07	
MW-15D	6/15/2009	5.16	6.67	0.00	0.00	0.25	0.07	
MW-15D	6/24/2009	4.96	7.91	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	6/30/2009	5.60	8.25	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	8/13/2009	5.85	7.38	0.00	0.00	0.00	0.07	DNAPL staining on bailer
MW-15D	8/26/2009	7.41	8.88	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	10/2/2009	5.85	7.32	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	10/6/2009	5.97	7.53	0.00	0.00	0.25	0.07	DNAPL staining on bailer

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-15D	12/18/2009	7.01	8.48	0.00	0.00	0.25	0.07	DNAPL staining on bailer, globules present in bailer
MW-15D	1/26/2010	5.54	6.98	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	2/3/2010	5.56	7.05	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	3/1/2010	5.21	6.68	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	4/16/2010	5.35	6.87	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	8/3/2010	7.85	9.35	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	8/10/2010	8.43	9.93	0.00	0.00	0.25	0.07	
MW-15D	8/30/2010	8.86	--	0.00	--	NB	--	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-15D	2/18/2011	5.30	--	0.00	--	NB	--	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-15D	2/22/2011	4.47	--	0.00	--	NB	--	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-15D	3/4/2011	4.60	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	3/18/2011	5.29	--	0.00	0.00	0.25	0.07	
MW-15D	4/4/2011	5.57	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	4/12/2011	4.11	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	4/19/2011	4.33	--	0.00	0.00	0.08	0.07	DNAPL staining on bailer; Bottom at 19.75'
MW-15D	5/18/2011	4.78	--	0.00	--	NB	--	Bottom at 19.71'; Measured for DNAPL with tape
MW-15D	6/16/2011	--	--	0.00	--	NB	--	Measured for DNAPL with tape
MW-15D	6/27/2011	6.64	--	0.00	0.00	0.25	0.07	
MW-15D	7/18/2011	7.42	--	0.10	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	7/25/2011	7.65	--	0.00	0.00	0.50	0.07	DNAPL staining on bailer
MW-15D	8/5/2011	7.83	--	0.00	0.00	0.25	0.07	
MW-15D	8/24/2011	8.48	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	10/6/2011	7.07	--	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	11/8/2011	5.35	--	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	6/5/2012	--	--	0.05	--	NB	0.07	Bottom at 19.88'
MW-15D	11/14/2012	--	--	0.10	--	NB	0.07	
MW-15D	1/9/2013	--	--	0.10	--	NB	0.07	Bottom at 19.82'
MW-15D	4/18/2013	--	--	0.10	--	NB	0.07	
MW-15D	8/23/2013	--	--	0.00	--	NB	0.07	Bottom at 19.82'
MW-15D	4/16/2014	--	--	0.10	0.00	0.00	0.07	Bottom at 19.8'
MW-15D	12/292014	--	--	0.00	0.00	0.00	0.07	Trace on probe; bottom at 20.00'
MW-15D	3/4/2015	--	--	0.00	0.00	0.00	0.07	Trace on probe; bottom at 20.00'
MW-15D	5/19/2015	--	--	0.10	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	7/13/2015	--	--	0.00	0.00	0.00	0.07	
MW-15D	1/6/2016	--	--	0.10	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	2/19/2016	--	--	0.10	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	6/14/2016	--	--	0.10	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	9/9/2016	--	--	0.00	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	10/21/2016	--	--	0.00	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	12/2/2016	--	--	0.00	0.00	0.00	0.07	Bottom at 20.00'

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Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-15D	2/24/2017	--	--	0.00	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	4/21/2017	--	--	0.00	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	7/21/2017	--	--	0.05	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	10/20/2017	--	--	0.10	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	2/27/2018	--	--	0.00	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	5/18/2018	--	--	0.00	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	8/10/2018	--	--	0.00	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	11/19/2018	--	--	0.05	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	3/15/2019	--	--	0.05	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	6/14/2019	--	--	0.10	0.00	0.00	0.07	Bottom at 20.00'
MW-15D	9/20/2019	--	--	0.00	0.00	0.00	0.07	Bottom at 20.00'
MW-16D	8/4/2000	NM	--	NM	--	--	--	
MW-16D	11/13/2000	NM	--	NM	--	--	--	
MW-16D	2/1/2001	NM	--	NM	--	--	--	
MW-16D	6/21/2001	NM	--	NM	--	--	--	Grey water, odor
MW-16D	12/11/2001	NM	--	NM	--	--	--	
MW-16D	8/11/2003	5.33	--	0.00	--	--	--	
MW-16D	10/29/2003	4.30	--	NM	--	--	--	Purged dry
MW-16D	2/17/2004	NM	--	OBS	--	--	--	
MW-16D	9/9/2004	5.71	--	0.10	--	--	--	
MW-16D	6/28/2007	NM	--	NM	--	--	--	Red floculant present in bailer along with slight sheen
MW-16D	7/5/2007	NM	--	0.60	--	--	--	
MW-16D	7/24/2007	5.83	--	0.01	--	--	--	
MW-16D	8/6/2007	NM	--	0.01	--	--	--	Clear water
MW-16D	8/9/2007	NM	--	NM	--	--	--	Did not bail
MW-16D	10/15/2007	NM	--	0.00	--	--	--	Purged dry @ 2.75 gal, well under pressure
MW-16D	10/17/2007	NM	--	0.00	--	--	--	
MW-16D	10/19/2007	NM	--	0.00	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-16D	11/30/2007	5.31	--	0.00	--	--	--	
MW-16D	3/5/2008	3.77	--	0.00	--	--	--	
MW-16D	4/10/2008	NM	--	0.00	--	--	--	Recorded <0.01' DNAPL
MW-16D	9/18/2008	--	--	0.00	0.00	0.25	0.00	DNAPL on bailer
MW-16D	9/24/2008	--	--	0.05	0.05	0.20	0.05	DNAPL on bailer
MW-16D	9/26/2008	7.46	--	0.00	0.00	0.25	0.05	DNAPL on bailer
MW-16D	9/30/2008	7.62	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer bottom
MW-16D	10/1/2008	NM	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer bottom
MW-16D	10/2/2008	7.73	--	OBS	0.00	0.25	0.05	DNAPL staining on bailer bottom
MW-16D	10/3/2008	7.76	--	OBS	0.00	0.25	0.05	
MW-16D	10/14/2008	9.29	--	OBS	0.00	0.25	0.05	
MW-16D	10/17/2008	7.86	--	0.00	0.00	0.25	0.05	
MW-16D	10/21/2008	8.00	--	0.00	0.00	0.25	0.05	
MW-16D	10/24/2008	7.95	--	0.00	0.00	0.25	0.05	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-16D	10/27/2008	7.98	--	0.00	0.00	0.25	0.05	
MW-16D	11/21/2008	8.87	--	0.00	0.00	0.25	0.05	
MW-16D	11/25/2008	9.25	--	0.00	0.00	0.25	0.05	
MW-16D	12/2/2008	5.06	--	0.00	0.00	0.25	0.05	
MW-16D	12/4/2008	4.98	--	0.00	0.00	0.25	0.05	
MW-16D	12/9/2008	4.47	--	0.00	0.00	0.25	0.05	Clear water
MW-16D	12/18/2008	4.43	--	0.00	0.00	0.25	0.05	Odor
MW-16D	12/30/2008	3.94	--	0.00	0.00	0.25	0.05	Odor
MW-16D	1/2/2009	4.04	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	1/7/2009	3.99	--	0.00	0.00	0.25	0.05	
MW-16D	1/14/2009	4.11	--	0.00	0.00	0.25	0.05	Clear water, slight odor
MW-16D	1/20/2009	5.84	--	0.00	0.00	0.25	0.05	Clear water
MW-16D	1/23/2009	4.78	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	1/26/2009	5.08	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	1/27/2009	5.26	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer bottom
MW-16D	1/28/2009	5.13	--	0.00	0.00	0.25	0.05	
MW-16D	2/5/2009	4.60	--	0.00	0.00	0.25	0.05	Clear water
MW-16D	3/3/2009	4.19	--	0.00	0.00	0.25	0.05	Clear water
MW-16D	3/11/2009	4.30	5.41	0.00	0.00	0.25	0.05	
MW-16D	3/17/2009	4.52	6.03	0.00	0.00	0.25	0.05	
MW-16D	3/25/2009	4.02	6.96	0.00	0.00	0.50	0.05	
MW-16D	3/31/2009	3.88	5.37	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	4/20/2009	3.74	5.26	0.00	0.00	0.25	0.05	
MW-16D	4/29/2009	3.93	5.42	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	5/6/2009	4.06	5.55	0.00	0.00	0.25	0.05	
MW-16D	5/11/2009	4.00	5.52	0.00	0.00	0.25	0.05	
MW-16D	5/20/2009	3.89	5.40	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	5/27/2009	4.05	5.56	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	6/15/2009	4.04	5.56	0.00	0.00	0.25	0.05	
MW-16D	6/24/2009	3.94	5.83	0.00	0.00	0.25	0.05	
MW-16D	6/30/2009	4.59	6.37	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	7/31/2009	4.42	5.94	0.00	0.00	0.25	0.05	Clear water
MW-16D	8/13/2009	4.69	6.23	0.00	0.00	0.00	0.05	DNAPL staining on bailer
MW-16D	8/26/2009	6.42	7.93	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	10/2/2009	4.87	6.41	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	10/6/2009	4.98	6.47	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	12/18/2009	4.25	5.76	0.00	0.00	0.25	0.05	DNAPL staining on bailer, globules present
MW-16D	1/26/2010	4.15	5.66	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	2/3/2010	4.31	5.87	0.00	0.00	,25	0.05	DNAPL staining on bailer
MW-16D	3/1/2010	4.07	5.53	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	4/16/2010	4.00	5.16	0.01	0.00	0.25	0.05	DNAPL staining on bailer and globules present
MW-16D	8/3/2010	6.99	8.51	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	8/10/2010	7.40	8.90	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer

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MW-16D	8/30/2010	8.28	--	0.00	--	NB	--	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-16D	2/18/2011	4.39	--	0.00	--	NB	--	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-16D	2/22/2011	3.64	--	0.00	--	NB	--	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-16D	3/4/2011	3.67	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	3/18/2011	4.06	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	4/4/2011	4.30	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	4/12/2011	3.45	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	4/19/2011	3.43	--	0.00	0.00	0.08	0.05	DNAPL staining on bailer; Bottom at 18.70'
MW-16D	5/18/2011	3.77	--	0.00	--	NB	--	Bottom at 18.70'; Measured for DNAPL with tape
MW-16D	6/16/2011	--	--	0.00	--	NB	--	Measured for DNAPL with tape
MW-16D	6/27/2011	3.72	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	7/13/2011	5.98	--	0.00	0.00	0.08	0.05	Odor
MW-16D	7/18/2011	6.50	--	0.00	0.00	0.25	0.05	Bottom at 18.75'
MW-16D	7/25/2011	6.95	--	0.00	0.00	0.25	0.05	
MW-16D	8/5/2011	7.53	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bottom of bailer
MW-16D	8/24/2011	8.17	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bottom of bailer
MW-16D	10/6/2011	6.05	--	0.00	0.00	0.25	0.05	
MW-16D	11/8/2011	4.49	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	6/5/2012	--	--	0.00	--	NB	0.05	Bottom at 18.83'
MW-16D	11/14/2012	--	--	0.00	--	NB	0.05	Sheen
MW-16D	1/9/2013	--	--	0.00	--	NB	0.05	Bottom at 18.78'
MW-16D	4/18/2013	--	--	0.00	--	NB	0.05	Globs
MW-16D	8/23/2013	--	--	0.00	--	NB	0.05	Bottom at 18.80'
MW-16D	4/16/2014	--	--	0.10	0.00	0.00	0.05	Bottom at 18.75'
MW-16D	12/31/2014	--	--	0.00	0.00	0.00	0.05	Trace on probe; bottom at 18.98'
MW-16D	3/4/2015	--	--	0.00	0.00	0.00	0.05	Trace on probe; bottom at 18.95'
MW-16D	5/19/2015	--	--	0.10	0.00	0.00	0.05	Bottom at 18.95'
MW-16D	7/13/2015	--	--	0.00	0.00	0.00	0.05	
MW-16D	1/6/2016	--	--	0.10	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	2/19/2016	--	--	0.10	0.00	0.00	0.05	
MW-16D	6/22/2016	--	--	0.10	0.00	0.00	0.05	Bottom at 19.40'
MW-16D	9/9/2016	--	--	0.00	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	10/21/2016	--	--	0.00	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	12/2/2016	--	--	0.05	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	2/24/2017	--	--	0.00	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	4/21/2017	--	--	0.05	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	7/21/2017	--	--	0.05	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	10/20/2017	--	--	0.10	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	2/27/2018	--	--	0.10	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	5/18/2018	--	--	0.10	0.00	0.00	0.05	Bottom at 19.00'

Notes:
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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-16D	8/10/2018	--	--	0.10	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	11/19/2018	--	--	0.05	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	3/15/2019	--	--	0.10	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	6/14/2019	--	--	0.30	0.00	0.00	0.05	Bottom at 19.00'
MW-16D	9/20/2019	--	--	0.40	0.00	0.00	0.05	Bottom at 19.00'
MW-19D	8/4/2000	NM	--	NM	--	--	--	
MW-19D	11/13/2000	NM	--	NM	--	--	--	
MW-19D	2/1/2001	NM	--	NM	--	--	--	
MW-19D	6/21/2001	NM	--	NM	--	--	--	Not enough water to purge
MW-19D	12/11/2001	NM	--	NM	--	--	--	
MW-19D	8/11/2003	18.00	--	0.00	--	--	--	
MW-19D	10/29/2003	13.30	--	NM	--	--	--	Trace DNAPL
MW-19D	2/17/2004	NM	--	NM	--	--	--	
MW-19D	9/9/2004	8.41	--	0.01	--	--	--	
MW-19D	6/28/2007	NM	--	NM	--	--	--	Odor, black floculents present in bailer
MW-19D	7/5/2007	NM	--	1.04	--	--	--	
MW-19D	7/24/2007	7.11	--	0.00	--	--	--	
MW-19D	8/6/2007	NM	--	0.01	--	--	--	Clear water
MW-19D	8/9/2007	NM	--	NM	--	--	--	Did not bail
MW-19D	10/15/2007	NM	--	0.00	--	--	--	Purged dry @ 1.75 gal, grey
MW-19D	10/17/2007	NM	--	0.00	--	--	--	
MW-19D	10/19/2007	NM	--	0.00	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-19D	11/30/2007	15.88	--	0.00	--	--	--	
MW-19D	3/5/2008	9.71	--	0.00	--	--	--	
MW-19D	4/10/2008	--	--	0.00	0.00	0.25	0.00	
MW-19D	9/18/2008	--	--	0.00	0.00	0.25	0.00	
MW-19D	9/24/2008	--	--	0.00	0.00	0.25	0.00	
MW-19D	9/26/2008	11.33	--	0.00	0.00	0.25	0.00	
MW-19D	9/30/2008	12.49	--	0.00	0.00	0.25	0.00	Odor to water in bailer
MW-19D	10/1/2008		--	0.00	0.00	0.25	0.00	Small DNAPL globules in bailer; odor
MW-19D	10/2/2008	14.77	--	0.00	0.00	0.25	0.00	DNAPL staining on bailer bottom
MW-19D	10/3/2008	15.32	--	OBS	0.00	0.25	0.00	DNAPL staining on bailer bottom
MW-19D	10/14/2008	15.46	--	OBS	0.00	0.25	0.00	
MW-19D	10/17/2008	16.06	--	0.00	0.00	0.25	0.00	
MW-19D	10/21/2008	16.73	--	0.00	0.00	0.25	0.00	
MW-19D	10/24/2008	17.26	--	0.00	0.00	0.25	0.00	Trace bentonite in water at bottom of bailer
MW-19D	10/27/2008	17.69	--	0.00	0.00	0.25	0.00	
MW-19D	11/21/2008	19.03	--	0.00	0.00	0.25	0.00	
MW-19D	11/25/2008	18.79	--	0.00	0.00	0.25	0.00	
MW-19D	12/2/2008	18.50	--	0.00	0.00	0.25	0.00	
MW-19D	12/4/2008	18.69	--	0.00	0.00	0.25	0.00	
MW-19D	12/9/2008	18.50	--	0.00	0.00	0.25	0.00	Tan

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MW-19D	12/18/2008	17.76	--	0.00	0.00	0.25	0.00	Slight odor
MW-19D	12/30/2008	16.54	--	0.00	0.00	0.25	0.00	Clear water, dark grey at bottom 1.0' of bailer
MW-19D	1/2/2009	17.12	--	0.00	0.00	0.25	0.00	Clear water, dark grey at bottom 1.0' of bailer
MW-19D	1/7/2009	17.20	--	0.00	0.00	0.25	0.00	
MW-19D	1/14/2009	17.39	--	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	1/20/2009	17.65	--	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	1/23/2009	17.95	--	0.00	0.00	0.25	0.00	grey
MW-19D	1/26/2009	18.40'	--	0.00	0.00	0.25	0.00	grey
MW-19D	1/27/2009	18.29'	--	0.00	0.00	0.25	0.00	1' of grey water in bailer
MW-19D	1/28/2009	18.54'	--	0.00	0.00	0.25	0.00	
MW-19D	2/5/2009	18.08	--	0.00	0.00	0.25	0.00	Clear water
MW-19D	3/3/2009	16.31	--	0.00	0.00	0.25	0.00	Clear water
MW-19D	3/11/2009	16.76	17.92	0.00	0.00	0.25	0.00	
MW-19D	3/17/2009	17.23	18.41	0.00	0.00	0.25	0.00	
MW-19D	3/25/2009	16.80	18.24	0.00	0.00	0.50	0.00	
MW-19D	3/31/2009	17.62	18.27	0.00	0.00	0.25	0.00	
MW-19D	4/20/2009	16.74	17.41	0.00	0.00	0.25	0.00	
MW-19D	4/29/2009	16.29	17.23	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	5/6/2009	16.56	17.61	0.00	0.00	0.25	0.00	
MW-19D	5/11/2009	16.87	17.60	0.00	0.00	0.25	0.00	
MW-19D	5/20/2009	16.36	17.35	0.00	0.00	0.25	0.00	Clear water
MW-19D	5/27/2009	16.83	17.81	0.00	0.00	0.25	0.00	
MW-19D	6/15/2009	16.72	17.76	0.00	0.00	0.25	0.00	
MW-19D	6/24/2009	16.89	18.02	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	6/30/2009	16.58	18.31	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	7/31/2009	14.88	15.80	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	8/13/2009	14.93	15.98	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-19D	8/26/2009	15.22	16.19	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	10/2/2009	14.05	15.22	0.00	0.00	0.25	0.00	
MW-19D	10/6/2009	14.93	16.19	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-19D	12/18/2009	14.94	15.96	0.00	0.00	0.25	0.00	DNAPL staining on bailer, globules present
MW-19D	1/26/2010	14.22	15.31	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-19D	2/3/2010	14.86	15.82	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-19D	3/1/2010	14.72	15.81	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-19D	8/3/2010	9.54	11.01	0.00	0.00	0.25	0.00	
MW-19D	8/10/2010	10.84	12.31	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	8/30/2010	11.67	--	0.00	--	NB	0.00	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-19D	2/18/2011	12.62	--	0.00	--	NB	0.00	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-19D	2/22/2011	12.44	--	0.00	--	NB	0.00	Recovery Program Temproaraily suspended; Measured for DNAPL with tape

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Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-19D	7/8/2011	8.21	--	0.00	--	NB	0.00	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-19D	7/13/2011	8.34	--	0.10	0.00	0.08	0.00	
MW-19D	8/24/2011	8.79	--	0.00	0.00	0.08	0.00	Slight DNAPL staining on bailer and globules
MW-19D	10/6/2011	9.04	--	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	11/8/2011	9.91	--	0.00	0.00	0.25	0.00	
MW-19D	6/5/2012	--	--	0.00	--	NB	0.00	Bottom at 19.38'
MW-19D	11/14/2012	--	--	0.10	--	NB	0.00	
MW-19D	4/18/2013	--	--	0.10	--	NB	0.00	Globs
MW-19D	8/23/2013	--	--	0.00	--	NB	0.00	Bottom at 19.35'
MW-19D	6/14/2014	--	--	0.00	0.00	0.00	0.00	Bottom at 19.5'
MW-19D	12/29/2014	--	--	0.00	0.00	0.00	0.00	Trace on probe; botttom at 19.80'
MW-19D	3/4/2015	--	--	0.00	0.00	0.00	0.00	Trace on probe; botttom at 19.80'
MW-19D	5/19/2015	--	--	0.05	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	1/6/2016	--	--	0.10	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	2/19/2016	--	--	0.10	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	6/22/2016	--	--	0.10	0.00	0.00	0.00	Bottom at 19.52'
MW-19D	9/9/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	10/21/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	12/2/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	2/24/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	4/21/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	7/18/2017	--	--	0.05	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	10/20/2017	--	--	0.10	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	2/27/2018	--	--	0.10	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	5/18/2018	--	--	0.05	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	8/10/2018	--	--	0.05	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	11/19/2018	--	--	0.05	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	3/15/2019	--	--	0.02	0.00	0.00	0.00	Bottom at 19.50'
MW-19D	6/14/2019	--	--	0.10	0.00	0.00	0.00	Bottom at 19.60'
MW-19D	9/20/2019	--	--	0.10	0.00	0.00	0.00	Bottom at 19.60'
MW-20D	8/4/2000	--	--	NM	--	--	--	
MW-20D	11/13/2000	--	--	NM	--	--	--	
MW-20D	2/1/2001	--	--	NM	--	--	--	
MW-20D	6/21/2001	--	--	NM	--	--	--	
MW-20D	12/11/2001	--	--	NM	--	--	--	
MW-20D	8/11/2003	--	--	NM	--	--	--	
MW-20D	10/29/2003	6.37		NM	--	--	--	Cloudy, sheen present, odor
MW-20D	2/17/2004	--	--	0.50	--	--	--	
MW-20D	9/9/2004	7.31		1.50	--	--	--	
MW-20D	6/28/2007	--	--	NM	--	--	--	Grey, odor, sheen
MW-20D	7/20/2007	--	--	0.75	--	--	--	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-20D	7/24/2007	7.20	--	0.09	--	--	--	
MW-20D	8/6/2007	--	--	0.30	--	--	--	Clear water of DNAPL at 1.5 gal, no drawdown
MW-20D	8/9/2007	--	--	NM	--	--	--	Clear water of DNAPL at 2.0 gal, no drawdown
MW-20D	10/15/2007	--	--	0.20	--	--	--	Clear water of DNAPL at 1.0 gal
MW-20D	10/17/2007	--	--	0.10	--	--	--	
MW-20D	10/19/2007	--	--	0.08	--	--	--	Clear water, sheen present, odor remaining after purge of 0.75 gal
MW-20D	11/30/2007	7.12	--	0.01	--	--	--	
MW-20D	3/5/2008	4.99	--	0.05	--	--	--	DNAPL/grey water
MW-20D	4/10/2008	--	--	0.33	--	--	--	DNAPL/grey water
MW-20D	9/8/2008	--	--	0.50	0.10	0.90	0.10	DNAPL/grey water
MW-20D	9/9/2008	--	--	0.80	0.05	0.15	0.15	DNAPL/grey water
MW-20D	9/10/2008	--	--	1.20	0.10	0.15	0.25	
MW-20D	9/12/2008	--	--	1.00	0.05	0.15	0.30	
MW-20D	9/16/2008	--	--	0.50	0.10	0.15	0.40	
MW-20D	9/18/2008	--	--	0.10	0.10	0.15	0.50	
MW-20D	9/24/2008	--	--	0.10	0.05	0.15	0.55	
MW-20D	9/26/2008	--	--	0.20	0.10	0.40	0.65	
MW-20D	9/30/2008	--	--	0.10	0.01	0.24	0.66	~ 1' of grey water in bailer
MW-20D	10/1/2008	--	--	0.10	0.05	0.15	0.71	~ 0.7' of grey water in bailer
MW-20D	10/2/2008	--	--	0.15	0.05	0.15	0.76	Recorded <0.01' DNAPL
MW-20D	10/3/2008	--	--	0.10	0.05	0.15	0.81	DNAPL staining on bailer on bottom of bailer
MW-20D	10/14/2008	--	--	0.05	0.05	0.15	0.86	DNAPL staining on bailer on bottom of bailer
MW-20D	10/17/2008	--	--	0.00	0.00	0.25	0.86	DNAPL staining on bailer on bottom of bailer
MW-20D	10/21/2008	--	--	0.05	0.05	0.24	0.91	DNAPL staining on bailer on bottom of bailer
MW-20D	10/24/2008	--	--	0.05	0.05	0.24	0.96	DNAPL staining on bailer on bottom of bailer
MW-20D	10/27/2008	--	--	0.00	0.00	0.25	0.96	DNAPL staining on bailer on bottom of bailer
MW-20D	11/21/2008	--	--	0.00	0.00	0.24	0.96	DNAPL staining on bailer on bottom of bailer
MW-20D	11/25/2008	--	--	0.05	0.05	0.24	1.01	DNAPL staining on bailer on bottom of bailer
MW-20D	12/2/2008	--	--	0.00	0.00	0.25	1.01	DNAPL staining on bailer on bottom of bailer
MW-20D	12/4/2008	--	--	0.00	0.00	0.25	1.01	Slight DNAPL staining on outside of bailer of bailer
MW-20D	12/9/2008	--	--	0.00	0.00	0.25	1.01	Slight DNAPL staining on outside of bailer of bailer
MW-20D	12/18/2008	--	--	0.00	0.00	0.25	1.01	DNAPL staining on bailer on outside and bottom of bailer
MW-20D	12/30/2008	--	--	0.00	0.00	0.25	1.01	Slight DNAPL staining on outside of bailer and bottom of bailer
MW-20D	1/2/2009	6.20		0.00	0.00	0.25	1.01	DNAPL staining on bailer, 0.05' of globules, dark water
MW-20D	1/7/2009	--	--	0.00	0.00	0.25	1.01	
MW-20D	1/14/2009	--	--	0.05	0.00	0.25	1.01	
MW-20D	1/20/2009	--	--	0.00	0.00	0.25	1.01	DNAPL staining on bailer
MW-20D	1/23/2009	--	--	NM	0.00	0.25	1.01	DNAPL staining on bailer
MW-20D	1/26/2009	--	--	0.00	0.00	0.25	1.01	Slight DNAPL staining on bailer
MW-20D	1/27/2009	--	--	0.00	0.00	0.25	1.01	Black water with sheen present and globules
MW-20D	1/28/2009	--	--	0.00	0.00	0.25	1.01	

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MW-20D	2/5/2009	--	--	0.00	0.00	0.25	1.01	Slight DNAPL staining on outside of bailer of bailer
MW-20D	3/3/2009	5.88	--	0.01	0.01	0.24	1.02	Slight DNAPL staining on bailer on bottom of bailer
MW-20D	3/11/2009	6.45	7.85	0.00	0.00	0.25	1.02	
MW-20D	3/17/2009	6.67	8.04	0.00	0.00	0.25	1.02	
MW-20D	3/25/2009	6.05	6.17	0.10	0.05	0.70	1.07	
MW-20D	3/31/2009	5.96	7.23	0.05	0.01	0.24	1.08	
MW-20D	4/20/2009	5.80	5.91	0.00	0.00	0.25	1.08	DNAPL staining on bailer
MW-20D	4/29/2009	6.20	9.38	0.10	0.00	0.75	1.08	Greyish black water
MW-20D	5/6/2009	6.18	6.21	0.00	0.00	0.25	1.08	Slight DNAPL staining on bailer
MW-20D	5/11/2009	6.18	7.55	0.00	0.00	0.25	1.08	Very Slight DNAPL staining on bailer
MW-20D	5/20/2009	5.94	7.19	0.00	0.00	0.25	1.08	Clear water
MW-20D	5/27/2009	6.56	7.80	0.00	0.00	0.25	1.08	Slight DNAPL staining on bailer
MW-20D	6/15/2009	6.23	7.57	0.00	0.00	0.25	1.08	
MW-20D	6/24/2009	5.76	7.32	0.00	0.00	0.25	1.08	Slight DNAPL staining on bailer
MW-20D	6/30/2009	6.84	8.31	0.00	0.00	0.25	1.08	
MW-20D	7/31/2009	6.43	7.69	0.00	0.00	0.25	1.08	
MW-20D	8/13/2009	6.97	8.29	0.02	0.01	0.49	1.09	Clear water
MW-20D	8/26/2009	7.59	8.81	0.00	0.00	0.25	1.09	DNAPL staining on bailer, Clear water
MW-20D	10/2/2009	7.05	8.34	0.00	0.00	0.25	1.09	Slight DNAPL staining on bailer
MW-20D	10/6/2009	7.11	8.37	0.00	0.00	0.25	1.09	Slight DNAPL staining on bailer
MW-20D	12/18/2009	6.21	7.65	0.00	0.00	0.25	1.09	DNAPL staining on bailer, DNAPL on bottom of bailer
MW-20D	1/26/2010	5.96	7.21	0.00	0.00	0.25	1.09	DNAPL staining on bailer
MW-20D	2/3/2010	7.60	7.79	0.00	0.00	0.25	1.09	DNAPL staining on bailer
MW-20D	3/1/2010	6.26	6.41	0.00	0.00	0.25	1.09	DNAPL staining on bailer
MW-20D	4/16/2010	6.33	7.68	0.00	0.00	0.25	1.09	Globules present; DNAPL staining on bailer
MW-20D	8/3/2010	7.60	8.72	0.05	0.01	0.24	1.10	
MW-20D	8/10/2010	7.62	8.82	0.00	0.00	0.25	1.10	DNAPL staining on bailer
MW-20D	8/30/2010	7.65	--	0.00	--	NB	1.10	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-20D	2/18/2011	6.71	--	0.68	--	NB	1.10	Recovery Program Temproaraily suspended; Measured for DNAPL with tape
MW-20D	2/22/2011	5.48	--	0.75	--	NB	1.10	DNAPL level hard to decipher; Measured for DNAPL with tape
MW-20D	3/4/2011	5.76	--	0.00	0.00	0.25	1.10	DNAPL staining on bailer
MW-20D	3/18/2011	6.58	--	0.00	0.00	0.25	1.10	DNAPL staining on bailer
MW-20D	4/4/2011	6.21	--	0.00	0.00	0.25	1.10	
MW-20D	4/12/2011	5.50	--	0.20	0.00	0.00	1.10	
MW-20D	4/19/2011	5.10	--	0.10	0.01	0.07	1.11	Bottom at 25.85'
MW-20D	5/18/2011	6.36	--	0.15	0.02	0.23	1.13	Bottom at 25.84'
MW-20D	6/6/2011	7.06	--	0.40	--	NB	1.13	Bottom at 25.84'; Measured for DNAPL with tape
MW-20D	6/7/2011	7.00	--	0.30	0.03	0.22	1.16	
MW-20D	6/20/2011	6.10	--	0.10	0.01	0.25	1.17	
MW-20D	6/27/2011	6.02	--	0.20	0.01	0.24	1.18	
MW-20D	7/8/2011	7.25	--	0.10	0.01	0.24	1.19	

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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-20D	7/13/2011	7.48	--	0.20	0.01	0.49	1.20	
MW-20D	7/18/2011	7.54	--	0.00	0.00	0.25	1.20	DNAPL staining on bailer
MW-20D	7/25/2011	7.46	--	0.20	0.00	0.25	1.20	
MW-20D	8/5/2011	7.63	--	0.00	0.00	0.25	1.20	
MW-20D	8/15/2011	7.53	--	0.10	0.00	0.43	1.20	
MW-20D	8/24/2011	7.64	--	0.10	0.00	0.50	1.21	
MW-20D	9/6/2011	7.82	--	0.00	0.00	0.08	1.21	DNAPL staining on bailer
MW-20D	9/12/2011	7.82	--	0.00	0.00	0.25	1.21	DNAPL staining on bailer
MW-20D	9/19/2011	7.64	--	0.00	0.00	0.25	1.21	DNAPL staining on bailer
MW-20D	10/10/2011	7.68	--	0.01	0.00	0.25	1.21	DNAPL staining on bailer
MW-20D	10/24/2011	7.04	--	0.01	0.01	0.24	1.22	
MW-20D	11/8/2011	6.82	--	0.00	0.00	0.25	1.22	DNAPL staining on bailer
MW-20D	6/5/2012	--	--	0.20	--	NB	1.22	Bottom at 26.05'
MW-20D	11/14/2012	--	--	0.25	--	NB	1.22	
MW-20D	4/18/2013	--	--	0.10	--	NB	1.22	
MW-20D	8/23/2013	--	--	0.30	--	NB	1.22	Bottom at 26.05'
MW-20D	6/14/2014	--	--	0.10	0.00	0.00	1.22	Bottom at 26.0'
MW-20D	12/29/2014	--	--	0.10	0.00	0.00	1.22	Bottom at 26.45'
MW-20D	3/4/2015	--	--	0.10	0.00	0.00	1.22	Bottom at 26.45'
MW-20D	5/19/2015	--	--	0.10	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	1/6/2016	--	--	0.10	0.00	0.00	1.22	Bottom at 26.60'
MW-20D	2/19/2016	--	--	0.10	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	6/22/2016	--	--	0.10	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	9/9/2016	--	--	0.20	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	10/21/2016	--	--	0.20	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	12/2/2016	--	--	0.30	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	2/24/2017	--	--	0.20	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	4/21/2017	--	--	0.00	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	7/18/2017	--	--	0.25	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	10/20/2017	--	--	0.10	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	2/27/2018	--	--	0.30	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	5/18/2018	--	--	0.30	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	8/10/2018	--	--	0.10	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	11/19/2018	--	--	0.30	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	3/15/2019	--	--	0.40	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	6/14/2019	--	--	0.40	0.00	0.00	1.22	Bottom at 26.20'
MW-20D	9/20/2019	--	--	0.30	0.00	0.00	1.22	Bottom at 26.20'
MW-21D	8/4/2000	--	--	NM	--	--	--	
MW-21D	11/13/2000	--	--	NM	--	--	--	
MW-21D	2/1/2001	--	--	NM	--	--	--	
MW-21D	6/21/2001	--	--	NM	--	--	--	
MW-21D	12/11/2001	--	--	NM	--	--	--	

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DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-21D	8/11/2003	--	--	NM	--	--	--	
MW-21D	10/29/2003	3.71	--	NM	--	--	--	Clear water, sheen present odor
MW-21D	2/17/2004	--	--	0.00	--	--	--	
MW-21D	9/9/2004	5.70	--	1.50	--	--	--	
MW-21D	6/28/2007	--	--	NM	--	--	--	Odor, sheen present
MW-21D	7/5/2007	--	--	1.04	--	--	--	
MW-21D	7/24/2007	4.55	--	0.60	--	--	--	
MW-21D	8/6/2007	--	--	2.50	--	--	--	Clear water of DNAPL at 6.0 gal, no drawdown, sheen present
MW-21D	8/9/2007	--	--	1.50	--	--	--	Clear water of DNAPL at 5.5 gal, no drawdown
MW-21D	10/15/2007	--	--	1.20	--	--	--	Clear water of DNAPL at 2.75 gal
MW-21D	10/17/2007	--	--	1.05	--	--	--	
MW-21D	10/19/2007	--	--	0.75	--	--	--	Trace DNAPL, sheen present, odor remaining after purge of 4.0 gal
MW-21D	11/30/2007	4.20	--	0.45	--	--	--	
MW-21D	3/5/2008	2.61	--	1.75	--	--	--	
MW-21D	4/10/2008	--	--	0.66	--	--	--	
MW-21D	9/5/2008	--	--	0.75	1.50	1.00	1.50	
MW-21D	9/5/2008	--	--	0.50	0.20	0.45	1.70	
MW-21D	9/5/2008	--	--	0.16	0.05	0.70	1.75	
MW-21D	9/8/2008	--	--	1.80	0.50	1.25	2.25	
MW-21D	9/9/2008	--	--	0.85	0.05	0.15	2.30	
MW-21D	9/10/2008	--	--	1.20	0.10	0.15	2.40	
MW-21D	9/12/2008	--	--	1.30	0.25	1.50	2.65	
MW-21D	9/16/2008	--	--	1.80	0.20	0.05	2.85	
MW-21D	9/18/2008	--	--	1.80	0.20	1.05	3.05	
MW-21D	9/24/2008	--	--	1.90	0.20	0.05	3.25	
MW-21D	9/26/2008	--	--	2.50	0.35	0.80	3.60	
MW-21D	9/26/2008	--	--	0.20	0.10	0.40	3.70	
MW-21D	9/30/2008	--	--	0.60	0.20	1.05	3.90	
MW-21D	10/1/2008	--	--	1.20	0.10	0.15	4.00	
MW-21D	10/2/2008	--	--	0.80	0.10	0.90	4.10	
MW-21D	10/3/2008	--	--	0.80	0.10	0.65	4.20	
MW-21D	10/14/2008	--	--	0.30	0.20	1.80	4.40	
MW-21D	10/17/2008	--	--	2.60	0.50	1.50	4.90	
MW-21D	10/17/2008	--	--	0.10	0.05	0.40	4.95	
MW-21D	10/21/2008	--	--	2.00	0.25	1.00	5.20	
MW-21D	10/24/2008	--	--	1.30	0.13	0.87	5.33	
MW-21D	10/27/2008	--	--	0.50	0.10	0.15	5.43	
MW-21D	11/21/2008	--	--	2.00	1.00	0.75	6.43	
MW-21D	11/25/2008	--	--	1.20	0.15	1.35	6.58	
MW-21D	12/2/2008	--	--	0.60	0.15	0.85	6.73	
MW-21D	12/4/2008	--	--	0.60	0.05	0.70	6.78	
MW-21D	12/9/2008	--	--	0.30	0.05	0.74	6.83	
MW-21D	12/18/2008	--	--	1.50	0.25	1.00	7.08	

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-21D	12/30/2008	--	--	1.50	0.20	0.55	7.28	DNAPL staining on bailer on outside and bottom of bailer
MW-21D	1/2/2009	3.69	--	2.20	0.50	0.75	7.78	DNAPL staining on bailer, few globules at bottom of bailer
MW-21D	1/7/2009	--	--	0.00	0.00	0.25	7.78	
MW-21D	1/14/2009	--	--	0.05	0.01	0.25	7.79	Slight DNAPL staining on bailer
MW-21D	1/20/2009	--	--	0.00	0.00	0.25	7.79	DNAPL staining on bailer, sheen present
MW-21D	1/23/2009	--	--	0.00	0.00	0.25	7.79	DNAPL staining on bailer
MW-21D	1/26/2009	--	--	0.01	0.01	0.49	7.80	DNAPL staining on bailer
MW-21D	1/27/2009	--	--	0.00	0.00	0.25	7.80	0.2' of grey water in bailer
MW-21D	1/28/2009	--	--	0.00	0.00	0.25	7.80	
MW-21D	2/5/2009	--	--	0.00	0.00	0.25	7.80	Clear water, Slight DNAPL staining on outside of bailer of bailer, took 1.5 minutes to recharge
MW-21D	3/3/2009	4.46	--	0.00	0.00	0.25	7.80	Clear water, Slight DNAPL staining on outside of bailer of bailer
MW-21D	3/11/2009	4.52	4.54	0.00	0.00	0.25	7.80	
MW-21D	3/17/2009	4.86	6.82	0.00	0.00	0.25	7.80	
MW-21D	3/25/2009	3.95	4.12	0.00	0.00	0.50	7.80	DNAPL staining on bailer
MW-21D	3/31/2009	4.01	4.15	0.00	0.00	0.25	7.80	
MW-21D	4/20/2009	3.87	3.99	0.00	0.00	0.25	7.80	
MW-21D	4/29/2009	4.15	4.45	0.00	0.00	0.25	7.80	
MW-21D	5/6/2009	4.10	4.10	0.00	0.00	0.25	7.80	
MW-21D	5/11/2009	4.06	4.64	0.00	0.00	0.25	7.80	Clear water,
MW-21D	5/20/2009	3.77	3.96	0.00	0.00	0.25	7.80	1.0' grey water; cloudy
MW-21D	5/27/2009	4.39	4.59	0.00	0.00	0.25	7.80	Slight DNAPL staining on bailer
MW-21D	6/15/2009	3.94	4.01	0.00	0.00	0.25	7.80	
MW-21D	6/24/2009	3.62	3.80	0.00	0.00	0.25	7.80	
MW-21D	6/30/2009	4.68	4.68	0.00	0.00	0.25	7.80	
MW-21D	7/31/2009	4.58	6.61	0.00	0.00	0.25	7.80	
MW-21D	8/13/2009	4.73	5.34	0.00	0.00	0.25	7.80	
MW-21D	8/26/2009	5.29	5.45	0.00	0.00	0.25	7.80	0.5' grey water in bailer
MW-21D	10/2/2009	4.12	4.46	0.00	0.00	0.25	7.80	
MW-21D	10/6/2009	4.49	4.72	0.00	0.00	0.25	7.80	Slight DNAPL staining on bailer
MW-21D	12/18/2009	4.69	5.28	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	1/26/2010	4.54	4.83	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	2/3/2010	5.07	5.17	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	3/1/2010	4.94	5.01	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	4/16/2010	5.00	5.00	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	8/3/2010	5.52	5.60	0.00	0.00	0.25	7.80	
MW-21D	8/10/2010	5.57	5.62	0.00	0.00	0.25	7.80	
MW-21D	8/30/2010	5.60	--	0.00	--	NB	7.80	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-21D	2/18/2011	5.05	--	0.00	--	NB	7.80	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-21D	2/22/2011	4.06	--	0.00	--	NB	7.80	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-21D	3/4/2011	4.33	--	0.00	0.00	0.25	7.80	DNAPL staining on bailer

Notes:
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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-21D	3/18/2011	5.00	--	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	4/4/2011	3.69	--	0.00	0.00	0.25	7.80	
MW-21D	4/12/2011	4.05	--	0.20	0.10	0.40	7.90	
MW-21D	4/19/2011	3.80	--	0.80	0.03	0.13	7.93	Bottom at 26.11'
MW-21D	4/25/2011	3.46	--	0.75	0.13	0.37	8.06	
MW-21D	5/9/2011	4.55	--	1.00	0.10	0.40	8.16	
MW-21D	5/18/2011	4.63	--	0.10	0.00	0.25	8.16	Bottom at 26.04'
MW-21D	6/6/2011	4.08	--	1.40	--	NB	8.16	Bottom at 26.06'; Measured for DNAPL with tape
MW-21D	6/7/2011	4.05	--	1.50	0.21	0.54	8.37	
MW-21D	6/20/2011	4.39	--	0.90	0.07	0.43	8.44	
MW-21D	6/27/2011	3.98	--	0.70	0.01	0.24	8.45	
MW-21D	6/28/2011	4.34	--	0.50	0.04	0.21	8.49	
MW-21D	7/8/2011	4.10	--	0.15	0.01	0.24	8.50	
MW-21D	7/13/2011	5.27	--	0.90	0.03	0.47	8.53	
MW-21D	7/18/2011	5.34	--	0.40	0.04	0.46	8.57	
MW-21D	7/25/2011	6.21	--	0.50	0.04	0.46	8.61	
MW-21D	8/5/2011	5.46	--	0.05	0.00	0.25	8.61	
MW-21D	8/15/2011	5.42	--	0.70	0.08	0.43	8.68	
MW-21D	8/24/2011	5.42	--	0.90	0.05	0.45	8.73	
MW-21D	9/6/2011	5.67	--	0.70	0.08	0.43	8.81	
MW-21D	9/12/2011	5.69	--	0.80	0.01	0.25	8.83	
MW-21D	9/19/2011	5.00	--	0.60	0.01	0.25	8.84	
MW-21D	10/6/2011	5.38	--	0.90	0.09	0.41	8.93	
MW-21D	10/10/2011	5.42	--	0.50	0.00	0.25	8.93	
MW-21D	10/19/2011	5.03	--	0.60	0.03	0.23	8.95	
MW-21D	10/24/2011	5.04	--	0.20	0.01	0.24	8.96	
MW-21D	11/8/2011	5.03	--	0.00	0.00	0.25	8.96	Slight DNAPL staining on bailer
MW-21D	4/24/2012	4.86	--	2.20	0.00	0.00	8.96	First time pumping with EDRS, did not record amount pumped
MW-21D	5/23/2012	--	--	--	1.00	4.00	9.96	
MW-21D	7/24/2012	--	--	--	0.20	5.30	10.16	
MW-21D	7/31/2012	--	--	--	0.20	3.42	10.36	
MW-21D	8/21/2012	--	--	0.90	0.50	4.77	10.86	
MW-21D	9/18/2012	--	--	--	0.11	1.22	10.97	
MW-21D	9/27/2012	--	--	--	0.11	2.39	11.08	
MW-21D	10/2/2012	--	--	--	0.11	2.41	11.19	
MW-21D	10/15/2012	--	--	--	0.10	2.48	11.29	
MW-21D	11/14/2012	--	--	1.80	--	NB	11.29	
MW-21D	4/18/2013	--	--	3.00	--	NB	11.29	
MW-21D	8/23/2013	--	--	6.30	--	NB	11.29	Bottom at 27.18'; installed air lift
MW-21D	9/23/2013	--	--	--	0.43	1.55	11.72	
MW-21D	11/4/2013	--	--	--	0.43	0.52	12.15	
MW-21D	11/12/2013	--	--	--	0.43	0.89	12.58	
MW-21D	11/15/2013	--	--	--	0.42	0.63	13.00	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-21D	11/18/2013	--	--	--	0.42	0.82	13.42	
MW-21D	3/28/2014	--	--	3.00	1.00	0.68	14.42	
MW-21D	4/8/2014	--	--	--	0.92	0.96	15.34	
MW-21D	4/11/2014	--	--	--	0.24	0.00	15.58	
MW-21D	4/15/2014	--	--	--	0.92	0.27	16.50	
MW-21D	4/16/2014	--	--	--	0.00	0.00	16.50	Unable to measure DNAPL thickness due to airlift assembly
MW-21D	4/18/2014	--	--	--	0.92	0.53	17.42	
MW-21D	5/2/2014	--	--	--	0.92	0.53	18.34	
MW-21D	5/6/2014	--	--	--	0.92	0.58	19.26	
MW-21D	5/13/2014	--	--	--	0.92	0.59	20.18	
MW-21D	5/19/2014	--	--	--	0.92	0.37	21.10	
MW-21D	5/22/2014	--	--	--	0.85	0.00	21.95	
MW-21D	5/27/2014	--	--	--	0.32	0.00	22.27	
MW-21D	8/29/2014	--	--	--	0.45	2.65	22.72	
MW-21D	9/5/2014	--	--	--	0.45	1.56	23.17	
MW-21D	9/12/2014	--	--	--	0.45	2.05	23.62	
MW-21D	9/19/2014	--	--	--	0.45	0.66	24.07	
MW-21D	10/10/2014	--	-	0.50	0.45	0.84	24.52	Bottom at 26.40'
MW-21D	10/17/2014	--	--	--	0.45	0.92	24.97	
MW-21D	10/24/2014	--	--	--	0.45	1.16	25.42	
MW-21D	11/6/2014	--	--	--	0.43	0.76	25.85	
MW-21D	12/29/2014	--	--	--	0.00	0.00	25.85	Unable to measure DNAPL thickness due to airlift assembly
MW-21D	3/4/2015	--	--	--	0.00	0.00	25.85	Unable to measure DNAPL thickness due to airlift assembly
MW-21D	4/3/2015	--	--	--	2.10	0.00	27.95	
MW-21D	4/10/2015	--	--	--	0.86	0.00	28.81	
MW-21D	4/17/2015	--	--	--	1.14	0.00	29.95	
MW-21D	4/24/2015	--	--	--	0.69	0.00	30.64	
MW-21D	5/19/2015	--	--	2.00	0.00	0.00	30.64	Bottom at 27.50'
MW-21D	6/5/2015	--	--	2.00	0.00	0.00	30.64	
MW-21D	7/13/2015	--	--	3.10	0.00	0.00	30.64	
MW-21D	9/28/2015	--	--	4.10	0.00	0.00	30.64	Bottom at 28.30'
MW-21D	1/6/2016	--	--	4.40	0.00	0.00	30.64	Bottom at 26.60'
MW-21D	2/19/2016	--	--	5.00	0.00	0.00	30.64	Bottom at 27.00'
MW-21D	3/18/2016	--	--	--	1.20	0.00	31.84	Spouting, stop recovery
MW-21D	4/8/2016	--	--	--	1.60	0.00	33.44	
MW-21D	5/20/2016	--	--	--	1.10	0.00	34.54	
MW-21D	6/22/2016	--	--	3.00	0.00	0.00	34.54	Bottom at 28.30'
MW-21D	9/9/2016	--	--	4.50	0.00	0.00	34.54	Bottom at 28.30'
MW-21D	10/21/2016	--	--	4.50	0.00	0.00	34.54	Bottom at 28.30'
MW-21D	12/2/2016	--	--	4.50	0.00	0.00	34.54	Bottom at 28.30'
MW-21D	2/24/2017	--	--	4.50	0.00	0.00	34.54	Bottom at 28.30'
MW-21D	3/10/2017	--	--	--	0.50	2.53	35.04	
MW-21D	3/24/2017	--	--	--	0.50	1.51	35.54	

Notes:
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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-21D	4/7/2017	--	--	--	0.75	0.27	36.29	
MW-21D	4/21/2017	--	--	1.90	0.04	0.92	36.33	Bottom at 28.30'
MW-21D	7/18/2017	--	--	2.90	0.04	0.92	36.37	Bottom at 28.30'
MW-21D	10/20/2017	--	--	2.90	0.04	0.92	36.41	Bottom at 28.30'
MW-21D	2/27/2018	--	--	3.00	0.00	0.00	36.41	Bottom at 28.30'
MW-21D	5/18/2018	--	--	4.60	0.00	0.00	36.41	Bottom at 28.30'
MW-21D	8/10/2018	--	--	4.10	0.00	0.00	36.41	Bottom at 28.30'
MW-21D	11/19/2018	--	--	3.30	0.00	0.00	36.41	Bottom at 28.30'
MW-21D	3/15/2019	--	--	4.70	0.00	0.00	36.41	Bottom at 28.30'
MW-21D	6/14/2019	--	--	3.40	0.00	0.00	36.41	Bottom at 26.50'; did not reach bottom
MW-21D	7/12/2019	--	--	--	2.00	1.30	38.41	
MW-21D	9/20/2019	--	--	3.00	0.00	0.00	38.41	Bottom at 27.60; did not reach bottom
MW-21D	10/18/2019	--	--	--	1.00	2.20	39.41	
MW-22D	8/4/2000	--	--	NM	--	--	--	
MW-22D	11/13/2000	--	--	NM	--	--	--	
MW-22D	2/1/2001	--	--	NM	--	--	--	
MW-22D	6/21/2001	--	--	NM	--	--	--	
MW-22D	12/11/2001	--	--	NM	--	--	--	
MW-22D	8/11/2003	--	--	NM	--	--	--	
MW-22D	10/29/2003	3.61	--	NM	--	--	--	
MW-22D	2/17/2004	--	--	4.00	--	--	--	
MW-22D	9/9/2004	4.65	--	4.00	--	--	--	
MW-22D	6/28/2007	--	--	0.05	--	--	--	Grey, cloudy, sheen present
MW-22D	7/5/2007	--	--	NM	--	--	--	
MW-22D	7/24/2007	4.20	--	0.60	--	--	--	
MW-22D	8/6/2007	--	--	2.00	--	--	--	Clear water of DNAPL at 1.5 gal, no drawdown
MW-22D	8/9/2007	--	--	0.50	--	--	--	Clear water of DNAPL at 2.0 gal, no drawdown
MW-22D	10/15/2007	--	--	0.20	--	--	--	Clear water of DNAPL at 1.0 gal
MW-22D	10/17/2007	--	--	0.17	--	--	--	
MW-22D	10/19/2007	--	--	0.09	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-22D	11/30/2007	4.15	--	0.02	--	--	--	
MW-22D	3/5/2008	2.58	--	0.00	--	--	--	
MW-22D	4/10/2008	--	--	1.00	--	--	--	
MW-22D	9/5/2008	--	--	1.00	0.10	0.65	0.10	in bailer
MW-22D	9/5/2008	--	--	1.00	0.01	0.49	0.11	
MW-22D	9/5/2008	--	--	0.00	0.00	0.25	0.11	
MW-22D	9/8/2008	--	--	0.30	0.05	0.74	0.16	
MW-22D	9/9/2008	--	--	0.05	0.00	0.25	0.16	
MW-22D	9/10/2008	--	--	0.10	0.00	0.25	0.16	
MW-22D	9/12/2008	--	--	0.10	0.05	0.20	0.21	
MW-22D	9/16/2008	--	--	0.10	0.05	0.20	0.26	
MW-22D	9/18/2008	--	--	0.10	0.05	0.20	0.31	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-22D	9/24/2008	--	--	0.10	0.05	0.20	0.36	
MW-22D	9/26/2008	--	--	0.10	0.01	0.24	0.37	
MW-22D	9/30/2008	--	--	0.10	0.01	0.24	0.38	
MW-22D	10/1/2008	--	--	0.10	0.05	0.20	0.43	
MW-22D	10/2/2008	--	--	0.10	0.05	0.20	0.48	Recorded <0.01' DNAPL
MW-22D	10/3/2008	--	--	0.10	0.05	0.20	0.53	
MW-22D	10/14/2008	--	--	0.05	0.05	0.20	0.58	
MW-22D	10/17/2008	--	--	0.01	0.05	0.40	0.63	
MW-22D	10/21/2008	--	--	0.01	0.05	0.24	0.68	Recorded <0.01' DNAPL
MW-22D	10/24/2008	--	--	0.15	0.05	0.24	0.73	DNAPL staining on bottom of bailer
MW-22D	10/27/2008	--	--	0.05	0.05	0.24	0.78	DNAPL staining on bottom of bailer
MW-22D	11/21/2008	--	--	0.00	0.00	0.25	0.78	DNAPL staining on bottom of bailer
MW-22D	11/25/2008	--	--	0.00	0.00	0.25	0.78	DNAPL staining on bottom of bailer
MW-22D	12/2/2008	--	--	0.00	0.00	0.25	0.78	Trace DNAPL staining on bailer
MW-22D	12/4/2008	--	--	0.00	0.00	0.25	0.78	Trace DNAPL staining on bailer
MW-22D	12/9/2008	--	--	0.00	0.00	0.25	0.78	DNAPL staining on bottom and outside of bailer
MW-22D	12/18/2008	--	--	0.00	0.00	0.25	0.78	DNAPL staining on bottom and outside of bailer
MW-22D	1/2/2009	3.63	--	0.00	0.00	0.25	0.78	
MW-22D	1/7/2009	--	--	0.00	0.00	0.25	0.78	
MW-22D	1/14/2009	--	--	0.05	0.05	0.24	0.83	Slight DNAPL staining on bailer
MW-22D	1/20/2009	--	--	0.00	0.00	0.25	0.83	DNAPL staining on bailer,
MW-22D	1/23/2009	--	--	0.00	0.00	0.25	0.83	DNAPL staining on bailer
MW-22D	1/26/2009	--	--	0.01	0.00	0.25	0.83	DNAPL staining on bailer
MW-22D	1/27/2009	--	--	0.00	0.00	0.25	0.83	DNAPL staining on bailer
MW-22D	1/28/2009	--	--	0.00	0.00	0.25	0.83	
MW-22D	2/5/2009	--	--	0.00	0.00	0.25	0.83	Slight DNAPL staining on outside of bailer of bailer
MW-22D	3/3/2009	4.12	--	0.01	0.01	0.24	0.84	Slight DNAPL staining on outside of bailer of bailer
MW-22D	3/11/2009	4.14	4.16	0.00	0.00	0.25	0.84	
MW-22D	3/17/2009	4.52	4.53	0.00	0.00	0.25	0.84	
MW-22D	3/25/2009	3.63	3.65	0.01	0.05	0.50	0.89	Slight DNAPL staining on outside of bailer
MW-22D	3/31/2009	3.70	3.70	0.00	0.00	0.25	0.89	DNAPL staining on bailer
MW-22D	4/20/2009	3.54	3.59	0.00	0.00	0.25	0.89	DNAPL staining on bailer
MW-22D	4/29/2009	3.83	3.81	0.00	0.00	0.25	0.89	
MW-22D	5/6/2009	3.81	3.84	0.00	0.00	0.25	0.89	
MW-22D	5/11/2009	3.76	3.82	0.00	0.00	0.25	0.89	
MW-22D	5/20/2009	3.43	3.48	0.00	0.00	0.25	0.89	
MW-22D	5/27/2009	4.06	4.06	0.00	0.00	0.25	0.89	
MW-22D	6/15/2009	3.58	3.60	0.00	0.00	0.25	0.89	
MW-22D	6/24/2009	3.28	3.37	0.00	0.00	0.25	0.89	Slight DNAPL staining on bailer
MW-22D	6/30/2009	4.35	4.42	0.00	0.00	0.25	0.89	
MW-22D	7/31/2009	4.32	4.40	0.00	0.00	0.25	0.89	
MW-22D	8/13/2009	4.42	4.43	0.04	0.03	0.47	0.92	yellow-green water

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-22D	8/26/2009	4.97	4.96	0.10	0.05	0.45	0.97	
MW-22D	10/2/2009	3.78	3.81	0.10	0.01	0.24	0.98	
MW-22D	10/6/2009	4.17	4.27	0.00	0.00	0.25	0.98	
MW-22D	12/18/2009	4.34	4.40	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	1/26/2010	4.23	4.24	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	2/3/2010	4.74	4.77	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	3/1/2010	4.62	4.64	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	4/16/2010	4.68	4.70	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	8/3/2010	5.18	5.21	0.00	0.00	0.25	0.98	
MW-22D	8/10/2010	5.24	5.27	0.00	0.00	0.25	0.98	
MW-22D	8/30/2010	5.27	--	0.00	--	NB	0.98	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-22D	2/18/2011	4.74	--	0.00	--	NB	0.98	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-22D	2/22/2011	3.73	--	0.00	--	NB	0.98	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-22D	3/4/2011	4.02	--	0.00	0.00	0.25	0.98	
MW-22D	3/18/2011	4.60	--	0.00	0.00	0.25	0.98	
MW-22D	4/4/2011	3.40	--	0.00	0.00	0.25	0.98	
MW-22D	4/12/2011	3.71	--	0.00	0.00	0.25	0.98	
MW-22D	4/19/2011	3.47	--	0.00	--	NB	0.98	Bottom at 20.40'; Measured for DNAPL with tape
MW-22D	5/18/2011	4.30	--	0.00	--	NB	0.98	Bottom at 20.44'; Measured for DNAPL with tape
MW-22D	6/27/2011	3.61	--	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	7/8/2011	3.87	--	0.00	0.00	0.25	0.98	
MW-22D	7/13/2011	5.92	--	0.00	0.00	0.25	0.98	
MW-22D	7/18/2011	5.01	--	0.00	0.00	0.25	0.98	
MW-22D	7/25/2011	4.82	--	0.00	0.00	0.25	0.98	Trace DNAPL staining on bailer
MW-22D	8/5/2011	5.13	--	0.00	0.00	0.25	0.98	Trace DNAPL staining on bailer
MW-22D	8/24/2011	5.04	--	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	10/6/2011	5.05	--	0.00	0.00	0.25	0.98	
MW-22D	10/24/2011	4.76	--	0.01	0.01	0.24	0.99	
MW-22D	11/8/2011	4.75	--	0.00	0.00	0.25	0.99	Silty with DNAPL staining on bailer
MW-22D	6/5/2012	--	--	0.00	--	NB	0.99	Bottom at 20.62'
MW-22D	11/14/2012	--	--	0.00	0.00	NB	0.99	
MW-22D	4/18/2013	--	--	0.00	--	NB	0.99	Silty with DNAPL staining on probe
MW-22D	8/23/2013	--	--	0.00	--	NB	0.99	Bottom at 21.10'; 5' of sediment in well.
MW-22D	4/16/2014	--	--	0.00	0.00	0.00	0.99	Bottom at 20.75'
MW-22D	12/29/2014	--	--	0.00	0.00	0.00	0.99	Bottom at 21.70'
MW-22D	3/4/2015	--	--	0.00	0.00	0.00	0.99	Bottom at 21.70'
MW-22D	5/19/2015	--	--	0.00	0.00	0.00	0.99	Bottom at 21.00'
MW-22D	1/6/2016	--	--	0.00	0.00	0.00	0.99	Bottom at 21.25'; sediment
MW-22D	2/19/2016	--	--	0.00	0.00	0.00	0.99	Bottom at 21.55'; sediment
MW-22D	6/22/2016	--	--	0.00	0.00	0.00	0.99	Bottom at 21.45'; sediment
MW-22D	9/9/2016	--	--	0.00	0.00	0.00	0.99	Bottom at 21.55'; sediment

Notes:
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Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-22D	10/21/2016	--	--	0.00	0.00	0.00	0.99	Bottom at 22.30'; sediment
MW-22D	12/2/2016	--	--	0.00	0.00	0.00	0.99	Bottom at 21.55'; sediment
MW-22D	2/24/2017	--	--	0.00	0.00	0.00	0.99	Bottom at 21.55'; sediment
MW-22D	4/21/2017	--	--	0.00	0.00	0.00	0.99	Bottom at 21.55'; sediment
MW-22D	7/18/2017	--	--	0.00	0.00	0.00	0.99	Bottom at 21.55'; sediment
MW-22D	10/20/2017	--	--	0.00	0.00	0.00	0.99	Bottom at 21.80'; sediment
MW-22D	2/27/2018	--	--	0.00	0.00	0.00	0.99	Bottom at 21.80'; sediment
MW-22D	5/18/2018	--	--	0.00	0.00	0.00	0.99	Bottom at 21.80'; sediment
MW-22D	8/10/2018	--	--	0.00	0.00	0.00	0.99	Bottom at 21.80'; sediment
MW-22D	11/19/2018	--	--	0.00	0.00	0.00	0.99	Bottom at 21.80'; sediment
MW-22D	3/15/2019	--	--	0.40	0.00	0.00	0.99	Bottom at 21.80'; sediment
MW-22D	6/14/2019	--	--	0.00	0.00	0.00	0.99	Bottom at 22.20'
MW-22D	9/20/2019	--	--	0.00	0.00	0.00	0.99	Bottom at 21.00'; sediment
MW-23D	8/4/2000	--	--	NM	--	--	--	
MW-23D	11/13/2000	--	--	NM	--	--	--	
MW-23D	2/1/2001	--	--	NM	--	--	--	
MW-23D	6/21/2001	--	--	NM	--	--	--	
MW-23D	12/11/2001	--	--	NM	--	--	--	Purged dry @ 5.0 gal, strong odor
MW-23D	8/11/2003	--	--	NM	--	--	--	Odor, black floculants present in bailer
MW-23D	10/23/2003	3.23	--	NM	--	--	--	
MW-23D	9/9/2004	4.30	--	0.00	--	--	--	Grey
MW-23D	7/24/2007	4.08	--	OBS	--	--	--	Did not bail
MW-23D	10/15/2007	--	--	0.00	--	--	--	Purged dry @ 5.0 gal, grey
MW-23D	10/17/2007	--	--	0.00	--	--	--	
MW-23D	10/19/2007	--	--	0.00	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-23D	11/30/2007	7.57	--	0.00	--	--	--	
MW-23D	3/5/2008	3.04	--	0.00	--	--	--	
MW-23D	4/10/2008	--	--	0.00	--	--	--	
MW-23D	9/18/2008	--	--	0.00	0.00	0.25	0.00	
MW-23D	9/24/2008	--	--	0.00	0.00	0.25	0.00	
MW-23D	9/26/2008	4.42	--	0.00	0.00	0.25	0.00	
MW-23D	9/30/2008	4.57	--	0.00	0.00	0.25	0.00	
MW-23D	10/1/2008	--	--	0.00	0.00	0.25	0.00	
MW-23D	10/2/2008	4.65	--	0.00	0.00	0.25	0.00	
MW-23D	10/3/2008	4.67	--	0.00	0.00	0.25	0.00	
MW-23D	10/14/2008	4.53	--	0.00	0.00	0.25	0.00	
MW-23D	10/17/2008	4.52	--	0.00	0.00	0.25	0.00	
MW-23D	10/21/2008	4.64	--	0.00	0.00	0.25	0.00	
MW-23D	10/24/2008	4.28	--	0.00	0.00	0.25	0.00	
MW-23D	10/27/2008	4.33	--	0.00	0.00	0.25	0.00	
MW-23D	11/21/2008	4.14	--	0.00	0.00	0.25	0.00	Odor
MW-23D	11/25/2008	4.08	--	0.00	0.00	0.25	0.00	Odor

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MW-23D	12/2/2008	3.88	--	0.00	0.00	0.25	0.00	Odor
MW-23D	12/4/2008	3.89	--	0.00	0.00	0.25	0.00	
MW-23D	12/9/2008	3.22	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	12/18/2008	3.67	--	0.00	0.00	0.25	0.00	Slight odor
MW-23D	12/30/2008	2.88	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/2/2009	3.26	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/7/2009	3.29	--	0.00	0.00	0.25	0.00	
MW-23D	1/14/2009	3.50'	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/20/2009	3.89	--	0.00	0.00	0.25	0.00	Slight DNAPL staining on outside of bailer
MW-23D	1/23/2009	4.28	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/26/2009	4.34'	--	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-23D	1/27/2009	4.34	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/28/2009	4.31	--	0.00	0.00	0.25	0.00	
MW-23D	2/5/2009	4.13	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	3/3/2009	3.79	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	3/11/2009	3.80	5.29	0.00	0.00	0.25	0.00	
MW-23D	3/17/2009	4.10	5.68	0.00	0.00	0.25	0.00	
MW-23D	3/25/2009	3.28	6.22	0.00	0.00	0.50	0.00	Clear water
MW-23D	3/31/2009	3.27	4.76	0.00	0.00	0.25	0.00	
MW-23D	4/20/2009	3.13	3.27	0.00	0.00	0.25	0.00	
MW-23D	4/29/2009	3.42	4.94	0.00	0.00	0.25	0.00	
MW-23D	5/6/2009	3.50	4.98	0.00	0.00	0.25	0.00	
MW-23D	5/11/2009	3.29	4.86	0.00	0.00	0.25	0.00	
MW-23D	5/20/2009	3.08	4.54	0.00	0.00	0.25	0.00	Clear water
MW-23D	5.27/2009	3.68	5.19	0.00	0.00	0.25	0.00	
MW-23D	6/15/2009	3.22	4.63	0.00	0.00	0.25	0.00	
MW-23D	6/24/2009	2.86	5.61	0.00	0.00	0.25	0.00	
MW-23D	6/30/2009	3.87	5.07	0.00	0.00	0.25	0.00	
MW-23D	7/31/2009	3.92	5.10	0.00	0.00	0.25	0.00	
MW-23D	8/13/2009	4.01	6.62	0.00	0.00	0.25	0.00	
MW-23D	8/26/2009	4.60	6.13	0.00	0.00	0.25	0.00	Clear water
MW-23D	10/2/2009	3.42	4.90	0.00	0.00	0.25	0.00	
MW-23D	10/6/2009	3.77	5.19	0.00	0.00	0.25	0.00	
MW-23D	12/18/2009	3.93	5.52	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/26/2010	3.83	5.32	0.00	0.00	0.25	0.00	
MW-23D	2/3/2010	4.40	5.85	0.00	0.00	0.25	0.00	
MW-23D	3/1/2010	4.35	5.92	0.00	0.00	0.25	0.00	
MW-23D	8/30/2010	4.88	--	0.00	--	NB	0.00	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-23D	2/18/2011	4.39	--	0.00	0.00	NB	0.00	
MW-23D	2/22/2011	3.32	--	0.00	0.00	NB	0.00	
MW-23D	7/13/2011	4.58	--	0.00	0.00	0.08	0.00	
MW-23D	8/24/2011	4.70	--	0.00	0.00	0.08	0.00	Odor

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-23D	10/6/2011	4.68	--	0.00	0.00	0.25	0.00	Odor
MW-23D	4/16/2014	--	--	0.00	0.00	0.00	0.00	Bottom at 24.3', odor
MW-23D	12/29/2014	--	--	0.00	0.00	0.00	0.00	Bottom at 24.30'
MW-23D	3/4/2015	--	--	0.00	0.00	0.00	0.00	Bottom at 24.30'
MW-23D	2/19/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 24.30'
MW-23D	9/9/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	10/21/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	12/2/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	2/24/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	4/21/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	7/18/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	10/20/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	2/27/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	5/18/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	8/10/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	11/19/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	3/15/2019	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	6/14/2019	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-23D	9/20/2019	--	--	0.00	0.00	0.00	0.00	Bottom at 24.40'
MW-24A	3/5/2008	--	--	--	--	--	--	
MW-24A	4/10/2008	--	--	--	--	--	--	
MW-24A	9/5/2008	--	--	0.20	2.00	0.50	2.00	
MW-24A	9/5/2008	--	--	1.50	2.00	0.55	4.00	
MW-24A	9/5/2008	--	--	1.00	0.10	0.40	4.10	
MW-24A	9/5/2008	--	--	0.04	0.01	0.49	4.11	
MW-24A	9/8/2008	--	--	2.25	0.75	1.50	4.86	
MW-24A	9/9/2008	--	--	1.25	0.15	0.10	5.01	
MW-24A	9/10/2008	--	--	2.80	0.25	0.00	5.26	
MW-24A	9/12/2008	--	--	2.00	0.25	1.25	5.51	
MW-24A	9/18/2008	--	--	1.20	0.30	0.12	5.81	
MW-24A	9/24/2008	--	--	1.40	0.15	0.95	5.96	
MW-24A	9/26/2008	--	--	2.70	0.50	0.10	6.46	
MW-24A	9/26/2008	--	--	0.25	0.10	0.50	6.56	
MW-24A	9/30/2008	--	--	1.80	0.40	0.40	6.96	
MW-24A	9/30/2008	--	--	0.60	0.10	0.85	7.06	
MW-24A	9/16/2008	--	--	1.50	0.13	0.40	7.19	Bailed twice this day.
MW-24A	10/1/2008	--	--	1.00	0.10	0.15	7.29	
MW-24A	10/2/2008	--	--	0.50	0.15	0.85	7.44	Bailed twice this day.
MW-24A	10/2/2008	--	--	0.20	0.05	0.40	7.49	
MW-24A	10/3/2008	--	--	0.50	0.10	0.65	7.59	Bailed twice this day.
MW-24A	10/3/2008	--	--	0.10	0.05	0.90	7.64	
MW-24A	10/14/2008	--	--	1.50	0.55	1.70	8.19	Bailed 3 times this day.

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-24A	10/14/2008	--	--	0.80	0.20	0.80	8.39	
MW-24A	10/17/2008	--	--	1.80	0.80	0.95	9.19	
MW-24A	10/17/2008	--	--	0.75	0.10	0.40	9.29	
MW-24A	10/17/2008	--	--	0.00	0.00	0.25	9.29	Bailed twice this day.
MW-24A	10/21/2008	--	--	2.80	0.80	0.95	10.09	
MW-24A	10/21/2008	--	--	0.50	0.10	0.65	10.19	
MW-24A	10/24/2008	--	--	0.50	0.20	1.55	10.39	
MW-24A	10/27/2008	4.20	--	1.50	0.15	0.10	10.54	
MW-24A	11/21/2008	--	--	3.00	1.50	0.75	12.04	
MW-24A	11/25/2008	--	--	1.50	0.25	1.25	12.29	Bailed twice this day.
MW-24A	12/2/2008	--	--	1.00	0.20	1.05	12.49	
MW-24A	12/2/2008	--	--	1.50	0.15	0.85	12.64	
MW-24A	12/4/2008	--	--	1.25	0.15	0.85	12.79	
MW-24A	12/9/2008	--	--	0.70	0.05	0.95	12.84	
MW-24A	12/18/2008	--	--	3.00	0.50	1.00	13.34	Bailed twice this day.
MW-24A	12/30/2008	--	--	1.90	0.25	0.75	13.59	
MW-24A	12/30/2008	--	--	1.00	0.15	0.60	13.74	
MW-24A	1/2/2009	3.21	--	2.10	0.65	0.85	14.39	
MW-24A	1/7/2009	--	--	1.20	0.40	0.60	14.79	
MW-24A	1/14/2009	--	--	1.50	0.25	1.00	15.04	
MW-24A	1/20/2009	--	--	1.80	0.25	1.00	15.29	
MW-24A	1/20/2009	--	--	0.20	0.10	0.65	15.39	DNAPL present
MW-24A	1/23/2009	--	--	1.20	0.20	1.05	15.59	DNAPL present
MW-24A	1/26/2009	--	--	1.00	0.10	1.15	15.69	DNAPL present
MW-24A	1/27/2009	--	--	0.50	0.10	0.90	15.79	DNAPL present; Bailed twice this day.
MW-24A	1/28/2009	--	--	0.80	0.10	0.90	15.89	
MW-24A	2/5/2009	--	--	0.10	0.25		16.14	DNAPL present
MW-24A	3/3/2009	4.31	--	1.00	0.10	0.65	16.24	DNAPL present
MW-24A	3/11/2009	3.80	6.83	0.30	0.05	0.95	16.29	
MW-24A	3/17/2009	4.05	8.52	0.30	0.05	1.20	16.34	
MW-24A	3/25/2009	3.45	10.65	0.10	0.05	1.20	16.39	
MW-24A	3/31/2009	3.26	6.35	0.15	0.10	0.49	16.49	
MW-24A	4/20/2009	3.08	6.12	0.20	0.05	0.70	16.54	
MW-24A	4/29/2009	3.41	9.19	0.60	0.10	0.90	16.64	
MW-24A	5/6/2009	3.45	6.48	0.01	0.00	1.25	16.64	
MW-24A	5/11/2009	3.31	4.74	0.00	0.00	0.25	16.64	DNAPL staining on bailer
MW-24A	5/20/2009	2.96	8.83	0.05	0.04	0.96	16.68	
MW-24A	5/27/2009	3.61	9.53	0.05	0.04	0.96	16.72	
MW-24A	6/15/2009	3.12	9.12	0.30	0.15	0.85	16.87	
MW-24A	6/24/2009	2.74	10.66	0.18	0.08	0.67	16.95	
MW-24A	6/30/2009	3.64	8.50	1.00	0.15	1.10	17.10	
MW-24A	7/31/2009	4.18	5.76	2.00	0.30	0.70	17.40	
MW-24A	8/13/2009	3.90	15.62	2.80	0.45	0.80	17.85	

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-24A	8/26/2009	4.53	14.52	1.50	0.75	1.00	18.60	
MW-24A	10/2/2009	3.28	7.98	0.05	0.10	0.65	18.70	Tan water
MW-24A	10/6/2009	3.83	16.42	3.00	1.05	1.20	19.75	
MW-24A	12/18/2009	3.88	12.29	7.00	0.90	0.85	20.65	4.0' of DNAPL up rope tied on bailer
MW-24A	12/21/2009	3.62	8.21	1.50	0.22	0.78	20.87	
MW-24A	1/4/2010	4.33	14.38	0.08	0.62	1.38	21.49	Did not hit bottom until 3rd bailer was thrown down well
MW-24A	1/6/2010	4.47	12.21	1.25	0.24	1.01	21.73	
MW-24A	1/11/2010	4.58	12.53	1.50	0.30	0.95	22.03	
MW-24A	1/18/2010	4.13	9.81	2.60	0.22	0.53	22.25	
MW-24A	1/25/2010	3.63	12.72	2.50	0.27	0.73	22.52	
MW-24A	2/2/2010	4.30	12.35	1.50	0.16	0.84	22.68	
MW-24A	2/2/2010	7.42	14.04	0.50	0.03	0.97	22.71	
MW-24A	2/4/2010	4.40	12.80	1.50	0.16	0.84	22.87	
MW-24A	2/4/2010	6.25	13.29	0.50	0.03	0.97	22.90	
MW-24A	2/5/2010	4.31	NM	1.00	0.23	1.52	23.13	
MW-24A	2/22/2010	3.90	15.20	1.50	0.22	1.28	23.35	
MW-24A	3/2/2010	4.19	16.97	1.00	0.23	1.77	23.58	
MW-24A	3/2/2010	9.13	17.92	0.30	0.02	0.98	23.60	
MW-24A	3/4/2010	4.29	12.31	0.50	0.12	0.88	23.72	
MW-24A	3/8/2010	4.19	12.95	1.25	0.21	1.04	23.93	
MW-24A	3/11/2010	4.42	11.77	1.00	0.16	0.84	24.09	
MW-24A	4/16/2010	4.21	11.83	1.00	0.10	0.65	24.19	
MW-24A	4/26/2010	3.26	13.12	0.50	0.08	0.92	24.27	
MW-24A	5/5/2010	3.88	13.21	0.50	0.16	1.34	24.43	
MW-24A	6/1/2010	4.21	6.95	0.00	0.00	0.25	24.43	
MW-24A	6/9/2010	4.03	6.51	0.00	0.00	0.25	24.43	
MW-24A	8/17/2010	5.12	--	0.25	--	NB	24.43	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-24A	8/23/2010	4.64	--	1.15	--	NB	24.43	Recovery Program Temporarily Suspended, Bottom at 26.90'; Measured for DNAPL with tape
MW-24A	8/30/2010	4.76	--	1.70	--	NB	24.43	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-24A	9/17/2010	4.75	--	5.50	--	NB	24.43	Bottom at 26.92'; Measured for DNAPL with tape
MW-24A	9/24/2010	4.89	24.00	5.50	2.66	1.59	27.09	
MW-24A	10/1/2010	5.04	23.00	2.00	1.62	2.13	28.71	
MW-24A	10/5/2010	4.94	24.00	1.25	0.82	2.93	29.53	
MW-24A	10/12/2010	5.07	22.00	2.00	0.93	2.57	30.46	
MW-24A	10/18/2010	5.01	--	2.00	1.04	1.46	31.50	Bottom at 26.92'
MW-24A	12/10/2010	4.30	--	5.00	2.15	1.85	33.65	
MW-24A	12/28/2010	4.21	--	6.00	1.56	1.19	35.21	
MW-24A	1/3/2011	3.97	--	1.50	0.60	1.15	35.81	
MW-24A	1/10/2011	4.70	--	1.50	0.24	0.76	36.05	
MW-24A	1/17/2011	4.39	--	2.00	0.19	0.56	36.24	
MW-24A	1/28/2011	--	--	2.25	--	NB	36.24	Did not bail; Measured for DNAPL with tape

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CSX Transportation
Former Indiana Creosoting Company
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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-24A	2/18/2011	4.32	--	0.49	0.19	0.56	36.43	
MW-24A	2/22/2011	3.73	--	1.15	--	NB	36.43	Did not bail; Measured for DNAPL with tape
MW-24A	3/4/2011	3.52	--	0.60	0.09	0.41	36.52	
MW-24A	3/18/2011	3.91	--	1.00	0.12	0.63	36.64	Sand at bottom
MW-24A	3/28/2011	4.42	--	0.70	0.01	0.49	36.65	
MW-24A	4/4/2011	3.52	--	0.10	0.01	0.24	36.66	
MW-24A	4/12/2011	3.29	--	0.10	0.00	0.25	36.66	
MW-24A	4/19/2011	3.00	--	0.10	0.01	0.07	36.67	Bottom at 26.50'
MW-24A	4/25/2011	2.81	--	0.10	--	NB	36.67	Did not bail; Measured for DNAPL with tape
MW-24A	5/9/2011	3.70	--	0.30	0.03	0.22	36.70	
MW-24A	5/18/2011	3.87	--	0.15	0.00	0.25	36.70	Bottom at 26.50'
MW-24A	6/6/2011	4.31	--	0.40	--	NB	36.70	Bottom at 26.50'; Measured for DNAPL with tape
MW-24A	6/7/2011	4.25	--	0.40	0.03	0.22	36.73	
MW-24A	6/20/2011	3.60	--	0.30	0.01	0.24	36.74	
MW-24A	6/27/2011	3.07	--	0.60	0.03	0.22	36.77	
MW-24A	6/28/2011	3.57	--	0.30	0.02	0.06	36.79	
MW-24A	7/8/2011	3.33	--	0.50	0.05	0.70	36.84	
MW-24A	7/11/2011	4.43	--	0.20	0.01	0.49	36.85	
MW-24A	7/13/2011	4.49	--	0.60	0.04	0.46	36.89	
MW-24A	7/18/2011	4.60	--	1.50	0.14	0.36	37.03	
MW-24A	7/25/2011	4.38	--	1.50	0.15	0.35	37.18	
MW-24A	8/5/2011	4.70	--	1.30	0.50	0.50	37.68	
MW-24A	8/15/2011	4.58	--	2.30	0.44	0.56	38.12	
MW-24A	8/24/2011	4.60	--	2.80	0.48	0.56	38.59	
MW-24A	9/6/2011	6.14	--	2.50	0.59	0.41	39.18	
MW-24A	9/12/2011	4.89	--	2.00	0.50	1.50	39.68	
MW-24A	9/19/2011	6.20	--	1.00	0.46	0.54	40.14	
MW-24A	10/6/2011	4.60	--	2.20	0.71	1.04	40.85	
MW-24A	10/10/2011	4.62	--	2.70	0.46	0.54	41.32	
MW-24A	10/19/2011	4.31	--	3.00	0.64	0.36	41.95	
MW-24A	11/4/2011	3.87	--	3.00	0.56	0.44	42.52	
MW-24A	11/8/2011	4.29	--	0.90	0.14	0.36	42.65	
MW-24A	6/5/2012	--	--	3.20	0.00	NB	42.65	Bottom at 26.04, need to re survey.
MW-24A	7/31/2012	--	--	5.20	1.00	2.00	43.65	
MW-24A	8/21/2012	--	--	5.25	1.25	3.15	44.90	
MW-24A	8/24/2012	--	--	4.00	0.00	NB	44.90	
MW-24A	8/29/2012	--	--	5.00	0.75	2.26	45.65	
MW-24A	9/4/2012	--	--	3.50	0.50	1.65	46.15	
MW-24A	9/17/2012	--	--	5.00	0.00	NB	46.15	
MW-24A	9/18/2012	--	--	5.00	0.32	1.81	46.47	
MW-24A	9/27/2012	--	--	5.50	0.32	2.37	46.79	
MW-24A	10/2/2012	--	--	4.00	0.32	2.51	47.11	
MW-24A	10/15/2012	--	--	--	0.32	3.19	47.43	

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Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-24A	11/14/2012	--	--	5.20	--	NB	47.43	
MW-24A	12/5/2012	--	--	5.00	1.60	0.00	49.03	
MW-24A	12/17/2012	--	--	1.90	0.04	1.85	49.07	
MW-24A	1/2/2013	--	--	3.00	0.03	2.48	49.10	
MW-24A	1/7/2013	--	--	2.10	0.03	1.66	49.13	
MW-24A	4/18/2013	--	--	0.00	--	NB	49.13	
MW-24A	5/3/2013	--	--	0.00	--	NB	49.13	
MW-24A	8/23/2013	--	--	1.30	--	NB	49.13	Bottom at 23.98'; 2.5' of sediment in well
MW-24A	9/23/2013	--	--	--	0.43	0.82	49.56	Installed air lift
MW-24A	11/12/2013	--	--	--	0.43	0.58	49.99	
MW-24A	11/15/2013	--	--	--	0.42	0.78	50.41	
MW-24A	3/28/2014	--	--	--	0.90	0.17	51.31	
MW-24A	4/16/2014	--	--	--	0.00	0.00	51.31	Unable to measure DNAPL thickness due to airlift assembly
MW-24A	12/29/2014	--	--	--	0.00	0.00	51.31	Unable to measure DNAPL thickness due to airlift assembly
MW-24A	3/4/2015	--	--	--	0.00	0.00	51.31	Unable to measure DNAPL thickness due to airlift assembly
MW-24A	4/15/2015	--	--	5.00	0.00	0.00	51.31	
MW-24A	5/8/2015	--	--	--	0.90	1.07	52.21	
MW-24A	5/15/2015	--	--	--	0.89	0.72	53.10	
MW-24A	5/19/2015	--	--	1.50	0.00	0.00	53.10	
MW-24A	7/13/2015	--	--	2.00	0.00	0.00	53.10	
MW-24A	9/28/2015	--	--	4.80	0.00	0.00	53.10	Bottom at 25.85'
MW-24A	1/6/2016	--	--	4.40	0.00	0.00	53.10	Bottom at 25.90'
MW-24A	2/19/2016	--	--	5.25	0.00	0.00	53.10	Bottom at 26.75'
MW-24A	3/18/2016	--	--	--	0.90	0.84	54.00	
MW-24A	4/8/2016	--	--	--	0.05	1.26	54.05	
MW-24A	5/20/2016	--	--	--	0.05	1.00	54.10	
MW-24A	6/22/2016	--	--	0.80	0.00	0.00	54.10	Bottom at 26.75'
MW-24A	9/9/2016	--	--	1.00	0.00	0.00	54.10	Bottom at 26.75'
MW-24A	10/21/2016	--	--	3.00	0.00	0.00	54.10	Bottom at 26.75'
MW-24A	12/2/2016	--	--	3.50	0.00	0.00	54.10	Bottom at 26.75'
MW-24A	2/24/2017	--	--	2.90	0.00	0.00	54.10	Bottom at 26.75'
MW-24A	3/10/2017	--	--	--	0.84	0.00	54.94	
MW-24A	4/21/2017	--	--	1.70	0.00	0.00	54.94	Bottom at 26.75'
MW-24A	7/18/2017	--	--	2.30	0.00	0.00	54.94	Bottom at 26.75'
MW-24A	10/20/2017	--	--	2.30	0.00	0.00	54.94	Bottom at 26.75'
MW-24A	2/27/2018	--	--	3.40	0.00	0.00	54.94	Bottom at 26.75'
MW-24A	5/18/2018	--	--	2.30	0.00	2.90	54.94	Bottom at 26.75'
MW-24A	8/10/2018	--	--	1.60	0.00	2.90	54.94	Bottom at 26.75'
MW-24A	11/19/2018	--	--	2.20	0.00	2.90	54.94	Bottom at 26.75'
MW-24A	3/15/2019	--	--	2.60	0.00	2.90	54.94	Bottom at 26.75'
MW-24A	6/14/2019	--	--	1.40	0.00	2.90	54.94	Bottom at 25.00'; did not reach bottom
MW-24A	9/20/2019	--	--	3.30	0.00	2.90	54.94	Bottom at 25.80'; did not reach bottom

Notes:
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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-25A	3/5/2008	--	--	--	--	--	--	
MW-25A	4/10/2008	--	--	--	--	--	--	
MW-25A	9/5/2008	--	--	0.00	0.00	0.25	0.00	
MW-25A	9/9/2008	--	--	0.00	0.00	0.25	0.00	
MW-25A	9/18/2008	--	--	0.00	0.00	0.25	0.00	
MW-25A	9/24/2008	--	--	0.00	0.00	0.25	0.00	
MW-25A	9/26/2008	6.60	--	0.00	0.00	0.25	0.00	
MW-25A	9/30/2008	6.73	--	0.00	0.00	0.25	0.00	
MW-25A	10/1/2008	--	--	0.00	0.00	0.25	0.00	
MW-25A	10/2/2008	6.80	--	0.00	0.00	0.25	0.00	
MW-25A	10/3/2008	6.87	--	0.00	0.00	0.25	0.00	
MW-25A	10/14/2008	6.24	--	0.00	0.00	0.25	0.00	
MW-25A	10/17/2008	6.27	--	0.00	0.00	0.25	0.00	
MW-25A	10/21/2008	6.35	--	0.00	0.00	0.25	0.00	
MW-25A	10/24/2008	6.93	--	0.00	0.00	0.25	0.00	
MW-25A	10/27/2008	6.04	--	0.00	0.00	0.25	0.00	
MW-25A	11/21/2008	6.24	--	0.00	0.00	0.25	0.00	
MW-25A	11/25/2008	5.48	--	0.00	0.00	0.25	0.00	
MW-25A	12/2/2008	5.28	--	0.00	0.00	0.25	0.00	
MW-25A	12/4/2008	5.29	--	0.00	0.00	0.25	0.00	
MW-25A	12/9/2008	4.36	--	0.00	0.00	0.25	0.00	Tan water
MW-25A	12/18/2008	4.88	--	0.00	0.00	0.25	0.00	Slight odor
MW-25A	12/30/2008	4.04	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	1/2/2009	4.48	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	1/7/2009	4.50	--	0.00	0.00	0.25	0.00	
MW-25A	1/14/2009	4.67	--	0.00	0.00	0.25	0.00	Slight odor
MW-25A	1/20/2009	5.41	--	0.00	0.00	0.25	0.00	Light brown water
MW-25A	1/23/2009	4.28	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	1/26/2009	6.89	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	1/27/2009	5.83	--	0.00	0.00	0.25	0.00	Light-yellow colored water in bailer
MW-25A	1/29/2009	5.85	--	0.00	0.00	0.25	0.00	
MW-25A	2/5/2009	5.57	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	3/3/2009	4.78	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	3/11/2009	5.20	6.38	0.00	0.00	0.25	0.00	
MW-25A	3/17/2009	5.95	6.86	0.00	0.00	0.25	0.00	
MW-25A	3/25/2009	4.81	6.76	0.00	0.00	0.50	0.00	
MW-25A	3/31/2009	4.58	5.76	0.00	0.00	0.25	0.00	
MW-25A	4/20/2009	4.35	5.48	0.00	0.00	0.25	0.00	
MW-25A	4/29/2009	4.70	5.29	0.00	0.00	0.25	0.00	
MW-25A	5/6/2009	4.85	5.95	0.00	0.00	0.25	0.00	
MW-25A	5/11/2009	4.78	6.04	0.00	0.00	0.25	0.00	
MW-25A	5/20/2009	4.42	5.63	0.00	0.00	0.25	0.00	
MW-25A	5/27/2009	4.95	6.22	0.00	0.00	0.25	0.00	

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Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-25A	6/15/2009	4.79	5.63	0.00	0.00	0.25	0.00	
MW-25A	6/24/2009	4.64	5.79	0.00	0.00	0.25	0.00	
MW-25A	6/30/2009	5.49	6.21	0.00	0.00	0.25	0.00	
MW-25A	7/31/2009	5.21	6.48	0.00	0.00	0.25	0.00	
MW-25A	8/13/2009	5.56	6.85	0.00	0.00	0.25	0.00	
MW-25A	8/26/2009	6.74	7.95	0.00	0.00	0.25	0.00	
MW-25A	10/2/2009	4.98	5.96	0.00	0.00	0.25	0.00	
MW-25A	10/6/2009	5.61	6.50	0.00	0.00	0.25	0.00	
MW-25A	12/18/2009	4.58	5.95	0.00	0.00	0.25	0.00	
MW-25A	1/26/2010	4.35	5.55	0.00	0.00	0.25	0.00	
MW-25A	2/3/2010	5.10	6.31	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-25A	3/1/2010	4.88	6.25	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-25A	8/3/2010	6.99	8.08	0.00	0.00	0.25	0.00	
MW-25A	8/10/2010	7.20	8.27	0.00	0.00	0.25	0.00	
MW-25A	8/24/2011	NM	--	0.00	0.00	0.25	0.00	Silt in bailer
MW-25A	10/6/2011	NM	--	0.00	0.00	0.25	0.00	Odor, silt in bailer
MW-25A	4/16/2014	--	--	0.00	0.00	0.00	0.00	Bottom at 22.15'
MW-25A	1/6/2016	--	--	0.00	0.00	0.00	0.00	
MW-25A	2/19/2016	--	--	0.00	0.00	0.00	0.00	
MW-25A	9/9/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 22.30'
MW-25A	10/21/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 22.30'
MW-25A	12/2/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 22.30'
MW-25A	2/24/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 22.30'
MW-25A	4/21/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 22.30'
MW-25A	7/18/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 22.30'
MW-25A	10/20/2017	--	--	0.10	0.00	0.00	0.00	Bottom at 22.50'
MW-25A	2/27/2018	--	--	0.50	0.00	0.00	0.00	Bottom at 22.50'
MW-25A	5/18/2018	--	--	0.80	0.00	0.00	0.00	Bottom at 22.50'
MW-25A	6/14/2018	--	--	--	0.01	0.49	0.01	Bail
MW-25A	8/10/2018	--	--	0.00	0.00	0.00	0.01	Bottom at 22.50'
MW-25A	11/19/2018	--	--	0.05	0.00	0.00	0.01	Bottom at 22.50'
MW-25A	3/15/2019	--	--	0.00	0.00	0.00	0.01	Bottom at 22.50'
MW-25A	6/14/2019	--	--	0.00	0.00	0.00	0.01	Bottom at 22.40'
MW-25A	9/20/2019	--	--	0.00	0.00	0.00	0.01	Bottom at 22.50'
MW-26A	3/5/2008	--	--	--	--	--	--	
MW-26A	4/10/2008	--	--	--	--	--	--	
MW-26A	9/5/2008	--	--	0.00	0.00	0.25	0.00	
MW-26A	9/8/2008	37.48	--	0.00	0.00	0.25	0.00	
MW-26A	9/9/2008	--	--	0.00	0.00	0.25	0.00	
MW-26A	9/18/2008	--	--	0.00	0.00	0.25	0.00	
MW-26A	9/24/2008	--	--	0.00	0.00	0.25	0.00	
MW-26A	9/26/2008	37.33	--	0.00	0.00	0.25	0.00	

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CSX Transportation
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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-26A	9/30/2008	37.24	--	0.00	0.00	0.25	0.00	
MW-26A	10/1/2008	--	--	0.00	0.00	0.25	0.00	
MW-26A	10/2/2008	37.63	--	0.00	0.00	0.25	0.00	
MW-26A	10/3/2008	38.43	--	0.00	0.00	0.25	0.00	
MW-26A	10/14/2008	37.32	--	0.00	0.00	0.25	0.00	Brown water
MW-26A	10/17/2008	37.62	--	0.00	0.00	0.25	0.00	
MW-26A	10/21/2008	37.74	--	0.00	0.00	0.25	0.00	
MW-26A	10/24/2008	38.27	--	0.00	0.00	0.25	0.00	
MW-26A	10/27/2008	38.43	--	0.00	0.00	0.25	0.00	
MW-26A	11/21/2008	37.75	--	0.00	0.00	0.25	0.00	
MW-26A	11/25/2008	37.84	--	0.00	0.00	0.25	0.00	
MW-26A	12/2/2008	37.58	--	0.00	0.00	0.25	0.00	
MW-26A	12/4/2008	38.19	--	0.00	0.00	0.25	0.00	
MW-26A	12/9/2008	38.47	--	0.00	0.00	0.25	0.00	
MW-26A	12/18/2008	37.29	--	0.00	0.00	0.25	0.00	
MW-26A	12/30/2008	36.09	--	0.00	0.00	0.25	0.00	Clear water/ tan at bottom
MW-26A	1/2/2009	35.86	--	0.00	0.00	0.25	0.00	Light brown to clear water
MW-26A	1/7/2009	35.43	--	0.00	0.00	0.25	0.00	
MW-26A	1/14/2009	35.25	--	0.00	0.00	0.25	0.00	Cloudy water
MW-26A	1/20/2009	35.36	--	0.00	0.00	0.25	0.00	Clear water
MW-26A	1/23/2009	38.59	--	0.00	0.00	0.25	0.00	Clear water/light brown
MW-26A	1/26/2009	35.40	--	0.00	0.00	0.25	0.00	Grey water
MW-26A	1/27/009	35.85	--	0.00	0.00	0.25	0.00	Clear water
MW-26A	1/28/2009	35.61	--	0.00	0.00	0.25	0.00	
MW-26A	2/5/2009	35.65	--	0.00	0.00	0.25	0.00	Clear water
MW-26A	3/3/2009	33.08	--	0.00	0.00	0.25	0.00	Clear water
MW-26A	3/11/2009	33.00	34.36	0.00	0.00	0.25	0.00	
MW-26A	3/17/2009	33.28	34.81	0.00	0.00	0.25	0.00	
MW-26A	3/25/2009	31.97	34.56	0.00	0.00	0.50	0.00	
MW-26A	3/31/2009	33.49	34.83	0.00	0.00	0.25	0.00	
MW-26A	4/20/2009	37.51	38.86	0.00	0.00	0.25	0.00	
MW-26A	4/29/2009	36.79	37.54	0.00	0.00	0.25	0.00	
MW-26A	5/6/2009	36.78	NM	0.00	0.00	0.25	0.00	
MW-26A	5/11/2009	35.54	37.24	0.00	0.00	0.25	0.00	Clear water
MW-26A	5/20/2009	36.39	37.07	0.00	0.00	0.26	0.00	Clear water
MW-26A	5/27/2009	36.45	37.13	0.00	0.00	0.25	0.00	
MW-26A	6/15/2009	35.90	36.40	0.00	0.00	0.25	0.00	
MW-26A	6/24/2009	35.81	37.96	0.00	0.00	0.25	0.00	
MW-26A	6/30/2009	35.56	37.71	0.00	0.00	0.25	0.00	
MW-26A	7/31/2009	33.23	34.54	0.00	0.00	0.25	0.00	
MW-26A	8/13/2009	33.14	34.93	0.00	0.00	0.25	0.00	Clear water
MW-26A	8/26/2009	33.14	34.45	0.00	0.00	0.25	0.00	Clear water
MW-26A	10/2/2009	0.39	32.07	0.00	0.00	0.25	0.00	

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MW-26A	10/6/2009	31.61	33.21	0.00	0.00	0.25	0.00	
MW-26A	12/18/2009	29.98	31.41	0.00	0.00	0.25	0.00	Clear water
MW-26A	1/26/2010	35.36	NM	0.00	0.00	0.00	0.00	
MW-26A	2/3/2010	35.01	NM	0.00	0.00	0.00	0.00	
MW-26A	3/1/2010	34.85	NM	0.00	0.00	0.00	0.00	
MW-26A	8/3/2010	22.39	23.81	0.00	0.00	0.25	0.00	
MW-26A	8/10/2010	23.38	24.77	0.00	0.00	0.25	0.00	
MW-26A	7/13/2011	NM	--	0.00	0.00	0.08	0.00	
MW-26A	8/24/2011	NM	--	0.00	0.00	0.25	0.00	
MW-26A	10/6/2011	30.66	--	0.00	0.00	0.25	0.00	
MW-26A	4/16/2014	--	--	0.50	0.00	0.00	0.00	Bottom at 41.90'
MW-26A	12/31/2014	--	--	0.50	0.00	0.00	0.00	Bottom at 42.24'
MW-26A	3/4/2015	--	--	0.70	0.00	0.00	0.00	Bottom at 41.85'
MW-26A	5/19/2015	--	--	0.60	0.00	0.00	0.00	Bottom at 41.85'
MW-26A	1/6/2016	--	--	0.50	0.00	0.00	0.00	Bottom at 41.85'
MW-26A	2/19/2016	--	--	0.60	0.00	0.00	0.00	Bottom at 41.90'
MW-26A	6/22/2016	--	--	0.50	0.00	0.00	0.00	Bottom at 41.90'
MW-26A	9/9/2016	--	--	0.70	0.00	0.00	0.00	Bottom at 41.90'
MW-26A	10/21/2016	--	--	0.70	0.00	0.00	0.00	Bottom at 42.30'
MW-26A	12/2/2016	--	--	0.60	0.00	0.00	0.00	Bottom at 41.90'
MW-26A	2/24/2017	--	--	0.50	0.00	0.00	0.00	Bottom at 41.90'
MW-26A	4/21/2017	--	--	0.60	0.00	0.00	0.00	Bottom at 41.90'
MW-26A	7/18/2017	--	--	0.55	0.00	0.00	0.00	Bottom at 41.90'
MW-26A	10/20/2017	--	--	0.70	0.00	0.00	0.00	Bottom at 42.25'
MW-26A	2/27/2018	--	--	0.70	0.00	0.00	0.00	Bottom at 42.25'
MW-26A	5/18/2018	--	--	0.50	0.00	0.00	0.00	Bottom at 42.25'
MW-26A	6/14/2018	--	--	--	0.06	0.44	0.06	Bail
MW-26A	8/10/2018	--	--	0.10	0.00	0.00	0.06	Bottom at 42.25'
MW-26A	11/19/2018	--	--	0.05	0.00	0.00	0.06	Bottom at 42.25'
MW-26A	3/15/2019	--	--	0.05	0.00	0.00	0.06	Bottom at 42.25'
MW-26A	6/14/2019	--	--	0.10	0.00	0.00	0.06	Bottom at 43.90'
MW-26A	9/20/2019	--	--	0.10	0.00	0.00	0.06	Bottom at 42.00'
MW-27A	3/5/2008	--	--	--	--	--	--	Not Measured
MW-27A	4/10/2008	--	--	--	--	--	--	Not Measured
MW-27A	9/4/2008	--	--	0.80	3.00	49.50	3.00	
MW-27A	9/5/2008	--	--	4.40	2.00	0.50	5.00	
MW-27A	9/5/2008	--	--	1.50	0.25	0.50	5.25	
MW-27A	9/5/2008	--	--	1.00	0.20	0.80	5.45	
MW-27A	9/5/2008	--	--	1.50	0.25	0.75	5.70	
MW-27A	9/5/2008	--	--	1.00	0.15	0.60	5.85	
MW-27A	9/8/2008	--	--	3.58	2.50	0.40	8.35	
MW-27A	9/9/2008	--	--	1.00	0.10	0.15	8.45	

Notes:
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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-27A	9/10/2008	--	--	4.50	0.35	0.15	8.80	
MW-27A	9/16/2008	--	--	2.70	0.25	0.00	9.05	
MW-27A	9/18/2008	--	--	3.00	1.25	1.25	10.30	
MW-27A	9/24/2008	--	--	4.00	0.30	0.00	10.60	
MW-27A	9/24/2008	--	--	2.60	1.50	0.75	12.10	
MW-27A	9/26/2008	--	--	3.50	1.10	0.65	13.20	
MW-27A	9/26/2008	--	--	1.00	0.20	0.80	13.40	
MW-27A	9/30/2008	--	--	3.10	1.00	1.00	14.40	2.5' up rope from the bailer (~5.5' from the bottom of well), there was a 6" cresote DNAPL staining on bailer on the rope.
MW-27A	9/30/2008	--	--	1.00	0.25	0.75	14.65	Bailer valve noted as malfunctioning; sticking due to DNAPL build-up. Bailed twice this day.
MW-27A	10/1/2008	--	--	4.00	0.25	0.00	14.90	
MW-27A	10/2/2008	--	--	3.50	0.70	1.40	15.60	Bailed twice this day.
MW-27A	10/2/2008	--	--	0.50	0.10	0.40	15.70	
MW-27A	10/3/2008	--	--	1.50	0.50	0.75	16.20	Bailed twice this day. Took 4 bailers with a trace of DNAPL in all. Not sure if was making it to the bottom of well or not.
MW-27A	10/3/2008	--	--	0.50	0.05	0.65	16.25	
MW-27A	10/14/2008	--	--	2.50	1.00	1.50	17.25	Bailed 3 times this day.
MW-27A	10/14/2008	--	--	0.10	0.05	0.40	17.30	
MW-27A	10/17/2008	--	--	2.80	2.10	0.40	19.40	
MW-27A	10/17/2008	--	--	1.20	0.15	0.60	19.55	Bailed twice this day
MW-27A	10/17/2008	--	--	0.60	0.10	0.40	19.65	
MW-27A	10/21/2008	--	--	3.00	2.00	1.25	21.65	
MW-27A	10/21/2008	--	--	1.00	0.15	0.50	21.80	
MW-27A	10/24/2008	--	--	1.00	0.15	1.35	21.95	
MW-27A	10/27/2008	8.05	--	1.20	0.10	0.15	22.05	
MW-27A	11/21/2008	--	--	2.80	2.00	1.00	24.05	
MW-27A	11/25/2008	--	--	2.00	0.50	1.50	24.55	Bailed twice this day
MW-27A	12/2/2008	--	--	2.50	0.60	0.90	25.15	
MW-27A	12/2/2008	--	--	0.15	0.05	0.74	25.20	
MW-27A	12/4/2008	--	--	1.00	0.15	0.85	25.35	
MW-27A	12/9/2008	--	--	3.00	0.40	1.10	25.75	
MW-27A	12/18/2008	--	--	3.00	0.50	1.00	26.25	Bailed twice this day
MW-27A	12/30/2008	--	--	2.80	0.50	0.75	26.75	
MW-27A	12/30/2008	--	--	1.50	0.15	0.85	26.90	
MW-27A	1/2/2009	6.83	--	3.00	2.00	1.00	28.90	
MW-27A	1/7/2009	--	--	2.90	0.60	0.90	29.50	
MW-27A	1/14/2009	--	--	2.50	1.50	0.50	31.00	
MW-27A	1/20/2009	--	--	3.50	1.00	0.75	32.00	
MW-27A	1/20/2009	--	--	3.00	0.45	0.30	32.45	DNAPL thickness greater than 3.0'
MW-27A	1/23/2009	--	--	2.00	0.20	0.80	32.65	DNAPL thickness greater than 3.0'
MW-27A	1/26/2009	--	--	3.00	2.00	0.50	34.65	DNAPL present
MW-27A	1/27/2009	--	--	3.00	2.75	0.75	37.40	DNAPL present. Bailed twice this day.

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-27A	1/28/2009	--	--	2.00	0.25	1.25	37.65	
MW-27A	2/5/2009	--	--	1.30	3.00		40.65	DNAPL present. Bailed twice this day.
MW-27A	3/3/2009	7.34	--	6.00	2.50	1.00	43.15	
MW-27A	3/11/2009	6.34	7.42	2.80	1.20	1.30	44.35	DNAPL present
MW-27A	3/11/2009	--	--	1.00	0.13	1.37	44.48	
MW-27A	3/17/2009	7.77	7.84	3.00	0.55	1.95	45.03	
MW-27A	3/25/2009	6.83	6.84	3.00	0.75	0.80	45.78	
MW-27A	3/31/2009	6.39	6.95	3.00	1.85	1.15	47.63	
MW-27A	4/20/2009	6.73	7.25	2.80	0.75	1.50	48.38	
MW-27A	4/29/2009	7.05	7.05	3.00	1.50	1.50	49.88	
MW-27A	5/6/2009	7.00	7.06	3.00	1.50	1.75	51.38	
MW-27A	5/6/2009	NM	NM	3.00	0.75	1.00	52.13	
MW-27A	5/6/2009	NM	NM	0.80	0.20	0.80	52.33	
MW-27A	5/11/2009	6.95	6.95	3.00	1.25	2.00	53.58	
MW-27A	5/20/2009	6.64	6.70	2.50	1.25	3.75	54.83	
MW-27A	5/27/2009	7.26	7.30	1.20	0.15	1.10	54.98	
MW-27A	5/27/2009	NM	NM	2.00	0.15	0.85	55.13	
MW-27A	6/15/2009	6.82	6.85	0.10	0.25	1.00	55.38	
MW-27A	6/24/2009	6.48	6.61	1.50	0.40	1.10	55.78	
MW-27A	6/30/2009	6.71	6.93	2.50	0.85	1.90	56.63	
MW-27A	7/31/2009	7.73	10.04	3.00	2.00	1.25	58.63	
MW-27A	8/13/2009	7.67	8.27	3.00	2.20	0.80	60.83	
MW-27A	8/26/2009	8.24	8.22	0.10	1.25	1.50	62.08	
MW-27A	10/2/2009	7.02	7.02	2.50	0.75	1.75	62.83	
MW-27A	10/6/2009	7.39	7.48	1.50	1.55	1.45	64.38	
MW-27A	12/18/2009	7.53	7.81	5.50	2.15	1.10	66.53	
MW-27A	12/21/2009	7.39	7.57	1.50	0.55	0.95	67.08	
MW-27A	1/4/2010	8.01	9.23	0.67	1.97	2.53	69.05	
MW-27A	1/6/2010	8.12	8.31	2.50	0.88	1.37	69.93	
MW-27A	1/11/2010	8.20	8.92	3.00	1.05	1.20	70.98	
MW-27A	1/18/2010	8.02	8.73	5.00	1.93	1.32	72.91	DNAPL staining present on bailer
MW-27A	1/25/2010	7.23	7.49	9.50	1.35	1.15	74.26	DNAPL staining present on bailer
MW-27A	2/2/2010	7.94	9.87	11.00	1.69	1.56	75.95	
MW-27A	2/2/2010	7.94	9.08	5.00	0.70	1.55	76.65	
MW-27A	2/4/2010	7.98	8.97	8.00	1.09	1.16	77.74	
MW-27A	2/4/2010	7.97	8.50	3.00	0.18	1.57	77.92	
MW-27A	2/5/2010	7.81	9.07	5.00	0.69	1.81	78.61	
MW-27A	2/22/2010	7.12	8.31	11.00	1.45	1.80	80.06	
MW-27A	3/2/2010	7.88	9.09	10.00	1.43	2.07	81.49	
MW-27A	3/2/2010	7.93	9.17	2.00	0.23	1.02	81.72	
MW-27A	3/4/2010	7.91	NM	9.00	1.23	2.02	82.95	
MW-27A	3/4/2010	8.53	11.32	1.00	0.14	1.11	83.09	
MW-27A	3/8/2010	7.98	9.18	9.50	1.20	0.80	84.29	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-27A	3/11/2010	7.96	9.27	8.00	1.05	1.20	85.34	
MW-27A	3/24/2010	7.29	6.70	7.75	0.90	1.35	86.24	
MW-27A	4/16/2010	7.51	8.63	11.00	1.24	0.51	87.48	
MW-27A	4/26/2010	7.11	7.32	4.00	0.27	0.73	87.75	
MW-27A	5/5/2010	7.46	7.54	0.00	0.00	0.50	87.75	DNAPL Globules and coarse sand presnet in bailer
MW-27A	6/1/2010	7.93	8.32	0.00	0.00	0.25	87.75	
MW-27A	6/9/2010	7.78	7.87	0.00	0.00	0.25	87.75	
MW-27A	8/3/2010	8.39	--	0.00	--	NB	87.75	Measured for DNAPL with tape
MW-27A	8/10/2010	8.43	--	0.00	--	NB	87.75	Measured for DNAPL with tape
MW-27A	8/17/2010	8.62	--	0.00	--	NB	87.75	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-27A	8/23/2010	8.37	--	0.40	--	NB	87.75	Bottom at 26.35' (to sand); Measured for DNAPL with tape
MW-27A	8/30/2010	8.49	--	0.00	--	NB	87.75	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-27A	9/17/2010	8.47	--	0.00	--	NB	87.75	Sand at 26.31'; Measured for DNAPL with tape
MW-27A	2/18/2011	7.92	--	2.29	--	NB	87.75	Measured for DNAPL with tape
MW-27A	2/22/2011	6.90	--	0.50	0.13	0.38	87.88	Sand at 24.75'
MW-27A	4/19/2011	6.63	--	1.50	--	NB	87.88	Sand at 25.50'
MW-27A	6/27/2011	6.88	--	2.10	--	NB	87.88	Sand in well
MW-27A	6/5/2012	--	--	0.50	--	NB	87.88	Bottom at 25.75'; sand in well.
*Abandoned April 2013, Replaced with RW-17								
MW-29B	2/19/2009	--	--	2.00	0.25	1.00	0.25	Neon green water from tracer study, DNAPL present
MW-29B	3/3/2009	14.22	--	0.50	0.08	0.67	0.33	Neon green water from tracer study, DNAPL present
MW-29B	3/11/2009	10.86	15.33	0.25	0.08	0.92	0.41	
MW-29B	3/17/2009	10.10	14.06	0.30	0.10	0.90	0.51	
MW-29B	3/25/2009	10.79	17.94	0.50	0.05	1.00	0.56	Neon green water from tracer study
MW-29B	3/31/2009	10.83	15.34	0.80	0.10	0.65	0.66	
MW-29B	4/20/2009	6.44	11.44	0.01	0.00	0.75	0.66	Neon green water from tracer study
MW-29B	4/29/2009	10.08	14.56	0.10	0.00	0.75	0.66	
MW-29B	5/6/2009	11.08	15.45	0.00	0.00	0.25	0.66	
MW-29B	5/11/2009	11.53	13.06	0.00	0.00	0.25	0.66	DNAPL staining on bailer
MW-29B	5/20/2009	10.48	11.98	0.01	0.01	0.24	0.67	Yellow water from tracer study
MW-29B	5/27/2009	10.96	12.29	0.01	0.01	0.24	0.68	Neon green water from tracer study
MW-29B	6/15/2009	10.84	12.17	0.00	0.00	0.25	0.68	Neon green water from tracer study
MW-29B	6/24/2009	10.43	13.48	0.12	0.03	0.47	0.71	
MW-29B	6/30/2009	10.49	12.28	0.05	0.01	0.24	0.72	
MW-29B	7/31/2009	8.84	10.47	0.00	0.00	0.25	0.72	DNAPL staining on bailer
MW-29B	8/13/2009	10.89	15.51	0.30	0.04	0.71	0.76	
MW-29B	8/26/2009	9.67	11.20	0.01	0.00	0.25	0.76	Yellow water from tracer study
MW-29B	10/2/2009	7.93	9.45	0.10	0.01	0.24	0.77	0.3' dk. Grey water, yellow water from tracer study
MW-29B	10/6/2009	8.08	9.62	0.00	0.00	0.25	0.77	DNAPL on bottom of bailer

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MW-29B	12/18/2009	18.30	20.04	0.00	0.00	0.25	0.77	DNAPL staining on bailer
MW-29B	12/28/2009	NM	NM	0.25	0.06	0.18	0.83	
MW-29B	1/26/2010	11.31	18.77	0.20	0.10	1.15	0.93	
MW-29B	2/3/2010	10.45	12.87	0.00	0.00	0.25	0.93	DNAPL staining on bailer
MW-29B	2/22/2010	8.22	13.80	0.25	0.03	0.97	0.96	
MW-29B	3/8/2010	9.18	10.93	0.10	0.01	0.49	0.97	
MW-29B	4/16/2010	10.56	18.72	0.10	0.02	0.73	0.99	
MW-29B	6/1/2010	11.58	14.60	0.25	0.02	0.48	1.01	
MW-29B	7/6/2010	10.83	13.96	0.16	0.02	0.48	1.03	
MW-29B	8/3/2010	10.09	11.61	0.00	0.00	0.25	1.03	
MW-29B	8/10/2010	9.82	11.77	0.00	0.00	0.25	1.03	
MW-29B	8/30/2010	9.45	--	0.00	--	NB	1.03	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-29B	2/22/2011	8.32	--	0.00	--	NB	1.03	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-29B	3/4/2011	7.85	--	0.01	0.01	0.24	1.04	
MW-29B	3/28/2011	9.95	--	0.75	0.15	0.60	1.19	
MW-29B	4/4/2011	10.80	--	0.90	0.01	0.50	1.20	
MW-29B	4/12/2011	10.76	--	0.80	0.10	0.40	1.30	
MW-29B	4/19/2011	11.05	--	0.90	0.01	0.07	1.31	0.7' DNAPL staining on bailer on outside of bailer; Bottom at 37.05'
MW-29B	4/25/2011	10.36	--	0.50	0.06	0.44	1.37	
MW-29B	5/9/2011	10.36	--	0.30	0.01	0.25	1.38	
MW-29B	5/18/2011	11.07	--	0.20	0.00	0.25	1.38	Bottom at 36.96'
MW-29B	6/6/2011	11.18	--	0.90	--	NB	1.38	Bottom at 36.99'; Measured for DNAPL with tape
MW-29B	6/7/2011	11.17	--	0.90	0.04	0.21	1.42	
MW-29B	6/20/2011	10.62	--	0.20	0.01	0.24	1.43	
MW-29B	6/27/2011	11.99	--	0.50	0.05	0.45	1.48	
MW-29B	7/8/2011	--	--	0.20	0.02	0.23	1.50	
MW-29B	7/13/2011	10.49	--	0.30	0.02	0.48	1.52	
MW-29B	7/18/2011	10.65	--	0.10	0.00	0.25	1.52	
MW-29B	7/25/2011	10.52	--	0.20	0.00	0.25	1.53	
MW-29B	8/5/2011	18.20	--	0.01	0.00	0.25	1.53	Trace amount of DNAPL
MW-29B	8/15/2011	9.99	--	0.20	0.00	0.25	1.53	
MW-29B	8/24/2011	9.55	--	0.20	0.00	0.25	1.53	
MW-29B	9/6/2011	9.37	--	0.20	0.00	0.25	1.53	
MW-29B	9/12/2011	9.63	--	0.20	0.00	0.25	1.54	
MW-29B	9/19/2011	9.32	--	0.00	0.00	0.25	1.54	DNAPL staining on bailer
MW-29B	10/6/2011	9.62	--	0.00	0.00	0.25	1.54	Trace amount of DNAPL; green water
MW-29B	10/19/2011	8.93	--	0.20	0.00	0.25	1.54	
MW-29B	10/24/2011	8.60	--	0.10	0.00	0.25	1.54	
MW-29B	11/8/2011	7.77	--	0.00	0.00	0.25	1.54	Slight DNAPL staining on bailer, sheen
MW-29B	6/5/2012	--	--	1.30	--	NB	1.54	Bottom at 36.90, need to resurvey.
MW-29B	11/14/2012	--	--	1.50	--	NB	1.54	
MW-29B	1/9/2013	--	--	1.30	--	NB	1.54	Bottom at 36.55'

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-29B	4/18/2013	--	--	2.00	--	NB	1.54	
MW-29B	8/23/2013	--	--	3.80	--	NB	1.54	Bottom at 37.80', 5' of sediment in well
MW-29B	10/11/2013	--	--	--	2.93	27.07	4.47	Air Lift, Bottom at 41.05'
MW-29B	11/25/2013	--	--	0.00	--	NB	4.47	Bottom at 39.90', soft
MW-29B	4/16/2014	--	--	2.00	0.00	0.00	4.47	Bottom at 39.7'
MW-29B	12/29/2014	--	--	1.80	0.00	0.00	4.47	Bottom at 40.40'
MW-29B	3/4/2015	--	--	2.10	0.00	0.00	4.47	Bottom at 40.40'
MW-29B	5/19/2015	--	--	2.40	0.00	0.00	4.47	Bottom at 40.40'
MW-29B	7/13/2015	--	--	2.40	0.00	0.00	4.47	
MW-29B	1/6/2016	--	--	3.25	0.00	0.00	4.47	Bottom at 39.30'
MW-29B	2/10/2016	--	--	3.60	0.00	0.00	4.47	Bottom at 39.40'
MW-29B	6/22/2016	--	--	4.30	0.00	0.00	4.47	Bottom at 39.30'
MW-29B	6/29/2016	--	--	--	0.60	0.65	5.07	Bail
MW-29B	9/9/2016	--	--	0.60	0.00	0.00	5.07	Bottom at 39.40'
MW-29B	10/21/2016	--	--	0.90	0.00	0.00	5.07	Bottom at 39.85'
MW-29B	12/2/2016	--	--	1.10	0.00	0.00	5.07	Bottom at 39.90'
MW-29B	2/24/2017	--	--	1.00	0.00	0.00	5.07	Bottom at 39.90'
MW-29B	4/21/2017	--	--	1.10	0.00	0.00	5.07	Bottom at 39.90'
MW-29B	7/21/2017	--	--	1.90	0.00	0.00	5.07	Bottom at 39.90'
MW-29B	10/20/2017	--	--	2.80	0.00	0.00	5.07	Bottom at 39.90'
MW-29B	2/27/2018	--	--	3.90	0.00	0.00	5.07	Bottom at 39.90'
MW-29B	5/18/2018	--	--	5.20	0.00	0.00	5.07	Bottom at 39.90'
MW-29B	6/14/2018	--	--	--	0.96	0.29	6.03	Bail
MW-29B	8/10/2018	--	--	0.70	0.00	0.00	6.03	Bottom at 39.90'
MW-29B	11/19/2018	--	--	1.10	0.00	0.00	6.03	Bottom at 39.90'
MW-29B	3/15/2019	--	--	1.10	0.00	0.00	6.03	Bottom at 39.90'
MW-29B	6/12/2019	--	--	--	0.30	0.45	6.33	Bail
MW-29B	6/14/2019	--	--	0.40	0.00	0.00	6.33	Bottom at 40.00'
MW-29B	9/20/2019	--	--	0.40	0.0000	0.0000	6.33	Bottom at 40.00'
MW-36B	9/23/2010	--	--	0.20	0.02	0.23	0.02	
MW-36B	9/24/2010	19.31	--	0.20	0.02	0.23	0.04	
MW-36B	10/1/2010	19.28	--	0.33	0.03	0.22	0.07	
MW-36B	10/5/2010	19.28	20.85	0.40	0.04	0.21	0.11	
MW-36B	10/12/2010	19.29	20.26	0.40	0.04	0.21	0.15	
MW-36B	10/18/2010	19.24	20.24	0.40	0.04	0.21	0.19	
MW-36B	10/29/2010	18.26	--	0.40	--	NB	0.19	Measured for DNAPL with tape
MW-36B	12/10/2010	18.98	--	1.00	0.09	0.41	0.28	
MW-36B	12/28/2010	19.00	--	1.25	0.04	0.71	0.32	
MW-36B	1/3/2011	18.07	--	0.40	0.04	0.46	0.36	
MW-36B	1/10/2011	18.95	--	0.20	0.02	0.48	0.38	
MW-36B	1/17/2011	19.01	--	0.15	0.01	0.24	0.39	
MW-36B	1/28/2011	--	--	0.20	--	NB	0.39	Measured for DNAPL with tape

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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-36B	2/18/2011	18.89	--	0.51	--	NB	0.39	Measured for DNAPL with tape
MW-36B	2/22/2011	15.74	--	0.40	0.185	0.07	0.58	
MW-36B	3/4/2011	17.64	--	0.10	0.01	0.24	0.59	
MW-36B	3/18/2011	18.23	--	0.60	0.05	0.45	0.64	
MW-36B	3/28/2011	18.75	--	0.01	0.00	0.25	0.64	
MW-36B	4/4/2011	16.35	--	0.01	0.00	0.25	0.64	
MW-36B	4/12/2011	15.00	--	0.00	0.00	0.25	0.64	DNAPL staining on bailer
MW-36B	4/19/2011	11.42	--	0.01	0.01	0.07	0.65	Bottom at 36.80'
MW-36B	5/9/2011	17.81	--	0.05	0.01	0.24	0.66	
MW-36B	5/18/2011	18.28	--	0.00	--	NB	0.66	Bottom at 36.82'; Measured for DNAPL with tape
MW-36B	6/6/2011	18.91	--	0.30	--	NB	0.66	Bottom at 36.78'; Measured for DNAPL with tape
MW-36B	6/7/2011	18.84	--	0.20	0.02	0.23	0.68	
MW-36B	6/15/2011	18.79		0.10	0.01	0.24	0.69	
MW-36B	6/20/2011	18.03	--	0.30	0.01	0.24	0.70	
MW-36B	6/27/2011	15.80	--	0.20	0.01	0.24	0.71	
MW-36B	7/8/2011	18.90	--	0.10	0.01	0.24	0.72	Flouresents present in well due to tracer study
MW-36B	7/11/2011	18.99	--	0.50	0.04	0.46	0.76	
MW-36B	7/13/2011	19.07	--	0.20	0.00	0.49	0.76	
MW-36B	7/18/2011	19.12	--	0.30	0.01	0.24	0.77	
MW-36B	7/25/2011	18.87	--	0.30	0.00	0.25	0.77	
MW-36B	8/5/2011	19.30	--	0.10	0.01	0.25	0.78	
MW-36B	8/15/2011	19.15	--	0.50	0.01	0.49	0.79	
MW-36B	8/24/2011	19.10	--	0.40	0.01	0.24	0.80	
MW-36B	9/6/2011	19.39	--	0.40	0.01	0.24	0.81	
MW-36B	9/12/2011	19.31	--	0.20	0.00	0.25	0.82	
MW-36B	9/19/2011	18.56	--	0.20	0.08	0.17	0.90	
MW-36B	10/6/2011	19.16	--	0.20	0.01	0.24	0.91	
MW-36B	6/5/2012	--	--	1.40	--	NB	0.91	Bottom at 36.99'
MW-36B	11/14/2012	--	--	2.00	--	NB	0.91	
MW-36B	4/18/2013	--	--	2.00	--	NB	0.91	
MW-36B	8/23/2013	--	--	2.00	--	NB	0.91	Bottom at 36.95'
MW-36B	4/16/2014	--	--	2.00	0.00	0.00	0.91	Bottom at 36.9'
MW-36B	12/29/2014	--	--	1.70	0.00	0.00	0.91	Bottom at 37.45'
MW-36B	3/4/2015	--	--	2.30	0.00	0.00	0.91	Bottom at 37.10'
MW-36B	5/19/2015	--	--	2.10	0.00	0.00	0.91	Bottom at 37.10'
MW-36B	1/6/2016	--	--	2.00	0.00	0.00	0.91	Bottom at 37.10'
MW-36B	2/19/2016	--	--	2.20	0.00	0.00	0.91	Bottom at 37.15'
MW-36B	6/22/2016	--	--	2.70	0.00	0.00	0.91	Bottom at 37.15'
MW-36B	6/29/2016	--	--	--	0.35	0.90	1.26	Bail
MW-36B	9/9/2016	--	--	0.80	0.00	0.00	1.26	Bottom at 37.15'
MW-36B	10/21/2016	--	--	1.30	0.00	0.00	1.26	Bottom at 37.15'
MW-36B	12/2/2016	--	--	2.30	0.00	0.00	1.26	Bottom at 37.15'

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-36B	2/24/2017	--	--	2.50	0.00	0.00	1.26	Bottom at 37.15'
MW-36B	4/21/2017	--	--	2.10	0.00	0.00	1.26	Bottom at 37.15'
MW-36B	7/18/2017	--	--	2.40	0.00	0.00	1.26	Bottom at 37.15'
MW-36B	10/20/2017	--	--	2.40	0.00	0.00	1.26	Bottom at 37.45'
MW-36B	2/27/2018	--	--	2.20	0.00	0.00	1.26	Bottom at 37.45'
MW-36B	5/18/2018	--	--	2.10	0.00	0.00	1.26	Bottom at 37.45'
MW-36B	6/14/2018	--	--	--	0.38	0.38	1.64	Bail
MW-36B	8/10/2018	--	--	2.10	0.00	0.00	1.64	Bottom at 37.45'
MW-36B	11/19/2018	--	--	2.40	0.00	0.00	1.64	Bottom at 37.45'
MW-36B	3/15/2019	--	--	2.20	0.00	0.00	1.64	Bottom at 37.45'
MW-36B	6/12/2019	--	--	--	0.33	0.68	1.96	Bail
MW-36B	6/14/2019	--	--	1.90	0.00	0.00	1.96	Bottom at 37.20'
MW-36B	9/20/2019	--	--	2.80	0.00	0.00	1.96	Bottom at 37.20'
MW-36C	4/29/2010	49.48	NM	0.25	0.04	0.71	0.04	
MW-36C	5/11/2010	48.22	49.49	0.33	0.03	0.47	0.07	
MW-36C	6/1/2010	44.88	50.12	0.33	0.03	0.47	0.10	
MW-36C	6/9/2010	43.44	49.56	0.17	0.01	0.49	0.11	2" DNAPL staining on bailer
MW-36C	6/24/2010	43.66	48.73	0.33	0.01	0.49	0.12	
MW-36C	7/6/2010	39.65	44.13	0.25	0.02	0.48	0.14	
MW-36C	7/13/2010	39.13	43.92	0.25	0.02	0.48	0.16	
MW-36C	7/20/2010	38.62	41.12	0.08	0.01	0.24	0.17	
MW-36C	8/3/2010	34.97	37.42	0.20	0.02	0.48	0.19	
MW-36C	8/10/2010	35.45	36.70	0.01	0.00	0.25	0.19	
MW-36C	8/17/2010	35.21	--	0.00	--	NB	0.19	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-36C	8/23/2010	33.53	--	1.00	--	NB	0.19	Bottom at 63.50'; Measured for DNAPL with tape
MW-36C	8/30/2010	32.09	--	0.00	--	NB	0.19	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-36C	9/17/2010	29.14	31.81	0.25	0.02	0.48	0.21	
MW-36C	9/24/2010	38.68	--	0.20	0.02	0.23	0.23	
MW-36C	10/1/2010	37.66	38.95	0.00	0.00	0.25	0.23	DNAPL staining on bailer
MW-36C	10/5/2010	37.69	39.00	0.00	0.00	0.25	0.23	DNAPL staining on bailer
MW-36C	10/12/2010	36.74	--	0.00	0.00	0.25	0.23	DNAPL staining on bailer; bottom at 63.58'
MW-36C	10/18/2010	36.31	--	0.00	0.00	0.25	0.23	DNAPL staining on bailer
MW-36C	10/29/2010	34.40	--	0.00	--	NB	0.23	Measured for DNAPL with tape
MW-36C	12/10/2010	25.85	--	0.00	--	NB	0.23	Measured for DNAPL with tape
MW-36C	12/28/2010	32.97	--	0.20	0.01	0.24	0.24	
MW-36C	1/3/2011	18.07	--	0.10	0.01	0.24	0.25	
MW-36C	1/10/2011	32.24	--	0.00	0.01	0.24	0.26	
MW-36C	1/17/2011	31.77	--	0.00	0.00	0.25	0.26	DNAPL globules present in bailer
MW-36C	1/28/2011	--	--	0.00	--	NB	0.26	Measured for DNAPL with tape
MW-36C	2/18/2011	25.95	--	0.78	--	NB	0.26	Measured for DNAPL with tape

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-36C	2/22/2011	25.33	--	0.14	0.01	0.24	0.27	
MW-36C	3/4/2011	24.73	--	0.00	0.00	0.25	0.27	DNAPL staining on bailer
MW-36C	3/18/2011	31.42	--	0.00	0.01	0.24	0.28	
MW-36C	3/28/2011	32.35	--	0.00	0.00	0.25	0.28	
MW-36C	4/4/2011	29.83	--	0.00	0.00	0.25	0.28	DNAPL staining on bailer
MW-36C	4/12/2011	29.19	--	0.00	0.00	0.25	0.28	DNAPL staining on bailer
MW-36C	4/19/2011	28.79	--	0.00	--	NB	0.28	Bottom at 63.04'; Measured for DNAPL with tape
MW-36C	5/9/2011	24.76	--	0.15	0.01	0.24	0.29	
MW-36C	5/18/2011	25.93	--	0.00	--	NB	0.29	Measured for DNAPL with tape
MW-36C	6/6/2011	23.28	--	0.00	--	NB	0.29	Measured for DNAPL with tape
MW-36C	6/7/2011	22.15	--	0.00	0.00	0.25	0.29	
MW-36C	6/15/2011	21.04	--	0.00	--	NB	0.29	Measured for DNAPL with tape
MW-36C	6/20/2011	22.75	--	0.00	0.00	0.25	0.29	
MW-36C	6/27/2011	27.03	--	0.00	0.00	0.50	0.29	DNAPL staining on bailer
MW-36C	7/8/2011	26.85	--	0.00	0.00	0.25	0.29	DNAPL staining on bailer
MW-36C	7/11/2011	28.08	--	0.00	0.00	0.25	0.29	
MW-36C	7/18/2011	28.20	--	0.00	0.00	0.25	0.29	DNAPL staining on bailer
MW-36C	7/25/2011	29.09	--	0.00	0.00	0.25	0.29	DNAPL staining on bailer
MW-36C	8/5/2011	28.42	--	0.00	0.00	0.25	0.29	Trace amount of DNAPL in bailer
MW-36C	8/24/2011	26.51	--	0.20	0.00	0.08	0.29	0.08gal bailer used
MW-36C	10/6/2011	28.15	--	0.00	0.00	0.25	0.29	Trace amount of DNAPL in bailer
MW-36C	6/5/2012	--	--	0.50	--	NB	0.29	Bottom at 63.35'
MW-36C	11/14/2012	--	--	0.50	--	NB	0.29	
MW-36C	4/18/2013	--	--	0.00	--	NB	0.29	Globs
MW-36C	8/23/2013	--	--	0.00	--	NB	0.29	Bottom at 63.25'
MW-36C	4/16/2014	--	--	0.40	0.00	0.00	0.29	Bottom at 63.35'
MW-36C	12/31/2014	--	--	0.00	0.00	0.00	0.29	Trace on probe; bottom at 63.68'
MW-36C	3/4/2015	--	--	0.00	0.00	0.00	0.29	Trace on probe; bottom at 63.35'
MW-36C	5/19/2015	--	--	0.00	0.00	0.00	0.29	Trace on probe; bottom at 63.40'
MW-36C	1/6/2016	--	--	0.00	0.00	0.00	0.29	Trace on probe; bottom at 63.45'
MW-36C	2/19/2016	--	--	0.00	0.00	0.00	0.29	Trace on probe; bottom at 63.45'
MW-36C	6/22/2016	--	--	0.00	0.00	0.00	0.29	Trace on probe; bottom at 63.45'
MW-36C	9/9/2016	--	--	0.00	0.00	0.00	0.29	Bottom at 64.00'
MW-36C	10/21/2016	--	--	0.00	0.00	0.00	0.29	Bottom at 63.45'
MW-36C	12/2/2016	--	--	0.00	0.00	0.00	0.29	Bottom at 64.50'
MW-36C	2/24/2017	--	--	0.20	0.00	0.00	0.29	Bottom at 63.50'
MW-36C	4/21/2017	--	--	0.20	0.00	0.00	0.29	Bottom at 63.50'
MW-36C	7/18/2017	--	--	0.05	0.00	0.00	0.29	Bottom at 63.50'
MW-36C	10/20/2017	--	--	0.05	0.00	0.00	0.29	Bottom at 63.50'
MW-36C	2/27/2018	--	--	0.20	0.00	0.00	0.29	Bottom at 63.50'
MW-36C	5/18/2018	--	--	0.40	0.00	0.00	0.29	Bottom at 63.50'
MW-36C	8/10/2018	--	--	0.00	0.00	0.00	0.29	Bottom at 63.50'
MW-36C	11/19/2018	--	--	0.40	0.00	0.00	0.29	Bottom at 63.50'

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CSX Transportation
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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-36C	3/15/2019	--	--	0.50	0.00	0.00	0.29	Bottom at 63.50'
MW-36C	6/14/2019	--	--	0.50	0.00	0.00	0.29	Bottom at 63.50'
MW-36C	9/20/2019	--	--	0.60	0.00	0.00	0.29	Bottom at 63.40'
MW-37C	10/6/2011	NM	--	0.00	0.00	0.25	0.00	No odor, silty
MW-37C	10/10/2011	NM	--	0.00	0.00	0.25	0.00	Odor
MW-37C	10/19/2011	NM	--	0.00	0.00	0.25	0.00	Odor, silty
MW-37C	10/24/2011	26.75	--	0.00	0.00	0.25	0.00	Odor, silty
MW-37C	11/8/2011	NM	--	0.00	0.00	0.25	0.00	Odor, silty
MW-37C	4/16/2014	--	--	0.00	0.00	0.00	0.00	Trace product on bottom 1-2' of probe. Bottom at 48.9'
MW-37C	12/29/2014	--	--	0.00	0.00	0.00	0.00	Bottom at 49.30'
MW-37C	3/4/2015	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	1/6/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 49.05'
MW-37C	2/19/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	6/22/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	9/9/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	10/21/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	12/2/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	2/24/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	4/21/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	7/18/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	10/20/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	2/27/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	5/18/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	8/10/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	11/19/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	3/15/2019	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	6/14/2019	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-37C	9/20/2019	--	--	0.00	0.00	0.00	0.00	Bottom at 49.00'
MW-39A	4/14/2010	31.75	NM	2.00	0.25	1.00	0.25	
MW-39A	4/21/2010	35.03	37.60	0.50	0.10	0.15	0.35	
MW-39A	5/11/2010	30.59	35.67	3.33	0.57	0.68	0.92	
MW-39A	6/1/2010	28.78	35.78	3.25	0.66	0.84	1.58	
MW-39A	6/9/2010	29.19	35.91	2.00	0.21	0.79	1.79	
MW-39A	6/24/2010	30.35	36.01	3.50	0.59	0.66	2.38	
MW-39A	7/6/2010	28.22	34.61	3.00	0.29	0.46	2.67	
MW-39A	7/13/2010	27.97	35.01	3.00	0.33	0.67	3.00	
MW-39A	7/20/2010	25.73	34.01	3.00	0.38	0.62	3.38	
MW-39A	8/3/2010	25.69	28.19	1.00	0.09	0.41	3.47	
MW-39A	8/10/2010	24.07	29.16	1.50	0.29	0.96	3.76	
MW-39A	8/17/2010	26.81	--	1.25	--	NB	3.76	Recovery Program Temporarily Suspended; Measured for DNAPL with tape

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MW-39A	8/23/2010	23.25	--	2.50	--	NB	3.76	Bottom at 37.75'; Measured for DNAPL with tape
MW-39A	9/17/2010	15.62	20.32	2.70	0.53	0.72	4.29	
MW-39A	10/1/2010	23.13	--	3.25	0.51	0.74	4.80	
MW-39A	10/5/2010	25.35	31.12	2.25	0.58	0.92	5.38	
MW-39A	10/12/2010	27.95	--	3.40	0.63	0.62	6.01	
MW-39A	10/18/2010	28.04	--	3.00	0.65	0.85	6.66	
MW-39A	10/29/2010	27.95	--	3.50	--	NB	6.66	Bottom at 37.75'; Measured for DNAPL with tape
MW-39A	12/28/2010	15.95	--	3.50	0.55	0.70	7.21	
MW-39A	1/17/2011	9.50	--	4.25	0.43	0.57	7.64	
MW-39A	1/28/2011	--	--	2.00	--	NB	7.64	Measured for DNAPL with tape
MW-39A	3/18/2011	13.75	--	4.25	0.58	0.42	8.22	
MW-39A	4/4/2011	11.97	--	0.30	0.20	0.30	8.42	
MW-39A	4/12/2011	11.53	--	1.50	0.25	0.25	8.67	
MW-39A	4/19/2011	13.52	--	2.50	0.31	0.44	8.98	Bottom at 37.45'
MW-39A	5/9/2011	13.45	--	2.70	0.41	0.34	9.39	
MW-39A	5/16/2011	15.94	--	1.50	0.15	0.60	9.54	
MW-39A	6/16/2011	--	--	2.20	0.34	0.41	9.88	
MW-39A	6/20/2011	6.56	--	2.00	0.21	0.54	10.09	
MW-39A	6/27/2011	13.69	--	0.40	0.01	0.24	10.10	
MW-39A	7/8/2011	10.00	--	0.30	0.04	0.21	10.14	
MW-39A	7/11/2011	12.81	--	0.40	0.02	0.49	10.15	
MW-39A	7/13/2011	15.40	--	0.40	0.05	0.45	10.20	
MW-39A	7/18/2011	17.17	--	0.70	0.08	0.43	10.28	
MW-39A	7/25/2011	18.18	--	0.90	0.11	0.64	10.39	
MW-39A	8/5/2011	19.38	--	1.20	0.80	1.20	11.19	
MW-39A	8/15/2011	20.06	--	2.00	0.14	0.61	11.33	
MW-39A	8/24/2011	19.92	--	1.20	0.13	0.63	11.45	
MW-39A	9/6/2011	18.31	--	1.30	0.28	0.23	11.73	
MW-39A	9/12/2011	19.64	--	1.00	0.21	0.54	11.94	
MW-39A	9/19/2011	NM	--	--	--	--	11.94	Location underwater
MW-39A	10/10/2011	23.92	--	1.40	0.20	0.55	12.14	
MW-39A	10/19/2011	16.88	--	0.40	0.08	0.43	12.22	
MW-39A	10/24/2011	15.37	--	0.30	0.11	0.39	12.32	
MW-39A	11/8/2011	15.05	--	0.08	0.01	0.24	12.34	
MW-39A	6/5/2012	--	--	0.50	--	NB	12.34	Bottom at 37.60'
MW-39A	11/14/2012	--	--	0.50	--	NB	12.34	
MW-39A	4/18/2013	--	--	0.60	--	NB	12.34	
MW-39A	8/23/2013	--	--	0.50	--	NB	12.34	Bottom at 37.50'
MW-39A	4/16/2014	--	--	0.50	0.00	0.00	12.34	Bottom at 37.5'
MW-39A	12/29/2014	--	--	0.60	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	3/4/2015	--	--	0.60	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	5/19/2015	--	--	0.60	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	1/6/2016	--	--	0.60	0.00	0.00	12.34	Bottom at 37.70'

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MW-39A	2/19/2016	--	--	0.60	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	6/22/2016	--	--	0.60	0.00	0.00	12.34	Bottom at 37.75'
MW-39A	9/9/2016	--	--	0.00	0.00	0.00	12.34	Bottom at 37.15'
MW-39A	10/21/2016	--	--	0.60	0.00	0.00	12.34	Bottom at 37.80'
MW-39A	12/1/2016	--	--	0.60	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	2/24/2017	--	--	0.50	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	4/21/2017	--	--	0.50	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	7/18/2017	--	--	0.60	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	10/20/2017	--	--	0.60	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	2/27/2018	--	--	0.60	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	5/18/2018	--	--	0.50	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	8/10/2018	--	--	0.10	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	11/10/2018	--	--	0.50	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	3/15/2019	--	--	0.00	0.00	0.00	12.34	Bottom at 37.70'
MW-39A	6/14/2019	--	--	0.70	0.00	0.00	12.34	Bottom at 37.60'
MW-39A	9/20/2019	--	--	0.00	0.00	0.00	12.34	Bottom at 37.80'
MW-48A	1/11/2011	47.75	--	2.25	0.19	0.06	0.19	
MW-48A	1/12/2011	--	--	1.00	0.08	0.17	0.27	
MW-48A	4/18/2011	23.65	33.80	3.80	0.68	1.07	0.95	Bottom at 71.05'
MW-48A	4/18/2011	33.70	38.00	1.00	0.10	0.65	1.05	
MW-48A	4/18/2011	37.85	40.70	0.00	0.00	0.50	1.05	
MW-48A	4/18/2011	40.30	41.50	0.00	0.00	0.25	1.05	
MW-48A	4/18/2011	41.30	42.60	0.00	0.00	0.25	1.05	Bailed five times this day
MW-48A	4/19/2011	38.60	44.40	1.50	0.20	0.80	1.25	
MW-48A	4/19/2011	44.05	45.45	0.20	0.02	0.23	1.27	
MW-48A	4/19/2011	45.00	46.15	0.10	0.01	0.24	1.28	
MW-48A	4/19/2011	45.80	47.00	0.10	0.01	0.24	1.29	Bailed four times this day
MW-48A	4/20/2011	42.70	46.95	0.50	0.07	0.68	1.36	
MW-48A	4/20/2011	46.45	49.05	0.10	0.02	0.48	1.38	
MW-48A	4/20/2011	48.55	49.70	0.00	0.00	0.25	1.38	Bailed three times this day
MW-48A	4/21/2011	45.40	48.30	1.00	0.09	0.41	1.47	
MW-48A	4/25/2011	38.12	--	3.25	0.50	1.00	1.97	
MW-48A	4/26/2011	43.70	--	1.60	0.26	1.24	2.23	
MW-48A	4/27/2011	46.95	--	1.30	0.17	0.83	2.40	
MW-48A	4/29/2011	43.62	--	2.20	0.38	0.87	2.78	
MW-48A	5/4/2011	34.95	--	2.70	0.45	1.30	3.23	
MW-48A	5/9/2011	34.10	--	3.50	0.57	1.18	3.80	
MW-48A	5/10/2011	39.79	--	1.00	0.11	0.64	3.91	
MW-48A	5/11/2011	41.43	--	1.00	0.11	0.64	4.02	
MW-48A	5/12/2011	41.90	--	0.80	0.12	1.13	4.14	
MW-48A	5/13/2011	45.53	--	0.80	0.13	1.12	4.27	
MW-48A	5/16/2011	38.92	--	1.50	0.23	0.77	4.50	

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MW-48A	5/19/2011	35.59	--	2.10	0.53	0.22	5.03	
MW-48A	5/24/2011	30.71	--	1.50	0.23	0.77	5.26	
MW-48A	5/31/2011	29.71	--	1.80	0.28	0.72	5.54	
MW-48A	6/2/2011	31.99	--	0.60	0.10	0.90	5.64	
MW-48A	6/7/2011	30.58	--	1.70	0.21	0.79	5.85	
MW-48A	6/9/2011	--	--	0.75	0.14	0.86	5.99	
MW-48A	6/14/2011	30.99	--	0.75	0.15	1.10	6.14	
MW-48A	6/15/2011	35.88	--	1.00	0.15	0.85	6.29	
MW-48A	6/16/2011	39.05	--	0.40	0.07	0.93	6.36	
MW-48A	6/20/2011	34.74	--	3.00	0.28	0.72	6.64	Bailed twice this day
MW-48A	6/20/2011	39.65	--	0.50	0.03	0.47	6.67	
MW-48A	6/21/2011	40.28	--	0.50	0.07	0.93	6.74	Bailed twice this day
MW-48A	6/21/2011	51.84	--	0.30	0.03	0.47	6.77	
MW-48A	6/22/2011	54.10	--	0.40	0.03	0.47	6.80	
MW-48A	6/23/2011	47.79	--	1.00	0.11	0.89	6.91	
MW-48A	6/24/2011	47.58	--	0.10	0.01	0.49	6.92	
MW-48A	6/27/2011	38.55	--	1.70	0.17	0.83	7.09	Bailed twice this day
MW-48A	6/27/2011	--	--	0.00	0.00	0.25	7.09	
MW-48A	6/28/2011	41.45	--	2.30	0.33	0.67	7.42	Bailed twice this day
MW-48A	6/28/2011	--	--	0.50	0.03	0.22	7.45	
MW-48A	6/29/2011	45.60	--	1.50	0.20	1.05	7.65	
MW-48A	6/30/2011	46.84	--	0.85	0.11	0.89	7.76	
MW-48A	7/1/2011	47.49	--	0.90	0.07	0.68	7.83	Bailed twice this day
MW-48A	7/1/2011	50.85	--	0.20	0.01	0.49	7.84	Last time to bail well, per home owner
MW-48A	9/26/2011	33.10	--	4.10	0.74	0.76	8.58	Bottom at 71.10'
MW-48A	7/13/2015	--	--	12.00	0.00	0.00	8.58	
MW-48A	7/16/2015	--	--	--	3.25	1.75	11.83	Bailed out all DNAPL in well
MW-48A	7/17/2015	--	--	0.00	0.00	0.00	11.83	
MW-48A	9/9/2016	--	--	16.55	0.00	0.00	11.83	Bottom at 72.74'
MW-48A	10/21/2016	--	--	12.50	0.00	0.00	11.83	Bottom at 72.15'
MW-48A	12/2/2016	--	--	18.50	0.00	0.00	11.83	Bottom at 71.50'
MW-48A	2/24/2017	--	--	18.60	0.00	0.00	11.83	Bottom at 71.50'
MW-48A	4/21/2017	--	--	18.80	0.00	0.00	11.83	Bottom at 71.50'
MW-48A	7/18/2017	--	--	17.00	0.00	0.00	11.83	Bottom at 71.50'
MW-48A	10/20/2017	--	--	20.20	0.00	0.00	11.83	Bottom at 72.00'
MW-48A	2/27/2018	--	--	15.20	0.00	0.00	11.83	Bottom at 72.00'
MW-48A	5/18/2018	--	--	12.40	0.00	0.00	11.83	Bottom at 72.00'
MW-48A	8/10/2018	--	--	15.20	0.00	0.00	11.83	Bottom at 72.00'
MW-48A	11/19/2018	--	--	13.70	0.00	0.00	11.83	Bottom at 72.00'
MW-48A	3/15/2019	--	--	11.10	0.00	0.00	11.83	Bottom at 72.00'
MW-48A	6/14/2019	--	--	12.20	0.00	0.00	11.83	Bottom at 72.00'
MW-48A	9/20/2019	--	--	10.30	0.00	0.00	11.83	Bottom at 72.00'

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-51A	8/17/2011	14.94	--	2.50	0.38	0.62	0.38	
MW-51A	8/18/2011	11.05	--	2.70	0.85	0.90	1.23	
MW-51A	8/24/2011	10.64	--	3.25	0.75	0.50	1.98	
MW-51A	8/29/2011	10.82	--	NM	3.45	1.55	5.43	
MW-51A	9/6/2011	10.90	--	2.80	1.25	0.75	6.68	
MW-51A	9/12/2011	10.92	--	4.0	0.88	0.63	7.56	
MW-51A	9/19/2011	10.59	--	2.5	0.99	0.51	8.54	
MW-51A	10/6/2011	10.60	--	8.0	2.813	0.187	11.36	Took over an hour to bail
MW-51A	10/10/2011	10.65	--	5.0	2.05	0.45	13.41	
MW-51A	10/14/2011	10.33	--	7.5	1.78	0.23	15.18	
MW-51A	10/17/2011	10.51	--	7.2	1.89	0.36	17.07	
MW-51A	10/19/2011	10.03	--	8.0	1.68	0.33	18.74	
MW-51A	10/24/2011	10.04	--	7.5	1.40	0.85	20.14	
MW-51A	10/28/2011	9.70	--	9.6	3.65	0.35	23.79	DNAPL Recovery Test preformed; See separate 51A spreadsheet.
MW-51A	10/31/2011	9.88	--	8.7	9.10	8.15	32.89	TD = 59.40' An accumulation test was preformed this day. Removal(gal.) are total throughout day. See separate 51A spreadsheet.
MW-51A	11/3/2011	12.56	--	11.7	3.92	0.08	36.81	TD = 59.30'
MW-51A	11/4/2011	9.99	--	12.6	0.00	0.00	36.81	Did not bail
MW-51A	11/7/2011	10.18	--	12.0	4.80	3.20	41.61	TD = 59.44'; Used pump to recover DNAPL. Pump stopped working, DNAPL thickness went up to 20.0'
MW-51A	11/8/2011	20.40	--	24.1	2.25	0.50	43.86	TD = 59.45'
MW-51A	11/9/2011	11.33	--	23.9	4.25	0.00	48.11	Bailed product down to 15'
MW-51A	6/5/2012	--	--	10.8	--	NB	48.11	Bottom at 58.42', need to resurvey.
MW-51A	7/31/2012	--	--	10.0	9.00	0.00	57.11	
MW-51A	8/1/2012	--	--	18.0	5.00	0.00	62.11	
MW-51A	8/23/2012	--	--	10.3	7.25	9.21	69.36	
MW-51A	8/24/2012	--	--	19.3	4.75	4.77	74.11	
MW-51A	8/27/2012	--	--	12.5	7.50	6.67	81.61	
MW-51A	8/28/2012	--	--	31.0	--	NB	81.61	
MW-51A	8/29/2012	--	--	29.0	9.73	0.00	91.34	
MW-51A	8/30/2012	--	--	31.0	7.25	0.22	98.59	
MW-51A	8/31/2012	--	--	32.0	9.76	0.00	108.35	
MW-51A	9/4/2012	--	--	32.0	9.24	0.00	117.59	
MW-51A	9/10/2012	--	--	32.0	9.75	0.50	127.34	
MW-51A	9/11/2012	--	--	36.0	9.75	0.00	137.09	
MW-51A	9/12/2012	--	--	33.0	9.25	0.00	146.34	
MW-51A	9/13/2012	--	--	33.0	7.13	0.00	153.47	
MW-51A	9/14/2012	--	--	12.0	1.50	4.81	154.97	
MW-51A	9/17/2012	--	--	13.5	--	NB	154.97	
MW-51A	9/18/2012	--	--	13.5	4.44	1.70	159.41	
MW-51A	9/27/2012	--	--	14.5	4.44	5.10	163.85	
MW-51A	10/2/2012	--	--	29.5	4.44	3.57	168.29	

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MW-51A	10/11/2012	--	--	27.5	5.00	2.96	173.29	
MW-51A	10/15/2012	--	--	--	4.44	3.51	177.73	
MW-51A	10/22/2012	--	--	--	4.44	4.49	182.17	
MW-51A	10/29/2012	--	--	--	5.50	2.35	187.67	
MW-51A	11/5/2012	--	--	29.0	5.53	3.31	193.20	
MW-51A	11/19/2012	--	--	--	5.54	3.97	198.74	
MW-51A	12/3/2012	--	--	--	5.28	0.00	204.02	
MW-51A	4/18/2013	--	--	8.2	0.00	NB	204.02	
MW-51A	8/23/2013	--	--	3.0	0.00	NB	204.02	Bottom at 56.85'; 2' of sediment in well
MW-51A	4/16/2014	--	--	4.0	0.00	0.00	204.02	Bottom at 56.75'
MW-51A	12/29/2014	--	--	3.5	0.00	0.00	204.02	Bottom at 57.10'
MW-51A	3/4/2015	--	--	4.3	0.00	0.00	204.02	Bottom at 57.10'
MW-51A	5/19/2015	--	--	3.5	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	1/6/2016	--	--	5.0	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	2/19/2016	--	--	5.5	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	6/22/2016	--	--	3.8	0.00	0.00	204.02	Bottom at 58.00'
MW-51A	9/9/2016	--	--	2.0	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	10/21/2016	--	--	2.1	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	12/2/2016	--	--	2.1	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	2/24/2017	--	--	2.9	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	4/21/2017	--	--	2.1	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	7/18/2017	--	--	3.3	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	10/20/2017	--	--	1.0	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	2/27/2018	--	--	1.8	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	5/18/2018	--	--	1.7	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	8/10/2018	--	--	0.9	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	11/19/2018	--	--	2.0	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	3/15/2019	--	--	1.2	0.00	0.00	204.02	Bottom at 57.00'
MW-51A	6/14/2019	--	--	2.4	0.00	0.00	204.02	Bottom at 56.50'
MW-51A	9/20/2019	--	--	1.60	0.00	0.00	204.02	Bottom at 56.50'
MW-54A	5/2/2012	--	--	1.50	--	NB	0.00	
MW-54A	6/5/2012	--	--	2.70	--	NB	0.00	
MW-54A	11/14/2012	--	--	4.00	--	NB	0.00	
MW-54A	4/18/2013	--	--	4.50	--	NB	0.00	
MW-54A	8/23/2013	--	--	3.70	--	NB	0.00	Bottom at 44.78'
MW-54A	4/16/2014	--	--	4.25	0.00	0.00	0.00	Bottom at 44.7'
MW-54A	4/25/2014	--	--	--	0.90	2.46	0.90	
MW-54A	4/29/2014	--	--	--	0.89	2.25	1.79	
MW-54A	8/14/2014	--	--	--	0.50	4.48	2.29	
MW-54A	8/29/2014	--	--	--	0.26	2.45	2.55	
MW-54A	9/5/2014	--	--	--	0.26	1.53	2.81	
MW-54A	9/12/2014	--	--	--	0.26	1.01	3.07	

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MW-54A	10/17/2014	--	--	--	0.26	1.44	3.33	
MW-54A	10/24/2014	--	--	--	0.23	1.43	3.56	
MW-54A	12/31/2014	--	--	--	0.00	0.00	3.56	Unable to measure DNAPL thickness due to airlift assembly
MW-54A	3/4/2015	--	--	--	0.00	0.00	3.56	Unable to measure DNAPL thickness due to airlift assembly
MW-54A	3/27/2015	--	--	--	0.60	2.89	4.16	
MW-54A	4/3/2015	--	--	--	0.08	1.62	4.24	
MW-54A	4/10/2015	--	--	--	0.08	1.27	4.32	
MW-54A	4/17/2015	--	--	--	0.07	1.65	4.39	
MW-54A	4/24/2015	--	--	--	0.07	1.26	4.46	
MW-54A	5/19/2015	--	--	0*	0.00	0.00	4.46	Trace DNAPL on probe. Bottom at 30.10' (could not reach bottom)
MW-54A	6/5/2015	--	--	0*	0.00	0.00	4.46	
MW-54A	7/13/2015	--	--	0*	0.00	0.00	4.46	
MW-54A	9/28/2015	--	--	0*	0.00	0.00	4.46	Bottom at 30.60 (Cannot access bottom of well)
MW-54A	1/6/2016	--	--	1.40	0.00	0.00	4.46	Bottom at 45.20'
MW-54A	2/19/2016	--	--	1.50	0.00	0.00	4.46	Bottom at 44.90'
MW-54A	3/25/2016	--	--	--	0.80	1.54	5.26	
MW-54A	4/1/2016	--	--	--	0.03	1.21	5.29	
MW-54A	4/8/2016	--	--	--	0.03	1.80	5.32	
MW-54A	5/11/2016	--	--	--	0.02	2.44	5.34	
MW-54A	5/20/2016	--	--	--	0.02	1.50	5.36	
MW-54A	6/22/2016	--	--	0.20	0.00	0.00	5.36	Bottom at 45.80'
MW-54A	9/9/2016	--	--	0.00	0.00	0.00	5.36	Bottom at 44.90'
MW-54A	10/21/2016	--	--	0.00	0.00	0.00	5.36	Bottom at 28.00'; could not reach bottom
MW-54A	12/2/2016	--	--	0.70	0.00	0.00	5.36	Bottom at 45.15'
MW-54A	2/24/2017	--	--	1.10	0.00	0.00	5.36	Bottom at 45.15'
MW-54A	4/21/2017	--	--	1.50	0.00	0.00	5.36	Bottom at 45.15'
MW-54A	7/18/2017	--	--	2.20	0.00	0.00	5.36	Bottom at 45.15'
MW-54A	10/20/2017	--	--	2.20	0.00	0.00	5.36	Bottom at 45.15'
MW-54A	2/27/2018	--	--	2.30	0.00	0.00	5.36	Bottom at 45.15'
MW-54A	5/18/2018	--	--	1.40	0.00	0.00	5.36	Bottom at 45.15'
MW-54A	8/10/2018	--	--	0.90	0.00	0.00	5.36	Bottom at 45.15'
MW-54A	11/19/2018	--	--	2.50	0.00	0.00	5.36	Bottom at 45.15'
MW-54A	3/15/2019	--	--	1.80	0.00	0.00	5.36	Bottom at 45.15'
MW-54A	5/31/2019	--	--	--	1.00	2.12	6.36	
MW-54A	6/14/2019	--	--	0.80	0.46	1.77	6.82	Bottom at 45.30'
MW-54A	9/20/2019	--	--	0.60	0.00	0.00	6.82	Bottom at 45.30'
RW-1	12/28/2009	4.61	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-1	1/6/2010	5.39	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-1	1/11/2010	5.48	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-1	1/18/2010	5.41	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-1	1/25/2010	4.07	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-1	2/1/2010	5.33	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL

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Bloomington, Indiana

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RW-1	2/22/2010	4.40	4.56	0.20	0.20	0.98	0.20	
RW-1	3/8/2010	5.24	5.30	0.05	0.01	0.24	0.21	DNAPL staining on bailer
RW-1	3/11/2010	5.24	5.38	0.25	0.04	0.71	0.25	
RW-1	4/16/2010	5.23	6.30	0.33	0.18	3.32	0.43	
RW-1	4/26/2010	3.62	4.31	0.20	0.11	3.39	0.54	
RW-1	5/5/2010	4.56	5.38	0.15	0.09	3.41	0.63	
RW-1	5/11/2010	4.18	4.96	0.50	0.40	4.85	1.03	
RW-1	6/1/2010	5.12	6.35	0.05	0.19	5.06	1.22	
RW-1	6/9/2010	4.98	6.12	0.10	0.25	5.00	1.47	
RW-1	6/24/2010	5.13	6.11	0.20	0.18	5.07	1.65	
RW-1	7/6/2010	5.74	6.57	1.00	0.84	4.41	2.49	
RW-1	7/13/2010	5.89	6.51	1.00	0.68	4.57	3.17	
RW-1	7/20/2010	5.34	5.91	1.25	1.05	4.20	4.22	
RW-1	8/3/2010	6.02	7.78	0.50	0.54	8.21	4.76	
RW-1	8/10/2010	6.17	6.98	0.01	0.11	3.39	4.87	
RW-1	8/17/2010	7.31	--	0.00	--	NB	4.87	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-1	8/23/2010	6.08	--	0.50	--	NB	4.87	Bottom at 42.35'; Measured for DNAPL with tape
RW-1	8/30/2010	6.39	--	1.00	--	NB	4.87	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-1	9/17/2010	6.33	--	0.50	--	NB	4.87	Bottom at 42.55'; Measred for DNAPL with tape
RW-1	9/24/2010	6.57	--	1.40	--	NB	4.87	Bottom at 43.60'; Measured for DNAPL with tape
RW-1	10/1/2010	6.80	--	1.00	--	NB	4.87	Bottom at 42.80'; Measured for DNAPL with tape
RW-1	10/5/2010	6.62	--	1.25	--	NB	4.87	Bottom at 42.91'; Measured for DNAPL with tape
RW-1	10/12/2010	6.87	--	1.50	--	NB	4.87	Bottom at 42.96'; Measured for DNAPL with tape
RW-1	10/18/2010	6.78	--	1.50	--	NB	4.87	Bottom at 43.32'; Measured for DNAPL with tape
RW-1	12/10/2010	5.55	--	2.25	0.17	2.83	5.04	Bottom at 43.67'
RW-1	12/28/2010	5.50	--	1.00	--	NB	5.04	Bottom at 43.63'; Measured for DNAPL with tape
RW-1	1/3/2011	4.98	--	2.10	--	NB	5.04	Bottom at 43.70'; Measured for DNAPL with tape
RW-1	1/10/2011	5.52	--	1.50	--	NB	5.04	Measured for DNAPL with tape
RW-1	1/17/2011	5.58	--	0.80	--	NB	5.04	Bottom at 43.55'; Measured for DNAPL with tape
RW-1	1/28/2011	--	--	1.25	--	NB	5.04	Measured for DNAPL with tape
RW-1	2/18/2011	5.38	--	1.22	--	NB	5.04	Measured for DNAPL with tape
RW-1	2/22/2011	3.93	--	1.50	0.10	1.90	5.14	
RW-1	3/4/2011	4.41	--	0.05	--	NB	5.14	Measured for DNAPL with tape
RW-1	3/18/2011	4.97	--	0.65	--	NB	5.14	Bottom at 42.25'; Measured for DNAPL with tape
RW-1	3/28/2011	5.32	--	0.00	0.00	0.25	5.14	Bottom at 43.55'
RW-1	4/4/2011	4.48	--	0.00	0.00	0.25	5.14	
RW-1	4/12/2011	3.78	--	0.45	0.10	0.40	5.24	Bottom at 42.21'
RW-1	4/19/2011	3.74	--	0.60	0.01	0.07	5.25	Bottom at 42.07'
RW-1	4/25/2011	3.48	--	0.50	--	NB	5.25	Bottom at 42.15'; Measured for DNAPL with tape
RW-1	5/9/2011	5.50	--	0.50	0.10	0.90	5.35	Bottom at 42.11'
RW-1	5/18/2011	4.93	--	0.10	0.00	0.25	5.35	Bottom at 42.2'

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Bloomington, Indiana

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RW-1	6/6/2011	5.38	--	0.00	--	NB	5.35	Bottom at 42.05'; Measured for DNAPL with tape
RW-1	6/15/2011	4.52	--	0.00	--	NB	5.35	Bottom at 41.95'; Measured for DNAPL with tape
RW-1	6/20/2011	4.58	--	0.60	0.01	0.99	5.36	Bottom at 42.05'
RW-1	6/27/2011	3.90	--	0.80	0.01	0.99	5.37	Bottom at 42.05'
RW-1	6/28/2011	4.45	--	0.70	--	NB	5.37	Measured for DNAPL with tape
RW-1	7/11/2011	5.65	--	0.60	0.01	0.99	5.38	Bottom at 41.96'
RW-1	7/13/2011	5.71	--	0.80	0.25	1.75	5.63	Bottom at 42.0'
RW-1	7/18/2011	5.94	--	0.50	0.03	0.97	5.66	Bottom at 42.0'
RW-1	7/25/2011	5.68	--	0.30	0.01	0.99	5.67	Bottom at 42.0'
RW-1	8/5/2011	6.92	--	0.00	0.00	1.00	5.67	Trace amount of DNAPL
RW-1	8/15/2011	5.86	--	0.00	0.01	0.99	5.68	Bottom at 42.1'
RW-1	8/24/2011	5.94	--	0.00	0.00	1.00	5.68	Bottom at 42.08'
RW-1	9/6/2011	6.36	--	0.30	--	NB	5.68	Bottom at 42.01'
RW-1	9/12/2011	6.40	--	0.00	--	NB	5.68	Bottom at 42.10'
RW-1	9/19/2011	5.78	--	0.00	--	NB	5.68	Bottom at 42.15'
RW-1	10/6/2011	5.52	--	0.40	--	NB	5.68	Bottom at 42.01'
RW-1	10/10/2011	5.93	--	0.40	--	NB	5.68	Bottom at 42.01'
RW-1	10/14/2011	5.54	--	0.40	0.01	0.99	5.69	Bottom at 42.01'
RW-1	10/19/2011	5.39	--	0.40	0.01	0.99	5.70	
RW-1	10/24/2011	5.23	--	0.30	0.01	0.99	5.71	
RW-1	11/8/2011	5.31	--	0.04	--	NB	5.71	
RW-1	6/5/2012	--	--	0.75	--	NB	5.71	Bottom at 42.15'
RW-1	11/14/2012	--	--	0.75	--	NB	5.71	
RW-1	1/9/2013	--	--	0.60	--	NB	5.71	Bottom at 41.95'
RW-1	4/18/2013	--	--	0.80	--	NB	5.71	
RW-1	8/23/2013	--	--	1.00	--	NB	5.71	5' of sediment in well; Bottom at 42.10'
RW-1	10/11/2013	--	--	--	6.00	14.20	11.71	Air lifted sediment; TD at 46.39'
RW-1	11/25/2013	--	--	0.08	--	NB	11.71	Bottom at 44.25', soft
RW-1	4/16/2014	--	--	0.10	0.00	0.00	11.71	Bottom at 46.3'
RW-1	12/29/2014	--	--	0.00	0.00	0.00	11.71	Trace on probe; bottom at 46.30'
RW-1	3/4/2015	--	--	0.00	0.00	0.00	11.71	Trace on probe; bottom at 46.30'
RW-1	5/19/2015	--	--	0.10	0.00	0.00	11.71	Bottom at 46.15'
RW-1	7/13/2015	--	--	0.10	0.00	0.00	11.71	
RW-1	1/6/2016	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	2/19/2016	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	6/22/2016	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	9/9/2016	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	10/21/2016	--	--	0.10	0.00	0.00	11.71	Bottom at 44.50'
RW-1	12/2/2016	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	2/24/2017	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	4/21/2017	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	7/21/2017	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	10/20/2017	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'

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RW-1	2/27/2018	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	5/18/2018	--	--	0.10	0.00	0.00	11.71	Bottom at 44.40'
RW-1	8/10/2018	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	11/19/2018	--	--	1.10	0.00	0.00	11.71	Bottom at 44.40'
RW-1	3/15/2019	--	--	0.00	0.00	0.00	11.71	Bottom at 44.40'
RW-1	6/14/2019	--	--	1.10	0.00	0.00	11.71	Bottom at 44.50'
RW-1	9/20/2019	--	--	0.70	0.00	0.00	11.71	Bottom at 44.20'
RW-2	12/28/2009	4.39	--	5.00	--	NB	--	Used weighted tape to gauge for DNAPL; obstruction at top of sump; did not bail
RW-2	1/6/2010	4.59	--	4.90	--	NB	--	Obstruction at top of sump; Bottom at 40.65'; did not bail; Measured for DNAPL with tape
RW-2	1/11/2010	4.68	--	4.90	--	NB	--	Obstruction at top of sump; Bottom at 40.65'; did not bail; Measured for DNAPL with tape
RW-2	1/18/2010	4.90	--	4.90	--	NB	--	Obstruction at top of sump; Bottom at 40.65'; did not bail; Measured for DNAPL with tape
RW-2	1/25/2010	3.83	--	4.00	--	NB	--	Obstruction at 41.91'; did not bail; Measured for DNAPL with tape
RW-2	2/1/2010	4.46		4.00	--	NB	--	Obstruction at 41.94'; did not bail; Measured for DNAPL with tape
RW-2	2/2/2010	4.51	4.53	0.50	0.02	0.98	0.02	Obstruction at 41.94'
RW-2	2/2/2010	4.52	4.53	0.50	0.02	0.98	0.04	Obstruction at 41.94'
RW-2	2/3/2010	4.50	4.51	0.50	0.01	0.74	0.05	Obstruction at 41.94'
RW-2	2/4/2010	4.57	4.58	0.20	0.01	0.74	0.06	Obstruction at 41.94'
RW-2	2/4/2010	4.59	4.60	0.20	0.01	0.74	0.07	Obstruction at 41.94'
RW-2	2/5/2010	4.43	4.44	0.20	0.01	0.74	0.08	Obstruction at 41.94'
RW-2	2/22/2010	3.71	3.71	0.20	0.01	0.74	0.09	2" well inserted
RW-2	3/2/2010	4.10	4.12	0.20	0.02	0.98	0.11	
RW-2	3/4/2010	4.21	4.21	0.01	0.01	0.24	0.12	DNAPL staining on bailer
RW-2	3/8/2010	5.02	5.04	0.05	0.01	0.49	0.13	DNAPL staining on bailer
RW-2	3/11/2010	4.60	4.82	0.00	0.00	0.50	0.13	DNAPL staining on bailer
RW-2	4/16/2010	4.45	4.45	0.00	0.00	0.50	0.13	
RW-2	4/26/2010	3.80	3.87	0.00	0.00	0.25	0.13	DNAPL globules present in bailer
RW-2	5/5/2010	4.15	4.19	0.00	0.00	0.25	0.13	DNAPL globules present in bailer
RW-2	6/1/2010	4.53	4.55	1.00	0.10	0.65	0.23	
RW-2	6/9/2010	4.31	4.34	1.00	0.10	0.65	0.33	
RW-2	6/24/2010	4.44	4.45	0.75	0.08	0.67	0.41	
RW-2	7/6/2010	4.82	4.86	1.25	0.19	0.81	0.60	
RW-2	7/13/2010	4.97	5.00	1.50	0.23	0.77	0.83	
RW-2	7/20/2010	4.41	4.43	0.00	0.00	0.25	0.83	
RW-2	8/3/2010	5.02	5.18	0.00	0.00	0.25	0.83	
RW-2	8/10/2010	5.03	5.11	0.40	0.24	1.01	1.07	
RW-2	8/17/2010	5.27	--	0.50	0.00	NB	1.07	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-2	8/23/2010	4.96	--	1.50	0.00	NB	1.07	Bottom at 43.65'; Measured for DNAPL with tape

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RW-2	8/30/2010	5.09	--	1.50	0.00	NB	1.07	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-2	9/17/2010	5.08	--	2.50	0.00	NB	1.07	Bottom at 43.66'; Measured for DNAPL with tape
RW-2	9/24/2010	5.20	--	3.20	0.00	NB	1.07	Bottom at 43.81'; Measured for DNAPL with tape
RW-2	10/1/2010	5.35	--	3.60	0.00	NB	1.07	Bottom at 43.68'; Measured for DNAPL with tape
RW-2	10/5/2010	5.28	--	3.70	0.00	NB	1.07	Bottom at 43.85'; Measured for DNAPL with tape
RW-2	10/12/2010	5.36	--	4.30	0.50	0.75	1.57	
RW-2	10/18/2010	5.36	--	5.00	0.51	0.49	2.08	Bottom at 43.90'
RW-2	12/10/2010	4.65	--	5.00	0.45	0.55	2.53	
RW-2	12/28/2010	4.50	--	2.75	0.35	0.40	2.88	
RW-2	1/3/2011	4.05	--	1.00	0.12	0.63	3.00	
RW-2	1/10/2011	4.60	--	1.00	0.10	0.40	3.10	
RW-2	1/17/2011	4.69	--	0.15	0.03	0.72	3.13	
RW-2	1/28/2011	--	--	0.50	0.00	NB	3.13	Measured for DNAPL with tape
RW-2	2/18/2011	3.89	--	0.24	0.00	NB	3.13	Measured for DNAPL with tape
RW-2	2/22/2011	3.55	--	0.50	0.00	NB	3.13	Measured for DNAPL with tape
RW-2	3/4/2011	3.86	--	--	0.00	NB	3.13	Silt and sand at bottom of well
RW-2	3/18/2011	4.18	--	0.15	0.01	0.24	3.14	
RW-2	3/28/2011	3.85	--	0.00	0.00	0.25	3.14	Bottom at 43.40'
RW-2	4/4/2011	3.33	--	--	0.00	NB	3.14	Obstruction at 21.9'
RW-2	4/12/2011	3.55	--	--	0.00	NB	3.14	Obstruction at 21.89'
RW-2	4/19/2011	3.29	--	--	0.00	NB	3.14	Obstruction at 22.0'
RW-2	4/25/2011	2.99	--	--	0.00	NB	3.14	Did not bail, 2" well broken
RW-2	10/24/2011	4.51	--	0.00	0.05	0.95	3.19	Pulled out some of 2" well, still broken segments at the bottom; bottom at 32.96'
RW-2	6/5/2012	--	--	2.50	0.00	NB	3.19	Bottom at 40.40, PVC still in well.
RW-2	11/14/2012	--	--	6.50	0.00	NB	3.19	Removed PVC, Added 2" SS, Bottom at 43.00'
RW-2	4/18/2013	--	--	6.20	0.00	NB	3.19	
RW-2	7/3/2013	--	--	10.00	0.26	7.13	3.45	Air Lift Installed
RW-2	7/8/2013	--	--	--	0.24	5.01	3.69	
RW-2	7/12/2013	--	--	--	0.24	5.09	3.93	
RW-2	7/15/2013	--	--	--	0.24	5.06	4.17	
RW-2	7/19/2013	--	--	--	0.24	5.42	4.41	
RW-2	7/22/2013	--	--	--	0.24	5.11	4.65	
RW-2	7/26/2013	--	--	--	0.24	5.29	4.89	
RW-2	8/9/2013	--	--	--	0.31	2.99	5.20	
RW-2	8/16/2013	--	--	--	0.31	2.94	5.51	
RW-2	8/19/2013	--	--	--	0.31	2.12	5.82	
RW-2	8/23/2013	--	--	0.00	0.31	1.57	6.13	Probe stopped 6' from bottom
RW-2	8/26/2013	--	--	--	0.31	2.33	6.44	
RW-2	9/5/2013	--	--	--	0.31	1.97	6.75	
RW-2	9/9/2013	--	--	--	0.31	2.09	7.06	
RW-2	9/13/2013	--	--	--	0.31	2.48	7.37	

Notes:
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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-2	9/16/2013	--	--	--	0.31	2.99	7.68	
RW-2	9/20/2013	--	--	--	0.31	0.40	7.99	
RW-2	9/23/2013	--	--	--	0.30	2.33	8.29	
RW-2	11/4/2013	--	--	--	0.43	1.30	8.72	
RW-2	11/12/2013	--	--	--	0.43	0.70	9.15	
RW-2	11/15/2013	--	--	--	0.42	0.63	9.57	
RW-2	11/18/2013	--	--	--	0.42	0.71	9.99	
RW-2	3/28/2014	--	--	--	0.25	0.69	10.24	
RW-2	4/1/2014	--	--	--	0.21	0.88	10.45	
RW-2	4/8/2014	--	--	--	0.21	0.78	10.66	
RW-2	4/11/2014	--	--	--	0.21	1.48	10.87	
RW-2	4/15/2014	--	--	--	0.21	0.65	11.08	
RW-2	4/16/2014	--	--	--	0.00	0.00	11.08	Unable to measure DNAPL thickness due to airlift assembly
RW-2	4/18/2014	--	--	--	0.20	1.60	11.28	
RW-2	4/29/2014	--	--	--	0.20	1.42	11.48	
RW-2	5/2/2014	--	--	--	0.20	1.41	11.68	
RW-2	5/6/2014	--	--	--	0.20	1.34	11.88	
RW-2	5/15/2014	--	--	--	0.20	1.44	12.08	
RW-2	5/19/2014	--	--	--	0.20	1.18	12.28	
RW-2	5/22/2014	--	--	--	0.20	0.70	12.48	
RW-2	5/27/2014	--	--	--	0.20	0.41	12.68	
RW-2	9/5/2014	--	--	--	2.50	3.05	15.18	
RW-2	9/12/2014	--	--	--	0.04	3.25	15.22	
RW-2	9/19/2014	--	--	--	0.03	2.33	15.25	
RW-2	9/25/2014	--	--	--	0.03	0.86	15.28	
RW-2	10/3/2014	--	--	--	0.03	1.45	15.31	
RW-2	10/10/2014	--	--	Globs	0.00	0.00	15.31	Bottom at 34.70'; did not reach TD
RW-2	10/17/2014	--	--	--	0.03	1.34	15.34	
RW-2	10/24/2014	--	--	--	0.03	1.02	15.37	
RW-2	12/31/2014	--	--	--	0.00	0.00	15.37	Unable to measure DNAPL thickness due to airlift assembly
RW-2	3/4/2015	--	--	--	0.00	0.00	15.37	Unable to measure DNAPL thickness due to airlift assembly
RW-2	4/3/2015	--	--	--	1.79	0.00	17.16	
RW-2	4/10/2015	--	--	--	0.00	2.27	17.16	
RW-2	4/17/2015	--	--	--	0.00	1.60	17.16	
RW-2	4/24/2015	--	--	--	0.00	1.38	17.16	
RW-2	5/19/2015	--	--	0.50	0.00	0.00	17.16	Bottom at 41.50'
RW-2	6/5/2015	--	--	0.25	0.00	0.00	17.16	
RW-2	7/13/2015	--	--	2.50	0.00	0.00	17.16	
RW-2	9/28/2015	--	--	4.50	0.00	0.00	17.16	Bottom at 42.30'
RW-2	1/6/2016	--	--	5.75	0.00	0.00	17.16	Bottom at 42.00'
RW-2	2/19/2016	--	--	7.10	0.00	0.00	17.16	Bottom at 43.25'
RW-2	3/18/2016	--	--	--	3.00	2.31	20.16	
RW-2	4/8/2016	--	--	--	0.50	2.00	20.66	
RW-2	5/20/2016	--	--	--	0.08	1.07	20.74	
RW-2	6/22/2016	--	--	0.80	0.00	0.00	20.74	Bottom at 43.40'
RW-2	9/9/2016	--	--	3.00	0.00	0.00	20.74	Bottom at 42.20'
RW-2	10/21/2016	--	--	3.50	0.00	0.00	20.74	Bottom at 42.50'

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Bloomington, Indiana

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RW-2	12/2/2016	--	--	4.50	0.00	0.00	20.74	Bottom at 42.50'
RW-2	2/24/2017	--	--	4.70	0.00	0.00	20.74	Bottom at 42.20'
RW-2	3/10/2017	--	--	--	2.00	0.86	22.74	
RW-2	3/24/2017	--	--	--	1.00	2.08	23.74	
RW-2	4/7/2017	--	--	--	0.40	2.72	24.14	
RW-2	4/21/2017	--	--	1.10	0.18	0.90	24.32	Bottom at 42.20'
RW-2	7/18/2017	--	--	3.60	0.00	0.00	24.32	Bottom at 42.20'
RW-2	10/20/2017	--	--	2.50	0.00	0.00	24.32	Bottom at 42.20'
RW-2	2/27/2018	--	--	4.40	0.00	0.00	24.32	Bottom at 42.20'
RW-2	5/18/2018	--	--	4.70	0.00	0.00	24.32	Bottom at 42.20'
RW-2	8/10/2018	--	--	4.70	0.00	0.00	24.32	Bottom at 42.20'
RW-2	11/19/2018	--	--	5.00	0.00	0.00	24.32	Bottom at 42.20'
RW-2	3/15/2019	--	--	4.80	0.00	0.00	24.32	Bottom at 42.20'
RW-2	6/14/2019	--	--	3.80	0.00	0.00	24.32	Bottom at 42.50'
RW-2	7/26/2019	--	--	--	2.00	1.39	26.32	
RW-2	9/20/2019	--	--	0.70	0.00	0.00	26.32	Bottom at 38.40'
RW-3	12/28/2009	4.79	--	2.00	0.00	NB	0.00	Used weighted tape to gauge for DNAPL; did not bail
RW-3	1/6/2010	4.99	--	2.00	0.00	NB	0.00	Did not bail; Measured for DNAPL with tape
RW-3	1/11/2010	5.09	--	2.00	0.00	NB	0.00	Did not bail; Measured for DNAPL with tape
RW-3	1/18/2010	4.78	--	2.00	0.00	NB	0.00	Did not bail; Measured for DNAPL with tape
RW-3	1/25/2010	4.22	--	2.00	0.00	NB	0.00	Did not bail; Measured for DNAPL with tape
RW-3	2/1/2010	4.85	--	2.00	0.00	NB	0.00	Did not bail; Measured for DNAPL with tape
RW-3	2/2/2010	4.91	4.93	1.00	0.02	0.98	0.02	
RW-3	2/2/2010	4.93	4.95	0.50	0.02	0.98	0.04	
RW-3	2/3/2010	4.95	4.96	0.50	0.02	0.98	0.06	
RW-3	2/4/2010	4.97	4.98	0.20	0.01	0.74	0.07	
RW-3	2/4/2010	4.97	5.03	0.20	0.01	0.99	0.08	
RW-3	2/5/2010	4.85	4.88	0.20	0.02	0.98	0.10	
RW-3	2/22/2010	4.45	4.46	0.50	0.06	0.94	0.16	
RW-3	3/2/2010	4.78	4.81	0.50	0.03	0.97	0.19	
RW-3	3/4/2010	5.01	5.04	0.20	0.04	0.96	0.23	
RW-3	3/8/2010	5.31	5.34	0.33	0.18	1.32	0.41	
RW-3	3/11/2010	4.98	5.03	1.00	0.36	1.89	0.77	
RW-3	4/16/2010	4.87	8.29	2.00	1.85	5.15	2.62	
RW-3	4/26/2010	4.16	4.23	1.25	0.84	4.41	3.46	
RW-3	5/5/2010	4.52	4.58	0.75	0.79	6.21	4.25	
RW-3	6/1/2010	4.88	6.02	2.50	3.50	7.00	7.75	
RW-3	6/9/2010	4.69	5.89	1.75	1.62	7.13	9.37	
RW-3	6/24/2010	4.83	6.39	2.75	3.61	8.64	12.98	
RW-3	7/6/2010	5.22	9.37	2.70	3.24	7.26	16.22	
RW-3	7/13/2010	5.34	9.82	2.50	2.98	5.77	19.20	
RW-3	7/20/2010	4.87	6.21	3.00	3.24	5.51	22.44	
RW-3	8/3/2010	5.39	5.45	0.90	0.72	6.28	23.16	
RW-3	8/10/2010	5.42	5.52	0.50	0.90	7.85	24.06	

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-3	8/17/2010	5.63	--	0.50	0.00	NB	24.06	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-3	8/23/2010	5.35	--	3.90	0.00	NB	24.06	Bottom at 44.60'; Measured for DNAPL with tape
RW-3	8/30/2010	5.48	--	4.89	0.00	NB	24.06	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-3	9/17/2010	5.46	--	6.90	6.13	4.37	30.19	Bottom at 44.52'
RW-3	9/24/2010	5.58	--	4.40	2.93	3.07	33.12	Bottom at 44.68'
RW-3	10/1/2010	5.77	5.77	2.60	1.20	3.30	34.32	Bottom at 44.42'
RW-3	10/5/2010	5.65	--	2.00	0.00	NB	34.32	Bottom at 44.54'; Measured for DNAPL with tape
RW-3	10/12/2010	5.74	--	2.40	0.68	3.82	35.00	Bottom at 44.53'
RW-3	10/18/2010	5.74	--	2.25	0.00	NB	35.00	Bottom at 44.48'
RW-3	12/10/2010	4.95	--	5.00	3.38	2.62	38.38	Bottom at 44.5'
RW-3	12/28/2010	4.88	--	2.50	1.05	7.95	39.43	Bottom at 44.51'
RW-3	1/3/2011	4.36	--	1.80	0.23	2.77	39.66	
RW-3	1/10/2011	4.83	--	1.80	0.23	2.77	39.89	
RW-3	1/17/2011	4.94	--	1.60	0.09	1.16	39.98	Bottom at 44.35'
RW-3	1/28/2011	--	--	2.00	--	NB	39.98	Measured for DNAPL with tape
RW-3	2/18/2011	4.84	--	1.24	--	NB	39.98	Measured for DNAPL with tape
RW-3	2/22/2011	3.80	--	1.13	--	NB	39.98	Measured for DNAPL with tape
RW-3	3/4/2011	4.08	--	0.60	0.02	1.48	40.00	
RW-3	3/18/2011	4.50	--	0.70	0.08	1.42	40.08	Bottom at 43.45, silt at bottom
RW-3	3/28/2011	4.80	--	0.50	0.01	0.24	40.09	
RW-3	4/4/2011	3.57	--	0.10	0.20	0.05	40.29	Bottom at 43.41'
RW-3	4/12/2011	3.84	--	0.10	0.00	0.25	40.29	Bottom at 43.55'
RW-3	4/19/2011	3.53	--	0.20	0.01	0.07	40.30	Bottom at 43.33'
RW-3	4/25/2011	3.25	--	0.20	--	NB	40.30	Bottom at 43.35'; Measured for DNAPL with tape
RW-3	5/9/2011	4.35	--	0.30	--	NB	40.30	Bottom at 43.20'; Measured for DNAPL with tape
RW-3	5/18/2011	4.48	--	0.70	0.10	0.24	40.40	Bottom at 43.32'
RW-3	6/6/2011	4.94	--	0.60	--	NB	40.40	Bottom at 43.22'; Measured for DNAPL with tape
RW-3	6/20/2011	4.24	--	0.70	0.01	0.99	40.41	Bottom at 43.3'
RW-3	6/27/2011	3.81	--	1.10	0.06	1.94	40.47	Bottom at 43.25'
RW-3	6/28/2011	4.22	--	0.70	0.01	0.99	40.48	
RW-3	7/8/2011	4.95	--	0.80	0.09	1.91	40.57	Bottom at 43.30'
RW-3	7/13/2011	5.14	--	0.60	0.05	0.95	40.62	Bottom at 43.26'
RW-3	7/18/2011	5.21	--	0.90	0.05	0.95	40.67	Bottom at 43.30'
RW-3	7/25/2011	4.05	--	1.20	0.08	0.01	40.75	Bottom at 43.20'
RW-3	8/5/2011	5.32	--	0.10	0.00	0.25	40.75	
RW-3	8/15/2011	5.20	--	1.40	0.65	3.35	41.40	Bottom at 43.20'
RW-3	8/24/2011	5.26	--	0.80	0.01	0.99	41.41	Bottom at 43.31'
RW-3	9/6/2011	5.51	--	0.90	0.20	0.80	41.61	Bottom at 43.27'
RW-3	9/12/2011	5.53	--	0.70	0.10	0.90	41.71	Bottom at 44.34'
RW-3	9/19/2011	4.99	--	0.20	0.50	0.95	42.21	Bottom at 43.34'
RW-3	10/6/2011	5.23	--	0.60	--	NB	42.21	Bottom at 43.24'

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-3	10/10/2011	5.28	--	0.60	--	NB	42.21	Bottom at 43.25'
RW-3	10/14/2011	5.10	--	0.60	0.15	0.85	42.36	Bottom at 43.25'
RW-3	10/19/2011	4.95	--	0.70	0.05	0.95	42.41	Bottom at 43.38'
RW-3	10/24/2011	4.95	--	0.30	0.05	0.95	42.46	Bottom at 43.30'
RW-3	11/8/2011	4.94	--	0.90	0.01	0.24	42.47	Bottom at 43.65'
RW-3	6/5/2012	--	--	1.60	--	NB	42.47	Bottom at 43.60'
RW-3	11/14/2012	--	--	2.80	--	NB	42.47	
RW-3	4/18/2013	--	--	3.10	--	NB	42.47	
RW-3	6/28/2013	--	--	5.00	0.70	10.06	43.17	Air Lift Installed
RW-3	7/1/2013	--	--	--	0.69	5.19	43.86	
RW-3	7/8/2013	--	--	--	0.69	4.78	44.55	
RW-3	7/12/2013	--	--	--	0.69	4.93	45.24	
RW-3	7/15/2013	--	--	--	0.69	4.66	45.93	
RW-3	7/19/2013	--	--	--	0.69	4.99	46.62	
RW-3	7/22/2013	--	--	--	0.69	5.11	47.31	
RW-3	7/26/2013	--	--	--	0.69	4.69	48.00	
RW-3	8/9/2013	--	--	--	0.25	2.25	48.25	
RW-3	8/16/2013	--	--	--	0.23	2.11	48.48	
RW-3	8/19/2013	--	--	--	0.23	2.21	48.71	
RW-3	8/23/2013	--	--	0.00	0.23	1.98	48.94	
RW-3	8/26/2013	--	--	--	0.23	2.30	49.17	
RW-3	9/5/2013	--	--	--	0.23	2.34	49.40	
RW-3	9/9/2013	--	--	--	0.23	2.49	49.63	
RW-3	9/13/2013	--	--	--	0.23	2.27	49.86	
RW-3	9/16/2013	--	--	--	0.23	2.07	50.09	
RW-3	9/20/2013	--	--	--	0.23	1.75	50.32	
RW-3	9/23/2013	--	--	--	0.23	2.61	50.55	
RW-3	11/4/2013	--	--	--	0.43	1.60	50.98	
RW-3	11/12/2013	--	--	--	0.43	1.12	51.41	
RW-3	11/15/2013	--	--	--	0.42	1.70	51.83	
RW-3	11/18/2013	--	--	--	0.42	1.48	52.25	
RW-3	3/28/2014	--	--	1.00	0.80	0.38	53.05	
RW-3	4/1/2014	--	--	--	0.76	0.97	53.81	
RW-3	4/8/2014	--	--	--	0.70	1.77	54.51	
RW-3	4/11/2014	--	--	--	0.70	1.07	55.21	
RW-3	4/15/2014	--	--	--	0.70	1.40	55.91	
RW-3	4/16/2014	--	--	0.00	0.00	0.00	55.91	Bottom at 44.4'
RW-3	4/18/2014	--	--	--	0.70	1.04	56.61	
RW-3	5/13/2014	--	--	--	0.70	0.56	57.31	
RW-3	5/19/2014	--	--	--	0.70	0.58	58.01	
RW-3	5/22/2014	--	--	--	0.70	0.00	58.71	
RW-3	5/27/2014	--	--	--	0.70	0.65	59.41	
RW-3	8/29/2014	--	--	--	1.00	2.63	60.41	

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RW-3	9/5/2014	--	--	--	1.00	1.29	61.41	
RW-3	9/12/2014	--	--	--	1.25	1.51	62.66	
RW-3	9/19/2014	--	--	--	0.06	2.16	62.72	
RW-3	9/25/2014	--	--	--	0.06	2.13	62.78	
RW-3	10/3/2014	--	--	--	0.06	1.93	62.84	
RW-3	10/10/2014	--	--	0.50	0.06	1.37	62.90	Bottom at 44.73'
RW-3	10/17/2014	--	--	--	0.06	1.34	62.96	
RW-3	10/24/2014	--	--	--	0.03	1.19	62.99	
RW-3	12/29/2014	--	--	0.10	0.00	0.00	62.99	Bottom at 45.35'
RW-3	3/4/2015	--	--	0.90	0.00	0.00	62.99	Bottom at 44.70'
RW-3	4/3/2015	--	--	--	2.25	0.25	65.24	
RW-3	4/10/2015	--	--	--	1.00	0.63	66.24	
RW-3	4/17/2015	--	--	--	1.00	0.73	67.24	
RW-3	4/24/2015	--	--	--	0.44	1.08	67.68	
RW-3	5/19/2015	--	--	0.00	0.00	0.00	67.68	Bottom at 44.50'
RW-3	6/5/2015	--	--	0.00	0.00	0.00	67.68	
RW-3	7/13/2015	--	--	0.00	0.00	0.00	67.68	
RW-3	9/28/2015	--	--	1.90	0.00	0.00	67.68	Bottom at 45.15'
RW-3	1/6/2016	--	--	3.05	0.00	0.00	67.68	Bottom at 44.40'
RW-3	2/19/2016	--	--	3.05	0.00	0.00	67.68	Bottom at 45.50'
RW-3	3/18/2016	--	--	--	2.50	1.24	70.18	
RW-3	4/8/2016	--	--	--	0.10	1.24	70.28	
RW-3	5/20/2016	--	--	--	0.09	1.54	70.37	
RW-3	6/22/2016	--	--	0.00	0.00	0.00	70.37	Bottom at 41.00' (did not reach bottom)
RW-3	9/9/2016	--	--	0.70	0.00	0.00	70.37	Bottom at 45.50'
RW-3	10/21/2016	--	--	0.80	0.00	0.00	70.37	Bottom at 45.50'
RW-3	12/2/2016	--	--	1.60	0.00	0.00	70.37	Bottom at 45.50'
RW-3	2/24/2017	--	--	1.80	0.00	0.00	70.37	Bottom at 45.50'
RW-3	4/21/2017	--	--	1.00	0.00	0.00	70.37	Bottom at 45.50'
RW-3	7/18/2017	--	--	2.60	0.00	0.00	70.37	Bottom at 45.50'
RW-3	10/20/2017	--	--	5.00	0.00	0.00	70.37	Bottom at 45.25'
RW-3	2/27/2018	--	--	5.50	0.00	0.00	70.37	Bottom at 45.25'
RW-3	4/6/2018	--	--	--	5.96	0.00	76.33	
RW-3	5/18/2018	--	--	0.40	0.00	0.00	76.33	Bottom at 45.25'
RW-3	8/10/2018	--	--	0.70	0.00	0.00	76.33	Bottom at 45.25'
RW-3	11/19/2018	--	--	0.80	0.00	0.00	76.33	Bottom at 45.25'
RW-3	3/15/2019	--	--	0.00	0.00	0.00	76.33	Bottom at 45.25'
RW-3	6/14/2019	--	--	1.90	0.00	0.00	76.33	Bottom at 45.00'
RW-3	9/6/2019	--	--	--	2.00	1.45	78.33	
RW-3	9/20/2019	--	--	--	1.00	2.52	79.33	
RW-4	12/4/2009	8.00	NM	23.00	5.00	10.00	5.00	Used bailer to gauge for DNAPL
RW-4	12/7/2009	8.00	NM	22.00	20.00	0.00	25.00	Used bailer to gauge for DNAPL

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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-4	12/8/2009	8.00	20.00	21.00	20.00	0.00	45.00	Used bailer to gauge for DNAPL
RW-4	12/28/2009	7.28	22.00	15.00	31.00	7.25	76.00	Used weighted tape to gauge for DNAPL
RW-4	12/29/2009	7.32	15.00	6.70	8.16	3.84	84.16	Used weighted tape to gauge for DNAPL
RW-4	1/4/2010	7.54	13.28	2.25	1.36	3.64	85.52	Used weighted tape to gauge for DNAPL
RW-4	1/5/2010	7.36	12.17	2.75	0.81	3.19	86.33	Used weighted tape to gauge for DNAPL
RW-4	1/6/2010	7.48	--	2.00	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	1/8/2010	7.49	--	2.50	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	1/11/2010	7.56	--	2.25	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	1/18/2010	7.77	--	4.40	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	1/25/2010	6.64	--	5.75	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	2/1/2010	7.32	--	5.80	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	2/2/2010	7.46	13.03	8.00	4.40	7.60	90.73	
RW-4	2/2/2010	7.62	12.98	3.00	1.47	9.53	92.20	
RW-4	2/4/2010	7.76	13.65	6.00	1.47	10.53	93.67	
RW-4	2/4/2010	7.49	13.85	3.00	1.39	11.61	95.06	
RW-4	2/5/2010	7.36	13.32	1.50	1.95	9.05	97.01	
RW-4	2/22/2010	5.98	11.56	5.00	5.86	8.14	102.87	
RW-4	3/2/2010	7.33	12.93	7.00	6.16	8.84	109.03	
RW-4	3/2/2010	7.68	12.73	3.00	1.51	8.49	110.54	
RW-4	3/4/2010	7.42	14.01	5.00	4.35	10.65	114.89	
RW-4	3/4/2010	8.01	13.31	1.00	0.86	6.14	115.75	
RW-4	3/8/2010	7.51	16.17	5.00	5.05	3.70	120.80	
RW-4	3/11/2010	8.12	16.97	1.50	1.80	6.20	122.60	
RW-4	3/24/2010	7.09	10.55	5.00	2.10	4.90	124.70	
RW-4	4/16/2010	7.51	18.37	5.00	6.21	9.54	130.91	
RW-4	4/26/2010	6.58	13.32	1.75	1.53	7.22	132.44	
RW-4	5/5/2010	6.96	13.91	1.75	2.36	6.39	134.80	
RW-4	6/1/2010	7.41	18.37	5.25	6.39	9.36	141.19	
RW-4	6/9/2010	7.26	17.65	2.25	3.89	6.61	145.08	
RW-4	6/24/2010	7.3	19.12	5.50	7.70	8.05	152.78	
RW-4	7/6/2010	7.72	18.12	5.00	9.01	6.74	161.79	
RW-4	7/13/2010	7.86	19.01	4.50	7.61	8.14	169.40	
RW-4	7/20/2010	7.35	19.17	3.00	5.86	9.89	175.26	
RW-4	8/3/2010	7.92	11.04	0.30	0.79	6.21	176.05	
RW-4	8/10/2010	7.9	13.87	0.40	1.40	12.60	177.45	
RW-4	8/17/2010	8.24	--	0.50	--	NB	177.45	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-4	8/23/2010	7.88	--	6.75	--	NB	177.45	Bottom at 45.25'; Measured for DNAPL with tape
RW-4	8/30/2010	8.01	--	7.30	--	NB	177.45	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-4	9/17/2010	7.96	--	11.10	8.66	1.84	186.11	Bottom at 45.30', did not bail all DNAPL out
RW-4	9/24/2010	8.13	--	9.70	12.98	0.52	199.09	Bottom at 45.30',
RW-4	10/1/2010	8.31	--	3.70	4.50	4.50	203.59	Bottom at 45.22'

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CSX Transportation
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Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-4	10/5/2010	8.2	--	2.10	--	NB	203.59	Bottom at 45.20'; Measured for DNAPL with tape
RW-4	10/12/2010	8.29	--	4.70	5.25	3.75	208.84	Bottom at 45.23; did not bail all DNAPL out
RW-4	10/18/2010	8.28	--	3.85	3.90	3.60	212.74	Bottom at 45.21'
RW-4	10/29/2010	7.97	--	4.68	--	NB	212.74	Bottom at 45.22'; Measured for DNAPL with tape
RW-4	12/10/2010	7.6	--	11.00	9.75	0.75	222.49	Bottom at 45.25'
RW-4	12/28/2010	7.35	--	9.00	9.90	0.60	232.39	Bottom at 45.25'
RW-4	1/3/2011	6.86	--	4.60	4.50	3.00	236.89	
RW-4	1/10/2011	7.46	--	2.10	2.63	4.87	239.52	
RW-4	1/17/2011	7.57	--	2.50	1.88	4.12	241.40	Bottom at 45.25'
RW-4	1/28/2011	--	--	3.25	--	NB	241.40	Measured for DNAPL with tape
RW-4	2/18/2011	7.4	--	4.42	--	NB	241.40	Measured for DNAPL with tape
RW-4	2/22/2011	6.35	--	5.30	1.60	2.00	243.00	
RW-4	3/4/2011	6.65	--	5.30	3.38	4.12	246.38	
RW-4	3/18/2011	6.97	--	4.60	2.93	6.07	249.31	Bottom at 44.90'
RW-4	3/28/2011	7.35	--	4.80	0.50	2.50	249.81	Bottom at 45.36'
RW-4	4/4/2011	6.22	--	4.80	0.60	0.15	250.41	Bottom at 44.9'
RW-4	4/12/2011	6.34	--	2.40	0.30	0.45	250.71	Bottom at 44.9'
RW-4	4/19/2011	6.06	--	5.90	2.24	1.76	252.95	Bottom at 45.05'
RW-4	4/25/2011	5.76	--	5.00	4.65	1.35	257.60	Bottom at 44.90'
RW-4	5/9/2011	6.76	--	2.00	2.05	1.95	259.65	Bottom at 44.95'
RW-4	5/16/2011	6.82	--	1.50	0.55	1.15	260.20	Bottom at 44.95'
RW-4	6/6/2011	7.42	--	2.40	--	NB	260.20	Bottom at 44.88'
RW-4	6/7/2011	7.35	--	2.40	3.65	2.35	263.85	
RW-4	6/20/2011	6.73	--	2.50	0.65	1.35	264.50	Bottom at 45.03'
RW-4	6/27/2011	6.33	'-	2.90	2.25	2.75	266.75	Bottom at 44.9'
RW-4	6/28/2011	4.64	--	1.00	0.10	0.90	266.85	
RW-4	7/8/2011	7.45	--	1.70	0.85	2.15	267.70	Bottom at 45.05'
RW-4	7/11/2011	7.58	--	1.20	1.25	1.75	268.95	Bottom at 44.90'
RW-4	7/13/2011	7.62	--	1.20	0.45	1.55	269.40	Bottom at 44.86'
RW-4	7/18/2011	7.75	--	1.60	0.80	2.20	270.20	Bottom at 44.9'
RW-4	7/25/2011	7.56	--	1.60	1.70	2.30	271.90	Bottom at 45.0'
RW-4	8/5/2011	7.84	--	1.40	1.40	2.60	273.30	
RW-4	8/15/2011	7.78	--	2.80	1.25	3.75	274.55	Bottom at 45.1'
RW-4	8/24/2011	7.78	--	3.00	2.65	2.35	277.20	Bottom at 45.05'
RW-4	9/6/2011	8.05	--	3.30	2.20	1.80	279.40	Bottom at 43.93'
RW-4	9/12/2011	8.08	--	3.20	3.00	2.00	282.40	Bottom at 45.00'
RW-4	9/19/2011	7.29	--	2.80	2.10	2.90	284.50	Bottom at 45.10'
RW-4	10/6/2011	7.7	--	4.60	4.80	2.20	289.30	Bottom at 44.92'
RW-4	10/10/2011	7.79	--	2.70	2.25	1.75	291.55	Bottom at 45.03'
RW-4	10/19/2011	7.44	--	2.60	2.20	2.80	293.75	Bottom at 44.95'
RW-4	10/24/2011	7.36	--	2.30	0.25	1.75	294.00	Bottom at 44.99'
RW-4	11/4/2011	6.95	--	3.50	2.95	2.05	296.95	
RW-4	6/5/2012	--	--	15.50	--	NB	296.95	Bottom at 45.15'

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-4	11/14/2012	--	--	20.20	--	NB	296.95	
RW-4	4/18/2013	--	--	20.40	--	NB	296.95	
RW-4	8/23/2013	--	--	16.50	--	NB	296.95	
RW-4	4/16/2014	--	--	--	0.00	0.00	296.95	Unable to measure DNAPL thicknes due to airlift assembly
RW-4	4/25/2014	--	--	--	11.11	8.73	308.06	
RW-4	4/29/2014	--	--	--	11.11	9.43	319.17	
RW-4	5/2/2014	--	--	--	10.70	10.35	329.87	
RW-4	5/6/2014	--	--	--	0.67	9.51	330.54	
RW-4	5/9/2014	--	--	--	0.67	4,48	331.21	
RW-4	5/13/2014	--	--	--	0.67	2.99	331.88	
RW-4	5/16/2014	--	--	--	0.67	2.82	332.55	
RW-4	5/19/2014	--	--	--	0.67	2,24	333.22	
RW-4	5/22/2014	--	--	--	0.66	1.58	333.88	
RW-4	5/27/2014	--	--	--	0.66	3.21	334.54	
RW-4	8/14/2014	--	--	--	2.00	4.01	336.54	
RW-4	8/22/2014	--	--	--	2.00	3.05	338.54	
RW-4	8/29/2014	--	--	--	2.00	1.01	340.54	
RW-4	9/5/2014	--	--	--	2.00	0.65	342.54	
RW-4	9/12/2014	--	--	--	2.00	1.24	344.54	
RW-4	9/19/2014	--	--	--	0.54	1.84	345.08	
RW-4	9/25/2014	--	--	--	0.53	1.11	345.61	
RW-4	10/3/2014	--	--	--	0.53	1.59	346.14	
RW-4	10/10/2014	--	--	--	0.53	1.89	346.67	
RW-4	10/17/2014	--	--	--	0.53	1.57	347.20	
RW-4	10/24/2014	--	--	--	0.53	2.27	347.73	
RW-4	11/6/2014	--	--	--	0.53	2.14	348.26	
RW-4	12/29/2014	--	--	--	0.00	0.00	348.26	Unable to measure DNAPL thicknes due to airlift assembly
RW-4	3/4/2015	--	--	--	0.00	0.00	348.26	Unable to measure DNAPL thicknes due to airlift assembly
RW-4	3/13/2015	--	--	--	5.00	4.87	353.26	
RW-4	3/20/2015	--	--	--	3.00	2.50	356.26	
RW-4	3/27/2015	--	--	--	1.00	2.53	357.26	
RW-4	4/3/2015	--	--	--	0.50	1.06	357.76	
RW-4	4/10/2015	--	--	--	0.50	0.99	358.26	
RW-4	4/17/2015	--	--	--	0.37	1.17	358.63	
RW-4	4/24/2015	--	--	--	0.37	0.63	359.00	
RW-4	5/19/2015	--	--	0.20	0.00	0.00	359.00	Bottom at 44.40'
RW-4	6/5/2015	--	--	0.00	0.00	0.00	359.00	
RW-4	7/13/2015	--	--	0.10	0.00	0.00	359.00	
RW-4	9/28/2015	--	--	0*	0.00	0.00	359.00	Bottom at 34.10' (cannot reach bottom of well).
RW-4	1/6/2016	--	--	5.75	0.00	0.00	359.00	Bottom at 44.40'
RW-4	2/19/2016	--	--	~5.75	0.00	0.00	359.00	Bottom at 37.00'; could not get probe to bottom of well
RW-4	3/18/2016	--	--	--	5.00	3.42	364.00	
RW-4	3/25/2016	--	--	--	2.00	3.11	366.00	

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CSX Transportation
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Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-4	4/1/2016	--	--	--	1.00	1.20	367.00	
RW-4	4/8/2016	--	--	--	0.50	1.47	367.50	
RW-4	5/11/2016	--	--	--	0.30	2.71	367.80	
RW-4	5/20/2016	--	--	--	0.15	2.14	367.95	
RW-4	6/22/2016	--	--	0.30	0.00	0.00	367.95	Bottom att 46.40'
RW-4	9/9/2016	--	--	0.00	0.00	0.00	367.95	Bottom at 43.40' (did not reach bottom)
RW-4	10/21/2016	--	--	1.00	0.00	0.00	367.95	Bottom at 44.50'
RW-4	12/2/2016	--	--	1.00	0.00	0.00	367.95	Bottom at 43.40' (did not reach bottom)
RW-4	2/24/2017	--	--	1.00	0.00	0.00	367.95	Bottom at 43.40' (did not reach bottom)
RW-4	3/10/2017	--	--	--	1.50	0.40	369.45	
RW-4	3/24/2017	--	--	--	0.19	1.65	369.64	
RW-4	4/7/2017	--	--	--	0.10	1.40	369.74	
RW-4	4/21/2017	--	--	0.00	0.00	0.00	369.74	Bottom at 43.40' (did not reach bottom)
RW-4	7/18/2017	--	--	0.15	0.00	0.00	369.74	Bottom at 43.40' (did not reach bottom)
RW-4	10/20/2017	--	--	0.50	0.00	0.00	369.74	Bottom at 44.30' (did not reach bottom)
RW-4	2/27/2018	--	--	2.50	0.00	0.00	369.74	Bottom at 44.30' (did not reach bottom)
RW-4	5/18/2018	--	--	1.20	0.00	0.00	369.74	Bottom at 44.30' (did not reach bottom)
RW-4	8/10/2018	--	--	1.40	0.00	0.00	369.74	Bottom at 44.30' (did not reach bottom)
RW-4	11/19/2018	--	--	1.40	0.00	0.00	369.74	Bottom at 44.30' (did not reach bottom)
RW-4	3/15/2019	--	--	1.60	0.00	0.00	369.74	Bottom at 44.30' (did not reach bottom)
RW-4	5/3/2019	--	--	--	0.30	4.90	370.04	
RW-4	5/17/2019	--	--	--	0.15	2.43	370.19	
RW-4	6/14/2019	--	--	0.30	0.00	0.00	370.19	Bottom at 43.50' (did not reach bottom)
RW-4	10/4/2019	--	--	0.30	0.00	0.00	370.19	Bottom at 45.50'
RW-5	12/28/2009	8.08	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-5	1/6/2010	8.38	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-5	1/11/2010	8.45	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-5	1/18/2010	8.55	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-5	1/25/2010	7.75	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-5	2/1/2010	8.17	--	0.00	--	NB	--	Used weighted tape to gauge for DNAPL
RW-5	2/22/2010	8.12	9.46	0.20	0.02	0.98	0.02	
RW-5	3/8/2010	8.14	10.62	0.33	0.06	0.69	0.08	
RW-5	3/11/2010	8.62	9.11	0.05	0.01	0.49	0.09	DNAPL staining on bailer
RW-5	4/16/2010	9.36	15.12	0.33	0.19	3.31	0.28	
RW-5	4/26/2010	7.80	22.13	2.50	2.12	6.63	2.40	
RW-5	5/5/2010	7.81	26.82	3.00	5.43	6.82	7.83	
RW-5	6/1/2010	8.08	22.31	4.00	6.56	3.94	14.39	
RW-5	6/9/2010	8.03	20.37	3.75	5.93	4.57	20.32	
RW-5	6/24/2010	8.14	21.96	4.25	7.53	8.22	27.85	
RW-5	7/6/2010	8.62	16.13	2.50	2.80	4.20	30.65	
RW-5	7/13/2010	8.64	17.98	2.50	3.33	5.42	33.98	
RW-5	7/20/2010	8.62	14.39	1.50	2.19	4.81	36.17	

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RW-5	8/3/2010	8.75	17.18	0.80	1.07	7.68	37.24	
RW-5	8/10/2010	9.13	17.60	1.40	1.16	5.84	38.40	
RW-5	8/17/2010	9.31	--	1.50	--	NB	38.40	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-5	8/23/2010	8.81	--	5.60	--	NB	38.40	Bottom at 46.65'; Measured for DNAPL with tape
RW-5	8/30/2010	8.86	--	5.78	--	NB	38.40	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-5	9/17/2010	8.83	--	5.72	7.26	3.24	45.66	Bottom at 45.55'
RW-5	9/24/2010	9.26	--	5.65	5.67	3.33	51.33	Bottom at 46.67'
RW-5	10/1/2010	9.42	--	5.40	4.50	4.50	55.83	Bottom at 46.55'
RW-5	10/5/2010	10.00	--	5.40	4.43	4.57	60.26	Bottom at 46.55'
RW-5	10/12/2010	9.42	--	5.00	3.98	5.02	64.24	Bottom at 46.57'
RW-5	10/18/2010	9.50	--	4.45	2.85	4.65	67.09	Bottom at 46.57'
RW-5	10/29/2010	8.91	--	4.49	--	NB	67.09	Bottom at 46.51'
RW-5	12/10/2010	9.45	--	5.20	4.65	2.85	71.74	Bottom at 46.6'
RW-5	12/28/2010	8.21	--	4.60	4.43	3.07	76.17	Bottom at 46.5'
RW-5	1/3/2011	7.70	--	4.50	3.00	3.00	79.17	
RW-5	1/10/2011	8.31	--	2.30	1.89	4.11	81.06	
RW-5	1/17/2011	8.43	--	1.75	1.13	3.37	82.19	Bottom at 46.6'
RW-5	1/28/2011	--	--	2.00	--	NB	82.19	Measured for DNAPL with tape
RW-5	2/18/2011	8.29	--	1.76	--	NB	82.19	Measured for DNAPL with tape
RW-5	2/22/2011	7.19	--	1.53	--	NB	82.19	Measured for DNAPL with tape
RW-5	3/4/2011	7.64	--	2.25	0.83	3.67	83.02	
RW-5	3/18/2011	7.92	--	1.90	--	NB	83.02	Bottom at 46.20'; Measured for DNAPL with tape
RW-5	3/28/2011	8.29	--	0.90	0.13	1.87	83.15	Bottom at 46.72'
RW-5	4/4/2011	7.95	--	1.50	0.15	0.35	83.30	Bottom at 46.15'
RW-5	4/12/2011	7.24	--	1.80	0.15	0.35	83.45	Bottom at 46.16'
RW-5	4/19/2011	6.74	--	2.40	1.38	1.62	84.83	Bottom at 46.13'
RW-5	4/25/2011	6.54	--	1.30	0.90	1.10	85.73	Bottom at 46.15'
RW-5	5/9/2011	7.75	--	0.80	0.35	1.65	86.08	Bottom at 46.15'
RW-5	5/16/2011	7.76	--	0.50	0.26	1.74	86.34	Bottom at 46.15'
RW-5	6/6/2011	8.34	--	1.40	--	NB	86.34	Bottom at 46.15'; Measured for DNAPL with tape
RW-5	6/7/2011	8.33	--	1.40	1.10	1.90	87.44	
RW-5	6/20/2011	7.60	--	1.70	0.70	1.30	88.14	Bottom at 46.16'
RW-5	6/27/2011	7.52	--	1.50	0.85	2.15	88.99	Bottom at 46.2'
RW-5	6/28/2011	7.74	--	1.00	0.10	0.90	89.09	
RW-5	7/8/2011	8.39	--	2.40	1.09	2.91	90.18	Bottom at 46.30'
RW-5	7/11/2011	8.52	--	1.10	0.50	1.50	90.68	Bottom at 46.25'
RW-5	7/13/2011	8.60	--	1.30	0.60	1.40	91.28	Bottom at 46.22'
RW-5	7/18/2011	8.65	--	2.30	1.15	1.85	92.43	Bottom at 46.20'
RW-5	7/25/2011	8.52	--	2.00	1.65	2.35	94.08	Bottom at 46.3'
RW-5	8/5/2011	8.76	--	2.10	1.55	2.45	95.63	
RW-5	8/15/2011	8.65	--	2.10	1.05	2.95	96.68	Bottom at 46.3'

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RW-5	8/24/2011	8.74	--	2.10	1.45	2.55	98.13	Bottom at 46.3'
RW-5	9/6/2011	8.95	--	2.20	1.35	1.65	99.48	Bottom at 46.18'
RW-5	9/12/2011	9.01	--	1.60	0.95	2.05	100.43	Bottom at 46.30'
RW-5	9/19/2011	8.63	--	1.80	1.45	3.55	101.88	Bottom at 46.30'
RW-5	10/6/2011	8.68	--	2.30	3.55	1.45	105.43	Bottom at 46.20'
RW-5	10/10/2011	8.74	--	0.90	0.60	1.40	106.03	Bottom at 46.17'
RW-5	10/19/2011	8.47	--	1.60	0.75	1.25	106.78	Bottom at 46.15'
RW-5	10/24/2011	8.32	--	1.20	0.45	1.55	107.23	Bottom at 46.25'
RW-5	11/4/2011	7.94	--	0.90	0.65	1.35	107.88	
RW-5	11/8/2011	8.34	--	1.10	0.05	0.21	107.93	Bottom at 46.35'
RW-5	6/5/2012	--	--	3.30	--	NB	107.93	Bottom at 46.35'
RW-5	11/14/2012	--	--	4.50	--	NB	107.93	
RW-5	4/18/2013	--	--	4.80	--	NB	107.93	
RW-5	8/23/2013	--	--	6.00	--	NB	107.93	Bottom at 45.82'
RW-5	4/16/2014	--	--	7.80	0.00	0.00	107.93	Bottom at 45.8'
RW-5	5/6/2014	--	--	--	0.45	1.30	108.38	
RW-5	12/29/2014	--	--	--	0.00	0.00	108.38	Unable to measure DNAPL thicknes due to airlift assembly
RW-5	3/4/2015	--	--	--	0.00	0.00	108.38	Unable to measure DNAPL thicknes due to airlift assembly
RW-5	4/15/2015	--	--	10.00	9.36	0.00	117.74	
RW-5	4/17/2015	--	--	--	1.00	4.33	118.74	
RW-5	4/24/2015	--	--	--	1.00	4.04	119.74	
RW-5	4/30/2015	--	--	--	0.10	1.98	119.84	
RW-5	5/8/2015	--	--	--	0.09	1.55	119.93	
RW-5	5/15/2015	--	--	--	0.09	2.01	120.02	
RW-5	5/19/2015	--	--	0.20	0.00	0.00	120.02	Bottom at 45.80'
RW-5	6/5/2015	--	--	1.00	0.00	0.00	120.02	
RW-5	7/13/2015	--	--	0.50	0.00	0.00	120.02	
RW-5	9/28/2015	--	--	0.70	0.00	0.00	120.02	Bottom at 46.80'
RW-5	1/6/2016	--	--	0.00	0.00	0.00	120.02	Trace on probe; Bottom at 46.00'
RW-5	2/19/2016	--	--	1.10	0.00	0.00	120.02	Bottom at 47.00'
RW-5	3/25/2016	--	--	--	0.75	1.40	120.77	
RW-5	4/1/2016	--	--	--	0.10	1.24	120.87	
RW-5	5/11/2016	--	--	--	0.05	3.06	120.92	
RW-5	6/22/2016	--	--	0.00	0.00	0.00	120.92	Bottom at 45.60'
RW-5	9/9/2016	--	--	0.10	0.00	0.00	120.92	Bottom at 47.00'
RW-5	10/21/2016	--	--	0.00	0.00	0.00	120.92	Bottom at 47.90'
RW-5	12/2/2016	--	--	0.20	0.00	0.00	120.92	Bottom at 47.00'
RW-5	2/24/2017	--	--	0.50	0.00	0.00	120.92	Bottom at 47.00'
RW-5	4/21/2017	--	--	0.40	0.00	0.00	120.92	Bottom at 47.00'
RW-5	7/18/2017	--	--	1.00	0.00	0.00	120.92	Bottom at 47.00'
RW-5	10/20/2017	--	--	0.40	0.00	0.00	120.92	Bottom at 47.00'
RW-5	2/27/2018	--	--	0.40	0.00	0.00	120.92	Bottom at 47.00'
RW-5	5/18/2018	--	--	0.40	0.00	0.00	120.92	Bottom at 47.00'

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RW-5	8/10/2018	--	--	0.40	0.00	0.00	120.92	Bottom at 47.00'
RW-5	11/19/2018	--	--	0.00	0.00	0.00	120.92	Bottom at 45.00'; did not reach bottom
RW-5	3/15/2019	--	--	0.00	0.00	0.00	120.92	Bottom at 45.00'; did not reach bottom
RW-5	6/14/2019	--	--	0.40	0.00	0.00	120.92	Bottom at 46.00'; did not reach bottom
RW-5	10/4/2019	--	--	3.00	0.00	0.00	120.92	Bottom at 46.50'
RW-6	4/16/2010	6.06	6.10	0.05	0.01	0.24	0.01	
RW-6	4/26/2010	5.25	5.97	0.00	0.00	1.75	0.01	Globules present in bailer
RW-6	5/5/2010	5.64	6.30	0.00	0.00	1.75	0.01	Globules present in bailer
RW-6	6/1/2010	6.11	6.55	0.00	0.00	1.75	0.01	Sheen and globules present in bailer
RW-6	6/9/2010	5.98	6.34	0.00	0.00	1.75	0.01	Sheen and globules present in bailer
RW-6	6/24/2010	5.99	6.13	0.00	0.00	0.25	0.01	
RW-6	7/6/2010	6.87	6.93	0.00	0.00	0.25	0.01	
RW-6	7/13/2010	7.01	7.13	0.00	0.00	0.25	0.01	
RW-6	7/20/2010	6.08	6.11	0.00	0.00	0.25	0.01	Globules and DNAPL staining on bailer
RW-6	8/3/2010	6.62	7.83	0.05	0.09	3.41	0.10	
RW-6	8/10/2010	6.67	7.46	0.00	0.00	0.25	0.10	
RW-6	8/17/2010	6.84	--	0.00	--	NB	0.10	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-6	8/23/2010	6.58	--	0.00	--	NB	0.10	Bottom at 38.55'; Measured for DNAPL with tape
RW-6	8/30/2010	6.70	--	0.00	--	NB	0.10	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-6	9/17/2010	6.69	--	0.00	--	NB	0.10	Bottom at 38.51'; Measured for DNAPL with tape
RW-6	9/24/2010	6.85	--	0.00	--	NB	0.10	Bottom at 38.53'; Measured for DNAPL with tape
RW-6	10/1/2010	7.05	--	0.00	--	NB	0.10	Bottom at 38.56'; Measured for DNAPL with tape
RW-6	10/5/2010	6.92	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	10/12/2010	7.05	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	10/18/2010	7.02	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	10/29/2010	6.68	--	0.00	--	NB	0.10	Bottom at 38.45'; Measured for DNAPL with tape
RW-6	12/10/2010	6.65	--	0.00	--	NB	0.10	38.5'; Measured for DNAPL with tape
RW-6	12/28/2010	6.05	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	1/3/2011	5.58	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	1/10/2011	6.18	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	1/17/2011	6.24	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	1/28/2011	--	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	2/18/2011	6.12	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	2/22/2011	5.07	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	3/4/2011	5.40	--	0.00	--	NB	0.10	Measured for DNAPL with tape
RW-6	3/18/2011	5.74	--	0.00	--	NB	0.10	Bottom at 38.50'; Measured for DNAPL with tape
RW-6	4/19/2011	4.84	--	0.00	--	NB	0.10	Bottom at 38.18'; Measured for DNAPL with tape
RW-6	5/9/2011	5.55	--	0.00	--	NB	0.10	Bottom at 38.15'; Measured for DNAPL with tape
RW-6	5/16/2011	5.55	--	0.00	--	NB	0.10	Bottom at 38.15'; Measured for DNAPL with tape
RW-6	6/6/2011	6.10	--	0.00	--	NB	0.10	Bottom at 38.1'; Measured for DNAPL with tape

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RW-6	6/20/2011	6.43	--	0.00	--	NB	0.10	Bottom at 38.1'; Measured for DNAPL with tape
RW-6	6/27/2011	5.08	--	0.00	--	NB	0.10	Bottom at 38.05'; Measured for DNAPL with tape
RW-6	7/8/2011	6.17	--	0.00	--	NB	0.10	Bottom at 38.05'; Measured for DNAPL with tape
RW-6	7/13/2011	6.33	--	0.00	--	NB	0.10	Bottom at 38.12'; Measured for DNAPL with tape
RW-6	7/18/2011	6.49	--	0.00	0.00	0.25	0.10	Bottom at 38.30'
RW-6	7/25/2011	6.28	--	0.00	--	NB	0.10	Bottom at 38.30'; Measured for DNAPL with tape
RW-6	8/5/2011	7.60	--	0.00	0.00	1.00	0.10	
RW-6	8/24/2011	6.51	--	0.00	0.00	0.00	0.10	Bottom at 38.19'
RW-6	10/10/2011	6.51	--	0.00	--	NB	0.10	Bottom at 38.11'
RW-6	11/8/2011	6.17	--	0.00	--	NB	0.10	Bottom at 38.36'
RW-6	6/5/2012	--	--	0.00	--	NB	0.10	Bottom at 38.30'
RW-6	11/14/2012	--	--	0.00	--	NB	0.10	
RW-6	4/18/2013	--	--	0.00	--	NB	0.10	
RW-6	8/23/2013	--	--	0.00	--	NB	0.10	Bottom at 38.15'; 4' of sediment in well
RW-6	4/16/2014	--	--	0.00	0.00	0.00	0.10	Trace DNAPL on probe. Bottom at 38.2'
RW-6	12/29/2014	--	--	0.00	0.00	0.00	0.10	Bottom at 38.35'
RW-6	3/4/2015	--	--	0.00	0.00	0.00	0.10	Bottom at 38.35'
RW-6	1/6/2016	--	--	0.00	0.00	0.00	0.10	Trace on probe; Bottom at 38.35'
RW-6	2/19/2016	--	--	0.00	0.00	0.00	0.10	Trace on probe; Bottom at 38.35'
RW-6	6/22/2016	--	--	0.00	0.00	0.00	0.10	Trace on probe; Bottom at 38.35'
RW-6	9/9/2016	--	--	0.00	0.00	0.00	0.10	Bottom at 38.35'
RW-6	10/21/2016	--	--	0.00	0.00	0.00	0.10	Bottom at 38.20'
RW-6	12/2/2016	--	--	0.00	0.00	0.00	0.10	Bottom at 38.35'
RW-6	2/24/2017	--	--	0.00	0.00	0.00	0.10	Bottom at 38.35'
RW-6	4/21/2017	--	--	0.00	0.00	0.00	0.10	Bottom at 38.35'
RW-6	7/18/2017	--	--	0.15	0.00	0.00	0.10	Bottom at 38.35'
RW-6	10/20/2017	--	--	0.60	0.00	0.00	0.10	Bottom at 38.35'
RW-6	2/27/2018	--	--	0.10	0.00	0.00	0.10	Bottom at 38.35'
RW-6	5/18/2018	--	--	0.00	0.00	0.00	0.10	Bottom at 38.55'
RW-6	8/10/2018	--	--	0.00	0.00	0.00	0.10	Bottom at 38.55'
RW-6	11/19/2018	--	--	0.10	0.00	0.00	0.10	Bottom at 38.55'
RW-6	3/15/2019	--	--	0.60	0.00	0.00	0.10	Bottom at 38.55'
RW-6	6/14/2019	--	--	0.60	0.00	0.00	0.10	Bottom at 38.00'
RW-6	9/20/2019	--	--	0.80	0.00	0.00	0.10	Bottom at 38.20'
RW-7	12/10/2010	8.55	--	3.60	0.95	3.55	0.95	Obstructions at 46.6' and 48.0'
RW-7	12/28/2010	8.31	--	2.50	0.75	3.75	1.70	Obstructions at 46.6' and 48.0'
RW-7	1/3/2011	7.84	--	2.00	0.30	2.70	2.00	Obstructions at 46.6' and 48.0'
RW-7	1/10/2011	8.38	--	2.00	0.38	4.12	2.38	Obstructions at 46.6' and 48.0'
RW-7	1/17/2011	8.60	--	1.50	0.00	NB	2.38	Measured for DNAPL with tape
RW-7	1/28/2011	--	--	1.75	0.00	NB	2.38	Obstructions at 46.6 and 48.0' Measured for DNAPL with tape
RW-7	3/4/2011	7.15	--	0.90	0.15	1.35	2.53	Obstruction at 46.4'
RW-7	3/18/2011	7.38	--	0.80	0.00	NB	2.53	Obstruction at 46.30'; Measured for DNAPL with tape

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RW-7	3/28/2011	7.39	--	0.90	0.06	0.44	2.59	Bottom at 46.85'
RW-7	4/4/2011	7.77	--	0.80	0.10	0.40	2.69	Bottom at 46.31'
RW-7	4/12/2011	7.06	--	0.70	0.10	0.40	2.79	Bottom at 46.22'
RW-7	4/19/2011	7.19	--	0.90	0.03	0.05	2.82	Bottom at 46.30', obstruction
RW-7	4/25/2011	7.35	--	0.50	0.08	0.42	2.90	Bottom at 46.30', obstruction
RW-7	5/9/2011	6.11	--	0.80	0.20	0.55	3.10	Bottom at 46.30', obstruction
RW-7	5/18/2011	6.81	--	1.00	0.20	0.30	3.30	Bottom at 46.3, obstruction
RW-7	6/6/2011	7.49	--	0.90	0.00	NB	3.30	Bottom at 46.28', obstruction; Measured for DNAPL with tape
RW-7	6/7/2011	7.40	--	0.90	0.10	0.90	3.40	Bottom at 46.30', obstruction
RW-7	6/20/2011	7.76	--	0.80	0.01	0.99	3.41	Bottom at 46.34', obstruction
RW-7	6/27/2011	8.06	--	1.00	0.10	1.90	3.51	Bottom at 46.3', obstruction
RW-7	6/28/2011	8.70	--	0.60	0.00	NB	3.51	Measured for DNAPL with tape
RW-7	7/8/2011	8.25	--	0.40	0.09	0.91	3.60	Bottom at 46.29'
RW-7	7/11/2011	8.73	--	0.70	0.10	0.90	3.70	Bottom at 46.21'
RW-7	7/13/2011	9.06	--	1.20	0.20	0.80	3.90	Bottom at 47.50'
RW-7	7/18/2011	9.10	--	0.90	0.08	0.92	3.98	Bottom at 46.6'
RW-7	7/25/2011	8.95	--	0.80	0.05	0.10	4.03	Bottom at 46.22'
RW-7	8/5/2011	8.69	--	0.20	0.15	1.85	4.18	
RW-7	8/15/2011	9.14	--	0.40	0.05	0.95	4.23	Bottom at 46.3'
RW-7	8/24/2011	8.64	--	0.50	0.00	1.00	4.23	Bottom at 46.4'
RW-7	9/6/2011	9.30	--	0.80	0.05	0.95	4.28	Bottom at 46.32
RW-7	9/12/2011	9.42	--	0.40	0.05	0.95	4.33	Bottom at 46.40'
RW-7	9/19/2011	9.37	--	1.50	0.20	1.80	4.53	Bottom at 47.65'
RW-7	10/6/2011	8.71	--	0.60	0.05	0.95	4.58	Bottom at 46.40'
RW-7	10/10/2011	1.50	--	0.70	0.05	0.95	4.63	Bottom at 46.40'
RW-7	10/19/2011	8.83	--	0.60	0.10	0.90	4.73	Bottom at 46.25'
RW-7	10/24/2011	8.50	--	0.40	0.10	0.90	4.83	Bottom at 46.35'
RW-7	11/8/2011	8.44	--	0.50	0.00	NB	4.83	Bottom at 46.52'
RW-7	6/5/2012	--	--	1.30	0.00	NB	4.83	Bottom at 46.60', obstruction
RW-7	10/26/2012	--	--	4.50	2.50	0.00	7.33	Bypassed obstruction with 2" Stainless Steel
RW-7	11/5/2012	--	--	5.00	0.27	4.82	7.60	
RW-7	11/14/2012	--	--	3.50	--	NB	7.60	
RW-7	11/26/2012	--	--	--	0.27	5.08	7.87	
RW-7	12/3/2012	--	--	--	0.75	5.05	8.62	
RW-7	12/4/2012	--	--	5.00	0.25	5.33	8.87	
RW-7	12/5/2012	--	--	6.00	0.25	1.90	9.12	
RW-7	12/14/2012	--	--	3.30	0.27	4.41	9.39	
RW-7	12/17/2012	--	--	1.10	0.27	4.88	9.66	
RW-7	12/28/2012	--	--	--	0.27	5.07	9.93	
RW-7	1/2/2013	--	--	6.50	0.57	2.43	10.50	
RW-7	1/7/2013	--	--	3.60	0.57	4.42	11.07	
RW-7	1/14/2013	--	--	--	0.56	2.52	11.63	
RW-7	4/18/2013	--	--	10.00	--	NB	11.63	

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Bloomington, Indiana

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RW-7	4/30/2013	--	--	--	1.88	1.88	13.51	
RW-7	5/6/2013	--	--	--	6.07	6.07	19.58	
RW-7	5/20/2013	--	--	--	4.71	4.71	24.29	
RW-7	5/23/2013	--	--	--	0.47	4.50	24.76	
RW-7	5/29/2013	--	--	--	0.42	3.23	25.18	
RW-7	6/10/2013	--	--	--	0.42	2.18	25.60	
RW-7	6/14/2013	--	--	--	0.42	3.46	26.02	
RW-7	6/24/2013	--	--	--	0.42	2.87	26.44	
RW-7	7/8/2013	--	--	--	0.42	4.68	26.86	Air Lift Installed
RW-7	7/12/2013	--	--	--	0.42	4.26	27.28	
RW-7	7/15/2013	--	--	--	0.42	5.21	27.70	
RW-7	7/19/2013	--	--	--	0.42	5.54	28.12	
RW-7	7/22/2013	--	--	--	0.42	5.13	28.54	
RW-7	7/26/2013	--	--	--	0.43	4.71	28.97	
RW-7	8/9/2013	--	--	--	0.43	1.57	29.40	
RW-7	8/16/2013	--	--	--	0.43	2.11	29.83	
RW-7	8/19/2013	--	--	--	0.43	2.21	30.26	
RW-7	8/23/2013	--	--	0.20	0.43	1.57	30.69	Probe stopped 4' from bottom
RW-7	8/26/2013	--	--	--	0.43	1.70	31.12	
RW-7	9/5/2013	--	--	--	0.43	1.67	31.55	
RW-7	9/9/2013	--	--	--	0.43	1.46	31.98	
RW-7	9/13/2013	--	--	--	0.42	1.94	32.40	
RW-7	9/16/2013	--	--	--	0.42	1.87	32.82	
RW-7	9/20/2013	--	--	--	0.42	1.48	33.24	
RW-7	9/23/2013	--	--	--	0.42	1.59	33.66	
RW-7	9/27/2013	--	--	--	0.42	1.83	34.08	
RW-7	9/30/2013	--	--	--	0.42	2.05	34.50	
RW-7	10/4/2013	--	--	--	0.42	1.66	34.92	
RW-7	10/7/2013	--	--	--	0.42	2.11	35.34	
RW-7	10/25/2013	--	--	--	0.43	1.77	35.77	
RW-7	10/28/2013	--	--	--	0.43	1.60	36.20	
RW-7	11/1/2013	--	--	--	0.43	1.69	36.63	
RW-7	11/4/2013	--	--	--	0.43	1.25	37.06	
RW-7	11/8/2013	--	--	--	0.42	0.70	37.48	
RW-7	11/12/2013	--	--	--	0.42	0.79	37.90	
RW-7	11/15/2013	--	--	--	0.42	1.24	38.32	
RW-7	11/18/2013	--	--	--	0.42	0.93	38.74	
RW-7	3/28/2014	--	--	--	0.85	0.41	39.59	
RW-7	4/1/2014	--	--	--	0.80	3.28	40.39	
RW-7	4/4/2014	--	--	--	0.77	0.54	41.16	
RW-7	4/8/2014	--	--	--	0.77	0.64	41.93	
RW-7	4/11/2014	--	--	--	0.77	0.38	42.70	
RW-7	4/15/2014	--	--	--	0.77	1.46	43.47	

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DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-7	4/16/2014	--	--	--	0.00	0.00	43.47	Unable to measure DNAPL thickness due to airlift assembly
RW-7	4/18/2014	--	--	--	0.77	1.25	44.24	
RW-7	4/29/2014	--	--	--	0.77	1.60	45.01	
RW-7	5/2/2014	--	--	--	0.77	0.92	45.78	
RW-7	5/6/2014	--	--	--	0.77	0.97	46.55	
RW-7	5/13/2014	--	--	--	0.77	0.88	47.32	
RW-7	5/16/2014	--	--	--	0.77	0.54	48.09	
RW-7	5/19/2014	--	--	--	0.77	0.57	48.86	
RW-7	5/22/2014	--	--	--	0.77	0.36	49.63	
RW-7	5/27/2014	--	--	--	0.75	0.57	50.38	
RW-7	8/14/2014	--	--	--	1.92	1.78	52.30	
RW-7	8/29/2014	--	--	--	1.91	0.93	54.21	
RW-7	9/5/2014	--	--	--	1.91	0.16	56.12	
RW-7	9/12/2014	--	--	--	1.91	0.31	58.03	
RW-7	10/10/2014	--	--	0.50	1.91	1.30	59.94	Bottom at 49.40'
RW-7	10/17/2014	--	--	--	1.16	0.00	61.10	
RW-7	10/24/2014	--	--	--	1.22	0.00	62.32	
RW-7	11/6/2014	--	--	--	1.61	0.00	63.93	
RW-7	12/29/2014	--	--	--	0.00	0.00	63.93	Unable to measure DNAPL thickness due to airlift assembly
RW-7	3/4/2015	--	--	--	0.00	0.00	63.93	Unable to measure DNAPL thickness due to airlift assembly
RW-7	3/20/2015	--	--	--	0.90	2.63	64.83	
RW-7	3/27/2015	--	--	--	0.00	2.03	64.83	
RW-7	4/3/2015	--	--	--	0.00	2.26	64.83	
RW-7	4/10/2015	--	--	--	0.00	1.95	64.83	
RW-7	4/17/2015	--	--	--	0.00	1.75	64.83	
RW-7	4/24/2015	--	--	--	0.00	1.58	64.83	
RW-7	5/19/2015	--	--	2.00	0.00	0.00	64.83	Bottom at 50.90'
RW-7	6/5/2015	--	--	0.50	0.00	0.00	64.83	Could not reach bottom
RW-7	9/28/2015	--	--	4.00	0.00	0.00	64.83	Bottom at 50.10'
RW-7	1/6/2016	--	--	4.50	0.00	0.00	64.83	Bottom at 50.50'
RW-7	2/19/2016	--	--	9.75	0.00	0.00	64.83	Bottom at 50.90'
RW-7	3/18/2016	--	--	--	1.50	2.80	66.33	
RW-7	3/25/2016	--	--	--	0.75	1.59	67.08	
RW-7	4/1/2016	--	--	--	0.50	0.75	67.58	
RW-7	4/8/2016	--	--	--	0.50	2.63	68.08	
RW-7	5/11/2016	--	--	--	0.25	2.24	68.33	
RW-7	5/20/2016	--	--	--	0.08	1.31	68.41	
RW-7	6/22/2016	--	--	0.50	0.00	0.00	68.41	Bottom at 50.10'
RW-7	9/9/2016	--	--	1.00	0.00	0.00	68.41	Bottom at 50.90'
RW-7	10/21/2016	--	--	4.10	0.00	0.00	68.41	Bottom at 50.00'
RW-7	12/2/2016	--	--	2.00	0.00	0.00	68.41	Bottom at 50.90'
RW-7	2/24/2017	--	--	4.80	0.00	0.00	68.41	Bottom at 50.90'; air lift plugged
RW-7	4/21/2017	--	--	4.80	0.00	0.00	68.41	Bottom at 50.90'

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Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-7	7/18/2017	--	--	4.90	0.00	0.00	68.41	Bottom at 50.90'
RW-7	10/20/2017	--	--	6.00	0.00	0.00	68.41	Bottom at 50.90' (sheet says 59.90'; believe this is an error)
RW-7	11/17/2017	--	--	--	6.00	7.21	74.41	
RW-7	2/27/2018	--	--	3.60	0.00	0.00	74.41	Bottom at 50.90' (sheet says 59.90'; believe this is an error)
RW-7	5/18/2018	--	--	3.50	0.00	0.00	74.41	Bottom at 50.90'
RW-7	8/10/2018	--	--	4.70	0.00	0.00	74.41	Bottom at 50.90'
RW-7	11/19/2018	--	--	5.20	0.00	0.00	74.41	Bottom at 50.90'
RW-7	3/15/2019	--	--	5.20	0.00	0.00	74.41	Bottom at 50.90'
RW-7	6/14/2019	--	--	0.70	0.00	0.00	74.41	Bottom at 43.90', did not reach bottom
RW-7	8/9/2019	--	--	--	3.14	0.00	77.55	
RW-7	8/23/2019	--	--	--	0.45	0.00	78.00	
RW-7	9/20/2019	--	--	5.60	0.00	0.00	78.00	Bottom at 50.20'
RW-7	10/4/2019	--	--	--	0.71	0.00	78.71	
RW-8	4/24/2012	5.44	--	23.00	0.00	0.00	0.00	First time pumping with EDRS, did not record amount pumped
RW-8	5/23/2012	--	--	--	6.84	0.00	6.84	
RW-8	5/24/2012	--	--	--	12.00	0.00	18.84	
RW-8	5/31/2012	--	--	--	6.50	0.00	25.34	
RW-8	6/5/2012	--	--	21.10	0.00	NB	25.34	Bottom at 45.50', top of pump.
RW-8	7/18/2012	--	--	--	33.04	10.50	58.38	
RW-8	7/31/2012	--	--	6.00	11.75	0.00	70.13	
RW-8	8/1/2012	--	--	--	15.87	0.00	86.00	
RW-8	8/15/2012	--	--	15.00	26.63	0.00	112.63	
RW-8	8/23/2012	--	--	15.00	24.23	16.66	136.86	
RW-8	8/24/2012	--	--	11.00	0.00	NB	136.86	
RW-8	8/29/2012	--	--	14.00	20.76	9.70	157.62	
RW-8	8/30/2012	--	--	14.00	11.56	3.81	169.18	
RW-8	8/31/2012	--	--	11.50	0.00	NB	169.18	
RW-8	9/4/2012	--	--	14.00	21.84	4.50	191.02	
RW-8	9/10/2012	--	--	14.00	22.00	3.75	213.02	
RW-8	9/11/2012	--	--	13.00	15.32	5.98	228.34	
RW-8	9/12/2012	--	--	11.00	11.00	4.50	239.34	
RW-8	9/13/2012	--	--	10.50	8.25	1.30	247.59	
RW-8	9/14/2012	--	--	9.00	9.89	0.00	257.48	
RW-8	9/17/2012	--	--	12.75	0.00	NB	257.48	
RW-8	9/18/2012	--	--	13.25	15.98	3.76	273.46	
RW-8	9/27/2012	--	--	15.50	15.98	9.57	289.44	
RW-8	10/2/2012	--	--	14.00	15.98	3.41	305.42	
RW-8	10/11/2012	--	--	14.50	15.98	3.36	321.40	
RW-8	10/15/2012	--	--	--	15.98	5.72	337.38	
RW-8	10/22/2012	--	--	--	17.41	3.77	354.79	
RW-8	10/29/2012	--	--	--	17.42	2.62	372.21	
RW-8	11/5/2012	--	--	12.00	17.41	2.93	389.62	

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RW-8	11/12/2012	--	--	--	19.55	0.99	409.17	
RW-8	11/14/2012	--	--	12.50	0.00	NB	409.17	
RW-8	11/19/2012	--	--	--	19.55	2.08	428.72	
RW-8	11/26/2012	--	--	--	21.18	0.00	449.90	
RW-8	12/3/2012	--	--	--	16.24	0.00	466.14	
RW-8	12/4/2012	--	--	12.80	14.84	0.00	480.98	
RW-8	12/11/2012	--	--	13.50	10.62	0.00	491.60	
RW-8	12/14/2012	--	--	9.00	13.75	0.00	505.35	
RW-8	12/17/2012	--	--	9.00	12.00	0.00	517.35	
RW-8	12/28/2012	--	--	--	16.64	0.00	533.99	
RW-8	1/2/2013	--	--	12.50	17.03	0.00	551.02	
RW-8	1/7/2013	--	--	11.70	17.50	0.00	568.52	
RW-8	1/14/2013	--	--	10.60	16.33	0.00	584.85	
RW-8	2/6/2013	--	--	11.25	10.60	0.00	595.45	
RW-8	4/3/2013	--	--	9.50	10.25	0.00	605.70	
RW-8	4/4/2013	--	--	7.50	10.25	0.00	615.95	
RW-8	4/18/2013	--	--	12.50	0.00	NB	615.95	
RW-8	4/22/2013	--	--	--	14.50	6.76	630.45	
RW-8	4/30/2013	--	--	--	20.34	0.00	650.79	
RW-8	5/3/2013	--	--	--	15.80	0.00	666.59	
RW-8	5/6/2013	--	--	--	0.90	0.00	667.49	
RW-8	5/20/2013	--	--	--	17.27	0.00	684.76	
RW-8	5/23/2013	--	--	--	13.7	3.99	698.46	
RW-8	5/29/2013	--	--	--	13.7	1.58	712.16	
RW-8	6/10/2013	--	--	--	12.68	0.00	724.84	
RW-8	6/14/2013	--	--	--	13.16	2.55	738.00	
RW-8	6/24/2013	--	--	--	13.17	3.12	751.17	
RW-8	7/1/2013	--	--	--	13.16	2.62	764.33	
RW-8	7/8/2013	--	--	--	13.17	2.69	777.50	
RW-8	7/12/2013	--	--	--	13.16	2.47	790.66	
RW-8	7/15/2013	--	--	--	9.44	0.00	800.10	
RW-8	7/19/2013	--	--	--	13.17	2.92	813.27	
RW-8	7/22/2013	--	--	--	10.62	0.00	823.89	
RW-8	7/26/2013	--	--	--	9.86	0.00	833.75	
RW-8	8/9/2013	--	--	--	15	0.00	848.75	
RW-8	8/16/2013	--	--	--	15.08	0.00	863.83	
RW-8	8/19/2013	--	--	--	15.32	0.00	879.15	
RW-8	8/23/2013	--	--	13.60	14.9	0.00	894.05	
RW-8	8/26/2013	--	--	--	15.37	0.00	909.42	
RW-8	9/5/2013	--	--	--	12.19	2.83	921.61	
RW-8	9/9/2013	--	--	--	12.18	3.25	933.79	
RW-8	9/13/2013	--	--	--	12.18	8.28	945.97	
RW-8	9/16/2013	--	--	--	14.08	5.30	960.05	

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RW-8	9/20/2013	--	--	--	14.07	4.09	974.12	
RW-8	9/23/2013	--	--	--	14.07	4.49	988.19	
RW-8	9/27/2013	--	--	--	13.18	4.27	1001.37	
RW-8	9/30/2013	--	--	--	13.18	5.66	1014.55	
RW-8	10/4/2013	--	--	--	13.17	5.64	1027.72	
RW-8	10/7/2013	--	--	--	13.17	4.92	1040.89	
RW-8	10/25/2013	--	--	--	8.20	6.55	1049.09	
RW-8	10/28/2013	--	--	--	8.20	6.51	1057.29	
RW-8	11/1/2013	--	--	--	8.20	6.88	1065.49	
RW-8	11/4/2013	--	--	--	8.20	6.75	1073.69	
RW-8	11/8/2013	--	--	--	8.17	6.93	1081.86	
RW-8	11/12/2013	--	--	--	8.17	5.66	1090.03	
RW-8	11/15/2013	--	--	--	8.16	6.45	1098.19	
RW-8	11/18/2013	--	--	--	11.45	4.32	1109.64	
RW-8	3/28/2014	--	--	13.50	14.32	1.04	1123.96	
RW-8	4/1/2014	--	--	--	14.32	1.95	1138.28	
RW-8	4/4/2014	--	--	--	14.32	0.70	1152.60	
RW-8	4/8/2014	--	--	--	13.75	0.50	1166.35	
RW-8	4/11/2014	--	--	8.00	13.72	0.74	1180.07	
RW-8	4/15/2014	--	--	--	13.70	1.79	1193.77	
RW-8	4/16/2014	--	--	12.00	0.00	0.00	1193.77	Bottom at 50.85'
RW-8	4/18/2014	--	--	--	14.32	1.00	1208.09	
RW-8	4/25/2014	--	--	--	13.44	0.00	1221.53	
RW-8	4/29/2014	--	--	--	14.31	0.31	1235.84	
RW-8	5/2/2014	--	--	--	12.22	3.25	1248.06	
RW-8	5/6/2014	--	--	--	12.22	0.14	1260.28	
RW-8	5/9/2014	--	--	--	9.88	0.00	1270.16	
RW-8	5/13/2014	--	--	--	12.22	0.03	1282.38	
RW-8	5/16/2014	--	--	--	10.97	1.57	1293.35	
RW-8	5/19/2014	--	--	--	10.97	1.60	1304.32	
RW-8	5/22/2014	--	--	--	10.96	1.66	1315.28	
RW-8	5/27/2014	--	--	--	10.96	0.69	1326.24	
RW-8	8/14/2014	--	--	--	16.32	3.78	1342.56	
RW-8	8/22/2014	--	--	--	16.32	3.38	1358.88	
RW-8	8/29/2014	--	--	--	13.70	1.77	1372.58	
RW-8	9/5/2014	--	--	--	15.00	3.30	1387.58	
RW-8	9/12/2014	--	--	-	14.50	1.20	1402.08	
RW-8	9/19/2014	--	--	--	13.90	1.10	1415.98	
RW-8	9/25/2014	--	--	--	12.00	3.48	1427.98	
RW-8	10/3/2014	--	--	--	12.50	0.86	1440.48	
RW-8	10/10/2014	--	--	--	12.50	1.70	1452.98	
RW-8	10/17/2014	--	--	--	17.36	1.28	1470.34	
RW-8	10/24/2014	--	--	--	12.50	0.30	1482.84	

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RW-8	10/31/2014	--	--	--	12.00	0.72	1494.84	
RW-8	11/6/2014	--	--	--	11.00	1.28	1505.84	
RW-8	12/29/2014	--	--	-	0.00	0.00	1505.84	Unable to measure DNAPL thickness due to airlift assembly
RW-8	3/4/2015	--	--	15.00	0.00	0.00	1505.84	Bottom at 51.00'
RW-8	3/13/2015	--	--	--	21.15	4.48	1526.99	
RW-8	3/20/2015	--	--	--	20.21	0.00	1547.20	
RW-8	3/27/2015	--	--	--	17.64	3.03	1564.84	
RW-8	4/3/2015	--	--	--	17.64	0.55	1582.48	
RW-8	4/10/2015	--	--	--	14.64	0.00	1597.12	
RW-8	4/17/2015	--	--	--	15.50	1.64	1612.62	
RW-8	4/24/2015	--	--	--	14.00	2.36	1626.62	
RW-8	4/30/2015	--	--	--	12.96	1.51	1639.58	
RW-8	5/8/2015	--	--	--	8.52	1.64	1648.10	
RW-8	5/15/2015	--	--	--	8.52	1.49	1656.62	
RW-8	5/19/2015	--	--	9.00	0.00	0.00	1656.62	Botom at 49.50'
RW-8	5/22/2015	--	--	--	8.36	1.00	1664.98	
RW-8	6/5/2015	--	--	9.00	9.73	5.01	1674.71	
RW-8	6/19/2015	--	--	--	9.73	4.76	1684.44	
RW-8	7/2/2015	--	--	--	18.30	0.40	1702.74	
RW-8	7/13/2015	--	--	11.80	0.00	0.00	1702.74	
RW-8	7/17/2015	--	--	--	15.00	1.67	1717.74	
RW-8	7/31/2015	--	--	--	12.00	3.54	1729.74	
RW-8	8/14/2015	--	--	--	8.00	3.57	1737.74	
RW-8	8/28/2015	--	--	--	7.50	3.12	1745.24	
RW-8	9/11/2015	--	--	--	7.01	2.20	1752.25	
RW-8	9/25/2015	--	--	--	6.50	2.64	1758.75	
RW-8	9/28/2015	--	--	5.00	0.00	0.00	1758.75	Bottom at 52.00
RW-8	10/9/2015	--	--	--	5.00	5.33	1763.75	
RW-8	10/23/2015	--	--	--	7.74	2.04	1771.49	
RW-8	11/6/2015	--	--	--	10.16	0.00	1781.65	
RW-8	11/20/2015	--	--	--	6.37	0.00	1788.02	
RW-8	12/4/2015	--	--	--	0.82	0.00	1788.84	
RW-8	12/11/2015	--	--	--	11.90	0.00	1800.74	
RW-8	1/6/2016	--	--	10.80	0.00	0.00	1800.74	Bottom at 52.00'
RW-8	2/19/2016	--	--	14.60	0.00	0.00	1800.74	Bottom at 52.00'
RW-8	3/18/2016	--	--	--	18.00	2.83	1818.74	
RW-8	3/25/2016	--	--	--	11.00	3.09	1829.74	
RW-8	4/1/2016	--	--	--	12.17	3.59	1841.91	
RW-8	4/8/2016	--	--	--	12.80	3.17	1854.71	
RW-8	4/27/2016	--	--	--	9.91	0.00	1864.62	
RW-8	5/11/2016	--	--	--	12.04	1.98	1876.66	
RW-8	5/20/2016	--	--	--	10.00	2.51	1886.66	
RW-8	6/17/2016	--	--	--	10.00	4.95	1896.66	

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DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-8	6/22/2016	--	--	9.60	0.00	0.00	1896.66	Bottom at 52.00'
RW-8	7/1/2016	--	--	--	9.00	2.18	1905.66	
RW-8	7/15/2016	--	--	--	7.00	3.36	1912.66	
RW-8	7/29/2016	--	--	--	7.00	2.98	1919.66	
RW-8	8/12/2016	--	--	--	6.38	1.48	1926.04	
RW-8	8/26/2016	--	--	7.10	6.27	1.62	1932.31	Bottom at 51.05'
RW-8	9/9/2016	--	--	4.10	5.76	2.96	1938.07	Bottom at 51.10'
RW-8	9/23/2016	--	--	--	5.75	1.78	1943.82	
RW-8	10/7/2016	--	--	--	5.50	2.21	1949.32	
RW-8	10/21/2016	--	--	3.90	4.50	3.38	1953.82	Bottom at 52.10'
RW-8	11/4/2016	--	--	--	4.50	2.98	1958.32	
RW-8	11/18/2016	--	--	--	4.00	1.48	1962.32	
RW-8	11/30/2016	--	--	--	4.00	2.60	1966.32	
RW-8	12/2/2016	--	--	0.60	0.00	0.00	1966.32	Bottom at 52.00'
RW-8	2/24/2017	--	--	13.10	0.00	0.00	1966.32	Bottom at 51.93'
RW-8	3/10/2017	--	--	--	12.00	0.94	1978.32	
RW-8	3/24/2017	--	--	--	10.00	2.32	1988.32	
RW-8	4/7/2017	--	--	--	9.15	0.56	1997.47	
RW-8	4/21/2017	--	--	7.60	7.00	0.26	2004.47	Bottom at 51.93'
RW-8	5/8/2017	--	--	--	6.76	0.50	2011.23	
RW-8	5/19/2017	--	--	--	7.00	1.23	2018.23	
RW-8	6/2/2017	--	--	--	5.00	2.09	2023.23	
RW-8	6/16/2017	--	--	--	4.00	1.82	2027.23	
RW-8	6/30/2017	--	--	--	3.88	3.27	2031.11	
RW-8	7/18/2017	--	--	4.80	3.50	2.35	2034.61	Bottom at 51.93'
RW-8	7/28/2017	--	--	--	3.00	2.34	2037.61	
RW-8	8/11/2017	--	--	-	3.00	1.77	2040.61	
RW-8	8/25/2017	--	--	--	4.00	0.15	2044.61	
RW-8	9/8/2017	--	--	--	3.45	1.63	2048.06	
RW-8	9/22/2017	--	--	--	3.15	1.26	2051.21	
RW-8	10/6/2017	--	--	--	3.00	1.43	2054.21	
RW-8	10/20/2017	--	--	2.60	3.00	1.54	2057.21	Bottom at 51.93'
RW-8	11/3/2017	--	--	--	2.46	0.41	2059.67	
RW-8	2/27/2018	--	--	9.40	0.00	0.00	2059.67	Bottom at 51.93'
RW-8	3/23/2018	--	--	--	7.27	7.61	2066.94	
RW-8	4/6/2018	--	--	--	5.00	4.96	2071.94	
RW-8	4/20/2018	--	--	--	3.00	3.28	2074.94	
RW-8	5/4/2018	--	--	--	3.00	2.09	2077.94	
RW-8	5/18/2018	--	--	2.50	3.00	1.74	2080.94	Bottom at 51.93'
RW-8	6/1/2018	--	--	--	2.00	1.79	2082.94	
RW-8	6/15/2018	--	--	--	2.32	2.15	2085.26	
RW-8	6/29/2018	--	--	--	2.00	3.04	2087.26	
RW-8	7/13/2018	--	--	--	2.00	1.98	2089.26	

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CSX Transportation
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Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-8	7/27/2018	--	--	--	2.00	1.83	2091.26	
RW-8	8/10/2018	--	--	1.30	2.00	1.48	2093.26	Bottom at 51.93'
RW-8	8/24/2018	--	--	--	2.00	2.96	2095.26	
RW-8	9/7/2018	--	--	--	2.00	1.11	2097.26	
RW-8	9/21/2018	--	--	--	2.50	1.23	2099.76	
RW-8	10/5/2018	--	--	--	2.50	0.48	2102.26	
RW-8	10/19/2018	--	--	--	2.50	1.54	2104.76	
RW-8	11/2/2018	--	--	--	2.00	3.30	2106.76	
RW-8	11/16/2018	--	--	--	2.41	2.33	2109.17	
RW-8	11/19/2018	--	--	0.50	0.00	0.00	2109.17	Bottom at 51.93'
RW-8	11/30/2018	--	--	--	2.41	1.38	2111.58	
RW-8	3/15/2019	--	--	9.70	0.00	0.00	2111.58	Bottom at 51.93'
RW-8	3/22/2019	--	--	--	10.00	2.97	2121.58	
RW-8	4/5/2019	--	--	--	3.14	2.12	2124.72	
RW-8	4/19/2019	--	--	--	3.00	2.89	2127.72	
RW-8	5/3/2019	--	--	--	3.00	1.01	2130.72	
RW-8	5/17/2019	--	--	--	3.50	1.97	2134.22	
RW-8	5/31/2019	--	--	--	3.00	1.23	2137.22	
RW-8	6/14/2019	--	--	3.70	3.00	1.09	2140.22	Bottom at 51.00'
RW-8	6/28/2019	--	--	--	2.50	0.62	2142.72	
RW-8	7/12/2019	--	--	--	2.50	1.01	2145.22	
RW-8	7/26/2019	--	--	--	2.50	1.40	2147.72	
RW-8	8/9/2019	--	--	--	2.50	1.19	2150.22	
RW-8	8/23/2019	--	--	--	2.70	1.13	2152.92	
RW-8	9/6/2019	--	--	--	2.20	1.13	2155.12	
RW-8	9/20/2019	--	--	2.15	1.50	1.91	2156.62	Bottom at 51.00'
RW-8	10/4/2019	--	--	--	1.50	1.70	2158.12	
RW-8	10/18/2019	--	--	--	1.50	1.59	2159.62	
RW-8	11/1/2019	--	--	--	1.50	2.42	2161.12	
RW-8	11/15/2019	--	--	--	1.50	2.05	2162.62	
RW-8	12/2/2019	--	--	--	1.45	2.45	2164.07	
RW-9	10/25/2012	--	--	12.50	10.75	1.25	10.75	
RW-9	10/26/2012	--	--	5.00	--	NB	10.75	
RW-9	10/29/2012	--	--	--	8.21	3.09	18.96	
RW-9	11/5/2012	--	--	12.00	8.21	3.78	27.17	
RW-9	11/14/2012	--	--	12.50	--	NB	27.17	
RW-9	11/26/2012	--	--	--	8.21	2.80	35.38	
RW-9	12/3/2012	--	--	9.80	10.07	0.00	45.45	
RW-9	12/4/2012	--	--	4.50	1.00	4.70	46.45	
RW-9	12/5/2012	--	--	4.00	3.50	2.37	49.95	
RW-9	12/14/2012	--	--	10.80	5.63	5.10	55.58	
RW-9	12/17/2012	--	--	5.50	5.64	5.22	61.22	

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Bloomington, Indiana

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RW-9	12/28/2012	--	--	--	5.63	3.97	66.85	
RW-9	1/7/2013	--	--	15.60	9.41	0.00	76.26	
RW-9	1/14/2013	--	--	12.20	0.95	0.00	77.21	
RW-9	3/27/2013	--	--	20.00	17.85	29.75	95.06	
RW-9	4/18/2013	--	--	17.60	--	NB	95.06	
RW-9	4/22/2013	--	--	--	10.90	0.00	105.96	
RW-9	4/30/2013	--	--	--	0.60	0.00	106.56	
RW-9	8/23/2013	--	--	12.80	--	NB	106.56	Air Lift Plugged
RW-9	4/16/2014	--	--	16.00	0.00	0.00	106.56	Bottom at 48.05'
RW-9	4/21/2014	--	--	--	15.00	7.95	121.56	
RW-9	4/29/2014	--	--	--	1.34	0.00	122.90	
RW-9	5/2/2014	--	--	--	3.15	0.00	126.05	
RW-9	5/6/2014	--	--	--	4.25	6.30	130.30	
RW-9	5/9/2014	--	--	--	4.24	3.62	134.54	
RW-9	5/13/2014	--	--	--	4.24	1.08	138.78	
RW-9	5/16/2014	--	--	--	2.69	4.61	141.47	
RW-9	5/19/2014	--	--	--	2.68	2.08	144.15	
RW-9	5/22/2014	--	--	--	1.35	0.00	145.50	
RW-9	5/27/2014	--	--	--	2.68	1.02	148.18	
RW-9	8/14/2014	--	--	--	7.00	3.27	155.18	
RW-9	8/22/2014	--	--	--	5.59	0.00	160.77	
RW-9	8/29/2014	--	--	--	4.26	0.00	165.03	
RW-9	9/5/2014	--	--	--	5.00	3.75	170.03	
RW-9	9/12/2014	--	--	--	7.00	1.56	177.03	
RW-9	9/19/2014	--	--	--	6.35	1.27	183.38	
RW-9	9/25/2014	--	--	--	6.00	2.27	189.38	
RW-9	10/3/2014	--	--	--	5.78	1.45	195.16	
RW-9	10/10/2014	--	--	6.60	5.78	2.26	200.94	Botom at 52.10'
RW-9	10/17/2014	--	--	--	5.78	2.90	206.72	
RW-9	10/24/2014	--	--	--	5.78	4.17	212.50	
RW-9	10/31/2014	--	--	--	5.78	0.95	218.28	
RW-9	11/6/2014	--	--	--	5.73	0.60	224.01	
RW-9	12/29/2014	--	--	16.10	0.00	0.00	224.01	Bottom at 53.90'
RW-9	3/4/2015	--	--	18.30	0.00	0.00	224.01	Botom at 52.10'
RW-9	3/13/2015	--	--	--	15.34	0.00	239.35	
RW-9	3/20/2015	--	--	--	15.00	3.99	254.35	
RW-9	3/27/2015	--	--	--	6.24	3.76	260.59	
RW-9	4/3/2015	--	--	--	6.23	2.99	266.82	
RW-9	4/10/2015	--	--	--	7.00	0.80	273.82	
RW-9	4/17/2015	--	--	--	7.00	0.49	280.82	
RW-9	4/24/2015	--	--	--	6.88	0.00	287.70	
RW-9	4/30/2015	-	--	--	0.81	5.82	288.51	
RW-9	5/8/2015	--	--	--	0.80	4.75	289.31	

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RW-9	5/15/2015	--	--	--	0.78	3.79	290.09	
RW-9	5/19/2015	--	--	2.40	0.00	0.00	290.09	Bottom at 52.05'
RW-9	6/5/2015	--	--	7.00	0.00	0.00	290.09	
RW-9	6/19/2015	--	--	--	8.10	0.00	298.19	
RW-9	7/2/2015	--	--	--	12.31	0.00	310.50	
RW-9	7/13/2015	--	--	8.50	0.00	0.00	310.50	
RW-9	7/17/2015	--	--	--	10.39	0.00	320.89	
RW-9	7/31/2015	--	--	--	10.62	0.00	331.51	
RW-9	8/14/2015	--	--	--	7.00	1.42	338.51	
RW-9	8/28/2015	--	--	--	1.97	0.00	340.48	Issue with air line
RW-9	9/11/2015	--	--	--	6.00	1.78	346.48	Air line issue resolved
RW-9	9/25/2015	--	--	--	5.00	2.05	351.48	
RW-9	9/28/2015	--	--	2.20	0.00	0.00	351.48	Bottom at 52.80'
RW-9	10/9/2015	--	--	--	5.00	2.26	356.48	
RW-9	10/23/2015	--	--	--	5.48	0.00	361.96	Echpod glitch
RW-9	11/6/2015	--	--	--	4.91	3.51	366.87	
RW-9	11/20/2015	--	--	--	3.47	0.00	370.34	
RW-9	12/4/2015	--	--	--	9.16	1.04	379.50	
RW-9	12/11/2015	--	--	--	3.48	0.00	382.98	
RW-9	1/6/2016	--	--	11.50	0.00	0.00	382.98	Bottom at 52.80'
RW-9	2/19/2016	--	--	16.10	0.00	0.00	382.98	Bottom at 52.80'
RW-9	3/18/2016	--	--	--	6.00	0.21	388.98	Believe botttom is plugged, stop early.
RW-9	3/25/2016	--	--	--	0.00	0.00	388.98	Plugged
RW-9	4/5/2016	--	--	--	4.67	0.00	393.65	Pulled piping, fixed air line kink.
RW-9	4/8/2016	--	--	--	5.00	5.27	398.65	
RW-9	5/11/2016	--	--	--	8.87	1.27	407.52	
RW-9	5/20/2016	--	--	--	5.00	2.83	412.52	
RW-9	6/17/2016	--	--	--	7.00	3.28	419.52	
RW-9	6/22/2016	--	--	9.40	0.00	0.00	419.52	Bottom at 52.55'
RW-9	7/1/2016	--	--	--	6.00	2.06	425.52	
RW-9	7/15/2016	--	--	--	6.00	4.12	431.52	
RW-9	7/29/2016	--	--	--	5.00	3.55	436.52	
RW-9	8/12/2016	--	--	--	5.00	2.59	441.52	
RW-9	8/26/2016	--	--	7.75	4.12	2.37	445.64	Bottom at 52.90'
RW-9	9/9/2016	--	--	5.50	4.04	1.48	449.68	Bottom at 52.90'
RW-9	9/23/2016	--	--	--	4.00	1.84	453.68	
RW-9	10/7/2016	--	--	--	3.75	1.88	457.43	
RW-9	10/21/2016	--	--	4.70	3.50	2.63	460.93	Bottom at 52.30'
RW-9	11/4/2016	--	--	--	3.50	2.29	464.43	
RW-9	11/18/2016	--	--	--	3.25	1.81	467.68	
RW-9	11/30/2016	--	--	--	3.00	3.63	470.68	
RW-9	12/2/2016	--	--	0.90	0.00	0.00	470.68	Bottom at 52.80'
RW-9	2/24/2017	--	--	12.70	0.00	0.00	470.68	Bottom at 52.80'

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RW-9	3/10/2017	--	--	--	10.00	1.82	480.68	
RW-9	3/24/2017	--	--	--	8.50	4.00	489.18	
RW-9	4/7/2017	--	--	--	4.00	6.03	493.18	
RW-9	4/21/2017	--	--	6.90	4.00	3.84	497.18	Bottom at 52.60'
RW-9	5/8/2017	--	--	--	3.93	0.84	501.11	
RW-9	5/19/2017	--	--	--	4.98	1.39	506.09	
RW-9	6/2/2017	--	--	--	4.64	1.66	510.73	
RW-9	6/16/2017	--	--	-	4.50	1.24	515.23	
RW-9	6/30/2017	--	--	--	5.25	2.29	520.48	
RW-9	7/18/2017	--	--	6.40	5.25	2.35	525.73	Bottom at 52.15'
RW-9	7/28/2017	--	--	--	4.50	1.50	530.23	
RW-9	8/11/2017	--	--	--	4.50	2.66	534.73	
RW-9	8/25/2017	--	--	--	4.25	2.66	538.98	
RW-9	9/8/2017	--	--	--	5.00	1.11	543.98	
RW-9	9/22/2017	--	--	--	5.25	1.87	549.23	
RW-9	10/6/2017	--	--	--	5.00	2.36	554.23	
RW-9	10/20/2017	--	--	6.40	5.00	1.49	559.23	Bottom at 52.45'
RW-9	11/3/2017	--	--	--	5.00	1.64	564.23	
RW-9	11/17/2017	--	--	--	5.41	2.58	569.64	
RW-9	2/27/2018	--	--	10.50	5.00	1.49	574.64	Bottom at 52.45'
RW-9	3/23/2018	--	--	--	9.01	6.84	583.65	
RW-9	4/6/2018	--	--	--	6.00	3.49	589.65	
RW-9	4/20/2018	--	--	--	5.00	1.13	594.65	
RW-9	5/4/2018	--	--	--	5.00	2.96	599.65	
RW-9	5/18/2018	--	--	3.95	5.00	1.37	604.65	Bottom at 52.45'
RW-9	6/1/2018	--	--	-	4.00	2.67	608.65	
RW-9	6/15/2018	--	--	--	5.06	2.27	613.71	
RW-9	6/29/2018	--	--	--	3.95	0.00	617.66	
RW-9	7/13/2018	--	--	--	5.00	2.15	622.66	
RW-9	7/27/2018	--	--	--	5.00	0.38	627.66	
RW-9	8/10/2018	--	--	5.60	5.00	1.86	632.66	Bottom at 52.45'
RW-9	8/24/2018	--	--	--	5.00	2.24	637.66	
RW-9	9/7/2018	--	--	--	5.00	0.78	642.66	
RW-9	9/21/2018	--	--	--	4.00	2.04	646.66	
RW-9	10/5/2018	--	--	--	4.00	1.91	650.66	
RW-9	10/19/2018	--	--	--	5.06	2.17	655.72	
RW-9	11/2/2018	--	--	--	4.00	2.13	659.72	
RW-9	11/16/2018	--	--	--	4.00	2.97	663.72	
RW-9	11/19/2018	--	--	2.60	0.00	0.00	663.72	Bottom at 52.45'
RW-9	11/30/2018	--	--	--	4.00	3.18	667.72	
RW-9	3/15/2019	--	--	11.50	0.00	0.00	667.72	Bottom at 52.45'
RW-9	3/22/2019	--	--	--	13.00	6.57	680.72	
RW-9	4/5/2019	--	--	--	4.00	4.10	684.72	

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

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RW-9	4/19/2019	--	--	--	4.00	3.34	688.72	
RW-9	5/3/2019	--	--	--	4.00	2.73	692.72	
RW-9	5/17/2019	--	--	--	3.64	1.63	696.36	
RW-9	5/31/2019	--	--	--	5.06	2.35	701.42	
RW-9	6/14/2019	--	--	7.30	5.05	1.51	706.47	
RW-9	6/28/2019	--	--	--	5.00	1.25	711.47	
RW-9	7/12/2019	--	--	--	2.21	0.00	713.68	
RW-9	7/26/2019	--	--	--	4.87	0.00	718.55	
RW-9	8/9/2019	--	--	--	3.00	0.21	721.55	
RW-9	8/23/2019	--	--	--	6.20	1.15	727.75	
RW-9	9/6/2019	--	--	--	4.50	1.49	732.25	
RW-9	9/20/2019	--	--	7.50	5.00	2.04	737.25	Bottom at 52.00'
RW-9	10/4/2019	--	--	--	4.06	2.07	741.31	
RW-9	10/18/2019	--	--	--	4.00	2.34	745.31	
RW-9	11/1/2019	--	--	--	4.00	3.13	749.31	
RW-9	11/15/2019	--	--	--	4.00	3.45	753.31	
RW-9	12/2/2019	--	--	--	4.00	4.29	757.31	
RW-10	11/14/2012	--	--	0.00	--	NB	0.00	
RW-10	3/26/2013	8.00	--	N/A	47.60	0.00	47.60	Removed 18' of sediment and DNAPL
RW-10	3/27/2013	8.00	--	6.50	10.00	7.85	57.60	
RW-10	4/2/2013	7.25	--	13.00	11.90	7.23	69.50	
RW-10	4/3/2013	--	--	11.40	12.00	6.00	81.50	
RW-10	4/4/2013	--	--	10.80	8.25	4.00	89.75	
RW-10	4/18/2013	--	--	15.50	--	NB	89.75	
RW-10	5/3/2013	--	--	--	10.00	9.90	99.75	
RW-10	5/6/2013	--	--	--	10.00	1.15	109.75	
RW-10	5/20/2013	--	--	--	10.00	10.68	119.75	
RW-10	5/23/2013	--	--	--	12.61	8.42	132.36	
RW-10	5/29/2013	--	--	--	12.61	2.81	144.97	
RW-10	6/10/2013	--	--	--	12.61	3.52	157.58	
RW-10	6/14/2013	--	--	--	4.46	11.10	162.04	
RW-10	6/24/2013	--	--	--	4.46	10.27	166.50	
RW-10	6/28/2013	--	--	--	4.46	6.14	170.96	
RW-10	7/1/2013	--	--	--	4.46	11.95	175.42	
RW-10	7/8/2013	--	--	--	1.59	8.47	177.01	
RW-10	7/12/2013	--	--	--	1.59	9.17	178.60	
RW-10	7/15/2013	--	--	--	1.60	8.98	180.20	
RW-10	7/19/2013	--	--	--	1.60	8.79	181.80	
RW-10	7/22/2013	--	--	--	2.89	7.95	184.69	
RW-10	7/26/2013	--	--	--	2.89	7.35	187.58	
RW-10	8/9/2013	--	--	--	2.89	7.71	190.47	
RW-10	8/16/2013	--	--	--	2.89	7.65	193.36	

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RW-10	8/19/2013	--	--	--	2.89	6.61	196.25	
RW-10	8/23/2013	--	--	--	0.64	5.28	196.89	
RW-10	8/26/2013	--	--	0.08	0.64	5.42	197.53	Bottom at 58.30'
RW-10	9/5/2013	--	--	--	0.64	5.00	198.17	
RW-10	9/9/2013	--	--	--	0.64	4.55	198.81	
RW-10	9/13/2013	--	--	--	0.64	1.38	199.45	
RW-10	9/16/2013	--	--	--	0.64	2.26	200.09	
RW-10	9/20/2013	--	--	--	0.64	2.46	200.73	
RW-10	9/23/2013	--	--	--	0.64	1.40	201.37	
RW-10	9/27/2013	--	--	--	0.64	1.52	202.01	
RW-10	9/30/2013	--	--	--	0.63	2.21	202.64	
RW-10	10/4/2013	--	--	--	0.63	1.64	203.27	
RW-10	10/7/2013	--	--	--	0.63	2.52	203.90	
RW-10	10/28/2013	--	--	--	0.73	0.97	204.63	
RW-10	11/1/2013	--	--	--	0.73	1.32	205.36	
RW-10	11/4/2013	--	--	--	0.73	0.81	206.09	
RW-10	11/8/2013	--	--	--	0.73	1.15	206.82	
RW-10	11/12/2013	--	--	--	0.73	0.25	207.55	
RW-10	11/15/2013	--	--	--	0.73	0.34	208.28	
RW-10	11/18/2013	--	--	--	0.72	0.28	209.00	
RW-10	3/28/2014	--	--	12.50	4.89	5.21	213.89	
RW-10	4/1/2014	--	--	--	2.11	8.02	216.00	
RW-10	4/4/2014	--	--	--	2.11	7.13	218.11	
RW-10	4/8/2014	--	--	--	2.11	2.78	220.22	
RW-10	4/11/2014	--	--	0.10	1.49	0.00	221.71	
RW-10	4/15/2014	--	--	0.10	2.11	0.24	223.82	
RW-10	4/16/2014	--	--	0.10	0.00	0.00	223.82	Bottom at 48.30'
RW-10	4/18/2014	--	--	--	2.11	3.70	225.93	
RW-10	5/13/2014	--	--	--	1.24	0.00	227.17	
RW-10	5/16/2014	--	--	--	1.20	0.00	228.37	
RW-10	5/19/2014	--	--	--	2.11	0.28	230.48	
RW-10	5/22/2014	--	--	--	0.23	1.07	230.71	
RW-10	5/27/2014	--	--	--	0.22	1.68	230.93	
RW-10	8/14/2014	--	--	--	3.22	0.00	234.15	
RW-10	8/22/2014	--	--	--	12.00	4.15	246.15	
RW-10	8/29/2014	--	--	--	4.53	0.48	250.68	
RW-10	9/5/2014	--	--	--	2.49	0.00	253.17	
RW-10	9/12/2014	--	--	--	1.26	0.00	254.43	
RW-10	10/10/2014	--	--	6.00	0.00	0.00	254.43	Bottom at 58.38'
RW-10	10/17/2014	--	--	--	4.43	2.36	258.86	
RW-10	10/24/2014	--	--	--	4.43	1.07	263.29	
RW-10	10/31/2014	--	--	--	2.61	0.00	265.90	
RW-10	12/29/2014	--	--	9.80	0.00	0.00	265.90	Bottom at 60.70'

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RW-10	3/4/2015	--	--	9.90	0.00	0.00	265.90	Bottom at 58.40'
RW-10	3/13/2015	--	--	--	5.00	5.36	270.90	
RW-10	3/20/2015	--	--	--	5.00	0.30	275.90	
RW-10	3/27/2015	--	--	--	0.17	3.79	276.07	
RW-10	4/3/2015	--	--	--	0.17	1.32	276.24	
RW-10	4/10/2015	--	--	--	0.17	2.23	276.41	
RW-10	4/17/2015	--	--	--	0.17	1.01	276.58	
RW-10	4/24/2015	--	--	--	0.17	1.10	276.75	
RW-10	5/19/2015	--	--	0.10	0.00	0.00	276.75	Bottom at 58.55'
RW-10	6/5/2015	--	--	0.10	0.00	0.00	276.75	
RW-10	7/13/2015	--	--	0.00	0.00	0.00	276.75	
RW-10	9/28/2015	--	--	0.10	0.00	0.00	276.75	Bottom at 59.10'
RW-10	1/6/2016	--	--	0.10	0.00	0.00	276.75	Bottom at 58.35'
RW-10	2/19/2016	--	--	0.20	0.00	0.00	276.75	Bottom at 59.00'
RW-10	6/22/2016	--	--	0.10	0.00	0.00	276.75	Bottom at 59.10'
RW-10	9/9/2016	--	--	0.00	0.00	0.00	276.75	Bottom at 59.00'
RW-10	10/21/2016	--	--	0.10	0.00	0.00	276.75	Bottom at 59.00'
RW-10	12/2/2016	--	--	0.10	0.00	0.00	276.75	Bottom at 59.00'
RW-10	2/24/2017	--	--	0.30	0.00	0.00	276.75	Bottom at 59.00'
RW-10	4/21/2017	--	--	0.30	0.00	0.00	276.75	Bottom at 59.00'
RW-10	7/18/2017	--	--	0.20	0.00	0.00	276.75	Bottom at 59.00'
RW-10	10/20/2017	--	--	0.20	0.00	0.00	276.75	Bottom at 59.00'
RW-10	2/27/2018	--	--	0.10	0.00	0.00	276.75	Bottom at 59.00'
RW-10	5/18/2018	--	--	0.10	0.00	0.00	276.75	Bottom at 59.00'
RW-10	8/10/2018	--	--	0.00	0.00	0.00	276.75	Bottom at 59.00'
RW-10	11/19/2018	--	--	0.30	0.00	0.00	276.75	Bottom at 59.00'
RW-10	3/15/2019	--	--	0.30	0.00	0.00	276.75	Bottom at 59.00'
RW-10	6/14/2019	--	--	0.40	0.00	0.00	276.75	Bottom at 58.30'
RW-10	10/4/2019	--	--	0.20	0.00	0.00	276.75	Bottom at 59.00'
RW-11	11/14/2012	--	--	0.00	--	NB	0.00	
RW-11	3/26/2013	8.00	--	N/A	0.00	15.00	0.00	
RW-11	3/27/2013	42.00	--	0.00	0.00	5.00	0.00	
RW-11	4/2/2013	31.00	--	0.04	0.00	0.00	0.00	
RW-11	4/4/2013	29.50	--	0.08	0.00	0.00	0.00	
RW-11	4/18/2013	--	--	0.13	--	NB	0.00	
RW-11	8/23/2013	--	--	0.00	--	NB	0.00	Bottom at 54.95'
RW-11	9/18/2013	--	--	0.10	0.00	25.00	0.00	DNAPL at start, well drawdown
RW-11	4/16/2014	--	--	0.10	0.00	0.00	0.00	Bottom at 55.10'
RW-11	9/5/2014	--	--	0.10	0.00	0.00	0.00	Bottom at 55.05'
RW-11	12/29/2014	--	--	0.10	0.00	0.00	0.00	Bottom at 56.60'
RW-11	3/4/2015	--	--	0.20	0.00	0.00	0.00	Bottom at 55.10'
RW-11	5/19/2015	--	--	0.10	0.00	0.00	0.00	Bottom at 55.10'

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RW-11	1/6/2016	--	--	0.10	0.00	0.00	0.00	Bottom at 55.00'
RW-11	2/19/2016	--	--	0.10	0.00	0.00	0.00	Bottom at 55.00'
RW-11	6/22/2016	--	--	0.10	0.00	0.00	0.00	Bottom at 55.00'
RW-11	9/9/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 55.00'
RW-11	10/21/2016	--	--	0.30	0.00	0.00	0.00	Bottom at 55.00'
RW-11	12/2/2016	--	--	0.20	0.00	0.00	0.00	Bottom at 55.00'
RW-11	2/24/2017	--	--	0.20	0.00	0.00	0.00	Bottom at 55.00'
RW-11	4/21/2017	--	--	0.10	0.00	0.00	0.00	Bottom at 55.00'
RW-11	7/18/2017	--	--	0.10	0.00	0.00	0.00	Bottom at 55.00'
RW-11	10/20/2017	--	--	0.20	0.00	0.00	0.00	Bottom at 56.00'
RW-11	2/27/2018	--	--	0.20	0.00	0.00	0.00	Bottom at 56.00'
RW-11	5/18/2018	--	--	0.05	0.00	0.00	0.00	Bottom at 56.00'
RW-11	8/10/2018	--	--	0.05	0.00	0.00	0.00	Bottom at 56.00'
RW-11	11/19/2018	--	--	0.10	0.00	0.00	0.00	Bottom at 56.00'
RW-11	3/15/2019	--	--	0.05	0.00	0.00	0.00	Bottom at 56.00'
RW-11	6/14/2019	--	--	0.30	0.00	0.00	0.00	Bottom at 55.15'
RW-11	9/20/2019	--	--	0.30	0.00	0.00	0.00	Bottom at 55.20'
RW-12	8/23/2013	--	--	0.00	--	NB	0.00	Bottom at 55.23'
RW-12	9/18/2013	--	--	0.10	0.00	100.00	0.00	DNAPL at start w/ sediment, clear
RW-12	4/16/2014	--	--	0.80	0.00	0.00	0.00	Bottom at 56.6'
RW-12	4/18/2014	--	--	--	0.60	2.14	0.60	
RW-12	4/29/2014	--	--	--	0.53	0.06	1.13	
RW-12	5/2/2014	--	--	--	0.53	2.55	1.66	
RW-12	5/6/2014	--	--	--	0.53	6.98	2.19	
RW-12	5/9/2014	--	--	--	0.53	5.23	2.72	
RW-12	5/13/2014	--	--	--	0.53	3.25	3.25	
RW-12	5/16/2014	--	--	--	0.53	2.32	3.78	
RW-12	5/19/2014	--	--	--	0.53	3.48	4.31	
RW-12	5/22/2014	--	--	--	0.53	2.77	4.84	
RW-12	5/27/2014	--	--	--	0.53	1.54	5.37	
RW-12	8/14/2014	--	--	--	0.00	3.92	5.37	
RW-12	9/5/2014	--	--	0.00	0.00	0.00	5.37	Bottom at 56.50'; stopped recovery
RW-12	10/10/2014	--	--	0.00	0.00	0.00	5.37	Bottom at 56.51'
RW-12	12/29/2014	--	--	0.00	0.00	0.00	5.37	Bottom at 59.80'
RW-12	3/4/2015	--	--	0.00	0.00	0.00	5.37	Bottom at 56.50'
RW-12	5/19/2015	--	--	0.00	0.00	0.00	5.37	Trace DNAPL on probe. Bottom at 56.60'
RW-12	7/13/2015	--	--	0.00	0.00	0.00	5.37	
RW-12	9/28/2015	--	--	0.00	0.00	0.00	5.37	Bottom at 56.60'
RW-12	1/6/2016	--	--	0.00	0.00	0.00	5.37	Bottom at 56.50'
RW-12	2/19/2016	--	--	0.00	0.00	0.00	5.37	Bottom at 56.50'
RW-12	6/22/2016	--	--	0.00	0.00	0.00	5.37	Bottom at 57.75'
RW-12	9/9/2016	--	--	0.00	0.00	0.00	5.37	Bottom at 57.30'

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RW-12	10/21/2016	--	--	0.00	0.00	0.00	5.37	Bottom at 57.30'
RW-12	12/2/2016	--	--	0.00	0.00	0.00	5.37	Bottom at 57.30'
RW-12	2/24/2017	--	--	0.00	0.00	0.00	5.37	Bottom at 57.30'
RW-12	4/21/2017	--	--	0.00	0.00	0.00	5.37	Bottom at 57.30'
RW-12	7/18/2017	--	--	0.00	0.00	0.00	5.37	Bottom at 54.50'; did not reach bottom
RW-12	10/20/2017	--	--	0.00	0.00	0.00	5.37	Bottom at 57.30'
RW-12	2/27/2018	--	--	0.00	0.00	0.00	5.37	Bottom at 57.30'
RW-12	5/18/2018	--	--	0.00	0.00	0.00	5.37	Bottom at 57.30'
RW-12	8/10/2018	--	--	0.00	0.00	0.00	5.37	Bottom at 57.30'
RW-12	11/19/2018	--	--	0.10	0.00	0.00	5.37	Bottom at 57.30'
RW-12	3/15/2019	--	--	0.00	0.00	0.00	5.37	Bottom at 57.30'
RW-12	6/14/2019	--	--	0.00	0.00	0.00	5.37	Bottom at 56.47'
RW-12	10/4/2019	--	--	0.00	0.00	0.00	5.37	Bottom at 57.00'
RW-13	8/23/2013	--	--	0.00	--	NB	0.00	Bottom at 60.75'
RW-13	9/18/2013	--	--	0.00	0.00	100.00	0.00	Clear
RW-13	4/16/2014	--	--	3.50	0.00	0.00	0.00	Bottom at 60.9'
RW-13	4/18/2014	--	--	--	0.36	2.81	0.36	
RW-13	4/29/2014	--	--	--	0.36	2.33	0.72	
RW-13	5/2/2014	--	--	--	0.36	3.44	1.08	
RW-13	5/6/2014	--	--	--	0.36	1.42	1.44	
RW-13	5/9/2014	--	--	--	0.36	2.04	1.80	
RW-13	5/13/2014	--	--	--	0.36	1.59	2.16	
RW-13	5/16/2014	--	--	--	0.36	1.93	2.52	
RW-13	5/19/2014	--	--	--	0.36	2.38	2.88	
RW-13	5/22/2014	--	--	--	0.36	1.62	3.24	
RW-13	5/27/2014	--	--	--	0.34	1.61	3.58	
RW-13	8/14/2014	--	--	--	0.18	3.13	3.76	
RW-13	9/5/2014	--	--	0.05	0.00	0.00	3.76	Bottom at 60.95'; stopped recovery
RW-13	10/10/2014	--	--	0.30	0.00	0.00	3.76	Bottom at 60.94'
RW-13	12/29/2014	--	--	0.80	0.00	0.00	3.76	Bottom at 62.50'
RW-13	3/4/2015	--	--	1.00	0.00	0.00	3.76	Bottom at 60.95'
RW-13	5/19/2015	--	--	1.10	0.00	0.00	3.76	Bottom at 61.10'
RW-13	7/13/2015	--	--	1.10	0.00	0.00	3.76	
RW-13	9/28/2015	--	--	1.50	0.00	0.00	3.76	Bottom at 62.00'
RW-13	1/6/2016	--	--	1.50	0.00	0.00	3.76	Bottom at 61.00'
RW-13	2/19/2016	--	--	1.60	0.00	0.00	3.76	Bottom at 59.95'
RW-13	6/22/2016	--	--	1.80	0.00	0.00	3.76	Bottom at 62.00'
RW-13	9/9/2016	--	--	1.70	0.00	0.00	3.76	Bottom at 62.00'
RW-13	10/21/2016	--	--	1.70	0.00	0.00	3.76	Bottom at 61.90'
RW-13	12/2/2016	--	--	1.40	0.00	0.00	3.76	Bottom at 62.00'
RW-13	2/24/2017	--	--	2.00	0.00	0.00	3.76	Bottom at 62.00'
RW-13	4/21/2017	--	--	2.00	0.00	0.00	3.76	Bottom at 62.00'

Notes:
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NB = not bailed
NM = not measured.

Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-13	7/18/2017	--	--	2.00	0.00	0.00	3.76	Bottom at 62.00'
RW-13	10/20/2017	--	--	1.90	0.00	0.00	3.76	Bottom at 62.00'
RW-13	2/27/2018	--	--	2.10	0.00	0.00	3.76	Bottom at 62.00'
RW-13	5/18/2018	--	--	1.90	0.00	0.00	3.76	Bottom at 62.00'
RW-13	8/10/2018	--	--	1.35	0.00	0.00	3.76	Bottom at 62.00'
RW-13	11/19/2018	--	--	2.10	0.00	0.00	3.76	Bottom at 62.00'
RW-13	3/15/2019	--	--	2.30	0.00	0.00	3.76	Bottom at 62.00'
RW-13	6/14/2019	--	--	2.90	6.70	0.13	10.46	Bottom at 63.00'
RW-13	6/28/2019	--	--	--	2.00	1.36	12.46	
RW-13	9/20/2019	--	--	0.20	0.00	0.00	12.46	Bottom at 61.00'
RW-14	6/4/2013	--	--	--	24.65	25.35	24.65	
RW-14	6/28/2013	--	--	20.00	14.78	6.02	39.43	
RW-14	7/1/2013	--	--	--	14.68	0.00	54.11	
RW-14	7/8/2013	--	--	--	14.74	0.76	68.85	
RW-14	7/12/2013	--	--	--	6.80	8.46	75.65	
RW-14	7/15/2013	--	--	--	6.80	9.36	82.45	
RW-14	7/19/2013	--	--	--	6.80	3.47	89.25	
RW-14	7/22/2013	--	--	--	6.80	4.81	96.05	
RW-14	7/26/2013	--	--	--	2.72	8.16	98.77	
RW-14	8/9/2013	--	--	--	2.72	7.58	101.49	
RW-14	8/16/2013	--	--	--	2.72	8.16	104.21	
RW-14	8/19/2013	--	--	--	2.72	8.04	106.93	
RW-14	8/23/2013	--	--	1.50	2.72	7.85	109.65	Bottom at 58.15
RW-14	8/26/2013	--	--	--	2.09	8.73	111.74	
RW-14	9/5/2013	--	--	--	2.06	8.69	113.80	
RW-14	9/9/2013	--	--	--	2.06	8.19	115.86	
RW-14	9/13/2013	--	--	--	2.06	3.64	117.92	
RW-14	9/16/2013	--	--	--	2.06	3.42	119.98	
RW-14	9/20/2013	--	--	--	2.06	3.76	122.04	
RW-14	9/23/2013	--	--	--	2.06	3.01	124.10	
RW-14	9/27/2013	--	--	--	0.85	4.51	124.95	
RW-14	9/30/2013	--	--	--	0.85	5.03	125.80	
RW-14	10/4/2013	--	--	--	0.85	6.54	126.65	
RW-14	10/7/2013	--	--	--	0.85	4.53	127.50	
RW-14	10/25/2013	--	--	--	0.11	1.78	127.61	
RW-14	10/28/2013	--	--	--	0.11	3.20	127.72	
RW-14	11/1/2013	--	--	--	0.11	2.88	127.83	
RW-14	11/4/2013	--	--	--	0.11	1.65	127.94	
RW-14	11/8/2013	--	--	--	0.11	1.35	128.05	
RW-14	11/12/2013	--	--	--	0.10	1.90	128.15	
RW-14	11/15/2013	--	--	--	0.10	1.95	128.25	
RW-14	11/18/2013	--	--	--	0.10	1.75	128.35	

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-14	3/28/2014	--	--	30.00	26.03	4.31	154.38	
RW-14	4/1/2014	--	--	41.00	28.56	1.22	182.94	
RW-14	4/4/2014	--	--	--	4.83	1.22	187.77	
RW-14	4/8/2014	--	--	--	9.25	1.22	197.02	
RW-14	4/11/2014	--	--	4.50	4.80	1.21	201.82	
RW-14	4/15/2014	--	--	3.00	4.29	1.21	206.11	
RW-14	4/16/2014	--	--	1.00	0.00	0.00	206.11	Bottom at 58.25'
RW-14	4/18/2014	--	--	--	2.34	1.21	208.45	
RW-14	4/29/2014	--	--	--	1.13	2.09	209.58	
RW-14	5/2/2014	--	--	--	1.09	2.73	210.67	
RW-14	5/6/2014	--	--	--	1.09	8.44	211.76	
RW-14	5/9/2014	--	--	--	1.09	1.76	212.85	
RW-14	5/13/2014	--	--	--	1.09	1.29	213.94	
RW-14	5/16/2014	--	--	--	1.09	1.36	215.03	
RW-14	5/19/2014	--	--	--	1.09	1.05	216.12	
RW-14	5/22/2014	--	--	--	1.09	1.18	217.21	
RW-14	5/27/2014	--	--	--	1.09	0.26	218.30	
RW-14	8/14/2014	--	--	--	12.00	3.86	230.30	
RW-14	8/22/2014	--	--	--	4.50	0.14	234.80	
RW-14	8/29/2014	--	--	--	0.52	4.00	235.32	
RW-14	9/5/2014	--	--	--	0.52	2.98	235.84	
RW-14	9/12/2014	--	--	--	3.75	1.52	239.59	
RW-14	9/19/2014	--	--	--	0.52	3.68	240.11	
RW-14	9/25/2014	--	--	--	0.52	4.12	240.63	
RW-14	10/3/2014	--	--	--	0.52	2.60	241.15	
RW-14	10/10/2014	--	--	0.50	0.52	1.36	241.67	
RW-14	10/17/2014	--	--	--	0.52	0.53	242.19	
RW-14	10/24/2014	--	--	--	0.48	1.12	242.67	
RW-14	10/31/2014	--	--	--	4.20	0.00	246.87	
RW-14	11/6/2014	--	--	--	1.11	0.00	247.98	
RW-14	12/29/14	--	--	12.00	0.00	0.00	247.98	Bottom at 62.50'
RW-14	3/4/2015	--	--	21.70	0.00	0.00	247.98	Bottom at 58.40'
RW-14	3/13/2015	--	--	--	22.31	2.69	270.29	
RW-14	3/20/2015	--	--	--	19.98	0.00	290.27	
RW-14	3/27/2015	--	--	--	20.37	0.00	310.64	
RW-14	4/3/2015	--	--	--	3.02	9.05	313.66	
RW-14	4/10/2015	--	--	--	3.02	7.01	316.68	
RW-14	4/17/2015	--	--	--	3.01	5.42	319.69	
RW-14	4/24/2015	--	--	--	3.14	5.29	322.83	
RW-14	4/30/2015	--	--	--	3.14	3.39	325.97	
RW-14	5/8/2015	--	--	--	3.13	2.35	329.10	
RW-14	5/15/2015	--	--	--	3.12	2.18	332.22	
RW-14	5/19/2015	--	--	0.40	0.00	0.00	332.22	Bottom at 58.50'

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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-14	6/5/2015	--	--	0.75	0.00	0.00	332.22	
RW-14	7/13/2015	--	--	7.50	0.00	0.00	332.22	
RW-14	7/17/2015	--	--	--	10.18	0.00	342.40	
RW-14	7/31/2015	--	--	--	6.83	3.78	349.23	
RW-14	8/14/2015	--	--	--	3.00	2.17	352.23	
RW-14	8/28/2015	--	--	--	2.00	2.30	354.23	
RW-14	9/11/2015	--	--	--	2.00	0.98	356.23	
RW-14	9/25/2015	--	--	--	3.00	2.82	359.23	
RW-14	9/28/2015	--	--	0.75	0.00	0.00	359.23	Bottom at 59.40'
RW-14	10/9/2015	--	--	--	2.00	3.26	361.23	
RW-14	10/23/2015	--	--	--	2.00	2.79	363.23	
RW-14	11/6/2015	--	--	--	2.00	2.57	365.23	
RW-14	11/20/2015	--	--	--	3.37	0.00	368.60	
RW-14	12/4/2015	--	--	--	4.72	0.00	373.32	
RW-14	12/11/2015	--	--	--	3.48	0.00	376.80	
RW-14	1/6/2016	--	--	2.40	0.00	0.00	376.80	Bottom at 60.00'
RW-14	2/19/2016	--	--	9.80	0.00	0.00	376.80	Bottom at 59.50'
RW-14	3/18/2016	--	--	--	12.43	3.49	389.23	EchoPod issues, stop early
RW-14	3/25/2016	--	--	--	6.00	0.69	395.23	EchoPod issues, stop early
RW-14	4/1/2016	--	--	--	5.00	6.90	400.23	
RW-14	4/8/2016	--	--	--	3.00	3.60	403.23	
RW-14	5/11/2016	--	--	--	2.50	7.42	405.73	
RW-14	5/20/2016	--	--	--	1.50	3.98	407.23	
RW-14	6/17/2016	--	--	--	2.35	0.98	409.58	
RW-14	6/22/2016	--	--	1.20	0.00	0.00	409.58	Bottom at 59.20'
RW-14	7/1/2016	--	--	--	1.50	2.84	411.08	
RW-14	7/15/2016	--	--	--	1.50	2.32	412.58	
RW-14	7/29/2016	--	--	--	1.50	2.69	414.08	
RW-14	8/12/2016	--	--	--	1.50	2.12	415.58	
RW-14	8/26/2016	--	--	1.10	1.50	2.94	417.08	Bottom at 62.40'
RW-14	9/9/2016	--	--	0.70	1.02	2.39	418.10	Bottom at 60.56'
RW-14	9/23/2016	--	--	--	1.01	3.22	419.11	
RW-14	10/7/2016	--	--	--	1.01	1.82	420.12	
RW-14	10/21/2016	--	--	0.50	1.01	1.37	421.13	Bottom at 59.50'
RW-14	11/4/2016	--	--	--	1.01	1.67	422.14	
RW-14	11/18/2016	--	--	--	1.01	4.68	423.15	
RW-14	12/2/2016	--	--	1.10	0.00	0.00	423.15	Bottom at 59.50'
RW-14	2/24/2017	--	--	9.70	0.00	0.00	423.15	Bottom at 59.50'
RW-14	3/10/2017	--	--	--	10.56	1.44	433.71	
RW-14	3/24/2017	--	--	--	5.50	6.09	439.21	
RW-14	4/7/2017	--	--	--	3.50	6.21	442.71	
RW-14	4/21/2017	--	--	0.50	2.00	1.68	444.71	Bottom at 59.50'
RW-14	5/8/2017	--	--	--	2.00	0.49	446.71	

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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-14	5/19/2017	--	--	--	1.50	3.07	448.21	
RW-14	6/2/2017	--	--	--	0.25	1.68	448.46	
RW-14	6/16/2017	--	--	--	0.10	2.15	448.56	
RW-14	6/30/2017	--	--	--	0.10	1.08	448.66	
RW-14	7/18/2017	--	--	1.10	0.00	0.00	448.66	Bottom at 59.50'
RW-14	10/20/2017	--	--	3.20	0.00	0.00	448.66	Bottom at 59.50'
RW-14	2/27/2018	--	--	19.70	0.00	0.00	448.66	Bottom at 59.50'
RW-14	3/23/2018	--	--	--	33.00	10.08	481.66	
RW-14	4/6/2018	--	--	--	2.80	7.77	484.46	Split in two drums
RW-14	4/20/2018	--	--	--	1.50	4.91	485.96	
RW-14	5/4/2018	--	--	--	1.50	3.22	487.46	
RW-14	5/18/2018	--	--	0.60	1.37	1.70	488.83	Bottom at 59.50'
RW-14	6/1/2018	--	--	--	1.00	2.76	489.83	
RW-14	6/15/2018	--	--	--	2.00	1.36	491.83	
RW-14	6/29/2018	--	--	--	1.95	3.44	493.78	
RW-14	7/13/2018	--	--	--	0.25	2.42	494.03	
RW-14	7/27/2018	--	--	--	0.25	1.58	494.28	
RW-14	8/10/2018	--	--	0.90	0.00	0.00	494.28	Bottom at 59.50'
RW-14	11/19/2018	--	--	2.85	0.00	0.00	494.28	Bottom at 59.50'
RW-14	3/15/2019	--	--	6.25	0.00	0.00	494.28	Bottom at 59.50'
RW-14	3/22/2019	--	--	--	7.00	5.78	501.28	
RW-14	4/5/2019	--	--	--	2.00	3.56	503.28	
RW-14	4/19/2019	--	--	--	1.53	1.74	504.81	
RW-14	6/14/2019	--	--	1.10	0.00	0.00	504.81	Bottom at 58.50'
RW-14	9/20/2019	--	--	2.15	0.00	0.00	504.81	Bottom at 58.50'
RW-14	11/1/2019	--	--	--	3.43	2.45	508.24	
RW-15	6/28/2013	--	--	9.50	3.40	7.42	3.40	
RW-15	7/3/2013	--	--	--	0.00	3.54	3.40	
RW-15	7/22/2013	--	--	--	3.40	7.12	6.80	
RW-15	7/26/2013	--	--	--	3.40	7.32	10.20	
RW-15	8/9/2013	--	--	--	0.46	2.99	10.66	
RW-15	8/16/2013	--	--	--	0.46	3.66	11.12	
RW-15	8/19/2013	--	--	--	0.46	2.99	11.58	
RW-15	8/23/2013	--	--	--	0.46	3.32	12.04	Not gauged during event
RW-15	8/26/2013	--	--	--	0.46	3.40	12.50	
RW-15	9/5/2013	--	--	--	0.45	3.00	12.95	
RW-15	9/9/2013	--	--	--	0.45	2.81	13.40	
RW-15	9/13/2013	--	--	--	0.45	1.96	13.85	
RW-15	9/16/2013	--	--	--	0.45	1.22	14.30	
RW-15	9/20/2013	--	--	--	0.45	1.57	14.75	
RW-15	9/23/2013	--	--	--	0.45	2.00	15.20	
RW-15	9/27/2013	--	--	--	0.45	2.64	15.65	

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CSX Transportation
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RW-15	9/30/2013	--	--	--	0.45	2.09	16.10	
RW-15	10/4/2013	--	--	--	0.45	1.24	16.55	
RW-15	10/7/2013	--	--	--	0.45	1.34	17.00	
RW-15	10/25/2013	--	--	--	0.11	2.54	17.11	
RW-15	10/28/2013	--	--	--	0.11	3.09	17.22	
RW-15	11/1/2013	--	--	--	0.11	1.89	17.33	
RW-15	11/4/2013	--	--	--	0.11	1.58	17.44	
RW-15	11/8/2013	--	--	--	0.11	1.24	17.55	
RW-15	11/12/2013	--	--	--	0.10	1.53	17.65	
RW-15	11/15/2013	--	--	--	0.10	1.46	17.75	
RW-15	11/18/2013	--	--	--	0.10	1.11	17.85	
RW-15	3/28/2014	--	--	7.6	4.00	5.61	21.85	
RW-15	4/1/2014	--	--	--	1.72	5.54	23.57	
RW-15	4/4/2014	--	--	--	1.72	8.17	25.29	
RW-15	4/8/2014	--	--	--	1.72	0.89	27.01	
RW-15	4/11/2014	--	--	--	1.72	1.01	28.73	
RW-15	4/15/2014	--	--	--	1.72	1.43	30.45	
RW-15	4/16/2014	--	--	0.30	0.00	0.00	30.45	Bottom at 56.8'
RW-15	4/18/2014	--	--	--	1.72	5.63	32.17	
RW-15	4/29/2014	--	--	--	1.07	0.80	33.24	
RW-15	5/2/2014	--	--	--	1.00	1.75	34.24	
RW-15	5/6/2014	--	--	--	1.00	0.56	35.24	
RW-15	5/9/2014	--	--	--	1.00	1.28	36.24	
RW-15	5/13/2014	--	--	--	1.00	0.60	37.24	
RW-15	5/16/2014	--	--	--	1.00	0.43	38.24	
RW-15	5/19/2014	--	--	--	1.00	1.04	39.24	
RW-15	5/22/2014	--	--	--	0.88	0.00	40.12	
RW-15	5/27/2014	--	--	--	1.00	0.04	41.12	
RW-15	8/14/2014	--	--	--	1.79	1.47	42.91	
RW-15	9/5/2014	--	--	2.30	0.00	0.00	42.91	Bottom at 56.40'; stopped recovery
RW-15	10/10/2014	--	--	2.80	0.00	0.00	42.91	
RW-15	12/29/2014	--	--	6.90	0.00	0.00	42.91	Bottom at 59.80'
RW-15	3/4/2015	--	--	10.80	0.00	0.00	42.91	Bottom at 56.25'
RW-15	3/20/2015	--	--	--	16.49	8.25	59.40	
RW-15	3/27/2015	--	--	--	2.00	3.74	61.40	
RW-15	4/3/2015	--	--	--	1.81	0.00	63.21	
RW-15	4/10/2015	--	--	--	2.00	2.14	65.21	
RW-15	4/17/2015	--	--	--	0.06	3.53	65.27	
RW-15	4/24/2015	--	--	--	0.06	3.55	65.33	
RW-15	4/30/2015	--	--	--	0.06	1.24	65.39	
RW-15	5/19/2015	--	--	0.80	0.00	0.00	65.39	Bottom at 57.00'
RW-15	6/5/2015	--	--	1.25	0.00	0.00	65.39	
RW-15	7/13/2015	--	--	4.00	0.00	0.00	65.39	

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CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-15	9/28/2015	--	--	5.40	0.00	0.00	65.39	Bottom at 58.00'
RW-15	1/6/2016	--	--	9.25	0.00	0.00	65.39	Bottom at 56.50'
RW-15	2/19/2016	--	--	14.00	0.00	0.00	65.39	Bottom at 58.15'
RW-15	3/18/2016	--	--	--	13.80	5.13	79.19	
RW-15	3/25/2016	--	--	--	8.00	3.51	87.19	
RW-15	4/1/2016	--	--	--	5.00	0.96	92.19	
RW-15	4/8/2016	--	--	--	4.00	1.03	96.19	
RW-15	5/11/2016	--	--	--	3.00	5.82	99.19	
RW-15	5/20/2016	--	--	--	2.00	1.42	101.19	
RW-15	6/17/2016	--	--	--	1.00	2.54	102.19	
RW-15	6/22/2016	--	--	0.60	0.00	0.00	102.19	Bottom at 58.00'
RW-15	7/1/2016	--	--	--	0.50	2.99	102.69	
RW-15	7/15/2016	--	--	--	0.29	0.78	102.98	
RW-15	9/9/2016	--	--	3.10	0.00	0.00	102.98	Bottom at 58.15'
RW-15	10/21/2016	--	--	5.60	0.00	0.00	102.98	Bottom at 58.15'
RW-15	11/30/2016	--	--	--	4.67	0.00	107.65	
RW-15	12/2/2016	--	--	4.50	0.00	0.00	107.65	Bottom at 59.50'
RW-15	2/24/2017	--	--	7.70	0.00	0.00	107.65	Bottom at 58.15'
RW-15	3/10/2017	--	--	--	8.00	1.71	115.65	
RW-15	3/24/2017	--	--	--	7.00	2.48	122.65	
RW-15	4/7/2017	--	--	--	5.00	4.98	127.65	
RW-15	4/21/2017	--	--	0.60	2.00	4.35	129.65	Bottom at 58.15'
RW-15	5/8/2017	--	--	--	1.17	0.76	130.82	
RW-15	5/19/2017	--	--	--	1.00	2.63	131.82	
RW-15	7/18/2017	--	--	4.10	0.00	0.00	131.82	Bottom at 58.15'
RW-15	10/20/2017	--	--	9.30	0.00	0.00	131.82	Bottom at 58.20'
RW-15	11/3/2017	--	--	--	14.00	4.02	145.82	
RW-15	11/17/2017	--	--	--	5.69	5.44	151.51	
RW-15	2/27/2018	--	--	2.50	0.00	0.00	151.51	Bottom at 58.20'
RW-15	5/18/2018	--	--	4.10	0.00	0.00	151.51	Bottom at 58.20'
RW-15	6/1/2018	--	--	--	5.68	4.80	157.19	
RW-15	6/15/2018	--	--	--	1.00	3.78	158.19	
RW-15	7/27/2018	--	--	--	0.70	2.84	158.89	
RW-15	8/10/2018	--	--	0.10	0.09	0.84	158.98	Bottom at 58.20'
RW-15	11/19/2018	--	--	0.90	0.09	0.84	159.07	Bottom at 58.20'
RW-15	3/15/2019	--	--	3.00	0.00	0.00	159.07	Bottom at 58.20'
RW-15	5/3/2019	--	--	--	4.50	3.38	163.57	
RW-15	5/17/2019	--	--	--	1.00	4.26	164.57	
RW-15	5/31/2019	--	--	--	0.32	2.05	164.89	
RW-15	6/14/2019	--	--	0.50	0.00	0.00	164.89	Bottom at 56.45'
RW-15	9/20/2019	--	--	1.50	0.00	0.00	164.89	Bottom at 56.40'
RW-15	11/15/2019	--	--	--	4.00	3.71	168.89	
RW-15	12/2/2019	--	--	--	1.00	2.83	169.89	

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CSX Transportation
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Bloomington, Indiana

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RW-16	8/23/2013	--	--	0.00	--	NB	0.00	Bottom at 50.85
RW-16	4/16/2014	--	--	0.00	0.00	0.00	0.00	Trace DNAPL on probe. Bottom at 50.6'
RW-16	9/5/2014	--	--	0.00	0.00	0.00	0.00	Bottom at 50.80'
RW-16	12/29/2014	--	--	0.00	0.00	0.00	0.00	Bottom at 51.45'
RW-16	3/4/2015	--	--	0.00	0.00	0.00	0.00	Bottom at 50.80'
RW-16	5/19/2015	--	--	0.00	0.00	0.00	0.00	Bottom at 50.65'
RW-16	1/6/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 50.70'
RW-16	2/19/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 50.70'
RW-16	6/22/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 50.70'
RW-16	9/9/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 51.50'
RW-16	10/21/2016	--	--	0.00	0.00	0.00	0.00	Botom at 51.70'
RW-16	12/2/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 51.50'
RW-16	2/24/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 51.50'
RW-16	4/21/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 51.50'
RW-16	7/18/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 51.50'
RW-16	10/20/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 51.20'
RW-16	2/27/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 51.20'
RW-16	5/18/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 51.20'
RW-16	8/10/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 51.20'
RW-16	11/19/2018	--	--	0.10	0.00	0.00	0.00	Bottom at 51.20'
RW-16	3/15/2019	--	--	0.50	0.00	0.00	0.00	Bottom at 51.20'
RW-16	6/14/2019	--	--	0.60	0.00	0.00	0.00	Bottom at 50.00'
RW-16	9/20/2019	--	--	0.80	0.00	0.00	0.00	Bottom at 50.60'
RW-17	8/23/2013	--	--	10.20	--	NB	0.00	Bottom at 41.55'; 9' of sediment in well
RW-17	4/16/2014	--	--	15.30	0.00	0.00	0.00	Bottom at 41.1'
RW-17	4/22/2014	--	--	--	36.04	0.00	36.04	Bottom at 48.0'
RW-17	4/25/2014	--	--	--	5.67	4.42	41.71	
RW-17	5/2/2014	--	--	--	2.36	7.88	44.07	
RW-17	5/6/2014	--	--	--	2.36	7.84	46.43	
RW-17	5/9/2014	--	--	--	2.35	8.14	48.78	
RW-17	5/13/2014	--	--	--	2.35	6.76	51.13	
RW-17	5/16/2014	--	--	--	1.35	8.09	52.48	
RW-17	5/19/2014	--	--	--	1.34	7.12	53.82	
RW-17	5/22/2014	--	--	--	1.34	5.63	55.16	
RW-17	5/27/2014	--	--	--	1.34	6.29	56.50	
RW-17	8/14/2014	--	--	--	20.00	3.79	76.50	
RW-17	8/22/2014	--	--	--	6.00	4.20	82.50	
RW-17	8/29/2014	--	--	--	0.22	4.89	82.72	
RW-17	9/5/2014	--	--	--	0.21	3.80	82.93	
RW-17	9/12/2014	--	--	--	0.21	2.18	83.14	
RW-17	9/19/2014	--	--	--	0.21	4.75	83.35	

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RW-17	9/25/2014	--	--	--	2.91	0.93	86.26	
RW-17	10/3/2014	--	--	--	2.90	1.27	89.16	
RW-17	10/10/2014	--	--	0.50	1.10	0.00	90.26	
RW-17	10/17/2014	--	--	--	1.47	0.00	91.73	
RW-17	10/24/2014	--	--	--	1.22	0.00	92.95	
RW-17	11/6/2014	--	--	--	3.75	1.83	96.70	
RW-17	12/29/2014	--	--	3.60	0.00	0.00	96.70	Bottom at 51.20'
RW-17	3/13/2015	--	--	--	12.00	4.88	108.70	
RW-17	3/20/2015	--	--	--	3.00	2.34	111.70	
RW-17	3/27/2015	--	--	--	1.00	2.55	112.70	
RW-17	4/3/2015	--	--	--	0.96	0.00	113.66	
RW-17	4/10/2015	--	--	--	1.00	3.15	114.66	
RW-17	4/17/2015	--	--	--	1.00	2.45	115.66	
RW-17	4/24/2015	--	--	--	1.00	1.90	116.66	
RW-17	4/30/2015	--	--	--	1.00	2.14	117.66	
RW-17	5/8/2015	--	--	--	1.00	3.07	118.66	
RW-17	5/15/2015	--	--	--	0.42	2.79	119.08	
RW-17	5/19/2015	--	--	1.00	0.00	0.00	119.08	Bottom at 47.75'
RW-17	6/5/2015	--	--	2.00	0.00	0.00	119.08	
RW-17	7/13/2015	--	--	7.60	0.00	0.00	119.08	
RW-17	8/14/2015	--	--	--	15.00	9.30	134.08	
RW-17	8/28/2015	--	--	--	3.00	4.03	137.08	
RW-17	9/11/2015	--	--	--	2.50	3.87	139.58	
RW-17	9/25/2015	--	--	--	1.00	2.36	140.58	
RW-17	9/28/2015	--	--	0.40	0.00	0.00	140.58	Bottom at 48.00'
RW-17	10/9/2015	--	--	--	1.50	1.98	142.08	
RW-17	10/23/2015	--	--	--	1.00	2.85	143.08	
RW-17	1/6/2016	--	--	4.30	0.00	0.00	143.08	Bottom at 47.80'
RW-17	2/19/2016	--	--	5.70	0.00	0.00	143.08	Bottom at 47.90'
RW-17	3/18/2016	--	--	--	10.00	4.16	153.08	
RW-17	3/25/2016	--	--	--	2.00	2.78	155.08	
RW-17	4/1/2016	--	--	--	1.00	1.42	156.08	
RW-17	4/8/2016	--	--	--	2.00	1.54	158.08	
RW-17	5/11/2016	--	--	--	2.00	5.04	160.08	
RW-17	5/20/2016	--	--	--	0.90	3.21	160.98	
RW-17	6/17/2016	--	--	--	4.11	3.73	165.09	
RW-17	6/22/2016	--	--	3.30	0.00	0.00	165.09	Bottom at 48.60'
RW-17	7/1/2016	--	--	--	3.50	2.34	168.59	
RW-17	7/15/2016	--	--	--	2.50	2.43	171.09	
RW-17	7/29/2016	--	--	--	2.00	2.81	173.09	
RW-17	8/12/2016	--	--	--	2.00	2.55	175.09	
RW-17	8/26/2016	--	--	0.90	2.00	2.41	177.09	Bottom at 49.80'
RW-17	9/9/2016	--	--	1.20	2.00	2.74	179.09	Bottom at 49.90'

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RW-17	9/23/2016	--	--	--	1.75	2.22	180.84	
RW-17	10/7/2016	--	--	--	1.52	2.17	182.36	
RW-17	10/21/2016	--	--	1.10	1.50	3.98	183.86	Bottom at 43.40' (did not reach bottom)
RW-17	11/4/2016	--	--	--	1.25	2.03	185.11	
RW-17	11/18/2016	--	--	--	1.00	1.59	186.11	
RW-17	12/2/2016	--	--	0.70	0.00	0.00	186.11	Bottom at 48.50'
RW-17	2/24/2017	--	--	1.50	0.00	0.00	186.11	Bottom at 48.50'
RW-17	4/21/2017	--	--	4.00	0.00	0.00	186.11	Bottom at 48.50'
RW-17	7/18/2017	--	--	11.30	0.00	0.00	186.11	Bottom at 48.50'
RW-17	7/28/2017	--	--	--	19.66	0.00	205.77	
RW-17	8/11/2017	--	--	--	3.61	6.76	209.38	
RW-17	8/25/2017	--	--	--	2.00	3.78	211.38	
RW-17	9/8/2017	--	--	--	2.00	3.27	213.38	
RW-17	9/22/2017	--	--	--	2.00	3.57	215.38	
RW-17	10/6/2017	--	--	--	1.00	3.48	216.38	
RW-17	10/20/2017	--	--	1.35	0.96	4.10	217.34	Bottom at 48.50'
RW-17	11/3/2017	--	--	--	0.96	1.13	218.30	
RW-17	2/27/2018	--	--	3.80	0.00	0.00	218.30	Bottom at 48.50'
RW-17	5/18/2018	--	--	9.80	0.00	0.00	218.30	Bottom at 48.50'
RW-17	6/29/2018	--	--	--	18.00	6.59	236.30	
RW-17	7/13/2018	--	--	--	2.00	2.24	238.30	
RW-17	7/27/2018	--	--	--	2.00	1.49	240.30	
RW-17	8/10/2018	--	--	0.90	2.00	2.86	242.30	Botom at 48.50'
RW-17	8/24/2018	--	--	--	1.00	1.39	243.30	
RW-17	9/7/2018	--	--	--	0.96	3.46	244.26	
RW-17	9/21/2018	--	--	--	1.20	1.22	245.46	
RW-17	10/5/2018	--	--	--	1.20	2.24	246.66	
RW-17	10/19/2018	--	--	--	1.20	3.06	247.86	
RW-17	11/2/2018	--	--	--	1.20	2.46	249.06	
RW-17	11/16/2018	--	--	--	1.20	2.44	250.26	
RW-17	11/19/2018	--	--	0.60	0.00	0.00	250.26	Bottom at 48.50'
RW-17	11/30/2018	--	--	--	1.16	2.65	251.42	
RW-17	3/15/2019	--	--	3.40	0.00	0.00	251.42	Bottom at 48.50'
RW-17	3/22/2019	--	--	--	5.00	3.54	256.42	
RW-17	4/5/2019	--	--	--	1.50	2.54	257.92	
RW-17	4/19/2019	--	--	--	0.54	2.14	258.46	
RW-17	6/14/2019	--	--	1.10	0.00	0.00	258.46	Bottom at 48.00'
RW-17	8/9/2019	--	--	--	4.00	1.53	262.46	
RW-17	8/23/2019	--	--	--	2.00	1.25	264.46	
RW-17	9/6/2019	--	--	--	2.30	1.69	266.76	
RW-17	9/20/2019	--	--	0.80	0.00	0.00	266.76	Bottom at 47.60'
RW-18	8/23/2013	--	--	0.00	--	NB	0.00	Bottom at 39.92'; 13' of sediment in well

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RW-18	4/16/2014	--	--	3.30	0.00	0.00	0.00	Bottom at 39.0'
RW-18	4/23/2014	--	--	--	8.51	67.14	8.51	Bottom at 51.7'
RW-18	4/25/2014	--	--	--	3.13	2.22	11.64	
RW-18	4/29/2014	--	--	--	3.13	2.82	14.77	
RW-18	5/2/2014	--	--	--	3.13	2.62	17.90	
RW-18	5/6/2014	--	--	--	1.46	9.28	19.36	
RW-18	5/9/2014	--	--	--	1.46	9.19	20.82	
RW-18	5/13/2014	--	--	--	1.45	8.16	22.27	
RW-18	5/16/2014	--	--	--	1.45	8.77	23.72	
RW-18	5/19/2014	--	--	--	0.00	8.61	23.72	
RW-18	5/22/2014	--	--	--	0.00	6.67	23.72	
RW-18	5/27/2014	--	--	--	0.00	8.21	23.72	
RW-18	8/14/2014	--	--	--	5.50	4.45	29.22	
RW-18	8/22/2014	--	--	--	3.50	2.61	32.72	
RW-18	8/29/2014	--	--	--	0.15	3.84	32.87	
RW-18	9/5/2014	--	--	--	0.15	3.22	33.02	
RW-18	9/12/2014	--	--	--	1.00	1.71	34.02	
RW-18	9/19/2014	--	--	--	0.15	2.32	34.17	
RW-18	9/25/2014	--	--	--	0.15	1.06	34.32	
RW-18	10/3/2014	--	--	--	0.15	3.94	34.47	
RW-18	10/10/2014	--	--	0.50	0.15	1.11	34.62	
RW-18	10/17/2014	--	--	--	0.15	1.16	34.77	
RW-18	10/24/2014	--	--	--	0.14	0.83	34.91	
RW-18	12/31/2014	--	--	5.30	0.00	0.00	34.91	Bottom at 54.20'
RW-18	3/4/2015	--	--	4.90	0.00	0.00	34.91	
RW-18	3/27/2015	--	--	--	8.00	2.29	42.91	
RW-18	4/3/2015	--	--	--	2.00	2.99	44.91	
RW-18	4/10/2015	--	--	--	1.50	3.02	46.41	
RW-18	4/17/2015	--	--	--	1.50	2.14	47.91	
RW-18	4/24/2015	--	--	--	0.55	3.39	48.46	
RW-18	4/30/2015	--	--	--	0.55	2.01	49.01	
RW-18	5/8/2015	--	--	--	0.55	2.35	49.56	
RW-18	5/15/2015	--	--	--	0.55	2.09	50.11	
RW-18	5/19/2015	--	--	0.00	0.00	0.00	50.11	Trace DNAPL on Probe, Bottom at 48.75'
RW-18	6/5/2015	--	--	3.00	0.00	0.00	50.11	
RW-18	7/13/2015	--	--	0.10	0.00	0.00	50.11	
RW-18	9/28/2015	--	--	4.10	0.00	0.00	50.11	Bottom at 49.70'
RW-18	1/6/2016	--	--	10.75	0.00	0.00	50.11	Bottom at 51.25'
RW-18	2/19/2016	--	--	11.30	0.00	0.00	50.11	Bottom at 50.35'
RW-18	3/25/2016	--	--	--	13.00	1.35	63.11	Issues with EchoPod, stop early
RW-18	4/1/2016	--	--	--	4.59	5.48	67.70	
RW-18	4/8/2016	--	--	--	1.50	1.74	69.20	
RW-18	5/11/2016	--	--	--	1.00	2.47	70.20	

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RW-18	5/20/2016	--	--	--	0.50	2.27	70.70	
RW-18	6/17/2016	--	--	--	1.25	2.75	71.95	
RW-18	6/22/2016	--	--	1.50	0.00	0.00	71.95	Bottom at 50.75'
RW-18	7/1/2016	--	--	--	1.00	2.36	72.95	
RW-18	7/15/2016	--	--	--	0.44	0.75	73.39	
RW-18	9/9/2016	--	--	0.80	0.00	0.00	73.39	Bottom at 50.35'
RW-18	10/21/2016	--	--	3.70	0.00	0.00	73.39	Bottom at 50.40'
RW-18	11/30/2016	--	--	--	3.51	0.00	76.90	
RW-18	12/2/2016	--	--	5.80	0.00	0.00	76.90	Bottom at 52.60'
RW-18	2/24/2017	--	--	8.50	0.00	0.00	76.90	Bottom at 52.60'
RW-18	3/10/2017	--	--	--	7.50	2.39	84.40	
RW-18	3/24/2017	--	--	--	6.00	4.21	90.40	
RW-18	4/7/2017	--	--	--	3.00	5.54	93.40	
RW-18	4/21/2017	--	--	0.80	1.00	4.40	94.40	Bottom at 52.60'
RW-18	5/8/2017	--	--	--	0.80	1.19	95.20	
RW-18	5/19/2017	--	--	--	0.50	3.04	95.70	
RW-18	7/18/2017	--	--	3.80	0.00	0.00	95.70	Bottom at 52.60'
RW-18	10/20/2017	--	--	5.50	0.00	0.00	95.70	Bottom at 52.60'
RW-18	11/17/2017	--	--	--	14.35	0.00	110.05	
RW-18	2/27/2018	--	--	3.40	0.00	0.00	110.05	Bottom at 52.60'
RW-18	5/18/2018	--	--	5.40	0.00	0.00	110.05	Bottom at 52.60'
RW-18	6/29/2018	--	--	--	2.56	2.44	112.61	
RW-18	7/13/2018	--	--	--	2.50	3.37	115.11	
RW-18	7/27/2018	--	--	--	2.00	1.09	117.11	
RW-18	8/10/2018	--	--	0.05	1.00	0.71	118.11	Bottom at 52.60'
RW-18	11/19/2018	--	--	0.50	0.00	0.00	118.11	Bottom at 52.60'
RW-18	3/15/2019	--	--	0.00	0.00	0.00	118.11	Bottom at 52.60'
RW-18	6/14/2019	--	--	2.40	0.00	0.00	118.11	Bottom at 50.80'; did not reach bottom
RW-18	6/28/2019	--	--	--	3.00	2.22	121.11	
RW-18	7/12/2019	--	--	--	1.50	1.37	122.61	
RW-18	7/26/2019	--	--	--	1.50	0.88	124.11	
RW-18	10/4/2019	--	--	2.80	0.00	0.00	124.11	Bottom at 52.60'
RW-19	12/11/2015	--	--	--	0.00	55.00	0.00	Removed ~20' of sediment (bottom was at 19')
RW-19	1/6/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 39.00' (~13' of sediment in well)
RW-19	2/19/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 40.60' (~12' of sediment in well)
RW-19	4/5/2016	--	--	--	0.00	50.00	0.00	Removed remaining sediment from well; bottom at ~52'
RW-19	6/22/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 50.00'
RW-19	9/9/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 49.60'
RW-19	10/21/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 49.50'
RW-19	12/2/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 49.50'
RW-19	2/24/2017	--	--	0.40	0.00	0.00	0.00	Bottom at 49.50'
RW-19	4/21/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 49.50'

Notes:
fbtoc = feet below top of casing.
OBS = evidence of DNAPL observed but thickness not measured.
DTW = depth to water.
NB = not bailed
NM = not measured.

Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-19	7/18/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 49.50'
RW-19	10/20/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 49.50'
RW-19	2/27/2018	--	--	0.20	0.00	0.00	0.00	Bottom at 49.50'
RW-19	5/18/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 49.50'
RW-19	8/10/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 49.50'
RW-19	11/19/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 49.50', silty
RW-19	3/15/2019	--	--	0.50	0.00	0.00	0.00	Bottom at 49.50'
RW-19	6/14/2019	--	--	1.00	0.00	0.00	0.00	Bottom at 48.60'
RW-19	10/4/2019	--	--	0.90	0.00	0.00	0.00	Bottom at 49.60'
PH-1	8/23/2013	--	--	0.00	0.50	50.00	0.50	Bottom at 51.80'; DNAPL in well when purged
PH-1	9/18/2013	--	--	0.00	1.00	35.00	1.50	DNAPL at start and at 30 gal.
PH-1	1/31/2014	--	--	1.00	0.00	0.00	1.50	Bottom at 51.85'
PH-1	4/16/2014	--	--	1.00	0.00	0.00	1.50	Bottom at 51.8'
PH-1	8/29/2014	--	--	1.10	0.00	0.00	1.50	Bottom at 51.8'
PH-1	12/29/2014	--	--	0.25	0.00	0.00	1.50	Bottom at 52.10'
PH-1	3/4/2015	--	--	0.00	0.00	0.00	1.50	Trace, Bottom at 51.85'
PH-1	5/19/2015	--	--	0.60	0.00	0.00	1.50	Bottom at 51.90'
PH-1	10/19/2015	--	--	1.00	0.62	5.02	2.12	Bottom at 51.90'
PH-1	10/20/2015	Abandoned						
PH-3	8/23/2013	--	--	0.00	0.00	100.00	0.00	Bottom at 46.42'
PH-3	9/18/2014	--	--	0.00	0.00	100.00	0.00	Odor, sheen
PH-3	1/31/2014	--	--	0.30	0.00	0.00	0.00	Bottom at 46.50'
PH-3	4/16/2014	--	--	0.40	0.00	0.00	0.00	Bottom at 46.4'
PH-3	8/29/2014	--	--	0.50	0.00	0.00	0.00	Bottom at 46.4'
PH-3	12/29/14	--	--	1.00	0.00	0.00	0.00	Bottom at 46.60'
PH-3	3/4/2015	--	--	1.10	0.00	0.00	0.00	Bottom at 46.60'
PH-3	5/19/2015	--	--	2.75	0.00	0.00	0.00	Bottom at 46.60'
PH-3	10/19/2015	--	--	2.30	1.86	5.04	1.86	Bottom at 46.55'
PH-3	10/20/2015	Abandoned						
PH-7	8/23/2013	--	--	1.40	0.00	0.00	0.00	Bottom at 41.86'
PH-7	9/18/2013	--	--	1.60	0.00	0.00	0.00	Bottom at 41.9'
PH-7	1/31/2014	--	--	2.50	0.00	0.00	0.00	Bottom at 42.00'
PH-7	4/16/2014	--	--	3.00	0.00	0.00	0.00	Bottom at 41.9'
PH-7	8/29/2014	--	--	3.75	0.00	0.00	0.00	Bottom at 41.85'
PH-7	12/29/2014	--	--	3.50	0.00	0.00	0.00	Bottom at 42.10'
PH-7	3/4/2015	--	--	3.65	0.00	0.00	0.00	Bottom at 42.10'
PH-7	5/19/2015	--	--	4.00	0.00	0.00	0.00	Bottom at 42.10'
PH-7	10/19/2015	--	--	3.70	2.48	5.48	2.48	Bottom at 42.00'
PH-7	10/21/2015	Converted to RW-19						

Notes:
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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
PH-9	8/23/2013	--	--	0.00	0.00	100.00	0.00	Bottom at 38.15'; 3' of sediment in well
PH-9	9/18/2013	--	--	1	0.00	0.00	0.00	Bottom at 41.60'
PH-9	1/31/2014	--	--	1.50	0.00	0.00	0.00	Bottom at 41.50'
PH-9	4/16/2014	--	--	1.50	0.00	0.00	0.00	Bottom at 41.55'
PH-9	8/29/2014	--	--	1.50	0.00	0.00	0.00	Bottom at 41.75'
PH-9	12/29/2014	--	--	2.20	0.00	0.00	0.00	Bottom at 42.50'
PH-9	3/4/2015	--	--	2.35	0.00	0.00	0.00	Bottom at 41.70'
PH-9	5/19/2015	--	--	2.75	0.00	0.00	0.00	Bottom at 41.75'
PH-9	10/19/2015	--	--	3.00	2.79	2.83	2.79	Bottom at 41.70'
PH-9	10/20/2015				Abandoned			
PH-11	8/23/2013	--	--	0.20	-	0.00	0.00	Bottom at 41.58'
PH-11	9/18/2013	--	--	1.00	0.00	0.00	0.00	Bottom at 41.50'
PH-11	1/31/2014	--	--	1.20	0.00	0.00	0.00	Bottom at 41.50'
PH-11	4/16/2014	--	--	1.00	0.00	0.00	0.00	Bottom at 41.4'
PH-11	8/29/2014	--	--	0.90	0.00	0.00	0.00	Bottom at 41.70'
PH-11	12/31/2014	--	--	1.80	0.00	0.00	0.00	Bottom at 41.65'
PH-11	3/4/2015	--	--	1.90	0.00	0.00	0.00	Bottom at 41.65'
PH-11	5/19/2015	--	--	2.50	0.00	0.00	0.00	Bottom at 41.65'
PH-11	10/19/2015	--	--	2.10	1.86	4.81	1.86	Bottom at 41.60'
PH-11	10/10/2015				Abandoned			
					Total DNAPL (gal.)	**Total Water (gal)**	**Total Mixture (gal.)**	
					5415.89	**5148.46**	**10564.35**	
InterceDNAPL or Trench Collection Sump								
Sump	3/5/2008	4.01	--	0.00	0.00	--	--	
Sump	10/14/2008	6.36	--	0.00	0.00	--	--	
Sump	10/17/2008	6.18	--	0.00	0.00	0.50	0.00	
Sump	10/21/2008	6.35	--	0.00	0.00	0.25	0.00	
Sump	12/9/2008	3.02	--	0.00	0.00	0.25	0.00	Clear water
Sump	12/18/2008	5.59	--	0.00	0.00	0.25	0.00	Clear water
Sump	12/30/2008	4.24	--	0.00	0.00	0.25	0.00	Clear water
Sump	1/2/2009	4.32	--	0.00	0.00	0.25	0.00	Clear water
Sump	1/7/2009	4.73	--	0.00	0.00	0.25	0.00	Slightly cloudy, slight odor
Sump	1/14/2009	4.79'	--	0.00	0.00	0.25	0.00	Clear water
Sump	1/23/2009	5.23	--	0.00	0.00	0.25	0.00	Clear water
Sump	1/26/2009	5.86'	--	0.00	0.00	0.25	0.00	Slightly cloudy
Sump	1/27/2009	5.40'	--	0.00	0.00	0.25	0.00	1.5' of grey water in bailer, rust globules, sheen present visible on water surface inside manhole, odor.
Sump	1/28/2009	5.28'	--	0.00	0.00	0.25	0.00	Tan water
Sump	2/5/2009	5.34	--	0.00	0.00	0.25	0.00	

Notes:
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Table 9.
DNAPL Recovery Data Table
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
Sump	3/11/2009	4.30	--	0.00	0.00	0.25	0.00	
Sump	3/17/2009	4.94	--	0.00	0.00	0.25	0.00	
Sump	3/25/2009	3.14	13.98	0.00	0.00	0.25	0.00	
Sump	3/31/2009	3.82	14.08	0.00	0.00	0.25	0.00	
Sump	4/20/2009	4.07	--	--	--	--	--	
Sump	4/29/2009	4.76	--	--	--	--	--	
Sump	5/6/2009	4.42	--	--	--	--	--	
Sump	5/11/2009	4.64	--	--	--	--	--	
Sump	5/20/2009	4.62	--	--	--	--	--	
Sump	5/27/2009	5.36	--	--	--	--	--	
Sump	6/15/2009	4.51	--	--	--	--	--	
Sump	6/24/2009	3.95	--	--	--	--	--	
Sump	6/30/2009	5.16	--	--	--	--	--	
Sump	7/31/2009	4.68	--	--	--	--	--	
Sump	8/13/2009	5.62	--	--	--	--	--	
Sump	8/26/2009	6.40	--	--	--	--	--	
Sump	10/2/2009	5.10	--	--	--	--	--	
Sump	10/6/2009	5.63	--	--	--	--	--	
Sump	12/18/2009	4.68	--	--	--	--	--	
Sump	2/3/2010	5.91	--	--	--	--	--	
Sump	8/30/2010	6.49	--	0.00	--	--	--	
Sump	10/10/2011	6.23	--	0.00	--	--	--	Bottom at 13.85'
Sump	11/8/2011	6.27	--	0.00	--	--	--	Rusty colored
Sump	4/16/2014	--	--	0.00	--	--	--	
Sump	5/19/2015	--	--	0.00	0.00	0.00	0.00	Bottom at 13.80'
Sump	1/6/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 13.80'
Sump	9/9/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	10/21/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	12/2/2016	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	2/24/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	4/21/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	7/21/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	10/20/2017	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	2/27/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	5/18/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	8/10/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	11/19/2018	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	3/15/2019	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	6/14/2019	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'
Sump	9/20/2019	--	--	0.00	0.00	0.00	0.00	Bottom at 14.00'

Notes:
fbtoc = feet below top of casing.
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ARCADIS Design & Consultancy for natural and built assets

Table 10.
Proposed MW Sampling Locations
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID Monitoring Wells	Unit Screened	Measuring Point (TOC) Elev. (ft. AMSL)	Ground Surface Elev. (ft. AMSL)	Depth to Screened Interval (from TOC) Top	Depth to Screened Interval (from TOC) Bottom	Screen Length (ft.)	Well Diameter (in.)	Screen Type	Screen Slot Size (in.)
MW-1D	URC	700.07	698.0	15.0	21.5	6.5	2	SS	0.010
MW-5D	URC	690.35	687.7	17.7	22.7	5.0	2	SS	0.010
MW-8S	Alluvium	691.66	688.6	5.6	9.1	3.5	2	PVC	0.010
MW-9	Alluvium	701.33	698.4	6.0	11.0	5.0	2	PVC	0.010
MW-16S	Alluvium	695.12	691.9	6.5	9.5	3.0	2	PVC	0.010
MW-20S	Alluvium	691.16	690.8	4.4	5.4	1.0	2	PVC	0.010
MW-21S	Alluvium	688.99	686.8	5.2	6.2	1.0	2	PVC	0.010
MW-23D	URC	687.96	684.7	19.3	24.3	5.0	2	PVC	0.010
MW-28B	URC	692.28	688.9	21.1	26.1	5.0	2	PVC	0.010
MW-28C	LRC	692.71	689.5	28.9	38.9	10.0	2	PVC	0.010
MW-31A	URC	692.88	690.6	13.8	23.8	10.0	2	PVC	0.010
MW-32A	URC	690.51	687.3	24.2	27.2	3.0	2	PVC	0.010
MW-34A	URC	688.01	685.2	19.8	29.8	10.0	2	PVC	0.010
MW-35B	URC	706.37	703.1	27.2	30.2	3.0	2	PVC	0.010
MW-35C	LRC	706.38	703.1	34.7	48.2	13.5	2	PVC	0.010
MW-36A	URC	700.44	697.1	22.9	27.9	5.0	2	PVC	0.010
MW-38A	URC	700.99	698.2	27.8	32.8	5.0	2	PVC	0.010
MW-40A	LRC	694.36	692.1	31.3	46.3	15.0	2	PVC	0.010
MW-40C	URC	694.78	692.2	11.1	16.1	5.0	2	PVC	0.010
MW-45C	URC	700.59	698.4	14.2	24.2	10.0	2	PVC	0.010
MW-46A	URC	688.81	686.8	26.1	36.1	10.0	2	PVC	0.010
MW-47A	URC	683.38	680.8	22.6	32.6	10.0	2	PVC	0.010
MW-50B	LRC	697.54	698.0	44.5	54.5	10.0	2	PVC	0.010
P-4	Alluvium	695.06	691.1	2.5	6.0	3.5	2	PVC	0.010

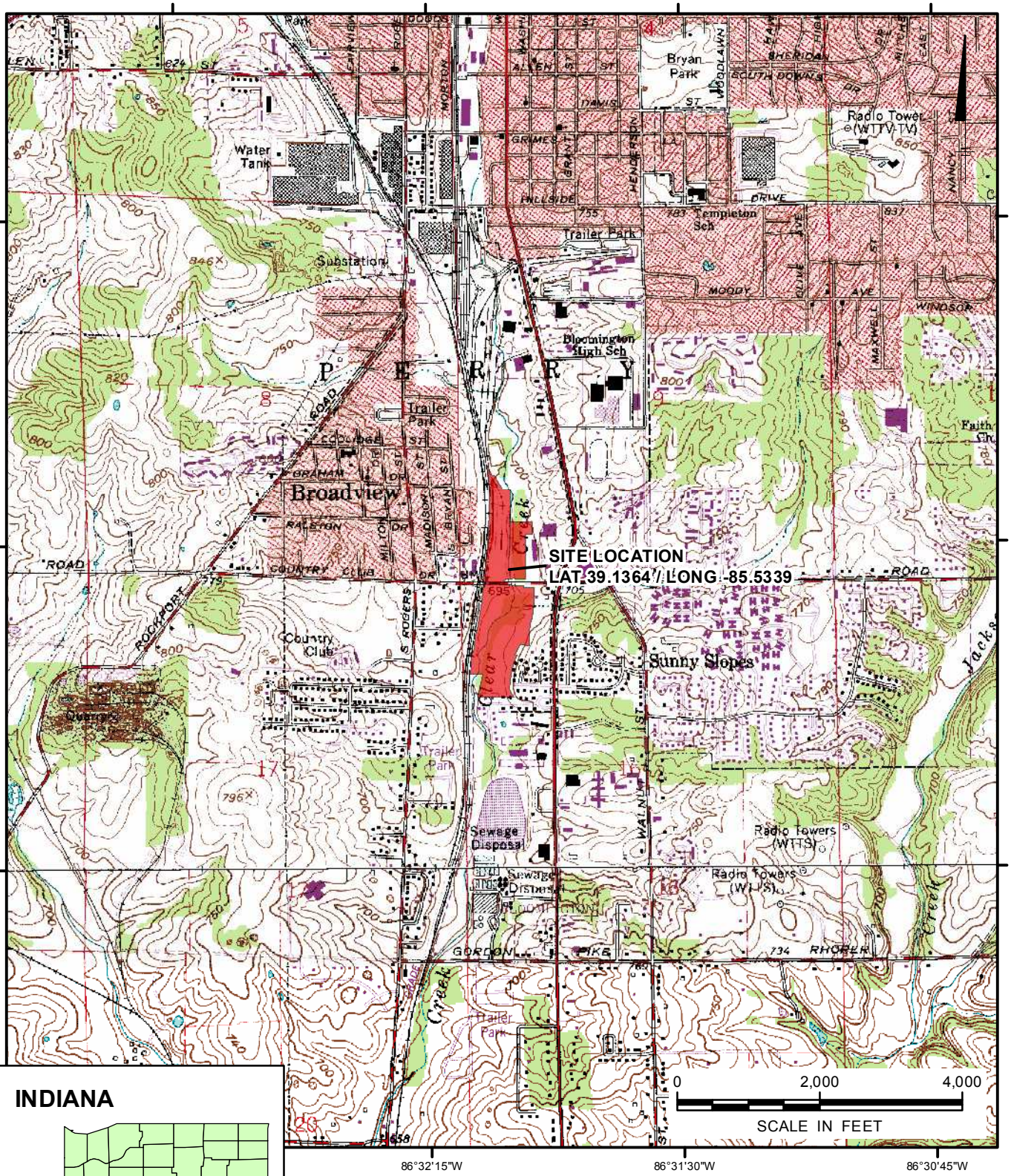
Elevations given in feet above Mean Sea Level (ft. AMSL), relative to the North American Vertical Datum of 1988 (NAVD88).
Coordinates referenced to the Indiana State Plane West (1302) grid; except decommissioned wells, which are referenced to the 1929 National Geodetic \
Coordinates and elevations for all wells surveyed by Cripe Architects and Engineers, Indianapolis, IN.

SS = stainless steel. PVC = polyvinyl chloride. TOC = top of well casing.
PVC = polyvinyl chlor URC = Upper Ramp Creek LRC = Lower Ramp Creek

Table 11.
Proposed Institutional Controls Parcel Information
CSX Transportation
Former Indiana Creosoting Company
Bloomington, Indiana

Address		Parcel Number	Owner Name	Owner Address
W.Walls Dr.	305	53-01-42-336-000.000-008	McClintock, Clovis D; Todd, Sherry; Labarr, Debra J	Same as Property Address
	306	53-08-17-100-032.000-008	Cree, R. Shane I & Inga	Same as Property Address
	410	53-08-17-100-018.000-008	Helms, Phyliss Ann	Same as Property Address
	420	53-08-17-100-019.000-008	Gingerich, Marilyn Margaret	Same as Property Address
	421	53-08-17-100-031.000-008	Ziegler, Carl H Rev Living Trust	7336 E. Kerr Creek Rd, Bloomington, IN 47403
	430	53-08-17-100-021.000-008	Burks, Richard E. & Betty J	Same as Property Address
	431	53-08-17-100-017.000-008	Malone, Ronald D. & Reva B.	Same as Property Address
S. Walls Dr.	2886	53-01-40-838-000.000-008	Charles Layne LLC	621 N. Walnut St, Bloomington, IN 47404
	2900	53-08-17-100-033.000-008	Sheck, Aaron D. & Lucrecia	Same as Property Address
	2903	53-01-40-873-000.000-008	Watts, Janet K.	Same as Property Address
	2904	53-08-17-100-013.000-008	Nentrup, Susan Jane	Same as Property Address
	2905	53-01-43-735-000.000-008	Richardson, Ricky W. & Margaret A.	Same as Property Address
	2907	53-01-40-613-000.000-008	Szakaly, Andrew & Nancy	PO Box 5021, Bloomington, IN 47407
	2908	53-08-17-100-012.000-008	Crane, Dave R	316 S. Rogers Street, Bloomington, IN 47403
	2909	53-01-40-892-000.000-008	Hacker, Joseph II	Same as Property Address
	2911	53-01-41-154-000.000-008	Wangle Properties LLC	1115 S. Longwood Drive, Bloomington, IN 47403
S. Rogers St.	2809	53-08-17-100-024.000-008	JTCT Investments LLC	2519 Summer Creek Dr, Bloomington, IN 47401
	2813	53-08-17-100-034.000-008	Hawley, Brad & Hawley, James	Same as Property Address
	2815	53-08-17-100-044.000-008	Kleinbauer, L. Mark & Susan	Same as Property Address
	2821	53-08-17-100-043.000-008	Rice Brothers Properties LLC	3801 W. Maple Leaf Dr, Bloomington, IN 47403
	2821	53-08-17-100-043.000-008	Rice Brothers Properties LLC	3801 W. Maple Leaf Dr, Bloomington, IN 47403
	2831	53-08-17-100-014.000-008	Rice Brothers Properties LLC	3801 W. Maple Leaf Dr, Bloomington, IN 47403
	2833	53-08-17-100-014.000-008	Rice Brothers Properties LLC	3801 W. Maple Leaf Dr, Bloomington, IN 47403
	2835	53-08-17-100-014.000-008	Rice Brothers Properties LLC	3801 W. Maple Leaf Dr, Bloomington, IN 47403
	2837	53-08-17-100-014.000-008	Rice Brothers Properties LLC	3801 W. Maple Leaf Dr, Bloomington, IN 47403
	2839	53-08-17-100-028.000-008	Rice, Wm. R. & Nancy C.	3801 W. Maple Leaf Dr, Bloomington, IN 47403
	2901	53-08-17-100-014.000-008	Rice Brothers Properties LLC	3801 W. Maple Leaf Dr, Bloomington, IN 47403
	2905	53-08-17-100-037.000-008	East, Jillian Emily	Same as Property Address
	2911	53-08-17-100-035.000-008	Moore, Kelly Ann	2293 Siebolt Quarry Rd, Bedford, IN 47421
	2913	53-08-17-100-016.000-008	Braunlin, Linda (Revocable Trust)	6465 W. Tarkington Ln, Bloomington, IN 47403
	2917	53-08-17-100-020.000-008	Larson, Sarah E & Michael J	Same as Property Address
	2921	53-08-17-100-030.000-008	Brown, Wendell L. & Joan L.	Same as Property Address
	2923	53-08-17-100-042.000-008	Hauk, Lawrence L.	Same as Property Address
	3009	53-01-41-358-000.000-008	Haley, Boyd L. & Patricia J. (Revocable Trust)	Same as Property Address
	3009	53-01-41-360-000.000-008	Haley, Boyd L. & Patricia J. (Revocable Trust)	Same as Property Address
	3009	53-01-41-362-000.000-008	Haley, Boyd L. & Patricia J. (Revocable Trust)	Same as Property Address
	3009	53-01-41-363-000.000-008	Haley, Boyd L. & Patricia J. (Revocable Trust)	Same as Property Address
	3009	53-08-16-200-053.000-008	Haley, Boyd L. & Patricia J. (Revocable Trust)	Same as Property Address
	--	53-08-17-100-029.000-008	Rice, James David & Janet Carol Ab Living Trust	3501 E. Winston St, Bloomington, IN 47401
S. Pinewood Dr.	--	53-08-16-200-068.000-009	Board of Commissioners of Monroe County	Courthouse Dr, Bloomington, IN 47404
W. Country Club Dr.	281	53-08-16-200-042.000-009	City of Bloomington, Indiana Boad of Park Commissioners	401 N. Morton St, Bloomington, IN 47404
	--	53-08-16-200-052.000-008	L&N Investment Corp.	C/o Seaborad System Railroad, 500 Water St, Rm 1208, Jacksonville, FL 32203
	--	53-08-16-200-063.000-008	L&N Investment Corp.	C/o Seaborad System Railroad, 500 Water St, Rm 1208, Jacksonville, FL 32203
	--	53-08-16-200-039.000-008	Indiana Limestone Acquisitions LLC	123 S. College Ave, Bloomington, IN 47404

Figures



PROJECTION: NAD83 State Plane Indiana West Feet

REFERENCE:
U.S.G.S. 7.5 Minute Series
Topographic Quadrangles:
Bloomington, Indiana 1977/1981,
Clear Creek, Indiana 1977/1981.
CONTOUR INTERVAL: 5 feet.

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA

REVISED REMEDIATION WORK PLAN

Site Location Map

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1

CITY: (KNOXVILLE) DIV/GROUP: (ENV/GIS) LD: (B.ALTOM) PIC: (-) PM: (S.SHARP) TM: (R.WOODRUFF) BY: BALTOM SAVED: 6/2/2016
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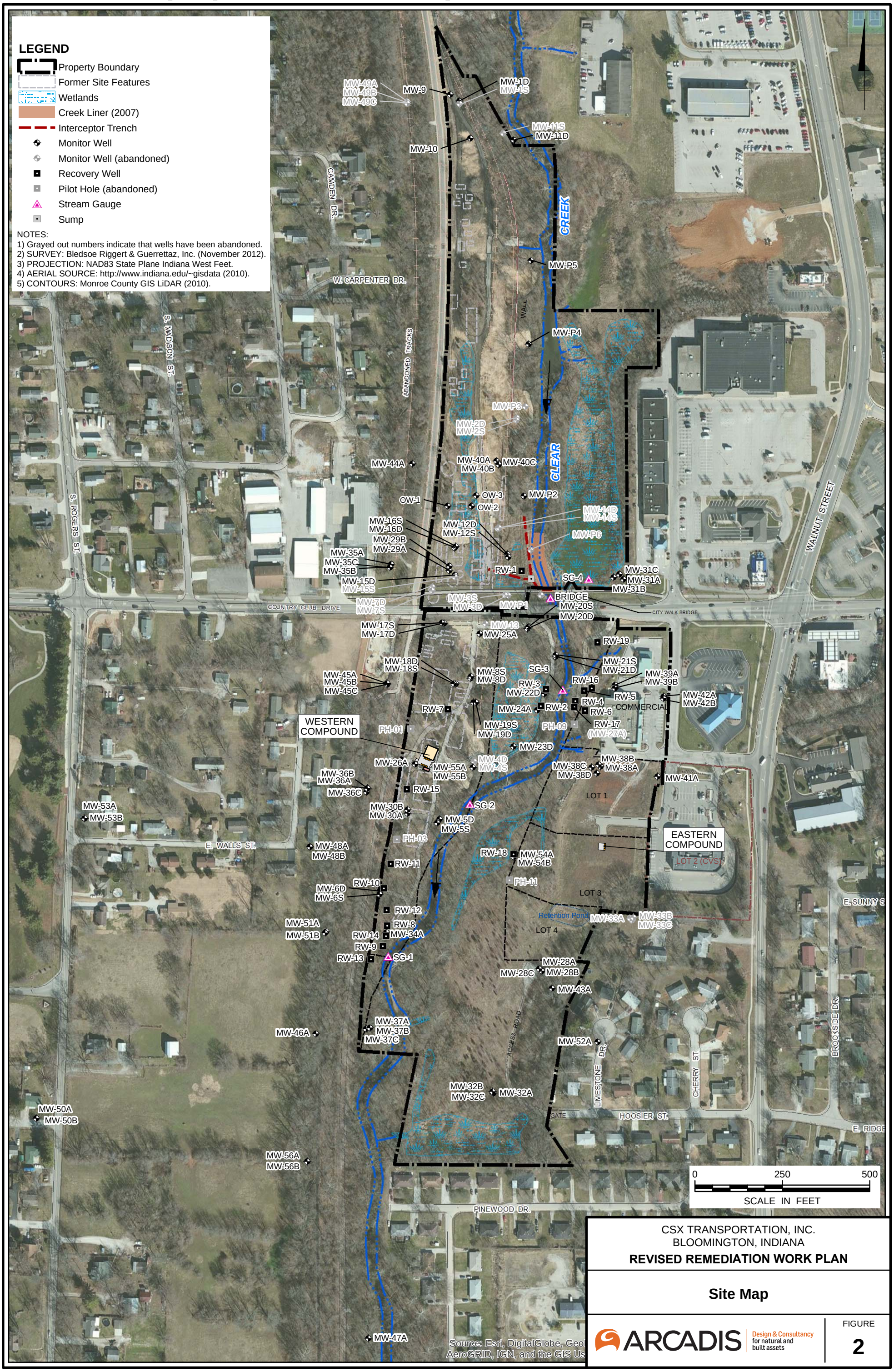


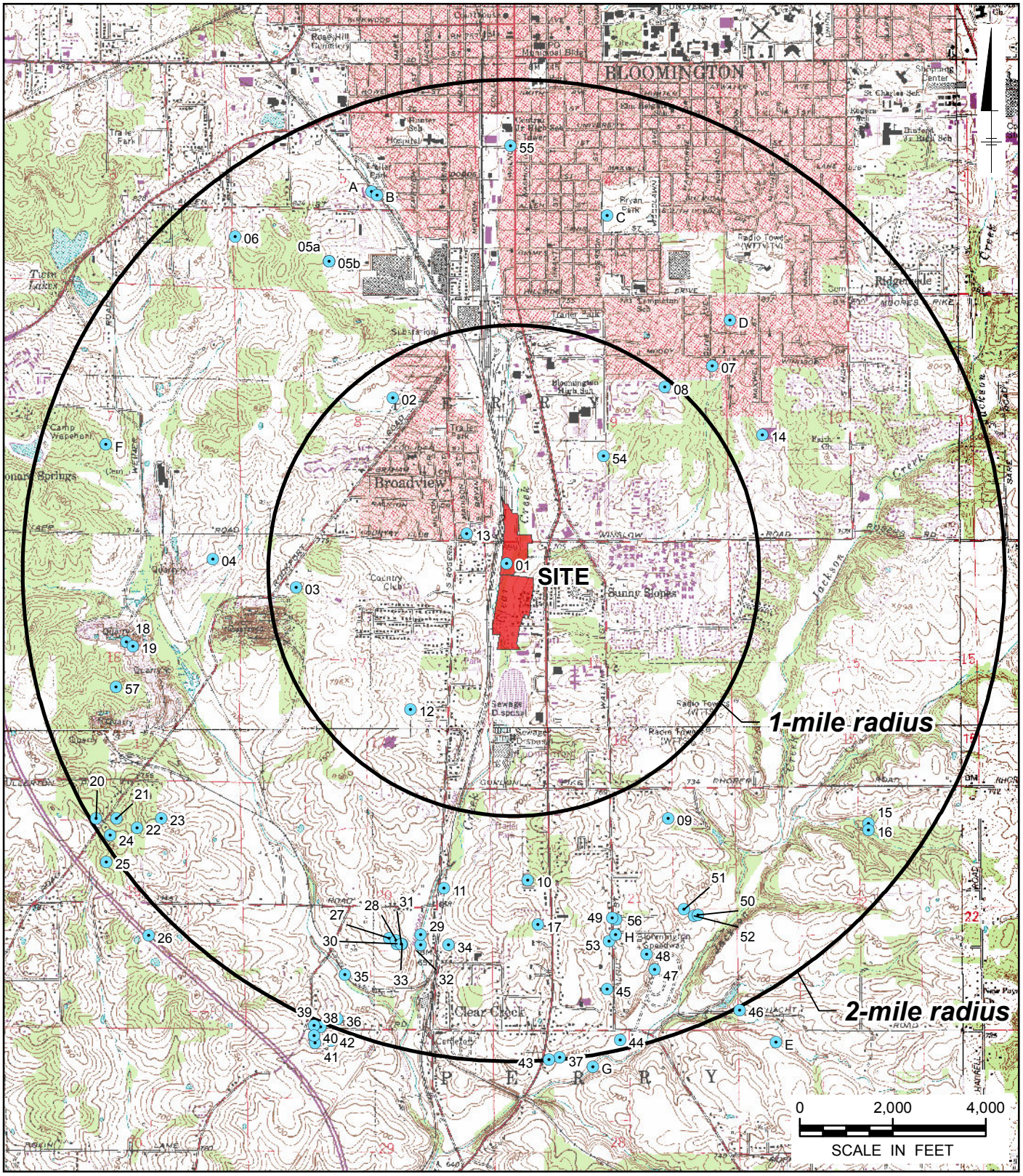
CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA

REVISED REMEDIATION WORK PLAN

Site Map

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2



INDIANA

REFERENCE:
U.S.G.S. 7.5 Minute
Series Topographic Quadrangles:
Bloomington, Indiana 1992,
Clear Creek, Indiana 1992.

LEGEND

- Water Supply Well (IDNR 2020)

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA

REVISED REMEDIATION WORK PLAN

Public Water Supply Survey

ARCADIS

FIGURE
3

CITY: (KNOXVILLE) DIV/GROUP: (ENV/GIS) LD: (B.ALTOM) PIC: (S.GLENN) PM: (S.SHARP) TM: (B.GRIGGS/R.WOODRUFF) BY: TJSCOTT
PROJECT: IN000072.0074 PATH: Z:\GISPROJECTS_ENV\CSX\IN_BLOOMINGTON\MAPDOCS\2020\F9 IN072_RISK PWS.MXD SAVED: 3/16/2020

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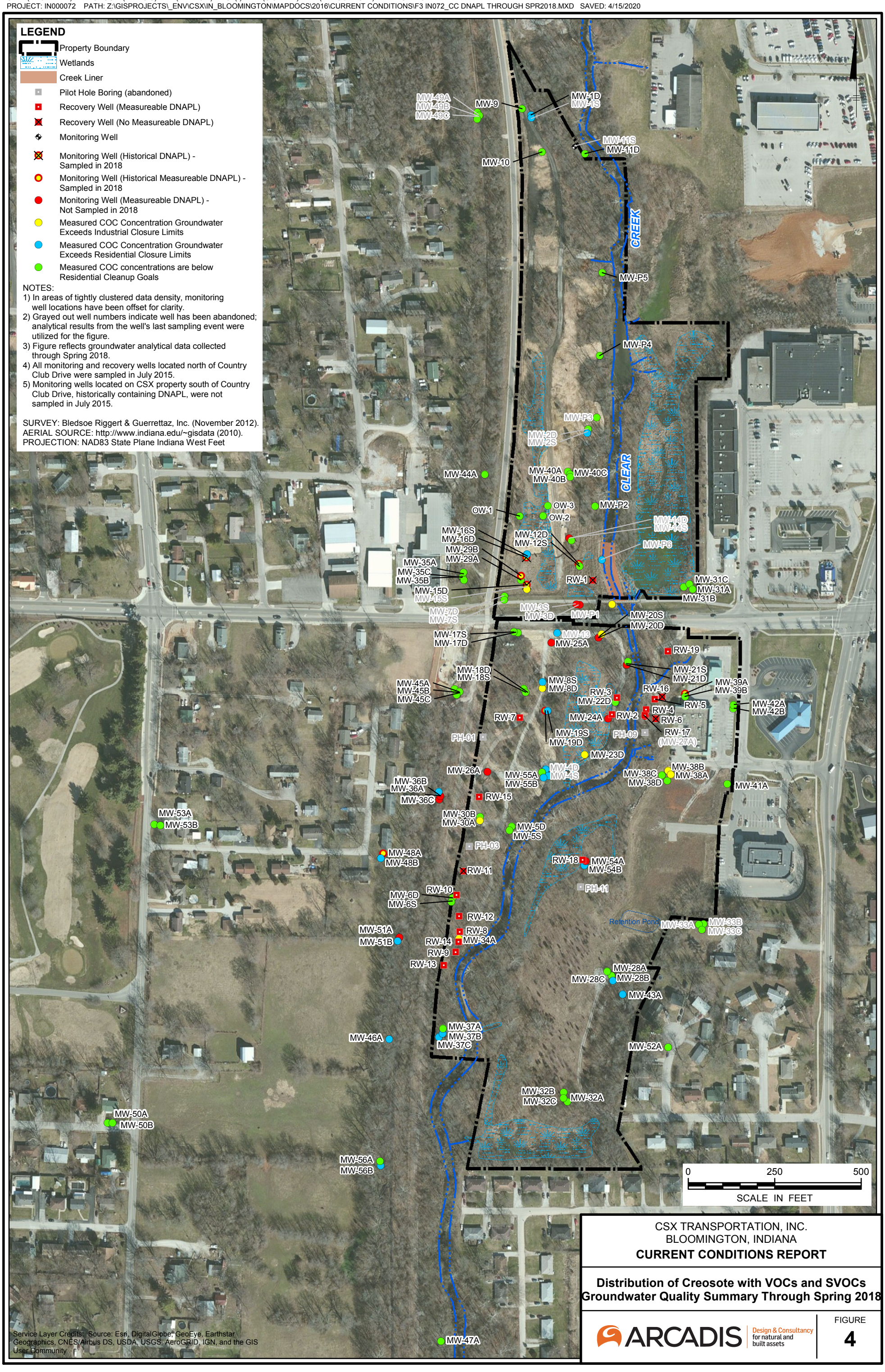
PROJECT: IN000072 PATH: Z:\GISPROJECTS_ENV\CSX\IN_BLOOMINGTON\MAPDOCS\2016\CURRENT CONDITIONS\F3 IN072_CC DNAPL THROUGH SPR2018.MXD SAVED: 4/15/2020



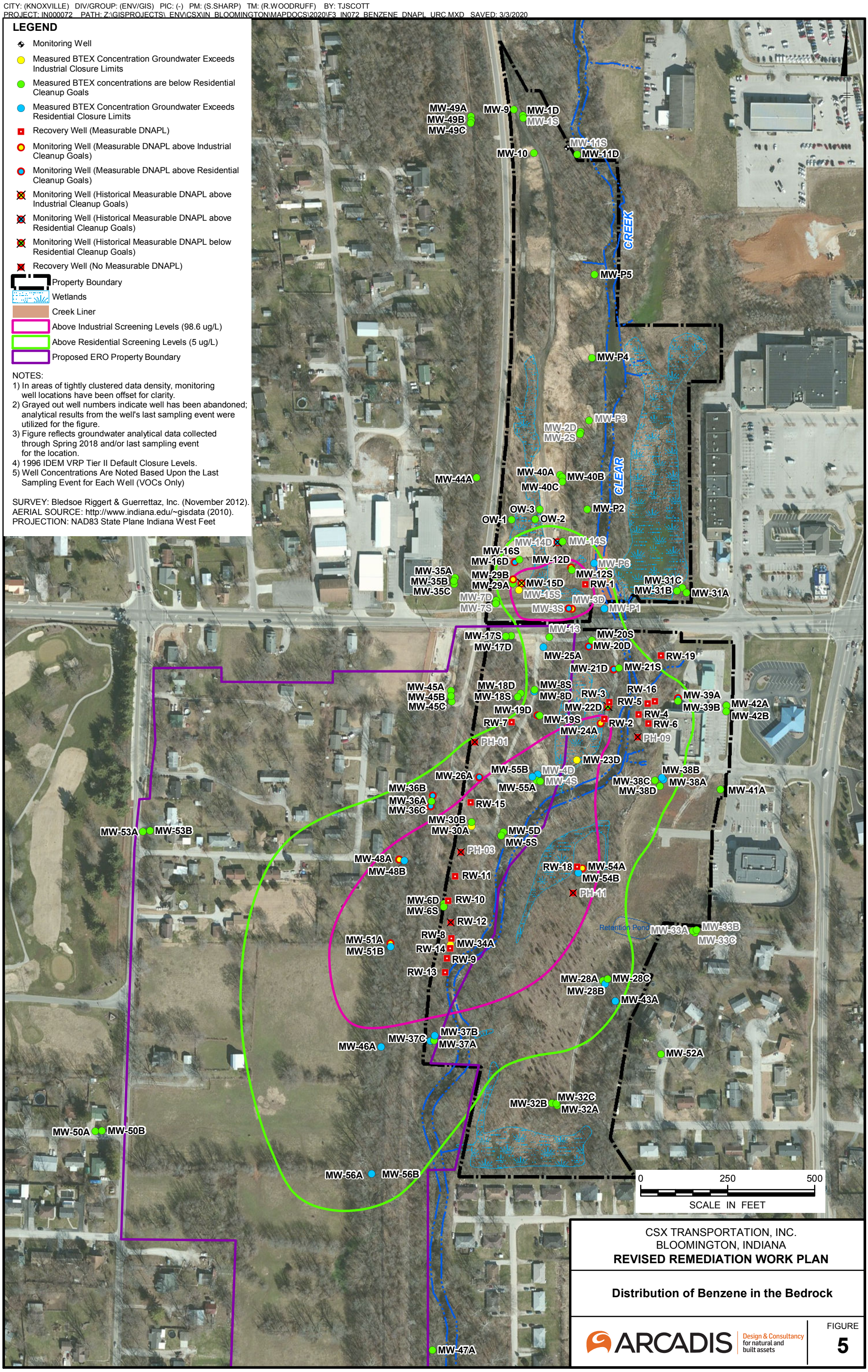
CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
CURRENT CONDITIONS REPORT

Distribution of Creosote with VOCs and SVOCs Groundwater Quality Summary Through Spring 2018

ARCADIS Design & Consultancy for natural and built assets

FIGURE
4

CITY: (KNOXVILLE) DIV/GROUP: (ENV/GIS) PIC: (-) PM: (S.SHARP) TM: (R.WOODRUFF) BY: TJSCOTT
PROJECT: IN000072 PATH: Z:\GISPROJECTS_ENV\CSX\IN_BLOOMINGTON\MAPDOCS\2020\F3_IN072_BENZENE_DNAPL_URC.MXD SAVED: 3/3/2020



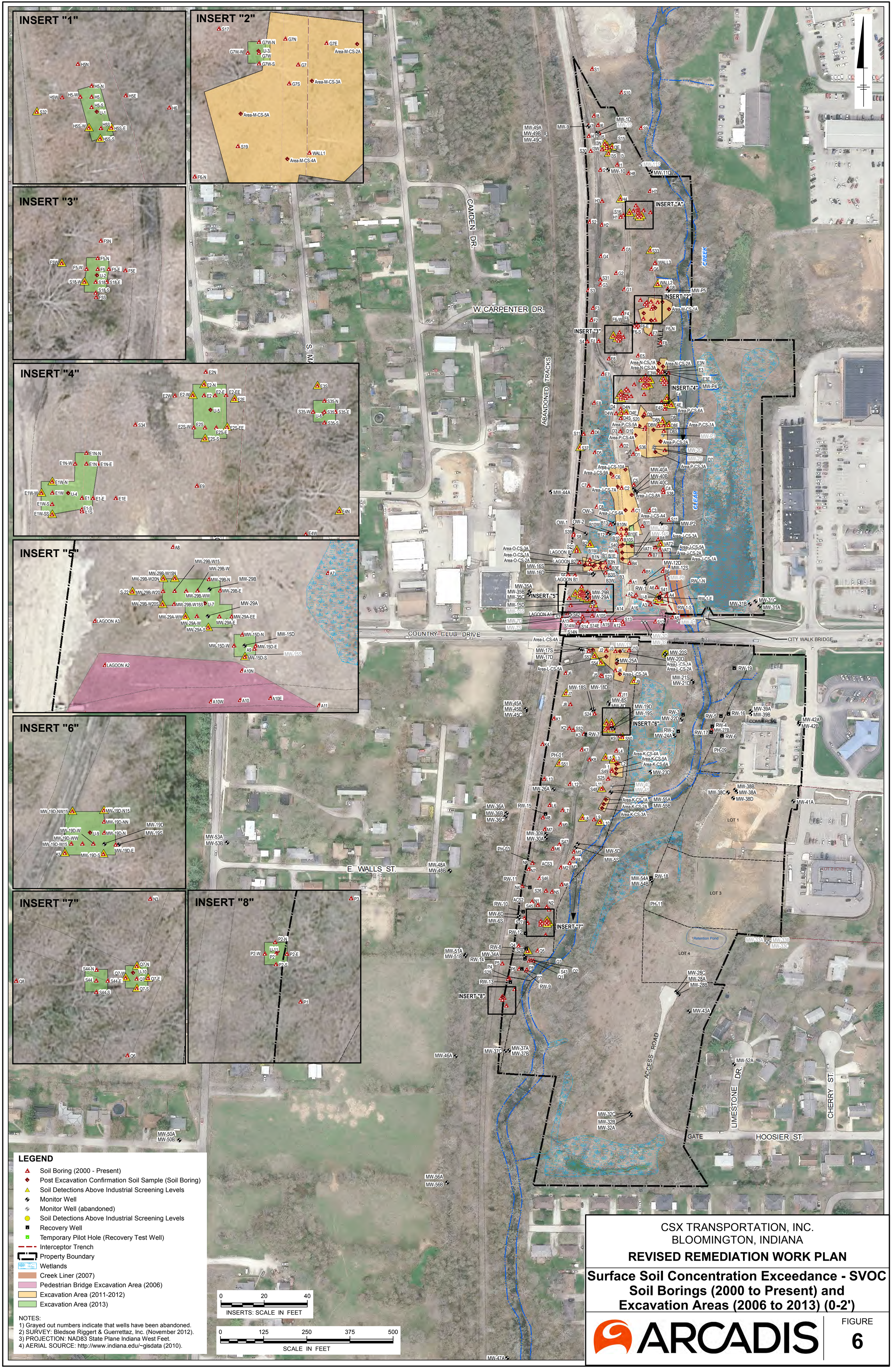
CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
REVISED REMEDIATION WORK PLAN

Distribution of Benzene in the Bedrock

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5

CITY: (KNOXVILLE) DIV/GROUP: (ENV/GIS) LD: (B.ALTOM) PIC: (S.GLENN) PM: (S.SHARP) TM: (B.GRIGGS/R.WOODRUFF) BY: tjscott
PROJECT: IN000072.0074 PATH: Z:\GISProjects_ENV\CSX\IN_Bloomington\MapDocs\2020\F10 IN072_RISK SITE SBsSurface_SVOCs.mxd SAVED: 2/29/2020



CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA

REVISED REMEDIATION WORK PLAN

Surface Soil Concentration Exceedance - SVOC Soil Borings (2000 to Present) and Excavation Areas (2006 to 2013) (0-2')

ARCADIS

FIGURE
6

CITY: (KNOXVILLE) DIV/GROUP: (ENV/GIS) LD: (B.ALTOM) PIC: (S.GLENN) PM: (S.SHARP) TM: (B.GRIGGS/R.WOODRUFF) BY: tjscott
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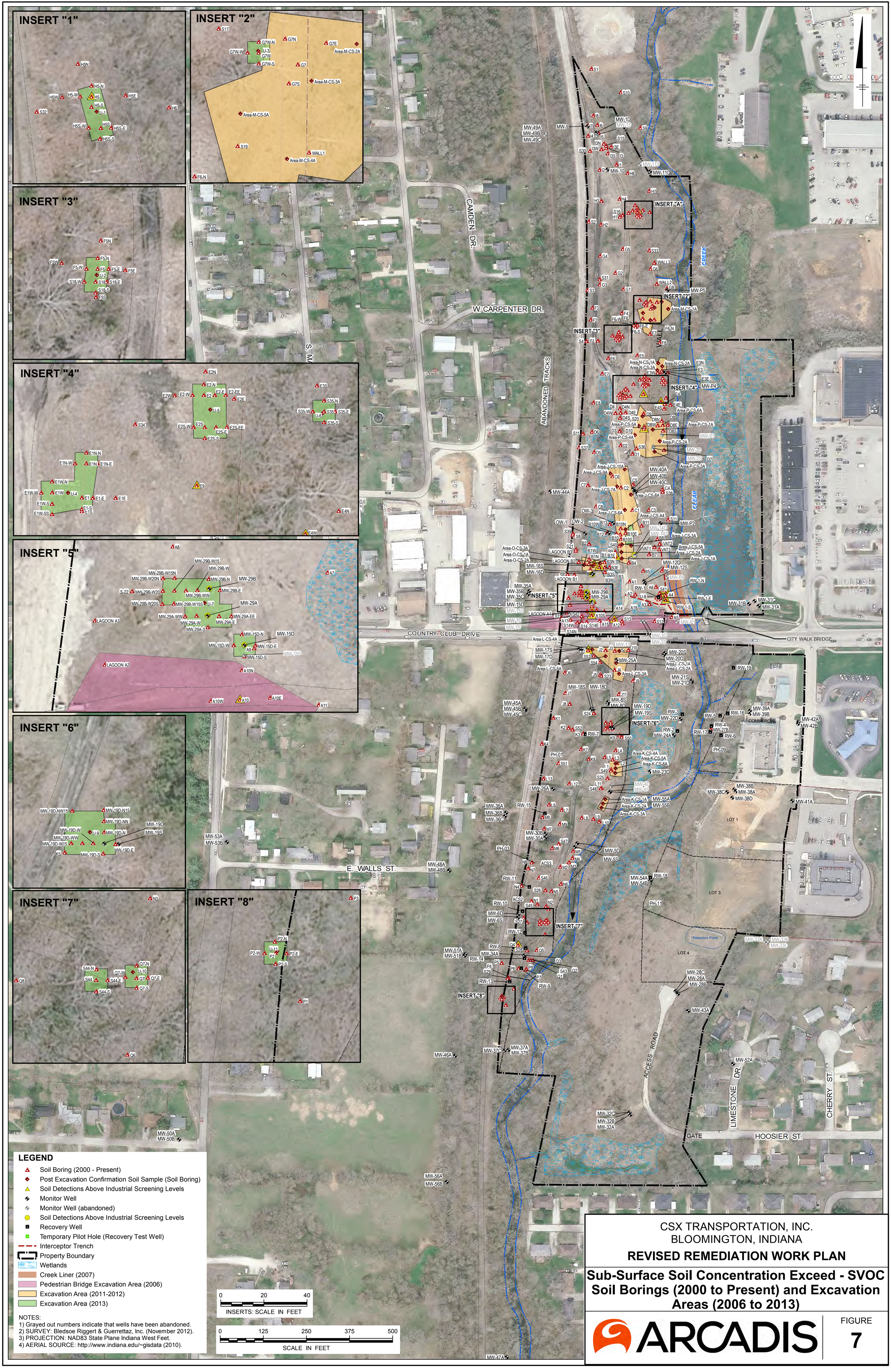


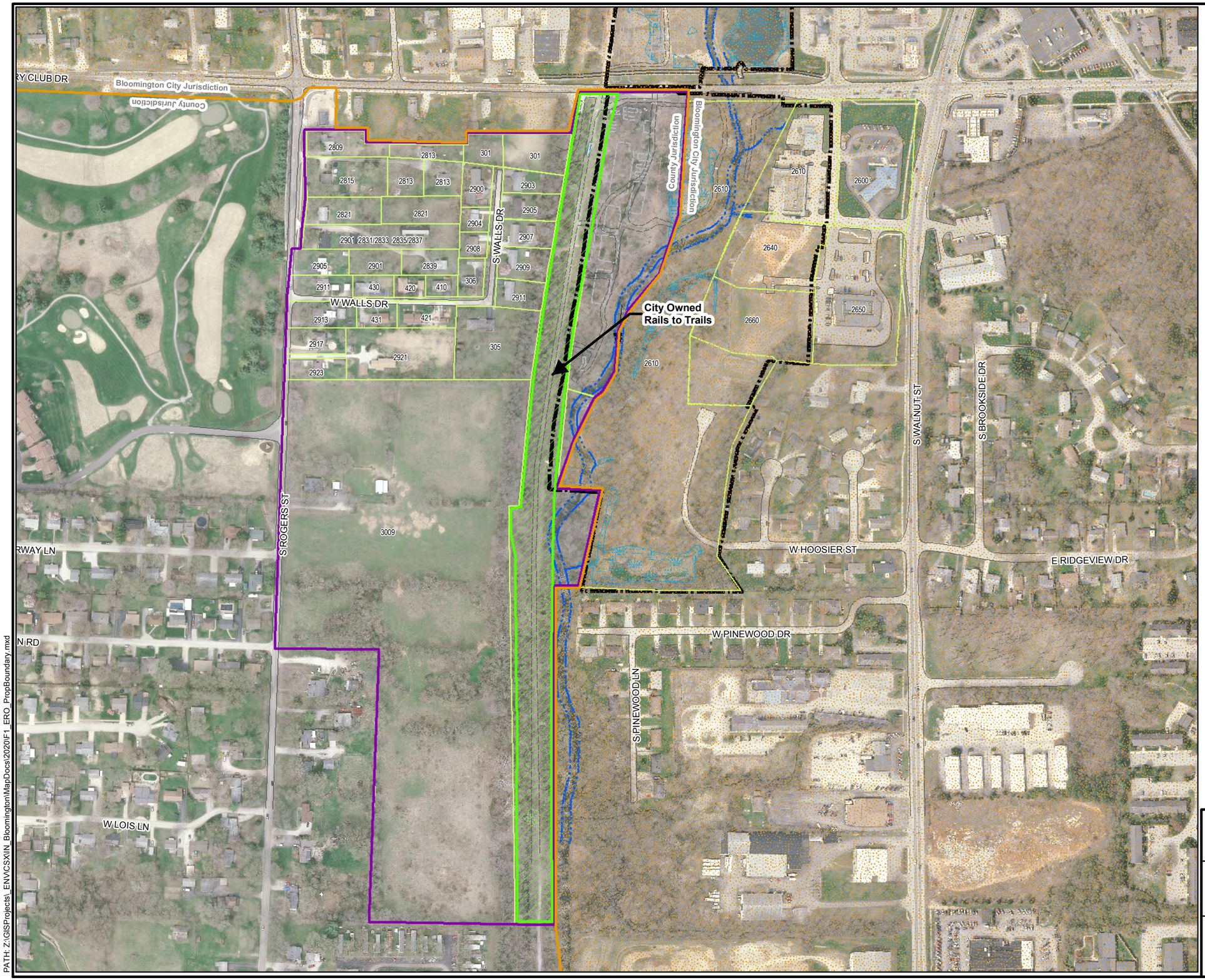
CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA

REVISED REMEDIATION WORK PLAN

Sub-Surface Soil Concentration Exceed - SVOC Soil Borings (2000 to Present) and Excavation Areas (2006 to 2013)

ARCADIS

FIGURE
7



LEGEND

- Site Boundary
- Wetlands
- City Owned Rails to Trails
- Bloomington City Jurisdiction
- Proposed ERO Property Boundary
- Parcel Boundary / Street Number

NOTES:

1. Street numbers were downloaded from http://bloomington.in.gov (April 2010).
2. All boundaries are approximated; not survey grade.

0 300 600

SCALE IN FEET

1 inch = 300 feet

AERIAL SOURE: http://www.indiana.edu/~gisdata (2010).
PROJECTION: NAD1983 State Plane Indiana West Feet

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA

REVISED REMEDIATION WORK PLAN

Area of Proposed Institutional Controls

ARCADIS

FIGURE
8

PATH: Z:\GISProjects_ENV\CSXIN_Bloomington\MapDocs\2020\F1_ERO_PropBoundary.mxd

CITY: (KNOXVILLE) DIV/GROUP: (ENV/GIS) LD: (B.ALTOM) PIC: (-) PM: (S.SHARP) TM: (R.WOODRUFF) BY: TJSCOTT
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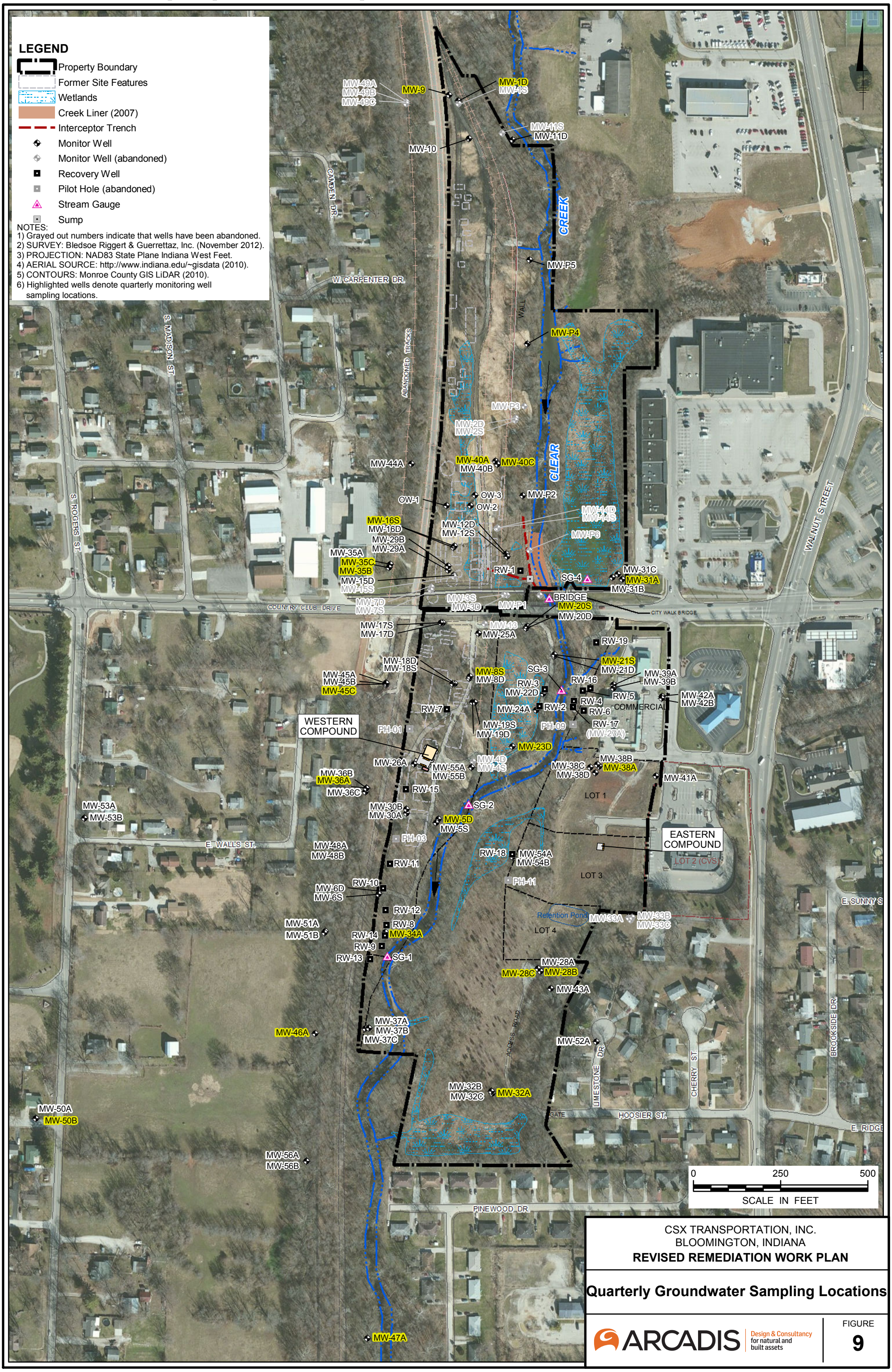

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
REVISED REMEDIATION WORK PLAN

Quarterly Groundwater Sampling Locations

ARCADIS Design & Consultancy for natural and built assets

FIGURE
9

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CSX Transportation, Inc.

REVISED REMEDIATION WORK PLAN

Part 2 of 6

Former Indiana Creosoting Company Facility
VRP #6970403
240 West Country Club Drive, Bloomington, Indiana

April 23, 2020

APPENDIX A

Geology and Hydrogeology Report (October 2011)

Imagine the result

CSX Transportation, Inc.

Geology and Hydrogeology Report

Former Indiana Creosoting Company
Bloomington, Indiana
IDEM VRP No. 6970403
CSXT Site No. 9415829

October 25, 2011

ARCADIS

Matthew D. Griles, LPG
Scientist/Geologist

Bryant Griggs
Project Scientist/Geologist

Steven C. Sharp, LPG
Senior Project Manager/ Principal Geologist

Geology and Hydrogeology Report

Former Indiana Creosoting Company
Bloomington, Indiana
IDEM VRP No. 6970403
CSXT Site No. 9415829

Prepared for:
CSX Transportation, Inc.

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Our Ref.:
IN000072.0059. 00001

Date:
October 25, 2011

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F Sanborn Maps

Geology and Hydrogeology Report

Former Indiana Creosoting Co.
Bloomington, Indiana
IDEM VRP No. 6970403
CSXT Site No. 9415829

Executive Summary

ARCADIS has prepared this Geology and Hydrogeology report for the former Indiana Creosoting Company facility located at 240 Country Club Road, Bloomington, Monroe County, Indiana. The objective of this report is to document the additional subsurface characterization work that has been performed both on-Site and off-Site since 2008 to develop a Conceptual Site Model (CSM) for defining the extent of creosote impacts in the subsurface and how those impacts are migrating through the bedrock subsurface. A total of 59 additional monitoring wells and 7 pilot study recovery wells have been installed since 2008 to further define the impacts in the subsurface. Various detailed testing has been conducted on these wells and other previously installed wells to gain a better understanding of the subsurface and migration of water through the subsurface. These tests included packer testing, falling head testing, hydraulic conductivity testing, long-term hydraulic head testing, tracer testing, free product monitoring and recovery, free product rate of recovery, and groundwater sampling. The results of these tests, as well as their impact on the CSM, are described in detail throughout this report.

The Site lies on the floor of a shallow north-south trending valley drained by Clear Creek. The creek runs southward through the Site dropping approximately 8 ft in elevation over the ½ mile between the north and south ends of the Site. Clear Creek is a gaining stream which flows on or very near bedrock, but has not developed an entrenched bedrock channel. The banks of the creek are typically composed of 3 feet of fine-grained flood-plain alluvium, often with low natural levies. The majority of the Site is within the active flood plain, and has been observed to flood several times a year. Moving outward (east or west) away from Clear Creek, the surface elevation increases dramatically as much as 15 ft at the Site and then substantially higher (up to 30 ft) as little as a block or two away from the Site.

The site geology consists of alluvium in the upper 5 to 15 ft thickening away from Clear Creek. The alluvium is underlain by a thin (0 to 5 ft) Harrodsburg Limestone unit in some areas. The Harrodsburg is underlain by the Ramp Creek Formation which is an interbedded siltstone and limestone unit as thick as 50 ft at the Site. The Ramp Creek Formation is underlain by the Borden Group which is a massive siltstone unit several hundred feet thick. The Borden Group, as detailed later, forms an aquitard which prevents the creosote from penetrating deeper than the depth of the Borden (approximately 40 ft on-site).

Two different tracer studies have been performed at the site. Results of the tracer testing have indicated flow velocities ranging from 2.5 ft/day to greater than 7000 ft/day, a rate indicative of conduit flow. This apparent diversity of flow rates illustrates the heterogeneity of the aquifer flow system. Groundwater simultaneously travels through the Upper Ramp Creek (URC) on an extreme range of fast and slow advective flow paths. Excluding the documented flow-rates of greater than 1000 ft/day, the average of traced apparent velocities is two orders-of-magnitude less (11 ft/day with a maximum of 30 ft/day). It can also be assumed that slower pathways exist that were too slow to be observed within the trace time-frames. No single velocity can fully characterize the behavior of the system. The multiple detections for each trace (excluding the rhodamine-wt trace, which was detected nowhere), indicate divergent flow. This is consistent with the epikarst model of disorganized solution development, in which distributed recharge enters and enlarges all available fractures with limited bias. Also, the proximity of Clear Creek provides many opportunities for groundwater to discharge, discouraging the development of convergent hierarchical drainages, which occur when one point of discharge (such as a large spring) is the only efficient discharge. The predominant straight-line direction of flow is south-southeast. This trend is aligned with the regional strike of bedrock, and likely indicates a strike-parallel bias to conduit pathways within the URC. The alternate pathways directions, southwest and east-southeast, are less common, but maintain a southward aspect that is consistent with the general down-valley hydraulic gradient.

The Upper Ramp Creek hydrostratigraphic unit is a karstic aquifer, in which the flow-dynamics are governed by solution-enlarged fractures. Compared to many karstic aquifers, the evidence of solution in the URC is subtle, the unit does not support cavernous void spaces, obvious sinkholes, or significant springs, yet the extent of solution development is sufficient to materially alter the hydraulic characteristics of the aquifer relative to ordinary fractured rock. The URC epikarst does not drain vertically to a deeper conduit network. It transmits water from recharge to discharge completely within itself (i.e., it is self-draining). The absence of a deeper conduit network is a function of the stratigraphic setting and limited recharge. The Lower Ramp Creek hydrostratigraphic unit model is distinguished from the URC by the absence of solution enlarged fractures. There is no clear stratigraphic marker dividing the URC and LRC, nor is there a distinct lithologic difference between the zones; however, the data collected during drilling and from completed wells consistently indicate a major difference in the hydraulic properties of the two zones. The Borden Group is a major aquitard, consisting of nearly 700 ft of siltstone and shale of very low permeability.

Integrating the above information with the observations of creosote made during drilling and at monitoring wells, reveals several modes of transport that appear to be at play in determining the migration of creosote at this Site. Creosote has moved predominantly southeastward, southward, and southwestward horizontally, as well as downward with distance from the former process area. This distribution is interpreted to result from the following:

- Southeastward and southward movement from the former process area: A combination of south-southeastward movement along solution-widened bedding planes (where the porosity appears to have formed along strike, which is aligned roughly N-S), and eastward movement along joints of the predominant (E-W oriented) joint set. The movement in these directions is likely aided by moving groundwater. As open bedding planes pinch out or become occluded with sediment, the creosote would be expected to move laterally until encountering an open joint, at which point it would move downward until a deeper, open bedding plane were encountered and the process would repeat itself, leading to a downward “stair-stepping” effect. It is possible that, given a strong enough upward hydraulic gradient, the creosote could move upward. While such upward movement has been documented in the literature, the observed increasing depth of creosote with distance from the source, coupled with the absence of creosote in Clear Creek (beneath which upward hydraulic gradients would be greatest) suggests that there are few if any joints that would allow upward movement, and where such pathways exist, the upward hydraulic gradients are not great enough to offset the downward driving force due to the density of the creosote. On the east side of Clear Creek, three factors combine to limit eastward movement. First, the direction of hydraulic gradient would generally reverse, making it more difficult for the creosote to continue moving eastward. Second, for creosote moving along bedding planes, eastward movement would require that the creosote move updip. Lastly, as creosote stair-steps downward, toward and beneath the valley wall and beneath the zone of karst weathering, joints and bedding planes will become tighter and opposing hydraulic gradients stronger. These factors will serve to limit the eastward movement of creosote on the east side of Clear Creek.

- Southwestward movement from the former process area: The southwestern component of creosote movement indicates that hydraulic gradients in the joints and bedding plane fractures are not great enough to completely arrest creosote movement in this direction, since this movement direction is generally against the hydraulic gradient (on the west side of the creek). Two processes are interpreted to be responsible for this direction of movement.

The first is westward movement of creosote along the predominant joint orientation. While eastward movement of creosote in an E-W trending joint would be favored (on the west side of the creek) because groundwater would also be expected to be moving eastward toward the creek; westward movement could occur, particularly along solution-widened joints, where the strength of the hydraulic gradient needed to move water through the joint would be slight. The second process responsible for moving creosote westward is the local dip of the bedding. Again, in the solution-widened porosity, the strength of the hydraulic gradient would be slight and apparently is not great enough to arrest down-dip movement of creosote due to gravity. Similar to the case of eastward movement (above), with distance westward, bedding planes and joints would be expected to tighten with depth, serving to restrict further westward movement.

A detailed DNAPL creosote monitoring and recovery program has been implemented at the site. The program monitors 28 wells on a weekly basis with some wells more or less often depending on the measured thickness. To date, DNAPL creosote has been detected in 24 monitoring or recovery wells both on-site and off-site. Of those 24 wells, nine have produced less than one gallon of creosote and eight of those nine have stopped producing altogether. Of the remaining 15 wells, eight (8) are consistent producers of more than 10 gallons. A total of approximately 612 gallons have been recovered through September 19, 2011; with nearly 300 gallons recovered from one location (RW-4).

The following report documents the findings in much greater detail especially the nature, extent and movement of the free product creosote on-site and off-site. CSX Transportation will continue to work with the IDEM to ensure there is no risk to human health and the environment from the residual creosote from the former operations of the Indiana Creosoting Company.

1. Introduction

ARCADIS has prepared this Geology and Hydrogeology report for the former Indiana Creosoting Company facility located at 240 Country Club Road, Bloomington, Monroe County, Indiana, as shown on Figure 1. The objectives of this report are to document the additional subsurface characterization work that has been performed both on-Site and off-Site since 2008 to develop a Conceptual Site Model (CSM) for defining the extent of impacts in the subsurface and how those impacts are migrating through the bedrock subsurface. The term "Site", as used in this report, refers to the property owned by CSXT that includes the former Indiana Creosoting Company facility. The property boundaries of the Site are illustrated on Figure 2.

The balance of this section discusses the Site's background, including its location, history, and regulatory status. We also briefly summarize previous work conducted at the Site. The remainder of the report is divided into five other sections:

- Section 2 – Scope-of-Work Methodology: This section summarizes the work performed since 2008, presents the collected data, and describes the methods used to collect them.

- Section 3 – Geologic and Hydrogeologic Characterization: This section briefly describes the regional geologic setting, and then presents our current understanding of the immediate geologic and hydrogeologic controls at the Site in order to understand the fate and transport of creosote constituents in the groundwater.

- Section 4 – Nature, Extent, and Movement of Creosote: This section discusses the extents of creosote impacts and the mechanisms for creosote movement in the overburden and bedrock.

- Section 5 – Groundwater Quality: The creosote in the subsurface, discussed previously, is being slowly dissolved by groundwater. As a result, IDEM's groundwater closure goals for several compounds contained in the creosote have been exceeded at a number of monitoring locations. This section discussed the nature and extent of dissolved contaminants of concern (COCs) at the Site.

- Section 6 – Summary: This section presents summarized information about all the evaluation sections on the form in one central area.

1.1 Site Background

1.1.1 Site Setting and History

The Site is located in Township 8 North, Range 1 West, Sections 9 and 16 within Perry Township in Bloomington, Indiana (Figure 1). The Site is bordered to the north and east by commercial/industrial properties and to the southeast, south and west by predominantly residential properties, although there is some commercial/industrial property along these boundaries as well.

The Site is a generally rectangular shaped parcel of land approximately 40 acres in size, and is divided into two portions by Country Club Road (Figure 2). The first portion, approximately 14 acres in size, is located north of Country Club Road and is divided by Clear Creek, which flows from north to south through the portion. This entire portion of the site generally lies in or near the floodplain of Clear Creek. The area west of Clear Creek (north of Country Club Road) is where the former creosoting operations took place. Creosote storage tanks and various railroad spurs were also located here. The area to the east of Clear Creek is a marshy area of floodplain that was included among land that CSX purchased in 2006 and was not part of the former wood-treating operation.

The second portion of the Site, which is also divided by Clear Creek, is located south of Country Club Road and comprises approximately 26 acres. The area to the west of Clear Creek was historically used to store untreated railroad ties and was never developed. The area to the east of Clear Creek consists of floodplain land that was included in CSXT's 2006 purchase described in the preceding paragraph, as well as approximately 6 acres of commercial land located predominantly above the floodplain that CSXT purchased in 2010. This area (east of Clear Creek) has historically been undeveloped.

Except for most of the commercial land acquired by CSXT in 2010, the Site occupies the valley floor of Clear Creek and is relatively flat, with a gentle slope toward the creek. The commercial property acquired in 2010 is also predominantly flat lying and is elevated about 10 feet above the valley floor. The exception is toward the western edge of this property, where the land surface drops off steeply to the valley floor.

The Site is currently undeveloped, except for a portion of the land purchased in 2010, which contains a small strip mall and oil change facility. In the former operations area, a few concrete foundations remain (Figure 2). Most of the site is covered either with

brush and grasses, or by trees (particularly along Clear Creek). Property access has been restricted by the installation of a fence along Country Club Road.

Wood-treating operations began circa 1914 by the American Creosoting Company and ceased in 1976. The Indiana Creosoting Company, a subsidiary of the Monon Railroad, purchased the property from the American Creosoting Company in 1961. The Monon Railroad merged with the Louisville and Nashville Railroad in 1971, which was the predecessor company to CSXT. All creosote storage, handling, and use appears to have occurred north of Country Club Road in the former operations area. Known locations of creosote storage tanks and other former operational features are shown on Figure 2.

1.1.2 Site Regulatory Status

The Site was formally entered into the Indiana Department of Environmental Management (IDEM) Voluntary Remediation Program (VRP) upon receipt of a signed application acceptance letter dated May 13, 1997. The VRP Application and subsequent Voluntary Remediation Agreement (VRA) reflect CSXT's intention to investigate and remediate the Site, as necessary, to achieve VRP closure for surface soil, subsurface soil, and groundwater for a non-residential property, and to ultimately obtain a Certificate of Completion and Covenant Not to Sue. The current remediation and clean-up objectives for soil and groundwater at the Site are 1996 VRP Tier II Default Non-residential (Industrial) Scenario for on-site impacts and residential for off-site impacts, unless an Environmental Restrictive Covenant (ERC) is agreed upon by the off-site property owners. CSXT expects the land-use of this property to remain industrial at this time. The Site's constituents of concern (COCs) are BTEX, PAHs, phenolic compounds, phthalates, arsenic and lead. The specific analytes and their respective closure levels are shown on Table 1. The affected media is surface soils, subsurface soils and bedrock, sediments and groundwater.

If cleanup goals for specific COCs were not established in the 1996 manual, then other cleanup goals were utilized including the 1996 IDEM Non-Rule Lead Policy and 2006 RISC Default Industrial Goals. Additionally, Exposure Point Concentrations (EPCs) may be calculated for constituents which may be detected above the applicable Cleanup Goals; these EPCs may in turn be compared to the applicable Cleanup Goals. ARCADIS will generate exposure routes/pathway conceptual site models (CSMs) once delineation has been completed. Also, site specific risk-based cleanup goals may be developed for the site in the future.

1.1.3 Site Environmental Studies

To date, there have been fifteen known environmental investigations/reports conducted at the Site. The investigations are located below and documented further in the RWP completed in 2009.

- *Indiana Department of Environmental Management Site Investigation – August 1987*
- *Limited Remediation Activity – January 1989 – ENSR*
- *Initial Assessment – December 1989 – ATEC*
- *Soil Sampling and Analysis Report – March 1990 – ATEC*
- *Site Characterization Work Plan – March 1990 – Weston, Inc.*
- *Sampling and Analysis Plan – January 1991 – ARCADIS G&M*
- *Soil Remediation Report – March 1992 – ARCADIS G&M*
- *Remedial Investigation / Hazard Characterization – August 1992 – ARCADIS G&M*
- *Additional Subsurface Investigation – June 1995 – ARCADIS G&M*
- *Supplemental Subsurface Investigation – December 1995 – ARCADIS G&M*
- *Risk Assessment, Former Indiana Creosoting Company- September 1996 – ARCADIS G&M*
- *Phase II Investigation Work Plan – August 1999 – ARCADIS G&M*
- *Phase II Investigation Report –January 2003 – ARCADIS G&M*
- *Further Site Investigation Report – September 2006 – ARCADIS*
- *Remediation Work Plan -- December 2009 -- ARCADIS*

2. Scope of Work-Methodology

From July 2008 through October 2011, eight drilling mobilizations have taken place on site. A total of 59 additional monitoring wells and seven (7) pilot study recovery wells have been installed since 2008 to further define the impacts in the subsurface. The following table summarizes these mobilizations and the number of wells installed during each mobilization:

Mobilization #	Start and End Date	# of Wells Drilled
1	7/22/08 - 8/11/08	4 MW's
2	1/5/09 - 2/6/09	5 MW's
3	10/12/09 - 11/18/09	10 MW's, 5 RW's
4	2/8/10 - 2/18/10	8 MW's
5	3/22/10 - 4/7/10	9 MW's, 1 RW
6	11/11/10 - 11/22/10	10 MW's, 1 RW
7	1/4/11 - 1/6/11	2 MW's
8	7/26/11 - 9/8/11	11 MW's

The particular monitoring wells which were installed during each of these events are identified in detail in Table 2. In addition to the installation of monitoring wells, ARCADIS has completed a variety of other tasks to obtain a better understanding of the geologic setting and the hydrogeology of the site as well as the nature and extent of DNAPL impacts. These activities included the characterization and documentation of all recovered rock core, an evaluation of drilling water loss, falling head tests, packer tests, dye trace studies, various hydraulic conductivity tests, and a transducer study. The following section details the procedures and steps employed to complete these tasks.

2.1 Investigative Drilling

Bedrock coring was completed to obtain a geologic framework of the subsurface structure across the site. Drilling through the overburden to the underlying bedrock was done utilizing a mini-sonic rig. This method consisted of a combination of rotation with high frequency vibration to advance a core barrel through the unconsolidated materials to a desired depth. Once desired depth was achieved, the core barrel was retrieved, and the sample was extracted into plastic sleeves or sample trays. Soil samples were collected continuously to bedrock. Soil samples were logged utilizing USCS Classification system. Additionally, soil samples were screened visually and with a photo-ionization detector (PID) for the presence of sheen, staining or other evidence of creosote. All noted observations are available on the boring logs provided in Appendix A. Once competent bedrock was identified, the core barrel was advanced at a

minimum 2 ft into competent bedrock material. The borehole was then reamed to a diameter of 6 inches, to set a 6 inch diameter steel temporary casing, ensuring that the unconsolidated portion of the hole is isolated from the bedrock portion of the hole; temporary casing was advanced at a minimum 2 ft into competent bedrock to achieve a competent seal.

Bedrock drilling was conducted utilizing a water rotary rock coring diamond bit mounted on a mini-sonic rig. The bedrock was cored using a five foot long core barrel that produced a five foot long by 2.5 inch diameter core. Drilling was performed using water (only) as drilling fluid. Drilling fluids (water) were recovered to the extent practicable and properly containerized for disposal.

Field geologists documented the volume of drilling water used, drilling water returned, and calculated the volume of water lost for each drilling interval; field geologists also noted any sheens, odors, or color changes in the drilling water return. Drilling fluids were not reused at subsequent well locations and fresh water was used at each borehole. During the drilling process, water loss volumes where closely evaluated to identify potential zones of increased permeability. Recorded water loss volumes were considered during the well construction design process in order to select appropriate intervals within the bedrock for groundwater screening.

Recovered bedrock core was characterized in the field and observations were recorded in the bedrock coring log. These logs provide detailed characterizations of all recovered rock cores within a consistent comprehensive word description which documents the encountered subsurface environment and the procedures used to gain that description. All logs are provided in Appendix A. The rock cores were logged in the field using standard methods for identifying rock type, texture, hardness, solution and void conditions, rock quality designations, and percent recovery. Additionally, the rock core was logged for more detailed analysis of mineralogy, dissolution features, and structural characterization. The recovered core was closely examined for the presence of DNAPL and/or sheens. The depths of all naturally occurring fractures, structural and lithographic features were documented on the bedrock coring log. Upon the completion of each core run, the depth of core hole was measured to properly document the termination depth after each core run. The percentage of bedrock core recovery for each core run was calculated and recorded on the bedrock coring log and core box. Rock Quality Designation (RQD) values were calculated for each core run. RQD values were calculated to indicate rock-mass properties according to Deere (1986) by summarizing all the bedrock core portions greater than four inches in length and

dividing the sum of these pieces by the length of the bedrock core run. RQD is expressed as a percentage.

All retrieved bedrock core was handled in a manner as to cause the least amount of mechanical fractures. The bedrock cores were boxed in vertical succession in an appropriate sized core box. Increasing depths were aligned left to right, and all bedrock core runs were separated and core depths marked utilizing wooden blocks. The core was stored on-Site.

If DNAPL was encountered, the project team was notified and consultation was made before proceeding with drilling activities. All drilling tools that came in contact with the DNAPL were cleaned to remove all DNAPL and pass inspection by the field geologist, prior to starting the next core run. Falling head tests were also completed at the termination of each run. The drillers filled the stand pipe and temporary/permanent casing with water, as the field geologists tracked the water level over the next 5 minutes. Once the falling head test was completed, the project team was notified of the results. If required, packer tests were conducted. Drilling activities resumed upon approval from the field geologist.

Upon the completion of rock coring activities, the core hole was flushed to remove all residual rock cuttings from the bottom of the core hole. All rock cuttings and re-circulated water utilized during rock coring were properly contained for disposal in accordance with state and federal regulations.

2.1.1 Setting Casing(s) for Bedrock Coring: Temporary Casing Advancement

Steel casings were set into bedrock in order to isolate the unconsolidated materials, minimize potential water loss, minimize cross contamination between wells, and to reduce the risk of the downward migration of DNAPL in the event it was encountered. Temporary steel casings (6 inch diameter) were initially set through the unconsolidated material and at least 2 foot into competent bedrock prior to rock coring. If a zone of water loss was encountered while rock coring above the proposed screened interval for a well, or if coring through a screened bedrock interval of an adjacent well, temporary steel casing may have been advanced to minimize water loss and/or cross contamination. Temporary casing is advanced by reaming the borehole out to 6 inch diameter, then slowly advancing the 6 inch steel casing down to the desired depth. Again, making sure that temporary casing is set in at least 2 foot of competent bedrock. Once in place, the borehole was flushed out with water and rock coring continued. Temporary casing advancement determinations were discussed with the project team

on a continued basis. If no zone of water loss was encountered while rock coring, coring continued without temporary casing advancement.

2.1.2 Setting Casing(s) for Bedrock Coring: Permanent Casing Advancement

Permanent steel casings (6 inch, 8 inch, and 10 inch) were advanced into bedrock if zones of water loss and/or DNAPL impacts were observed, or if coring through a screened bedrock interval of an adjacent well within a nested set. Permanent casings were used to seal off these intervals when rock coring resumed. The diameter of the initial permanent casing depends on the proposed well depth and possibility further impacts encountered later in the rock coring. A permanent (ten-inch diameter) steel shallow well casing with a permanent (six-inch diameter) intermediate steel casing is the maximum number of telescoped casing casings allowed at one boring location. If additional telescoped casings were required to complete deep bedrock boring, then a new location was selected and a larger intermediate casing was installed.

Permanent steel casing was advanced by reaming out the borehole 2 inches larger than the diameter of the desired casing, using a mini-sonic reaming bit. Also, reaming down to the desired depth the borehole is to be cased off; again, making sure the bottom of the permanent casing is set in at least 2 foot of competent bedrock. The field geologist in conjunction with the project team made the final determination of well casing installation depths.

Permanent casing was set by inserting a tremie pipe to the depth of the bottom of the casing between the outside of the casing and the inside of the temporary casing (reaming bit). Grout (bentonite cement fluid) was pumped through the pipe until undiluted grout return was noted at depth of approximately one foot below the top of the ground surface. The temporary mini-sonic casing was then gradually withdrawn. The tremie pipe was then disconnected from the grout pump without removing it from the bottom of the borehole; the five foot temporary casing sections were then withdrawn one at a time. The tremie pipe was re-connected between the removal of each five-foot section of temporary casing and additional grout was pumped until grout return was again observed. This procedure was repeated for each temporary casing section until all sections had been withdrawn from the boring. Additional grout was then pumped through the tremie pipe if necessary to achieve and maintain undiluted grout at the ground surface. . Monitoring wells designs which included the installation of a permanent casing are summarized in Table 2 and within the individual monitoring well construction logs included in Appendix B.

2.2 Well Installation/Construction

2.2.1 Monitoring Wells

Monitoring wells were installed to analyze identified site specific constituent of concern concentrations and mobility in ground water across the site. All monitoring wells were constructed from two-inch diameter PVC riser with a 0.010 slot PVC screen with a secure bottom cap. The filter pack surrounding the screen was sized appropriately for the screen slot size (#5 sand). The annular seal material used was hydrated bentonite chips and bentonite slurry (grout/cement). The top of the PVC riser/casing extend approximately 3ft above ground surface and was covered with a steel protective casing. The steel protective cover was finished with a 24” by 24” by 4” thick concrete pad. All monitoring well construction data was recorded on a monitoring well construction log and is summarized in Table 2 and is presented in Appendix B.

Wells were finished with a shale trap and at least a two-foot sump at the bottom of the screen if DNAPL impacts were noted and/or suspected in the uncased borehole. Monitoring wells designs which included the installation of a shale trap and sump are summarized in Table 2.

Prior to the installation of bedrock monitoring wells, the core hole was flushed to remove all residual bedrock cuttings and measured to confirm final depth. Once the final depth was determined and approved by field geologist/project team, well installation was started. Well screen and sump intervals were reviewed and approved by the project team. The sand pack was finished at least two feet above the top of screen. Above the sand pack, one foot of bentonite chips were installed using a dry tremie (slow pour) method; bentonite chips were then allowed to hydrate. Above the bentonite chips, a temporary tremie pipe was installed between the outside of the PVC well riser and the inside of the temporary sonic-rig casing to the top of the bentonite chip layer (well seal). Bentonite cement grout was pumped through the pipe until undiluted grout return is noted at depth of approximately one foot below the top of the ground surface. The temporary sonic-rig casing was then gradually withdrawn: the tremie pipe was disconnected from the grout pump without removing it from the bottom of the borehole; mini-sonic temporary casing sections were then withdrawn one at a time. The tremie pipe was then re-connected and additional grout was pumped until grout return was again observed. This procedure was repeated for each temporary min-sonic casing section until all sections were withdrawn from the boring. Additional grout was pumped through the tremie pipe if necessary to achieve and maintain undiluted grout to a depth at or near one foot below the ground surface.

Monitoring well development was completed no less than 48 hours after each well was constructed, allowing the bentonite-cement grout to fully cure. Well development was completed by surging the well with a submersible pump. Wells that produced sufficient water were purged until there was no visible sediment when surged. Wells that did not produce sufficient water were surged and purged dry, allowed to recovery, and then purged again. In either case, it was attempted to purge a greater amount of water from the well than was lost during rock coring.

Two monitoring wells have sustained damage since their installation. MW-24A appears to have either separated at the screen-riser interface or sustained damage to the screen and has resulted in an infilling of sand pack into the monitoring well. ARCADIS was able to airlift the sand out of the well and MW-24A was returned to the free product monitoring and recovery program. MW-27A appears to be damaged in a similar manner as MW-24A, however ARCADIS has not been able to airlift the sand pack out from the within the well and the well is not useable at this time. Additional repair ideas are planned for this well in the future.

2.2.2 Pilot Study Recovery Wells

Recovery wells were installed as a pilot study to evaluate how to recover the DNAPL efficiently, analyze the rate of DNAPL recharge and recovery, and determine whether an open borehole or a well designed with well construction material in the open borehole would be the most effective approach for DNAPL monitoring. The recovery wells were either constructed from 4 inch diameter PVC riser with a 0.010 slot stainless steel screen and a 4 foot long 4 inch diameter stainless steel sump, or with a 6 inch diameter open borehole with a 4 foot long 4 inch diameter stainless steel sump. Recovery wells constructed from 4 inch PVC riser include: RW-3 and RW-5. Recovery wells constructed with an open borehole include: RW-1, RW-2, RW-4, RW-6, and RW-7.

For recovery wells constructed from 4 inch PVC, the filter pack surrounding the screen was sized appropriately for the screen slot size (#5 sand). The annular seal material used was hydrated bentonite chips and bentonite slurry (grout/cement). The top of the PVC riser/casing extend approximately 3ft above ground surface and was covered with a steel protective casing. The steel protective cover was finished with a 24” by 24” by 4” thick concrete pad. All recovery well construction data was logged on a monitoring well construction form which is provided in Appendix B and summarized in Table 2. Installation of screened recovery wells followed the same procedures as monitoring well installation.

It should be noted that 2-inch material was placed in RW-2 due to limited access to the sump after initially being installed as an open borehole recovery well. The limited access is believed to have been a result of the displacement of the shale trap within the borehole. After the installation of the 2-inch well material, ARCADIS was able to access the sump within RW-2 for a period of time before the sump again became inaccessible and the 2-inch well material was subsequently removed from the well. Additionally, RW-7 is believed to exhibit a similar issue caused by the displacement of the shale trap and has resulted in limited access to the sump.

2.3 Groundwater Sampling

Groundwater monitoring was conducted to investigate the groundwater impacts across the site. Annual groundwater monitoring was conducted at the Site until April 2010. In order to establish a thorough dataset to evaluate groundwater conditions, ARCADIS began to conduct quarterly groundwater monitoring events beginning in April 2010. In addition to conducting groundwater sampling events once every quarter, ARCADIS performs an initial collection of groundwater samples immediately after a monitoring well has been installed. Low-flow groundwater collection procedures and methodologies have been implemented at the Site during the quarterly sampling events in accordance with the IDEM, Office of Land Quality (OLQ), Technical Memorandum (January 8, 2003) . Prior to November 2008, bailer sampling methodologies were typically used during sampling events; however, subsequent purging and sampling events have been performed using a combination of low flow via submersible pumps and bailer sampling methodologies. In instances where less than three feet of water was available for sampling, all sample constituents were collected via bailer in order to obtain a sufficient volume of water for sample analysis. The following table summarizes these events.

Dec. 2009	Annual	59	Low Flow and Bailer
Feb. 2010	Post Installation	8	Low Flow
Mar./Apr. 2010	Quarterly, Post Installation	16	Low Flow
Jun. 2010	Quarterly	32	Low Flow and Bailer
Sept. 2010	Quarterly	32	Low Flow
Dec. 2010	Quarterly, Post Installation	58	Low Flow and Bailer
Jan. 2011	Post Installation	2	Low Flow and Bailer
Mar. 2011	Quarterly	45	Low Flow
Aug./Sept 2011	Post Installation	11	Low Flow and Bailer

The sampling procedure consists of initially measuring the depth to water in each monitor well using an audible electronic water level indicator. Groundwater elevation data obtained during these sampling events as well as historical groundwater elevation data previously collected are presented in Table 3. Using a submersible variable rate pump, groundwater is pumped from the formation while continually gauging the static water level in the monitor well using an electronic water level indicator. Pumping rates are reduced and maintained as necessary to ensure that the water level in the well does not drop and that purging and sampling activities yield data that is representative of the formation. Pumping rates ideally range between 200-400ml/min, depending on well yield. Using a flow-through cell, water quality information including pH, temperature, specific conductance, oxidation/reduction potential (ORP), dissolved oxygen (DO), and turbidity, is continuously monitored and recorded every two minutes until readings become stable, or the maximum purge limit of 18 minutes has been reached. Readings are considered stable when all parameter readings are within 10% of each other, for three consecutive readings.

Groundwater samples are containerized with minimal headspace, sealed using a Teflon®-lined cap, placed in an ice-packed cooler, and shipped to Accutest Laboratories in Orlando FL, using appropriate chain-of-custody documentation. Groundwater samples analyzed for the following constituents: benzene, toluene, ethylbenzene, and xylenes (BTEX), semi volatile organic compounds (SVOCs), and total; and dissolved metals.

Reusable equipment (non-dedicated equipment) was decontaminated between sampling in a clean plastic five gallon bucket with a non-residue detergent/distilled water solution. A separate five gallon bucket was filled with distilled or laboratory prepared deionized water and utilized as the rinse water. The submersible centrifugal pumps were decontaminated by placing the pump and wiring in the detergent/water mixture, energizing the pump, and allowing it to run for 2 minutes re-circulating the wash water. This process was then repeated using the rinse water.

ARCADIS is currently monitoring groundwater on a quarterly basis utilizing a Level IV QA/QC during laboratory analyses. For every twenty groundwater samples collected from the monitoring wells and submitted for laboratory analysis, one field blank sample and one duplicate sample will be collected and submitted for the appropriate analyses. These samples will serve as Quality Assurance and Quality Control (QA/QC) samples.

2.4 Hydrogeologic Characterization Methodologies

2.4.1 Falling Head Tests

Falling head tests were performed at a number of monitoring wells during drilling activities to analyze bedrock zones for potential water loss and/or permeability, and identify suitable intervals for the installation of monitoring well screens. Beginning in October 2009, falling head tests were conducted after each interval was drilled (or at least every five feet in the event a drilling interval was completed short). A summary of the wells where falling head tests were performed is presented in Table 4. The falling head tests were completed after all tooling was removed from the borehole. Falling head tests were performed by completely filling the drill string with water. Once the drill string was full, the water was turned off. ARCADIS personnel began to immediately record the water level every minute for five minutes, within the drill string. If the water level stayed consistent, it was assumed that there was very little to no water loss, and packer testing was not warranted. If the water level continued to drop for the entire five minutes, it was assumed that water was being lost to the borehole, and packer testing may have been conducted. If loss of circulation was encountered while drilling (no return water), it was assumed that all water was lost to the formation and a falling head test was not performed.

The results of the falling head tests were broken down into three (3) categories: upper Ramp Creek, lower Ramp Creek, and Borden. In general the upper Ramp Creek units were observed to exhibit the greatest probability for water loss during the falling head tests. The lower Ramp Creek unit had a reduced probability for water loss; and the Borden unit had a very low to no probability for water loss. A summary of the wells where falling head tests were performed is presented in Table 4.

2.4.2 Packer Testing

Borehole packer testing was also conducted at select intervals during the installation of a few monitoring wells to provide further details and vertical resolution of the spatial distribution of bedrock permeability. Table 5 lists the monitoring wells selected for packer testing and provides a summary of the results. The intervals subjected to packer testing were selected on the basis of inspecting both the core logs and reviewing the data obtained during the falling head tests. Packer tests were used to assess the various hydrogeologic units encountered in the borehole; to help understand the detailed hydrogeologic properties of the various units. This knowledge was essential for the design of monitoring wells in the hydrogeological program. Packer

testing was not conducted if any indication of free phase creosote was detected during the drilling process. All groundwater pumped from the borehole was collected and stored in frac-tanks for disposal.

Packer testing was conducted in an open borehole, using either a single packer or double (straddle) packer assembly. A diagram of the single and double packer assembly is presented in Figure 3. Packer testing intervals were conducted from the bottom of a borehole to the top of a borehole, in an effort to decrease cross contamination of intervals.

The single packer assembly (diagram presented in Figure 3) was used when the testing interval was at the bottom of a borehole. Below the inflatable packer (which was inflated via nitrogen gas) was a 5 foot long, 2 inch diameter stainless steel screen. The packer was inflated to the manufacture's recommended air pressure above the ambient pressure at any specific depth in order to ensure that the packer is flush with the borehole. A submersible pump was then lowered down the inside of the packer assembly, which came to a rest at the top of the first packer. A pressure transducer (records depth, pressure, and temperature) was then lowered down the inside of the packer assembly, which came to a rest at the top of the submersible pump. The pressure transducer was allowed to collect a baseline reading before turning on the submersible pump to ensure that there was no water leakage around the packer. Once the submersible pump was turned on, water was being purged from the interval between the packer and the bottom of the borehole. Water level, water quality, and flow rate measurements were continuously recorded, along with the pressure transducer data. If sufficient water was produced from an interval, the flow rate was increased until drawdown was noted. If drawdown was noted instantaneously, the interval was purged dry, the pump was turned off, and rate of water recovery was observed at least ten minutes.

The double packer assembly (diagram presented in Figure 3) was used to seal off intervals above and below the desired testing interval in the borehole. Between the two inflatable packers (which were inflated via nitrogen gas) was a 5 foot long 2 inch diameter stainless steel screen. The two packers were inflated until flush with the borehole. A submersible pump was then lowered down the inside of the packer assembly, which came to a rest at the top of the first packer. A pressure transducer (records depth, pressure, and temperature) was then lowered down the inside of the packer assembly, which came to a rest at the top of the submersible pump. The pressure transducer was allowed to collect a baseline reading before turning on the submersible pump. Once the submersible pump was turned on, water was being

purged from the interval between the two packers. Water level, water quality, and flow rate measurements were continuously recorded, along with the pressure transducer data. If sufficient water was produced from an interval, the flow rate was increased until drawdown was noted. If drawdown was noted instantaneously, the interval was purged dry, the pump was turned off, and rate of water recovery was observed at least ten minutes.

Upon reviewing the result of the packer tests, results were broken down into three (3) categories: Harrodsburg/upper Ramp Creek, lower Ramp Creek, and Borden. There were no packer tests completed on overburden material. Harrodsburg/upper Ramp Creek units had the greatest probability for hydraulic conductivity during the packer tests. The lower Ramp Creek unit had a reduced probability for hydraulic conductivity; and the Borden unit had a very low to no probability for hydraulic conductivity.

2.4.3 Hydraulic Conductivity Testing

Hydraulic conductivity tests were performed to analyze the ease with which water can move through pore spaces or fractures within different lithologic units across the site. A total of forty-eight (48) wells were tested for hydraulic conductivity. In all, four (4) wells screened within the undifferentiated alluvium, twenty eight (28) upper Ramp Creek wells, twelve (12) lower Ramp Creek wells, and four (4) Borden wells were tested for hydraulic conductivity between January 2010 and April 2010. The following table provides a summary of the wells where hydraulic conductivity testing was performed.

Lithologic Unit	Monitoring Wells Tested	Number of Locations
Alluvium	MW-5S, MW-12S, MW-17S, and MW-18S	4
Upper Ramp Creek	MW-1D, MW-2D, MW-5D, MW-12D, MW-17D, MW-20D, MW-21D, MW-23D, MW-24A, MW-27A, MW-28B, MW-30A, MW-31A, MW-31C, MW-32A, MW-34A, MW-35A, MW-35B, MW-36A, MW-36B, MW-37A, MW-37B, MW-38A, MW-38B, MW-39A, MW-39B, MW-40B, and MW-40C	28
Low er Ramp Creek	MW-26A, MW-28C, MW-29B, MW-30B, MW-35C, MW-36C, MW-38D, MW-40A, MW-40B, RW-4, RW-5, and RW-6	12
Borden	MW-28A, MW-29A, MW-31B, and MW-38C	4

The hydraulic testing procedure was divided into three groups (as shown on Table 6): Group A, very slow yield wells; Group B, moderate or high yield wells; and Group C, very high yield wells. These three groups required different testing procedures. Group

A utilized drawdown and recovery testing. Group B utilized slug in and slug out testing. Group C utilized 1-hour step-rate pumping test.

Group A consists of wells with a very slow yield, where equilibration takes days or weeks. These wells were started earliest in the testing due to the length of the test. Initial water levels were taken after approaching the well. A submersible pump with tubing was then deployed to just above the well screen. The water in the well was then rapidly purged down to just above the well screen. The submersible pump was then quickly removed, immediately followed by collecting a water level measurement. Water levels were then collected every two minutes for the next ten minutes, followed by several more times throughout the first day of the test. Water levels were also collected at the beginning and end of each day onsite for at least one week.

Group B consists of wells with a moderate or high yield, where equilibration takes minutes. Initial water levels were taken after approaching the well. A pressure transducer was deployed to just above the bottom of the well, making sure it was secure and stationary at the top of the well. For wells that contained DNAPL, manual measurements were used instead of pressure transducers. After the transducer was deployed, the well was allowed to equilibrate to its initial water level. Once equilibrated, the transducer was turned on, allowing 1-2 minutes to record a baseline reading. Then, a slug of adequate size to displace at least 2 feet of water in a well was deployed into the well (falling head slug test), making sure that the slug entered the water column as quickly as possible and that the slug was secure and stationary after being deployed. Water levels were then recorded as quickly as possible at first, then at decreasing frequency, as appropriate. If the initial response was very slow, barely measurable, the well was to be moved to Group A. If the initial response was nearly instantaneous, the well was to be moved to Group C. With the slug still in the well, the well was allowed to equilibrate to within ½ foot of the initial water level.

After allowing the well to equilibrate, the slug was quickly removed from the well (rising head slug test), while leaving the transducer at the bottom of the well. Water levels were then recorded as quickly as possible at first, then at decreasing frequency, as appropriate. Water levels were recorded until the well was 75% equilibrated or until 20 minutes had elapsed. Then, the transducer was turned off and removed from the well.

Group C consists of wells with a very high yield, where equilibrium is very rapid. Initial water levels were taken after approaching the well. A submersible pump with tubing was then deployed to just above the well screen. A pressure transducer was then deployed, resting atop of the submersible pump. After the transducer was deployed,

the well was allowed to equilibrate to its initial water level. Once equilibrated, the transducer was turned on, allowing 1-2 minutes to record a baseline reading. Then the pump was turned on, regulated to pump approximately ½ gpm for ten minutes. Water levels, flow rates, and purge volumes were regularly recorded. After 10 minutes, the flow rate was increased to half throttle on the control box for 20 minutes, aiming for several feet of drawdown. After 20 minutes at half throttle, the flow rate was increased to full throttle on the control box for 20 minutes. After 20 minutes at full throttle, the pump was turned off, and allowed 10 minutes for recharge. Water levels were then recorded as quickly as possible at first, then at decreasing frequency, as appropriate. Following 10 minutes of recovery, the transducer was turned off and the pump and transducer were pulled out of the well.

The results of the hydraulic conductivity tests are summarized in Table 6. Figure 4 provides a comparison of the hydraulic conductivity observed within the various screened lithologic horizons. Figure 4 plots the calculated hydraulic conductivity versus the well screen elevations. Section 3.4 provides a detailed analysis and discussion of the results.

2.5 Tracer Tests

Three tracer tests were conducted at the Site to better understand groundwater flow directions and velocities in the bedrock beneath the former process area. The studies were conducted by Dr. Ralph Ewers, PhD of Ewers Water Consultants, Inc. (EWC). The first study was completed in May, 2008, followed by the second study in May, 2010. Two tracer studies were conducted at the Site to better understand groundwater flow directions and velocities in the bedrock beneath the former process area. The studies were conducted by Dr. Ralph Ewers, PhD of Ewers Water Consultants, Inc. (EWC), in Lexington, KY. The first study (Phase I) was completed in May, 2008 and included the injection of one dye, eosine. This was followed by the second study (Phase II) in May, 2010 which included the injection of two dyes, fluorescein and rhodamine WT. Details regarding the studies are contained in two reports prepared by EWC, which are included as Appendix C.

Tracer testing involved several tasks:

- *Area reconnaissance*. The purpose of the reconnaissance was to identify springs and stream reaches that would be appropriate for monitoring during the tracer study. Dye receptors consisting of mesh packets of

activated charcoal were deployed during the reconnaissance to characterize background fluorescence.

- *Background Study.* The purpose of the background study was to characterize background fluorescence of the waters to be monitored. These data are used to help select the appropriate dye to use for the study and develop criteria for determining positive detections after the dye is introduced.

- *Dye injection.* For both studies, existing monitoring wells were used as dye-injection points. Candidate wells were first yield-tested to determine their suitability as a dye-injection point.

- *Dye monitoring.* After injecting dyes, the array of dye detectors was periodically visited at regular intervals. During each visit the detectors were collected for analysis and replaced with fresh detectors.

EWC conducted the reconnaissance for the first tracer test during April 12-14, 2008. This included examining Clear Creek and selected tributaries for springs and surface water inputs. During the reconnaissance, stream and spring monitoring locations were selected and dye receptors were deployed. In addition, dye receptors were also deployed in selected Site monitoring wells. For the Phase 1 study, 47 monitoring locations were established, 12 spring locations, 21 stream locations, and 22 monitoring well locations. Of the 22 monitoring well locations, 4 monitoring wells had two receptors deployed in the well in order to ensure complete vertical coverage was obtained. Figures depicting the monitoring locations are contained in Appendix C. Monitoring was maintained throughout the study with regular receptor exchanges.

For the background study, dye receptors were collected on April 21^{st,} 2008, April 29th, 2008, and May 6th, 2008, and analyzed for all of the commonly-used fluorescent tracer dyes prior to dye injection. Based on these data, eosine was selected as the dye of choice for the first study, as it was not detected in any of the background samples.

Four monitoring wells were identified as candidates for dye injection: MW-12D, MW-14D, MW-15D, and MW-16D. These wells were identified based on their location (in the former process area, where creosote releases were believed to have occurred) and their screened intervals in the bedrock, On April, 15, 2008, these wells were tested to determine which would be used to inject the dye. The objective was to

select the well that demonstrated the best connection with the conduit porosity of the aquifer. That connection would be evidenced by the well's ability to readily accept injected water. MW-14D supported the highest injection rate and was selected as the dye injection well.

For the second tracer study (Phase II), the same dye-monitoring array was used, supplemented with several additional monitoring locations. Specifically, one new spring location was added, six stream locations were added in Clear Creek and seven new monitoring-well locations were added (these wells were installed after Phase I). The data from the original background study were used to select dyes for Phase II. Refer to the discussion of Phase II, below, for details.

2.5.1 Tracer Test Phase I

Dye was injected into MW-14D on May 6th, 2008. Potable water for the dye injection was obtained from a local potable source and brought in by truck. After priming the injection well with the potable water, five pounds of 50% eosine solution was introduced to the well through a tremie-injection device. The dye was introduced below the surface of the water and near the bottom of the well. Approximately 600 gallons of flush water were injected immediately after the dye was released. The flush water was alternately introduced at the bottom of the well via the tremie device and from the top via a garden hose. This procedure ensured that dye was not left isolated in stagnant portions of the water column in the well. MW-14D took flush water at a consistent rate of 0.6 gallons per minute.

During and after completing the first tracer study, several monitoring wells were installed, including the MW-35 cluster. During drilling of well MW-35B, a small void was penetrated and all of the drilling water lost. The well was subsequently screened across that interval. The high yield of this well, coupled with its location near the former process area, made it an excellent candidate as a dye-injection well for a follow-up study. Additionally, a second new monitoring well, MW-38A, was screened across a void and was located on the opposite side of Clear Creek, approximately 800 feet southeast of MW-35B. Because creosote was identified in the bedrock north of this well, it was also selected as a dye-injection well for the second study.

2.5.2 Tracer Test Phase II

On May 11th, 2010, 2.5 pounds of fluorescein dye were introduced into MW-35B using the same technique employed for MW-14D during the first tracer study. Water

for the dye injection was obtained from a local potable source. Approximately 1,200 gallons of flush water were injected immediately after the dye was released into the well. MW-35B took flush water at a consistent rate of three gallons per minute.

On May 25th, 2010, 2.5 pounds of the tracer dye rhodamine WT were introduced into MW-38A using the technique previously described. Approximately 2000 gallons of flush water were injected immediately after the dye was released into the well. MW-38A took flush water at a consistent rate of five gallons per minute. Complete results of the second tracer study are contained in Appendix C and a detailed evaluation and analysis of the results is provided in section 3.5.3.

2.6 Dense Non-Aqueous Phase Liquid (DNAPL) Monitoring and Recovery Activities

Creosote is denser than, and does not readily mix with, groundwater. Substances with these properties are referred-to as DNAPLs. Creosote has accumulated in a number of monitoring and recovery wells, most notably in the past several years, as the number of wells installed at the Site has increased. In response, ARCADIS implemented a program in September 2008 that is designed to monitor and recover accumulated creosote in wells were it has been observed, either historically or currently, and wells that have the potential to develop DNAPL. The objectives of this program are to:

- Better quantify DNAPL-production rates at individual wells,
- Remove contaminant mass from the subsurface, and
- Reduce DNAPL saturations and pressures, thereby reducing the potential for DNAPL migration.

Generally, monitoring and recovery activities are performed weekly. Twenty-eight wells are currently in the recovery program, including 23 on-site wells and five (5) off-site wells (MW-36B, MW-36C, MW-48A, MW-51A, and MW-51B). Weekly monitoring and removal activities were modified to quarterly at MW-48A on June 30, 2011 when access to the property became limited.

Table 7 presents the collected DNAPL thickness and recovery data for all of the wells in the program. Graphs depicting DNAPL recovery data for these wells are contained in Appendix D.

DNAPL thickness is measured by lowering a weighted tape or a disposable bailer until the well bottom is reached and then slowly retrieving the device. The thickness of

accumulated DNAPL (if any) is measured directly off the device and recorded. Where DNAPL is present, it is subsequently removed by bailing and the volumes of both DNAPL and groundwater removed are measured and recorded. All recovered DNAPL and groundwater are placed in an appropriately labeled, Indiana Department of Transportation approved, closed top, 55-gallon drum and temporarily stored in a secure location on site. Stored groundwater and creosote are periodically disposed off-Site in accordance with all applicable State and Federal DOT regulations.

2.7 Geophysical Activities

ARCADIS conducted limited geophysical activities at the site to assist with placement of permanent monitoring wells and to gain a better understanding of the subsurface. Though some aspects of the geophysical survey appeared to provide useful data (i.e. bedrock surface, some generalized features, and shallow voids on the east side of Clear Creek), other aspects did not correlate well with the actual geologic data collected through the monitoring well installation program. The geophysical methods used (resistivity, GPR and borehole) had difficulty identifying lithologic changes, especially the subtle variations. At this time, further geophysical data is not anticipated to be collected at the site because utilizing geophysical methods is not cost effective. The installation of permanent monitoring wells is the preferred method to ensure an accurate understanding of the subsurface in obtained. ARCADIS continues to review the data in the event geophysical methods become more useful in the future.

3. Geologic and Hydrologic Characterization

3.1 Regional Geology

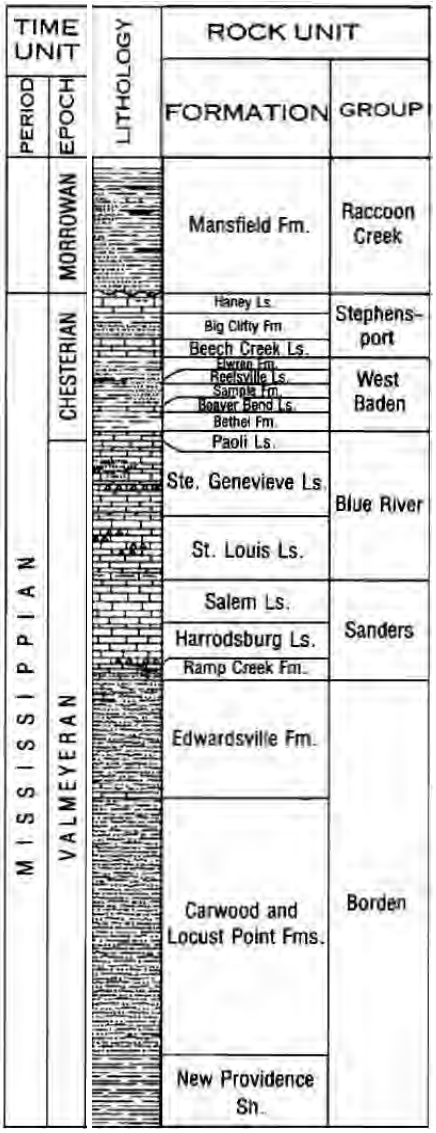
The following discussion of regional geology was augmented using available literature from a number of cited sources. Additionally, ARCADIS utilized the Indiana Geological Survey (IGS), located in Bloomington at Indiana University, as a reference to better understand various aspects of the regional geology. ARCADIS meet with the IGS several times to discuss regional stratigraphy and provided IGS personnel core from one of the drilling events for them to view. The IGS supplied ARCADIS with the latest bedrock geology maps of Bloomington and Monroe County for our reference as well as provided feedback and input regarding the structural trends observed regionally. The information discussed with the IGS was instrumental in understanding the geology from a regional perspective.

The Site lies in south-central Indiana, a region dominated by bedrock-controlled uplands, dissected by streams that drain generally south and westward to the White and Wabash Rivers. The strong relief in south-central Indiana reflects, in part, the absence of the Pleistocene glaciation which elsewhere in the state had the effect of leveling the topography. The physiography also reflects the variable weathering characteristics of the major bedrock units that outcrop across the region. The gently undulating upland topography in the immediate Bloomington area, for instance, reflects the strong erosional resistance of the Blue River and Sanders Groups limestones. Where these limestone units crop-out east of Bloomington, they expose the less resistant Borden Group siltstone, and the terrain is much more deeply eroded.

The bedrock in the Bloomington area is predominantly Mississippian-aged sedimentary rock (Figure 5). The bedrock in the region is very nearly flat-lying, with a dip of less than 1 degree to southwest. (Hasenmueller, et al., 2008) Though slight, the dip of bedrock means that, looking across the region from west to east, the bedrock units outcrop in sequential north-south bands from youngest to oldest (otherwise stated, a unit that is at the surface where you're standing will be progressively deeper, and covered by younger units to the west).

East of Bloomington, the rock is predominantly siltstone of the Borden Group (Hartke and Gray, 1989); west of Bloomington, it is a mixture of sandstone, shale, and limestone (West Baden and Stephensport Groups). Bloomington itself lies in a physiographic region called the Mitchell Plateau, a north-south-trending belt, about six miles wide, underlain by limestone assigned to the Mississippian aged Blue River and Sanders Groups (Hartke and Gray, 1989). The relationship of the various rock units in the region is depicted on the adjacent stratigraphic column.

The limestone surface across of the Mitchell Plateau is typically covered by at least several feet of unconsolidated material, except in areas of steep slopes such as adjacent to deeply-incised streams. Two classes of unconsolidated material are



Columnar section showing the upper part of the stratigraphic column beneath Monroe County (Modified from Hartke and Gray, 1989).

most common, i.e.:

- Residuum (also called terra rossa) is the predominant soil type, consisting chiefly of plastic red clay with stone fragments that develops in situ over limestone bedrock where slopes are not steep. Residuum is essentially the remnants of limestone that has mostly been dissolved away. This material can be a thick as 50 feet in some areas of the region (Thomas et al., 1981); though typically it is less than 20 feet and may be mostly absent or very thin in stream valleys due to erosion.

- Deposits of alluvium are common in current river valleys. Alluvium consists of sediments deposited by present-day streams, which typically include stratified silt and sand (i.e., overbank deposits) and localized deposits of sand and gravel related to the former channels of present-day meandering streams.

3.2 Regional Hydrostratigraphy

Monroe County has abundant rainfall (averaging about 44 inches per year), it does not have large, readily available groundwater resources (Hartke and Gray, 1989). The City of Bloomington draws its water supply from Lake Monroe, a surface water reservoir. Groundwater use in the region is typically limited to individual homeowners, farms or small rural communities. In the Bloomington area, three hydrostratigraphic systems of significant areal extent are recognized, although only one is considered a viable groundwater resource:

- The unconsolidated zone in the region is identified by Maier (2003a) as the Unglaciated Southern Hills and Lowlands Aquifer System. The clay-rich residuum that makes up the majority of this system is generally lower permeability, typically less than 20 ft thick and inconsistently saturated. The unconsolidated system is not used as a water resource.

- Blue River and Sanders Group Aquifer System is the only viable groundwater resource in the area, though it only yields supplies sufficient for domestic and small quantity users (Maier, 2003b). The aquifer system is typically less than 100 feet thick, though the full thickness of the Blue River and Sanders Groups may reach 400 ft where fully preserved to the west of Bloomington (Thompson et. al, 2007). The basal 30 to 35 ft section of this system is preserved at the Site, and is the primary horizon of interest for environmental investigation at the Site

- The Borden Group Aquifer System is composed primarily of siltstone and shale, with a thickness of up to 660 ft (Maier, 2003b). Infrequent and

unpredictable fine-grained sandstone lenses exist within the Borden Group (Hartke and Gray, 1989); however, the system is generally regarded as an aquitard and is only used where no other aquifer type is available (Maier, 2003b). As noted by Hartke and Gray (1989), the rocks of the Borden Group are generally too fine grained, have too few joints, and are too well cemented to act as an aquifer.

The permeability of the Blue River and Sanders Group Aquifer System is chiefly governed by fractures and karst weathering. Hartke and Gray (1989) note that the rocks most prone to dissolution are the St. Louis and Ste. Genevieve Limestones, and areas of the plateau underlain by these rocks contain the greatest frequency of karst features such as sinkholes, caves, and underground drainage. “Karst” is a term that describes both the weathering processes and resultant landforms in soluble rocks. In terms of groundwater movement, karst aquifers are aquifers whose permeability has been enhanced by dissolution. The Ramp Creek Formation, which is the most relevant bedrock formation in terms of groundwater movement at the site. The Ramp Creek Formation is not noted as a significant “karst-former”; however, the unit is predominantly limestone and, as will be discussed later in this report, its permeability has been enhanced by dissolution, which is an important factor concerning groundwater and contaminant movement.

The hydraulic characteristics of the bedrock aquifer systems are also directly influenced by their fractures. The orientations of bedding-plane fractures and joints in the region are relatively uniform and are similar for the rocks of both aquifer groups. The most prominent structural trends are as follows:

- Regional bedding: approximate strike 349º (north-northwest to south-southeast); 40-45 feet per mile (Walter Hasenmueller, Indiana Geological Survey, written communication).
- Primary joint set: strike 80° (east-northeast); vertical dip (Powell, 1976 and Ault, et al., 1985)

A secondary joint set has also identified orthogonal to the primary set; though less prominent and less frequent (Ault et al., 1985). Powell (1976) also found that primary joints were often vertically extensive, crossing multiple beds, whereas secondary joints were limited to individual beds. The orientations and relative frequency of joints was confirmed in bedrock exposures in Clear Creek at the Site (Appendix C).

Faulting is not widespread in the region. The nearest mapped fault to the Site is the Mount Carmel Fault, which is a 50-mile long, high-angle normal fault that trends north-

northwestward. This fault is located about 7 miles east of the Site and is not anticipated to be relevant regarding groundwater and contaminant movement in the Site bedrock.

3.3 Site Physiography

The Site lies on the floor of a shallow north-south trending valley drained by Clear Creek. The creek runs southward through the Site dropping approximately 8 ft in elevation over the ½ mile between the north and south ends of the Site. One perennial tributary joins the Creek within this reach, an unnamed stream flowing from the east, entering the Site via a culvert from the east side of Walnut Street and joining Clear Creek approximately 400 ft south of Country Club Road. It is likely that the original course of this stream (i.e., prior to being diverted into a culvert) arrived at Clear Creek approximately 200 ft farther to the south where there is currently a stranded channel immediately east of Clear Creek. Figure 2 illustrates the Site topography on two foot contour intervals.

Clear Creek flows on or very near bedrock, but has generally not developed an entrenched a bedrock channel. The banks of the creek are typically composed of 3 feet of fine-grained flood-plain alluvium, often with low natural levies. The majority of the Site is within the active flood plain, and has flooded several times within the previous five years. Clear Creek is a gaining stream. A number of small springs and seeps which discharge into the Creek have been identified within the bounds of the Site and farther downstream. These karst features are discussed in more detail later in this report and their locations are presented in Appendix C.

3.4 Site Stratigraphy and Hydrostratigraphy

The strata beneath the Site include a veneer of fine-grained alluvium on top of sedimentary bedrock. Regionally, greater than 150 ft of the Blue River Group and Sanders Group limestones may be present, however at the Site, Clear Creek has down-cut its valley through all but bottom 30 to 35 ft of the Blue River and Sanders Groups. The preserved section is predominantly composed of the Ramp Creek Formation, though a minor thickness of the overlying Harrodsburg Limestone may be preserved in places. This thin carbonate sequence overlies the Borden Group, comprised of an estimated 675 ft of low permeability siltstone and shale.

To aid in site characterization, ARCADIS has divided the stratigraphic section into four hydrostratigraphic intervals with distinct hydraulic characteristics. The table below provides an overview of the stratigraphy and hydrostratigraphy.

Stratigraphic Unit (approx. thickness)	Stratigraphic Characteristics	Hydrostratigraphic Unit (approx. thickness)	Hydraulic Characteristics
Alluvium (5 to 10 ft)	Predominantly fine-grained flood-plain type deposits: silty clay, silt. This horizon also includes some fill.	Unconsolidated Zone (less than 5 ft of saturation)	Low to moderate permeability. Poorly drained. Not significant relative to groundwater transport.
Harrodsburg Limestone (absent to 5 ft)	Limestone, dominantly coarse and bioclastic.	Upper Ramp Creek (15 to 20 ft)	Principal shallow water bearing zone; highly heterogeneous; permeability controlled by solution enlarged fractures.
Ramp Creek Formation (30 to 50 ft)	Dominantly fine grained limestone and dolomite, heterogeneous and thin-bedded with interbedded siltstone.		
		Lower Ramp Creek (10 to 30 ft)	Lower bulk permeability than upper zone; permeability is fracture controlled; no evidence of solution porosity.
Borden Group Edwardsville Fm (675 ft*)	Siltstone, generally massive bedded, with almost no macroscopic fossils.	Borden Aquitard (675 ft*)	Extremely low permeability aquitard.

* based on Indiana Geological Survey core log for borehole SDH-064 approximately 2 miles north of Site.

Each hydrostratigraphic unit is discussed in more detail below.

3.4.1 Unconsolidated Zone Hydrostratigraphic Unit.

The unconsolidated zone is predominantly overbank floodplain deposits, consisting of silty clay and clayey silt, interbedded with thin lenses of sand. North of Country Club Road, the sand lenses appear to occur randomly throughout the soil column. South of Country Club Road, sand lenses were most commonly observed immediately above the bedrock surface. Fill material is also present in some areas of the Site, particularly the former operations area immediately north of Country Club Road. Fill may include coal ash particles, and some construction debris. Note that several areas of the Site north of the Country Club Road were excavated during episodes of Site remediation (Figure 6). The excavations were typically extended to the bedrock surface; however some only extended a foot or two below the ground surface.

The unconsolidated zone is thin relative to the thickness of the other hydrostratigraphic units at the Site, and therefore has limited influence on groundwater movement. Within the floodplain, the average thickness of the unconsolidated zone is 4 to 6 feet. Of this thickness, typically less than 3 ft is saturated, varying with the undulations in the bedrock surface. Figure 7 represents the bedrock surface, based on wells and borings completed throughout the site. In general, the bedrock surface reflects the surface topography, forming a north-south valley that plunges gently southward following the grade of Clear Creek. The bedrock surface within the valley includes some irregular relief on a scale of 1 to 3 ft, likely reflecting former creek channels, or localized solution weathering.

The saturated unconsolidated zone has low to moderate permeability. Slug tests of wells screened in the saturated zone yield estimates of hydraulic conductivity ranging between 5 and 67 ft/day (Table 6). Where excavated and backfilled with clay, the unconsolidated zone will have significantly lower permeability. Since the principal excavation area extends the entire width of the Site west of Clear Creek, the excavation backfill is inferred to restrict the groundwater movement in the overburden from north to south, disconnecting the native soils to the north and south (Figure 6). Vertical groundwater exchange between overburden and bedrock is likely restricted to discrete areas where joint traces traverse the bedrock surface. The sparseness of hydraulically open joints may explain the generally poor drainage of the unconsolidated zone (which frequently supports areas of standing water).

3.4.2 Upper and Lower Ramp Creek Hydrostratigraphic Units

Upper Ramp Creek hydrostratigraphic unit (URC) refers to a hydraulically distinct zone that includes the upper 15 to 20 ft of the Ramp Creek Formation and, where present, the base of the Harrodsburg Limestone. The distinction between URC and Lower Ramp Creek hydrostratigraphic unit (LRC), which encompasses the bottom 10 to15 ft of the Ramp Creek Formation, is based on consistent differences observed in the hydraulic characteristics of the two zones. Lithologically, however, the URC and LRC are functionally indistinct. Both units may be described as follows:

- A mixed carbonate-siliciclastic formation, consisting of interbedded limestone, dolomite and siltstone.
- Carbonate beds are most commonly mudstone (silt/clay-size carbonate grains known as lime mud) and wackestone (lime-mud with floating sand-sized limestone particles, typically fossil fragments). The Ramp Creek also contains sporadic thin beds (<0.25 ft) of fossiliferous packstone (grain-

supported limestone with a lime-mud matrix), and less commonly grainstone (all sand-size grains with no lime-mud).

- Individual beds vary in thickness from less than an inch to 2 to 3 feet; typically the thickest beds are fine grained, either siltstone or carbonate mudstone.
- Geodes are common throughout the section.
- Individual beds are not easily correlated laterally between borings, suggesting that individual beds are laterally discontinuous within relatively short distances (e.g., 10's to 100's of feet). This is consistent with a shallow water, low-to-moderate energy depositional environment, with repeated cycles of storm-driven scour eroding shallow channels and sorting the carbonate sediments into fining upward sequences.

The basal portion of the Harrodsburg Limestone is lithologically similar to the Ramp Creek; though the Harrodsburg does not contain true siltstone beds (Rexroad, 1986a). Higher in the Harrodsburg section, the unit is distinctly fossiliferous, often composed almost entirely of crinoid and bryozoan fossil grainstones, with limited intergranular cement. Limestone of this description can be found in the uppermost bedrock on the valley sides, where less of the Harrodsburg has been eroded, but is absent within the Site boundaries, where only the very base, in any, of the Harrodsburg has been preserved. Because there is no clear stratigraphic marker to identify the Harrodsburg/Ramp Creek contact, the Harrodsburg is not differentiated from the Ramp Creek in logs or cross-sections (Figures 8 to 16).

The total thickness of carbonate units is typically 30 to 35 feet on the valley bottom near Clear Creek. This sequence gradually thickens to as much as 50 ft westward (e.g., west of the rails-to-trails corridor), as a result of the higher bedrock surface and of the westward dip of bedrock. The strike and dip of bedding at the Site is best estimated from a structure contour map of the Ramp Creek Formation -Borden Group contact (Figure 17). The contact is not a perfectly uniform surface, as a result of the erosion of the siltstone before deposition of the Ramp Creek (Rexroad, 1986b). However, bedding strike is predominantly north-to-south (348°). A clear westward slope is observed at the Site, descending approximately 1.4 ft for each 100 ft of horizontal distance down-dip (i.e., a dip of 0.84° west). This trend differs slightly from the regional dip of approximately 0.4° west; but the difference can be attributed to the disconformable contact and the expected local-scale variability in the depositional environment.

3.4.2.1 URC Hydraulic Characteristics

The Upper Ramp Creek hydrostratigraphic unit is a karstic aquifer, in which the flow-dynamics are governed by solution-enlarged fractures. Compared to many karst aquifers, the evidence of solution in the URC is subtle, the unit does not support cavernous void spaces, obvious sinkholes, or significant springs, yet the extent of solution development is sufficient to materially alter the hydraulic characteristics of the aquifer relative to ordinary fractured rock. The principal evidence that the URC is a karstic aquifer includes the following:

- **Void Spaces**. Approximately nine voids, ranging from about an inch to 1.8 ft in vertical height, have been detected while drilling in the URC (Table 8). Far more numerous instances of smaller solution-enlarged fractures (e.g., voids less than 1-inch in size that are difficult to detect directly while drilling) can be inferred from sudden complete loss of drilling fluid. Complete, or nearly complete, fluid-circulation loss occurred in approximately half of the wells drilled through the URC.

- **Rapid Flow Velocities**. Tracing work (described in more detail in Section 3.5.3 and Appendix C) demonstrates groundwater flow-rates greater than 200 ft/hour. Such groundwater velocities are physically possible only within an efficient conduit that can support turbulent flow. Note that tracing has also demonstrated flow velocities that are orders of magnitude slower, illustrating the heterogeneity of the URC's permeability structure.

- **Focused Discharges**. A number of small, but distinct springs located along the banks of Clear Creek discharge groundwater from the URC. These springs occur as small soil tubes (several inches in diameter or less) discharging at creek level. Larger springs exist in the vicinity, but are interpreted to discharge stratigraphically higher in the section; e.g., from the upper Harrodsburg or Salem Limestones.

- **Extreme Range of Well Yield**. Hydraulic tests of wells screening the URC give estimates of hydraulic conductivity that span seven orders of magnitude (Figure 4). Though the actual hydraulic conductivity values have no direct application in a karst aquifer, the range of values illustrates the contrast between the bulk rock, minor fractures, and the solution widened fractures. The vertical distribution of hydraulic conductivity values also helps distinguish the karst-influenced URC from the LRC, where there is no evidence of karst enhancement of aquifer permeability.

The karst drainage network in the URC is a special kind of epikarst. In general, an epikarst is the top-most horizon of a karst aquifer, formed as a weathering front where a carbonate aquifer down-wastes due to solutionally aggressive (corrosive) recharge from above. Typically, an epikarst will contain pervasive solution porosity that is irregularly interconnected within a framework of still-intact rock, partially decomposed rock, and residuum. An epikarst commonly acts as a transmission zone that stores and delivers groundwater vertically to a karst conduit network below. However, the epikarst at the Site differs significantly from these norms. The karst drainage network in the URC is interpreted to be a strata- and recharge-limited, self-draining epikarst. These distinctions can be explained as follows:

- The URC epikarst does not drain vertically to a deeper conduit network. It transmits water from recharge to discharge completely within itself (i.e., it is self-draining). The absence of a deeper conduit network is a function of the stratigraphic setting and limited recharge, described below.

- The stratigraphy of the Site limits karst development in two ways. The Ramp Creek Formation includes frequent siltstone interbeds, which are generally insoluble and therefore inhibit (but do not necessarily block) deeper solution development. The Ramp Creek is also underlain by the Borden Group aquitard, which has an extremely limited capacity to transmit groundwater. The presence of the Borden prevents deep circulation of groundwater, and consequently limits the vertical flux of groundwater through the Ramp Creek.

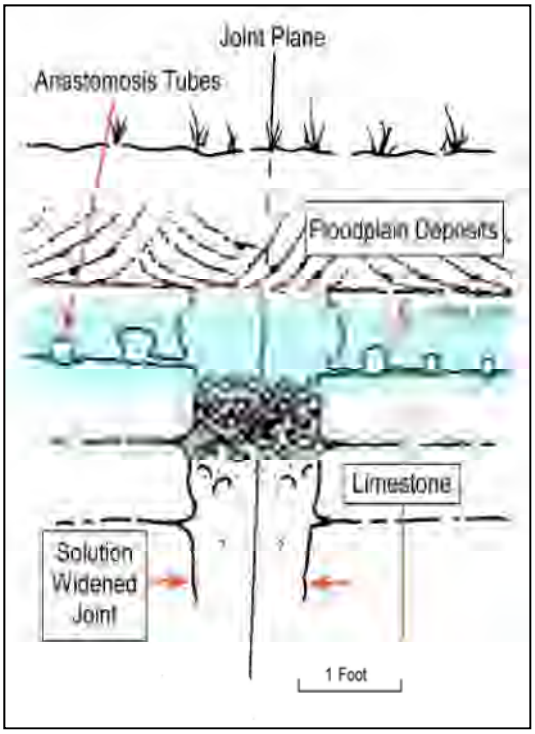
- Because karst develops as a result of groundwater flow, any limitation on recharge to an aquifer will limit the development of karst. It appears likely that the groundwater catchment for the Ramp Creek at the Site is only as extensive as its outcrop area, a narrow swath along Clear Creek valley. The observation that the large springs in the vicinity only occur at positions stratigraphically higher than the Ramp Creek (such as at Watercress Spring located just south of the Site, interpreted to discharge from the Harrodsburg Limestone), suggests that recharge occurring in the uplands east and west of the Site is primarily captured and channeled within conduit networks in the Harrodsburg and Salem Limestones above the Ramp Creek Formation. In this sense, the Ramp Creek can be considered an aquitard relative to the overlying strata, which have a higher capacity to develop karst conduit networks.

The geometry of the URC karst drainage system is controlled bedding-planes and joints (see inset figure below). As in any karst aquifer, conduits develop along pre-existing groundwater pathways. In the URC, these pathways are essentially limited to bedding planes (which are very nearly horizontal), and two orthogonal joints sets, both

of which are nearly vertical. As reported in Appendix C, the primary east-west striking joint set appears frequently in bedrock exposures in Clear Creek. These joints commonly exhibit evidence of solution enlargement. Joints, particularly the primary joint set which has been observed regionally to cross multiple beds, are considered to be the only viable mechanism for water to move vertically within the URC. The aperture of solution widened joints likely constricts with depth. Insoluble siltstone beds inhibit the solution widening of joints; however, solution enlarged fractures do exist at least 10 to 15 feet deeper than the shallowest siltstone beds encountered in the Ramp Creek.

Solution enlargement along bedding planes in the URC takes the form of anastamoses (convoluted entwined channels like tangled-spaghetti) formed on a bedding plane with apertures typically of an inch or less. Examples of this sort of conduit development can be seen in loose rocks within Clear Creek (see inset photograph).

The distribution of solution enlarged joints and fractures is not easily judged. In general, evidence from drilling suggests that solution-enlarged features may exist in any location at the Site, to depths of approximately 30 ft (10 to 15 feet above the Borden Group contact). The fact that solution development appears to be widespread, however, does not imply that there is a uniform distribution of flow pathways. Because individual stratigraphic beds have limited lateral extents, it follows that the extent of contiguous anastomoses formed on a particular bedding plane are likely to be laterally discontinuous, such that groundwater would be required to stair-step vertically along a joints in siltstone to another plane of anastomoses within the limestone beds to continue moving laterally. Even where solution porosity has developed, it may become permanently or temporarily choked by sediment infilling as the rock



Forms of solution enlarged fractures observed at Site. See also Appendix C.

Example of anastamoses formed on bedding planes in the Ramp Creek Fm. Scale increments are 4 inches.

continues to dissolve leaving a residuum of insoluble clay.

While the geometry of anastomoses may be extremely tortuous, they form as a result of groundwater flow, and therefore are biased to reinforce the prevailing flow-direction. Thus factors like the north-to-south base-level descent of Clear Creek, and the north-northwest to south-southeast regional strike of bedrock (which may be presumed to have remained constant throughout the time frame of karst development), will have influenced the geometry of the anastomoses. A flow bias parallel to strike arises in dipping layered bedrock where horizontal bedding plane fractures outnumber the vertical joints that cross-connect them. This anisotropy[1], which is nearly always present in ordinary fractured rock, is only magnified by solution enlargement. A strike direction bias is likely a key factor explaining why a majority of the completed traces at the Site are down-valley and generally parallel to strike, rather than taking the shortest-distance pathway to the creek. Groundwater flow is discussed in more detail in Section 3.5 below.

3.4.2.2 LRC Hydraulic Characteristics

The Lower Ramp Creek hydrostratigraphic unit model is distinguished from the URC by the absence of solution enlarged fractures. There is no clear stratigraphic marker dividing the URC and LRC, nor is there a distinct lithologic difference between the zones; however, the data collected during drilling and from completed wells consistently indicate a major difference in the hydraulic properties of the two zones. By contrast to the URC:

- The LRC contains no apparent voids (Table 8), or highly transmissive fractures (e.g., fractures where major drilling fluid loss occurs).
- Wells completed in the LRC have consistently very low yields. Slug test estimates of hydraulic conductivity range from 10^{-2} to 10^{-6} ft/day (Figure 4). For several of the lowest yield wells completed in the LRC, water-levels took about a year to fully recover after being purged (see hydrograph of MW-35C, Appendix E).

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[1] Anisotropy is the property of being directionally dependent. The hydraulic conductivity of the bedrock, that is, the ability of water to pass through the bedrock, is greater in the horizontal direction than the vertical direction.

The thickness of the LRC is approximately 10 to 15 ft, bound by the Borden Contact below, and the deepest occurrence of solution-enlarged fracture porosity above. The maximum depth of solution porosity in the Ramp Creek formation does not appear to be governed by a specific stratigraphic bed. Siltstone beds occur throughout the Ramp Creek Formation, yet no single bed appears to form a complete barrier to karst. The absence of solution development in the LRC can most likely be attributed to an absence of corrosive groundwater. Several factors contribute to this absence of corrosive flow:

- The multiple insoluble siltstone beds in the Ramp Creek will have a compounding influence with depth, promoting vertical-to-horizontal anisotropy strongly favoring horizontal flow, which inhibits the deep circulation of groundwater that would foster solution development in the LRC.
- What groundwater does reach the LRC would likely have been buffered and become more neutral as it passes through the various limestone beds in the URC.
- The underlying Borden Group is an extremely low permeability aquitard, limiting groundwater flux upward through the LRC.

The LRC is an aquitard. The porosity of the zone appears to be extremely slight, limited to sparse very-low transmissivity bedding plane fractures. Joints likely provide limited vertical interconnectivity, while very low-transmissivity bedding plane fractures convey the majority of groundwater transport that occurs in the unit.

3.4.3 Borden Aquitard Hydrostratigraphic Unit

The Borden Group is a major aquitard, consisting of nearly 700 ft of siltstone and shale of very low permeability. At the site, six bedrock wells have been completed in roughly the upper 20 ft of the Borden. Hydraulic testing of Borden aquitard wells has yield estimates of hydraulic conductivity that average 10^{-4} ft/day (Table 6). Water-levels in Borden aquitard wells have taken weeks to several months to recovery after being purged.

Rock core from the Borden has shown it to be very sparsely fractured, with all fractures parallel to bedding. No fractures observed in the Borden have shown clear indications that they yield water. It is likely that the low level of transmissivity detected in the Borden is imparted by these minor bedding plane fractures. With greater depth into the

Borden, it is anticipated that bedding plane fractures and joints occlude almost completely, allowing no discernable flow.

3.5 Groundwater Flow

Groundwater in the alluvium and shallow bedrock beneath the Site flows to Clear Creek, the local base-level. Given the Site's location, stretched out along about 1 mile of the creek, the southward descent of the creek channel is a principal determinant of groundwater heads in the subsurface, and thus the patterns of groundwater flow. While all groundwater in the unconsolidated zone, URC and LRC does discharge to the creek[2], the paths groundwater takes to the creek and the speed with which it travels there can vary significantly. This section explains the current understanding of how groundwater moves through the subsurface of the site.

3.5.1 Groundwater Flow between Hydrostratigraphic Units

Of the four hydrostratigraphic units described for the Site – the unconsolidated zone, URC, LRC, and Borden Aquitard – only the URC is adequately thick and transmissive to be of significant interest with respect to groundwater flow and solute transport (discussed in Section 4). The solution porosity in the URC is the most efficient hydraulic pathway for groundwater, evidenced by the much higher hydraulic conductivities estimated from URC wells relative to the other units. Groundwater does move through the other units; however the amount of flow is very small in comparison to the URC. (While a Darcy's law calculation cannot be made directly, given the karstic nature of the URC, it is reasonable to interpret, for example, that the 4 order of magnitude average difference in hydraulic conductivities estimated between the URC and LRC wells indicates that *at least* a 4 order of magnitude difference in volumetric flux also exists.) Nevertheless, since a relatively small amount of flow occurs between hydrostratigraphic units, the balance of this subsection describes the nature of that flow.

While the anisotropy of the system means that the principal flow direction in each hydrostratigraphic unit should be horizontal; consistent head differences between the units indicate that a component of flow will also be vertical, fostering a modest

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[2] It is probable that groundwater in the upper Borden Group also discharges to Clear Creek, while at some greater depth in the Borden Group, regional flow patterns prevail.

exchange of groundwater from one unit to another. Table 9 summarizes calculated vertical gradients for a number of well clusters. The dominant gradient relationships are shown in the inset table below.

Vertical flow within bedrock, both upward and downward, is constrained to joints. The spacing of joints observed in bedrock exposed in Clear Creek average approximately every 2 ft for the north-south joint set, and every 4 ft for the east-west set. While less frequent, the east-west set is much more pronounced with wider, often solution enlarged apertures, whereas the north-south joints are commonly very tight or healed. The spacing of hydraulically active joints has not been quantified, but is estimated to be significantly less than the spacing of all joints. Moreover, while some joints may cut through multiple beds, most joints will not completely cross-cut the Ramp Creek Formation. Instead, joints typically truncate on bedding plane fractures (structural interfaces); such that flow rising through a joint may need to flow horizontally for some distance before intersecting another open joint cutting the bed above it. This mode of flow, or stair-stepping, will typically have longer horizontal steps than vertical steps, due the relative spacing of bedding planes versus joints.

Hydrostratigraphic Unit	Dominant Vertical Gradient Direction
Unconsolidated Zone	
	↓
URC	
	↓
LRC	
	↑
Borden Aquitard	

Because the alluvium receives distributed recharge from above, the mode of transport in the unconsolidated zone is somewhat different. Downward flow from the unconsolidated zone into the bedrock can only occur at joints, thus the thin zone of saturation may be conceptualized as a shallow bowl with a cracked bottom. Near Clear Creek, it is likely that groundwater pathways will discharge directly to surface water, without entering the URC. Further from the creek, pathways will be highly irregular, determined in large part by the geometry and transmissivity of the joints that cross-cut the bedrock surface, into which water from the unconsolidated zone will drain.

Within the hydrostratigraphic profile, heads are consistently highest in the Borden Group. Water-levels in the Borden are strongly artesian, with levels that rise above the ground surface in places (commonly even higher than stickup well casings, so that the wells need to be sealed to prevent them from flowing). At Borden well MW-38C, for example, the head averages approximately 10 feet higher than the head in the adjacent URC wells (MW-38A and MW-38B) and also approximately 10 feet higher

than the stage of Clear Creek in that vicinity. The high water-level elevations in the Borden Group indicate that the unit is not recharged locally. To support the high heads observed, recharge to the Borden must occur in upland areas, potentially a long distance away. The strength of the upward gradient (e.g., 0.9 ft/ft upward as measured between MW-38C and MW-38D, Table 9) also testifies to the inefficiency of vertical flow from the Borden Aquitard into the URC. While gradients are strongly upward, the flux of groundwater from the Borden to the LRC is trivial, due to the extremely low hydraulic conductivity of both of those units.

Heads in the LRC are typically the lowest observed within the hydrostratigraphic profile. This indicates that the LRC receives a small component of vertical flow upward from the Borden and downward from the URC. At first glance, the gradient relationship between the LRC and URC is counterintuitive, on the basis that:

- all evidence suggests that the LRC is vastly less transmissive than the URC, and
- since the URC is shallower and in direct contact with Clear Creek, the normal expectation is that vertical flow from the LRC would be upward, that direction being the most energetically favorable pathway to discharge in Clear Creek.

A possible physical explanation for the downward gradient relationship between the URC and LRC relates to the strong anisotropy that favors horizontal flow, and the gradual descent of Clear Creek's elevation as it drains to the south. This argument may be stated as follows:

- As a highly stratified sedimentary bedrock unit, the Ramp Creek Formation, and the LRC in particular, is extremely anisotropic, favoring horizontal flow and strongly inhibiting vertical flow. Head differences exist but do not drive significant quantities of water between the URC and LRC. In the LRC, while the amount of flow in any direction is extremely small, the relative capacity for the unit to move water horizontally is greater than its capacity to receive water into the unit vertically.
- As Clear Creek descends in elevation to the south, it cuts deeper into the Ramp Creek Formation, allowing easier vertical communication from the LRC to creek level. Thus heads in the LRC in a given well may be more directly influenced by the stage of Clear Creek some distance downstream than by the stage of the creek near the well. In contrast, the URC is better connected hydraulically to Clear Creek. Thus levels in the URC are buffered

by the higher stage of the creek nearby; rather than by points further downstream.

While a downward gradient does exist from the URC to the LRC, the component of flow in the URC that moves downward is expected to be extremely small relative to the component of flow that occurs horizontally within the solution-enlarged fracture network. By analogy, a roof gutter with a pinhole leak will continuously drip a little water through the pinhole, but most of the water in the gutter will travel horizontally toward the downspout.

3.5.2 Potentiometric Surfaces

The potentiometric surface of the URC provides useful information to help understand the general patterns of groundwater flow, but must be used with caution. Tracing work, discussed later, has clearly demonstrated that actual groundwater flow paths cannot be predicted solely on the basis of the potentiometric surface. Because of the extreme heterogeneity and anisotropy of the karst drainage system; the standard continuum-based approach of using a potentiometric surface to infer groundwater flow lines is inappropriate.

Two potentiometric surface maps were created from the available groundwater elevation data (Table 3) to illustrate the general trends observed in the URC (Figures 18 and 19). Both surfaces show similar trends:

- Heads in the URC decrease moving southward (parallel to the descent of Clear Creek) and inward from the east and west toward Clear Creek.
- Within the former operations and tie storage areas of the site (west of Clear Creek immediately north and south of Country Club Road), heads in the URC generally decrease more rapidly southward than toward the creek, suggesting that flow might trend downstream following Clear Creek rather than taking the shortest-distance pathway to the Creek.
- An area of steep gradients near Country Club Road suggests an increase in bulk transmissivity south of the road, or a region of restricted flow pathways (a flow bottleneck) near the road.
- The apparent convergence of heads toward Clear Creek indicates that the creek is the sole groundwater discharge. In addition, the increasing heads moving away from Clear Creek to the east or west suggest that it is unlikely groundwater flow paths would short-circuit to an adjacent valley.

Beyond these general observations derived from the potentiometric surface maps, the best understanding of groundwater flow patterns at the Site is obtained from tracing studies, which are discussed in the following section.

3.5.3 Patterns of Groundwater Flow Indicated by Tracing

The results of fluorescent dye tracer studies initiated at the Site in 2008 provide the best direct evidence of how groundwater moves through the URC. The tracing work is described in detail in Appendix C. Figure 20 identifies the injection points and illustrates the dye detection locations. The inset table below summarizes the main findings from the three traces completed. A complete summary of all calculated apparent velocities is provided in Table 10.

Injection Location & Date	Dye Used	Dye Detections	Apparent Velocities	Direction(s) of Flow Vector
MW-14D on 5/6/08	Eosine	Detected in 10 monitoring wells, in Clear Creek, but in no springs	2.5 to 30 ft/day	SSE SW
MW-35B on 5/11/10	Fluorescein	Detected immediately in 2 minor springs and Clear Creek, later in 4 monitoring wells	12 to 7123 ft/day	SSE ESE
MW-38A on 5/25/10	Rhodamine -WT	Never detected in wells, springs, or in the creek	no apparent flow	no apparent flow

Note: Apparent velocities are based on first detected arrival and the straight-line distance traveled, and as such are always less than true average velocity within the conduits themselves.

The principal observations about groundwater flow stemming from the tracer studies may be summarized as follows:

- The URC supports flow velocities of at least 7123 ft/day, a rate indicative of conduit flow. Excluding two documented flow-rates of greater than 1000 ft/day (both observed at springs), the average of traced apparent velocities is two orders-of-magnitude less (11 ft/day with a maximum of 30 ft/day). It can also be assumed that slower pathways exist that were too slow to be observed within the trace time-frames. This apparent diversity of flow rates illustrates the heterogeneity of the aquifer flow system. Groundwater simultaneously travels through the URC on an extreme range of fast and slow advective flow paths. No single velocity can fully characterize the behavior of the system.

- The multiple detections for each trace (excluding the rhodamine-WT trace, which was detected nowhere), indicate divergent flow. This is consistent

with the epikarst model of disorganized solution development, in which distributed recharge enters and enlarges all available fractures with limited bias. Also, the proximity of Clear Creek provides many opportunities for groundwater to discharge, discouraging the development of convergent hierarchical drainages, which occur when one point of discharge (such as a large spring) is the only efficient discharge.

- The predominant straight-line direction of flow is south-southeast. This trend is aligned with the regional strike of bedrock, and likely indicates a strike-parallel bias to conduit pathways within the URC. The alternate pathways directions, southwest and east-southeast, are less common, but maintain a southward aspect that is consistent with the general down-valley hydraulic gradient.

- During the eosine trace, dye was detected at two locations on the east side of Clear Creek, opposite of the injection point, demonstrating that groundwater can migrate beneath the creek, at least in places. The straight-line pathways to these detection locations (URC wells MW-27A and MW-28B) are both south-southeast, consistent with the regional strike. The most probable explanation for this underflow is the high degree of anisotropy favoring lateral transport over vertical. Flow upward into the creek is limited by the availability of open joints; therefore flow cannot discharge to the creek at all points along the creek. Given that flow may cross beneath the creek, there are instances wherein the most efficient route to down-stream discharge is by way of conduit pathways on the east side. Underflow in this case does not imply that Clear Creek is not the ultimate discharge; rather that some sections of the creek are less efficiently connected with the groundwater flow system than others.

- The failure of the rhodamine-WT trace to document any complete flow connections is unusual. As hypothesized by Dr. Ralph Ewers (Appendix C), the injection location MW-38A must be connected to a region of the karst drainage network with very little advective movement. Such a region may exist where progressive evolution of the karst system bypasses a section of the aquifer, creating what is conceptually a stranded bywater, or where sediment infilling restricts flow within a section, having the same effect. This trace outcome suggests that some portions of the aquifer may function as zones of storage, with little mixing or interaction with the active flow-system.

In general, groundwater flow with the URC does follow the general expectations of any aquifer system on the flank of a gaining stream. Groundwater flow does trend toward and eventually discharge into Clear Creek, with a bias in the downstream direction.

The karst elements of the flow system add significant irregularity to the manner in which groundwater travels to Clear Creek; however the importance of those irregularities depends on the scale of concern. The principal uncertainties relate to specific flow paths, flow rates, and the mechanisms of mixing and storage that occur along a flow path. However, the bulk patterns of groundwater flow at the Site are understood adequately to constrain the risk that dissolved contaminant transport may pose to potential receptors.

4. Nature, Extent, and Movement of Creosote

Creosote is a liquid wood preservative that is distilled from coal tar, and is mainly composed of polycyclic aromatic hydrocarbons (PAHs), but also contains many other compounds including light hydrocarbons such as benzene, toluene, ethylbenzene and xylenes. Creosote is a member of a class of substances called dense non-aqueous phase liquids or “DNAPLs”; meaning that creosote is denser than, and does not readily mix with, groundwater. When released in the environment, several factors control how creosote will distribute itself in the subsurface; specifically (Feenstra and Cherry, 1988):

- The volume released
- The area of infiltration
- The duration of the release
- Properties of the creosote
- Properties of the soil and bedrock through which it is moving
- Subsurface groundwater flow conditions

Although little information is available regarding historical operations, given the facility’s long (60+ years) operational history and the large volume of creosote handled during that period, it is likely that a considerable quantity of creosote was inadvertently released in the form of periodic leaks and spills, as well as drips from freshly-treated ties. Information obtained during characterization work (test pits and soil borings) and remedial work (soil excavations) indicate that the areas where incidental releases most-likely occurred are limited to the former process area and presumed drip tracks. Based on review of Sanborn fire insurance maps (Appendix E) and aerial photographs, the former process area appears to have included up to five creosote storage tanks, the treatment retort and associated building, a concrete reservoir and the boiler room. The approximate locations of these features are shown on Figure 21. It should be

noted that little information is available regarding the actual operations at the Site. CSXT does not have a facility maps, reports or documents which provide details of operations at the Site. The only available information regarding operations was assumed from published Sanborn maps and aerial photos of the Site.

Samples of creosote that accumulated in two wells were collected and analyzed for selected physical properties. Results are summarized in the following table:

Sample location	Temperature (ºF)	Density (g/cm^3)	Viscosity		Interfacial Tension (dynes/cm)
			centistokes	centipoise	
MW-12D	60	1.115	77.6	86.5	17.7
MW-21D	55	1.126	92.3	104	20.3

Note:

g/cm^3 = grams per cubic centimeter.

These data show that, at ambient groundwater temperatures, the creosote is slightly denser than water and is moderately viscous. Interfacial tension is a property that helps determine what size opening the creosote will be able to enter and the values above are typical for creosote.

Upon release to the subsurface, creosote will come to rest as both disconnected blobs and ganglia referred to as residual DNAPL, and in continuous distributions referred to as pooled DNAPL. In the fractured rock at the Site, the residual and pooled DNAPL is restricted to open fractures and solution enhanced features.

Residual DNAPL forms at the trailing end of a migrating DNAPL body as a result of small-scale hydrodynamic instabilities (snap-off processes) and typically occupies up to approximately 30% of pore space in porous media, and up to approximately 20% of pore space in fractures. (Pankow and Cherry, 1996; Poulsen and Kueper, 1992; Reynolds and Kueper, 2002). Residual DNAPL is immobile under ambient conditions. Pooled DNAPL is potentially mobile, and will enter wells that are screened across it.

Information on the properties of soil and bedrock through which the creosote has moved, as well as the relevance of groundwater flow on creosote movement, are included in the following discussions of the extent and movement of creosote in the overburden and bedrock.

4.1 Extent and Movement of Creosote in Overburden

Investigations conducted over the years have reasonably defined the limits of creosote-impacted overburden and through interim remedial actions, the most heavily impacted regions of overburden have been excavated and properly disposed offsite in 1991. Figure 7 depicts these remediated areas. Based on this work, it appears that the primary source of creosote was incidental leaks and spills in the former process area, where creosote was handled and stored. The overburden in this area is relatively thin and mostly unsaturated, and there are no uniform and continuous low-permeability layers that would act as capillary barriers to promote lateral spreading of the creosote; therefore, creosote moved primarily downward until it reached the bedrock.

Of the 32 monitoring locations set within the overburden, only one piezometer and one well have historically been noted to contain creosote, P-1 and MW-3S; however the accumulated thicknesses were either not measured or were less than 0.5 feet. Both of these monitoring points were decommissioned in 2006 associated with construction of the pedestrian bridge by the City of Bloomington. The pedestrian bridge is located adjacent and parallel to Country Club Road and spans Clear Creek.

Several areas where creosote is still present in the overburden exist; these areas are referred to as “bleed” areas. These regions are located within or north of the former process area (Figure 21). During warm periods, creosote present in shallow soils seeps out at the surface in small quantities from the bleed areas. The source of this shallow creosote may be related to the former drip tracks – rail lines where charges of freshly-treated ties were allowed to cool and shed excess creosote. These bleed areas are targeted for future remediation via excavation illustrated on Figure 21. The distribution of creosote in these soils is sporadic and limited to a depth of three feet, and the degree of creosote saturation appears slight. Based on these observations, this creosote is judged to be relatively immobile, and not to be an ongoing source of creosote to either Clear Creek or bedrock.

Example of a creosote “bleed” located in the northern portion of the site.

4.2 Storage, Extent, and Movement of Creosote in Bedrock

Presently, the majority of creosote in the subsurface resides in the bedrock and is limited to the Ramp Creek formation. The following two subsections describe how creosote is stored and distributed in the bedrock, and then provide a conceptual model explaining its movement.

4.2.1 Creosote Storage

Creosote in the bedrock is stored primarily in the secondary (fracture) and tertiary (solution) porosity. While the rock is expected to have appreciable primary porosity (several percent), the observations regarding the lack of creosote on rock core suggest that the pore spaces are too small for creosote to penetrate.

Creosote stored in the bedrock can be either residual (immobile) or pooled (potentially mobile). As noted earlier in this section, residual creosote can occupy up to approximately 20% of pore space in fractures. Reynolds and Kueper (2002) define fractures as rough, planar openings in rock having any orientation and mechanical apertures (openings) generally less than 2000 microns (0.2 cm). In solution enhanced features having opening sizes in excess of 2000 microns, the residual saturation may be close to zero because of the lack of opportunity for capillary trapping; therefore the majority of the creosote stored in solution enhanced features would be pooled. The saturation within a DNAPL pool generally ranges from approximately 30% to 70% of pore space.

Values for the secondary and tertiary porosity for the Ramp Creek formation are not readily available; however, Worthington (1999) provides an estimate of the secondary porosity for Mississippian-aged carbonate rocks in the Mammoth Cave area of Kentucky of 0.03 percent. Because the tertiary porosity of the site bedrock is not well developed and appears limited to a small number of bedding planes containing anastomoses with apertures on the scale of a few inches or less, as well as occasional soil-filled grikes, it is estimated that the tertiary porosity is likely less than 1 percent.

Implications regarding the information presented above are:

- The solution porosity can store considerably more creosote than the secondary porosity, and it will be more likely to be pooled (potentially mobile) rather than residual.

- Since the secondary porosity is rather low (that is there are few fractures in this unit), a relatively small volume of creosote contained in this porosity could spread a long distance within the bedrock. In other words, just because creosote is encountered in a particular location, it doesn't necessarily mean there is a large volume.

- As described in Section 2.5, wells containing creosote have been routinely monitored for a number of years. Accumulated creosote is periodically removed from wells, and efforts are made to maintain creosote levels to within the sumps of those wells so equipped. The collected data are contained in Table 7. Graphs depicting the volume of creosote removed from wells in the recovery program are contained in Appendix D. Note that for selected wells during selected monitoring events, only a portion of the creosote contained in the well was removed due to waste disposal issues or a lack of significant thickness; therefore, the cumulative amounts of creosote shown on the graphs for such wells may represent an underestimate of their true yield. Nevertheless, a total of approximately 612 gallons of creosote has been removed from the bedrock through September 19, 2011. Though nearly half (46%) of the total 612 gallons recovered has been removed from one location (approximately 285 gallons from RW-4).

Creosote Recovery	Wells Where Observed
> 10 gallons	MW-24A, MW-27A, MW-39A, MW-48A, RW-3, RW-4, RW-5, MW-51A
1-10 gallons	MW-12D, MW-20D, MW-21D, MW-29B, RW-1, RW-2, RW-7
< 1 gallon, ongoing recovery	MW-36B
<1 gallon, no further recovery	MW-3D, MW-14D, MW-15D, MW-16D, MW-19D, MW-22D, MW-36C, RW-6

In total, creosote has historically accumulated in 24 bedrock wells (Figure 22). Of those, nine have produced less than one gallon and eight of those nine have stopped producing altogether (see adjacent table). With the exception of the MW-36B and C, these wells were installed early in the investigation program to screen only the top 15 feet of bedrock. Of the remaining 15 wells, eight are consistent producers (MW-24A, MW-27A, MW-39A, MW-48A, MW-51A, RW-3, RW-4, and RW-5), having produced

more than 10 gallons, and continue to produce.[3] Some of these wells are screened in the URC, some in the LRC, and those denoted with the prefix “RW” are screened across the entire Ramp Creek Formation.

4.2.2 Creosote Extent

The observed horizontal limits of creosote in the bedrock are depicted on Figure 22. The creosote observations include wells where creosote has accumulated, as well as intervals where creosote globules or films were observed during drilling (in return water or on rock core) or during packer testing (in discharge water or on packer-test apparatus. As is evident from the figure, creosote has migrated chiefly southeastward, southward, and southwestward from the former process area and is frequently pooled. Creosote has also migrated eastward from the former process area, and historically had been identified in Clear Creek in the form of occasional globules on the creek bottom. This occurrence prompted a remedial action designed to prevent creosote from discharging to the creek. The action consisted of installing a creek liner and associated creosote-collection system in the affected reach of creek in 2007. The location of the liner and collection system is shown on Figure 2. The collection system consists of three “interceptor trenches” installed into the shallow bedrock:

- One beneath the downstream end of the creek liner
- One along the stream bank adjacent to the liner, and
- One perpendicular to the creek trending west toward the access road

These trenches are routed to a common sump, the location of which is shown on Figure 2. Since the system was installed, no creosote has been observed in the creek or in the collection sump. More details regarding the liner system are contained in the *Remediation Work Plan* (ARCADIS, 2009). Neither free product creosote nor dissolved-phase concentrations have been observed at a cluster of three bedrock wells drilled on the opposite (east) side of the creek (MW-31A, B, and C).

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[3] MW-48A has only produced approximately 8 gallons and MW-51A has only produced just over 5 gallons; however based on their current accumulation rates, are expected to produce more than 10 gallons.

Vertically, the shallowest observations of creosote generally occur beneath the former process area, whereas observations at more distal locations tend to occur at greater depths within the formation. This does not mean that creosote occurs only in the shallow bedrock at the former process area. At monitoring well MW-29B, which is screened in the LRC, from 10 to 20 feet above the contact with the Borden Group, DNAPL is present. The deepest observation of creosote occurs at well MW-48A. At this well, creosote was not observed during drilling; but a creosote thickness of 2.25 feet was observed within the well four days after it was installed. MW-48A has a ten-foot-long screen, with the screen bottom set at the contact between the LRC and the underlying Borden Group. Using the depth to bedrock at this location (approximately 20 feet) and the depth to the base of the screen (70 feet), the creosote containing interval is between approximately 40 to 50 feet below the top of bedrock. There is no evidence that the creosote is able to penetrate the Borden Group.

It is important to note that the limits of creosote are difficult to pinpoint for several reasons. First, as is discussed later in this report, the migration pathways are complexly distributed and occupy only a small percentage of the bedrock volume. Secondly, there is frequently little-to-no evidence of creosote observed during drilling. A sheen is rarely seen on the return water during drilling, and sheens or creosote droplets are rarely seen on recovered rock core. At approximately 75% of the wells where creosote has historically accumulated at least once, there was no evidence of creosote observed during drilling. This observation suggests that the creosote is non-wetting to the limestone and is often flushed from the secondary and tertiary porosity containing it during drilling. These observations also indicate that the creosote is limited to secondary and tertiary (solution) porosity, and cannot invade the primary porosity of the rock.

4.2.3 Creosote Movement

Upon reaching the bedrock, moving creosote would spread out, following the slope of the bedrock surface, until it reached fractures that were sufficiently open for the creosote to enter. Given the persistent jointing of the rock, and the fact that a number of the joints have been widened by solution (forming grikes), it is expected that a creosote body would not have to travel a substantial distance along the bedrock surface before gaining entry. The fact that the bedrock bedding dips slightly means that open bedding planes periodically crop out at the bedrock surface as well. Such shallow bedding planes are also typically widened by solution in the shallow bedrock and would afford little resistance to creosote entry.

Once in the bedrock, the creosote would exploit the complex, interconnected pathways formed by the joints and open bedding planes. The vertical joints would allow creosote to move downward; however, several factors serve to limit the downward movement to within the Ramp Creek Formation:

- Most joints penetrate only one or several beds before they truncate on a bedding plane fracture.
- Joints tend to close with depth – even master joints that can penetrate multiple beds.
- Grikes also taper with depth, as the corrosivity of downward-moving groundwater diminishes rapidly as it contacts and dissolves the rock.
- The expected small aperture (width) of any joints in the Borden group and the very strong upward hydraulic gradient between the Borden Group and LRC combine to make the Borden Group an effective capillary barrier to the creosote.

As noted in Section 3.3, the predominant orientation of joints is east-west, with a secondary set of joints oriented north-south. Lateral movement of the creosote in the joints would be limited to these two orientations.

Although joints may be more likely to allow creosote to enter the bedrock, as creosote accumulates in joints, it will also move outward in the open bedding planes that intersect them. Conceptually, creosote in a bedding plane can move in any direction laterally. The actual direction of migration in a bedding plane will be affected by the bedding dip, the direction of the hydraulic gradient, the properties of the creosote body, and the orientations of interconnected, larger aperture regions in the bedding plane. In those bedding-plane fractures in the URC that have been widened by solution and contain anastomoses, creosote would be expected to migrate freely throughout the solution porosity where it is not clogged with sediment. The interplay between these myriad factors, coupled with the laterally discontinuous nature of the open bedding planes, results in a complex distribution of creosote in open bedding planes at the borehole and site scale.

In the solution porosity of the URC, another mechanism may influence creosote movement, namely turbulent flow. The frequent observed loss of drilling water, evidence of voids, and high groundwater velocities demonstrated by the dye traces conducted at the site indicate that turbulent flow of groundwater can occur. In a turbulent flow regime, droplets of creosote can be mobilized and transported with the

moving groundwater. Such mobilized creosote could be ejected from springs, or settle in low spots in the conduit network further downgradient, as turbulent-flow conditions subside. While turbulent flow could complicate creosote movement and distribution, the general absence of creosote in the creek and creek sediments suggests that this potential mode of transport is not significant in terms of delivering creosote to the land surface.

Integrating the above information with the observations of creosote made during drilling and at monitoring wells, reveals several modes of transport that appear to be at play. Creosote has moved predominantly southeastward, southward, and southwestward horizontally, as well as downward with distance from the former process area. This distribution is interpreted to result from the following:

- Southeastward and southward movement from the former process area: A combination of south-southeastward movement along solution-widened bedding planes (where the porosity appears to have formed along strike, which is aligned roughly N-S), and eastward movement along joints of the predominant (E-W oriented) joint set. The movement in these directions is likely aided by moving groundwater. As open bedding planes pinch out or become occluded with sediment, the creosote would be expected to move laterally until encountering an open joint, at which point it would move downward until a deeper, open bedding plane were encountered and the process would repeat itself, leading to a downward “stair-stepping” effect. It is possible that, given a strong enough upward hydraulic gradient, the creosote could move upward. While such upward movement has been documented in the literature, the observed increasing depth of creosote with distance from the source, coupled with the absence of creosote in Clear Creek (beneath which upward hydraulic gradients would be greatest) suggests that there are few if any joints that would allow upward movement, and where such pathways exist, the upward hydraulic gradients are not great enough to offset the downward driving force due to the density of the creosote. On the east side of Clear Creek, three factors combine to limit eastward movement. First, the direction of hydraulic gradient would generally reverse, making it more difficult for the creosote to continue moving eastward. Second, for creosote moving along bedding planes, eastward movement would require that the creosote move updip. Lastly, as creosote stair-steps downward, toward and beneath the valley wall and beneath the zone of karst weathering, joints and bedding planes will become tighter and opposing hydraulic gradients stronger. These factors will serve to limit the eastward movement of creosote on the east side of Clear Creek.

- Southwestward movement from the former process area: The southwestern component of creosote movement indicates that hydraulic gradients in the joints and bedding plane fractures are not great enough to completely arrest creosote movement in this direction, since this movement direction is generally against the hydraulic gradient (on the west side of the creek). Two processes are interpreted to be responsible for this direction of movement. The first is westward movement of creosote along the predominant joint orientation. While eastward movement of creosote in an E-W trending joint would be favored (on the west side of the creek) because groundwater would also be expected to be moving eastward toward the creek; westward movement could occur, particularly along solution-widened joints, where the strength of the hydraulic gradient needed to move water through the joint would be slight. The second process responsible for moving creosote westward is the local dip of the bedding. Again, in the solution-widened porosity, the strength of the hydraulic gradient would be slight and apparently is not great enough to arrest down-dip movement of creosote due to gravity. Similar to the case of eastward movement (above), with distance westward, bedding planes and joints would be expected to tighten with depth, serving to restrict further westward movement.

To date there is no clear evidence that the creosote is continuing to migrate. Creosote has not been observed in Clear Creek in appreciable amounts since the creek liner system was installed, and there have been no monitoring wells that were creosote-free for a long period of time and then had creosote appear. Nevertheless, the relatively high viscosity of the creosote would tend to cause it to move relatively slowly and increase the time required for a significant release volume that occurred over a protracted timeframe to reach its final distribution. For this site, the timescale of creosote migration could be on the order of decades.

5. Groundwater Quality

The creosote in the subsurface, discussed previously, is being slowly dissolved by groundwater. As a result, IDEM's groundwater closure goals for several compounds contained in the creosote have been exceeded at a number of monitoring locations. This section discussed the nature and extent of dissolved constituents of concern (COCs) at the Site.

5.1 COCs Detected in Groundwater

The identified COCs detected in groundwater at the Site are organic compounds associated with coal-tar creosote and are presented on Table 1. The compounds include:

- The BTEX group of volatile organic compounds (benzene, toluene, ethylbenzene and xylenes), of which only benzene is commonly detected above IDEM closure goals. Analytical results for groundwater samples submitted for BTEX analysis are provided in Table 11.
- The group of 19 SVOCs known as polycyclic aromatic hydrocarbons (PAHs). The PAH compounds are the COCs most commonly detected above IDEM closure goals. The PAH compound naphthalene, which is among the most soluble and mobile in groundwater, is detected most often and at the highest concentrations of all COCs. Analytical results for groundwater samples submitted for SVOC analysis are provided in Table 12.
- A group of seven phenolic SVOCs. Of these, the compound pentachlorophenol is detected above IDEM closure goals most frequently. The highest concentrations of organic COCs occur where creosote is known to be present, evidence that the dissolve phase COCs are generated from dissolution of the creosote. Lower concentrations are detected at some wells where there is no indication that creosote has been physically present. At these locations, the suite of detected COCs is often smaller, yet the principal components (e.g., benzene, naphthalene, phenanthrene, 2-methylnaphthalene, fluoranthene) are the same as those detected in the presence of creosote, and thus are clear indicators of a creosote source.

Two other SVOCs, which belong to a class of chemicals known as “phthalates”, are occasionally detected in groundwater samples: butylbenzylphthalate and bis(2-ethlyhexyl)phthalate. Of these two compounds, only bis(2-ethlyhexyl)phthalate has been detected periodically above the residential closure goals. These compounds are used as plasticizers in plastics, can be leached from plastics by water, and are also common laboratory contaminants. They are not noted as compounds contained in creosote or among those compounds found at wood-treating sites (USEPA, 1992) Furthermore, these chemicals are commonly detected in samples collected from wells that do not contain dissolved creosote compounds. Based on this information, phthalates are not considered to be COCs for the Site.

The metals arsenic and lead have also been identified as COCs; however, there is no apparent correlation of metals detections with creosote or other known site-related impacts. The analytical results for groundwater samples submitted for analysis of arsenic and lead concentrations are provided in Table 11. Arsenic and lead concentrations that exceed closure goals are distributed sporadically throughout the Site with no clear spatial pattern, and have been detected in background locations such as MW-31C and MW-35C. Concentrations that exceed closure goals, moreover, are far more common in total (unfiltered) samples than dissolved (filtered samples), and are not consistently detected in consecutive sampling events. These observations suggest that the low levels of lead and arsenic detected in groundwater at the Site are naturally occurring, not derived from a Site-related source.

5.2 Distribution of Organic COCs in Groundwater

The distribution of organic COCs is tied directly to the distribution of creosote, discussed in Section 4, for creosote is the clear source of the dissolved COCs. Figure 22 shows locations where one or more organic COC has been detected above the residential and non-residential IDEM closure goals, or where creosote is present. As described in Section 4, the distribution of creosote follows several trends:

- Creosote is shallowest in the principal source area, the former operations area immediately north of Country Club Road. In this region, either residual or pooled creosote is present in various locations expected in the subsurface down into the LRC.
- South of Country Club Road and along Clear Creek, creosote occurs deeper in the subsurface, starting in the base of the URC and extending through the LRC. It is not present in shallow bedrock or the alluvium here.
- To the west and southwest of the principal source area, creosote is only found in the LRC.

Impacts to groundwater generally follow the spatial trends of creosote, with only minor deviations that can be explained by dissolved phase transport occurring independent of creosote migration. Because groundwater flow at the Site is generally convergent toward Clear Creek, transport of dissolved impacts from the body of creosote does not expand the footprint of impacts significantly beyond the creosote footprint. As such, the extent of dissolved phase impacts is delineated in the same areas that creosote is delineated; e.g.:

- East of Clear Creek, the MW-31 cluster, the MW-52A, MW-41, the MW- 42 cluster bound the eastern extent of dissolved phase impacts.
- To the west and northwest of the source area, the MW-35 cluster, well MW-44 and the MW-45 cluster bound the northwest extent of dissolved phase impacts.
- To the southwest, samples from the perimeter wells (well cluster MW-53, well cluster MW-50 and well MW-47A) do not contain concentrations of dissolved COCs that exceed closure goals.

Nearly all wells with organic COC concentrations that exceed closure goals either contain creosote, have done so previously, or are in a region of the Site where creosote has been identified nearby. Dissolved-phase transport of COCs a significant distance from the creosote source does not appear to occur, with the possible exception of the southernmost wells at the Site. Exceedances of COCs at MW-28B and MW-43A, in the southeast, may be the result of dissolve phase transport, since no DNAPL has been identified in that vicinity. Note that a tracer study (discussed in Section 3) documented a flow connection from the source area to MW-28B; thus efficient transport of dissolved COCs is quite plausible. Detections at the MW-37B and MW 46A (southwest corner of the Site), may also be the result of dissolved transport from a NAPL source to the north. However, in both of these instances (the southeast and southwest), it cannot be ruled out that NAPL has migrated into the vicinity of these monitoring wells, but has not been directly observed.

While groundwater from the former process area was traced to several small springs that discharge to Clear Creek near the MW-5 well pair and MW-34A, the quality of the spring water has not yet been characterized.

6. Summary

CSX Transportation has conducted multiple investigations to characterize the nature, extent and movement of the free product creosote on-site and off-site associated with this project. Based on the data to date, there appears to be minimal or no risk associated with the creosote impacts at the Site. CSX Transportation will continue to work with the IDEM to ensure there is no risk to human health and the environment from the residual creosote from the former operations of the Indiana Creosoting Company. CSX Transportation anticipates developing the remedial action plan in the near future and presenting that plan to the IDEM.

7. References

ARCADIS Geraghty & Miller, Proposed Phase II Investigation Work Plan. August 1999.

ARCADIS. Phase II Investigation Report. CSX Transportation, Bloomington, Indiana. January 2003

ARCADIS. Remediation Work Plan. CSX Transportation, Bloomington, Indiana. December 2009

Ault, C.H., and Sullivan, D.M. 1982. Faulting in Southwestern Indiana: U.S. Nuclear Regulatory Commission, NUREG/CR2908, 34-44 p.

Ault, C. H., D. Harper, C. R. Smith, and M. A. Wright. 1985. Faulting and jointing in near surface mines of southwestern Indiana. Prepared by the Indiana Geological Survey for the U.S. Nuclear Regulatory Commission, Washington, D.C. NUREG/CR-4117 RA.

Driscoll F.G. 1986. Groundwater and Wells Second Edition. Johnson Filtration Systems Inc, St. Paul, MN. p 75.

Feenstra, S. and J.A. Cherry. (1988) Subsurface Contamination by Dense Non-Aqueous Phase Liquids (DNAPL) Chemicals, International Groundwater Symposium, International Association of Hydrogeologists, Halifax, N.S.

Fenelon J.M., Bobay K.E., and others. 1994. Hydrogeologic Atlas of Aquifers in Indiana. Water-Resources Investigations Report 92-4142. United Stated Geological Survey.

Hartke, E.J., and H. H. Gray, 1989. Geology for Environmental Planning in Monroe County, Indiana, Geological Survey Special Report 47. Indiana Dept. of Natural Resources.

Hasenmueller, W. A., Estell, C. M., Keith, B. D., and Thompson, T. A., 2008, Bedrock geologic map of Monroe County, Indiana: Indiana Geological Survey Miscellaneous Map 73.

Indiana Department of Environmental Management. Voluntary Remediation Program Resource Guide. July 1996.

Maier, Randal D., 2003. Unconsolidated aquifer systems of Monroe County, Indiana. Indiana Dept. of Natural Resources, Div. of Water. Map with text.

Pankow, J.F. and Cherry, J.A. (editors), 1996. Chlorinated Solvents and Other DNAPLs in Groundwater. Waterloo Press, Portland, OR.

Poulsen, M. and Kueper, B.H., 1992. A field experiment to study the behavior of tetrachloroethylene in unsaturated porous media. Environmental Science and Technology, Vol. 26, No. 5, pp. 889-895.

Powell, R.L., 1976, Some Geomorphic and Hydrologic Implications of Jointing in Carbonate Strata of Mississippian Age in South-Central Indiana, Ph.D. thesis, Purdue University

Rexroad, C. B. , 1986a, Harrodsburg Limestone, in Shaver, R. H. , and others, Compendium of Paleozoic rock-unit stratigraphy in Indiana A revision: Indiana Geological Survey Bulletin 59.

Rexroad, C. B. , 1986b, Borden Group, in Shaver, R. H. , and others, Compendium of Paleozoic rock-unit stratigraphy in Indiana A revision: Indiana Geological Survey Bulletin 59

Reynolds, D.A. and Kueper, B.H., 2002. Numerical examination of the factors controlling DNAPL migration through a single fracture. Journal of Ground Water, Vol. 40, No. 4, pp. 368-377.

Thomas, J.A., Wingard, R.C., and Kempf, P.A., 1981, Soil Survey of Monroe County, Indiana: U.S. Department of Agriculture Soil Conservations Service.

Thompson et al, 2007. Geologic Map of Bloomington 7.5 minute quadrangle, Indiana. 2007.

U.S. Department of Agriculture. Soil Survey of Monroe County, Indiana. May 1981.

United States Geologic Survey. Bloomington Quadrangle 7.5 Minute Series Topographic Map. 1990.

Table 1. Site Constituent of Concern List
Former Indiana Creosoting Company
Bloomington, Indiana

	Yes	Closure Limits mg/L Industrial	mg/L Residential	mg/L Laboratory Run Detection Limit
Polycyclic Aromatic Hydrocarbons				
Acenaphthene	X	6.13	1.82	**Note 1**
Acenaphthylene	X	0.73	0.071	**Note 1**
Anthracene	X	31	9.12	**Note 1**
Benzo(a)anthracene	X	0.01	0.0001	**Note 1**
Benzo(a)pyrene	X	0.01	0.0002	**Note 1**
Benzo(b)fluoranthene	X	0.01	0.0002	**Note 1**
Benzo(g,h,i)perylene	X	***	***	**Note 1**
Benzo(k)fluoranthene	X	0.039	0.0002	**Note 1**
Carbazole	X	0.14	0.043	**Note 1**
Chrysene	X	0.392	0.0002	**Note 1**
Dibenzo(a,h)anthracene	X	0.01	0.0003	**Note 1**
Dibeznofuran	X	0.2	0.015	**Note 1**
Fluoranthene	X	0.818	0.243	**Note 1**
Fluorene	X	4.09	1.22	**Note 1**
Indeno(123-c,d)pyrene	X	0.01	0.0	**Note 1**
2-Methlynaphthalene	X	0.41	0.031	**Note 1**
Naphthalene	X	4.09	1.22	**Note 1**
Phenanthrene	X	0.310	0.023	**Note 1**
Pyrene	X	3.07	0.912	**Note 1**
BTEX				
Benzene	X	0.099	0.005	**0.005**
Toluene	X	10.2	0.7	**0.7**
Ethylbenzene	X	20.4	1	**1**
Exylenes	X	204	10	**1**
Phenolic Compounds				
2,4-Dimethylphenol	X	2	0.73	**Note 1**
2-Methylphenol (o-cresol)	X	5.11	1.52	**Note 1**
3-Methylphenol (m-cresol)	X	5.11	1.52	**Note 1**
4-Methylphenol (p-cresol)	X	5.11	1.52	**Note 1**
Pentachlorophenol	X	0.05	0.001	**Note 1**
2,4-Dichlorophenol	X	0.31	0.11	**Note 1**
Phenol	X	12	3.65	**Note 1**
2,4,6-Trichlorophenol	X	0.26	0.01	**Note 1**
Phthalates				
Butylbenzylphthalate	X	20	0.1	**Note 1**
Bis(2-ethylhexy)phthalate	X	0.204	0.006	**Note 1**
Metals				
Arsenic	X	0.05	0.05	**0.005**
Lead	X	0.015	0.015	**0.005**

Closure Limits are the IDEM VRP Industrial/Residential Closure Values

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Table 2. Well Construction Details
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID Monitoring Wells	Unit Screened	Date Completed	Northing Coordinate (ft.)	Easting Coordinate (ft.)	Measuring Point (TOC) Elev. (ft. AMSL)	Ground Surface Elev. (ft. AMSL)	TOC (manhole and protop) (ft. ags)	Depth Below Ground Surface (ft. bgs)	Depth to Screened or Open Interval (ft. bgs)		Depth to Screened Interval (from TOC)		Elev. of Screened Interval (ft. AMSL)		Screen or Open-Hole Length (ft.)	Well Diam. (in.)	Casing/Screen Type	Screen Slot Size (in.)	Sump Length (ft.)	Estimated Hydraulic Conductivity (K) (ft/day)	K Test Method
									Top	Bottom	Top	Bottom	Top	Bottom							
MW-1S	Alluvium	2/21/1991	1417895.23	3108446.63	700.84	697.8	3.04	10.0	5.0	10.0	8.0	13.0	692.8	687.8	5.0	2	SS	0.010	--	--	--
MW-1D	URC	2/8/1991	1417902.94	3108445.62	700.07	698.0	2.04	19.5	13.0	19.5	15.0	21.5	685.0	678.5	6.5	2	SS	0.010	--	0.88	SL
MW-2S	Alluvium	2/12/1991	1416988.19	3108609.77	696.04	692.2	3.86	6.0	1.0	6.0	4.9	9.9	691.2	686.2	5.0	2	SS	0.010	--	--	--
MW-2D	URC	2/13/1991	1416994.33	3108610.85	694.34	692.4	1.97	15.5	10.5	15.5	12.5	17.5	681.9	676.9	5.0	2	SS	0.010	--	0.6	SL
MW-3S (Abnd)	Alluvium	2/14/1991	10007.97	10255.90	692.89	Abnd	4.15	6.0	1.0	6.0	5.2	10.2	--	--	5.0	2	SS	0.010	--	--	--
MW-3D (Abnd)	URC	2/13/1991	10008.22	10265.13	691.65	Abnd	3.50	13.5	8.5	13.5	12.0	17.0	--	--	5.0	2	SS	0.010	--	--	--
MW-4S	Alluvium	2/19/1991	1415996.15	3108486.15	690.80	687.6	3.24	7.5	2.5	7.5	5.7	10.7	685.1	680.1	5.0	2	SS	0.010	--	--	--
MW-4D	URC	2/20/1991	1416009.91	3108488.22	690.30	687.4	2.87	16.0	11.0	16.0	13.9	18.9	676.4	671.4	5.0	2	SS	0.010	--	--	--
MW-5S	Alluvium	2/19/1991	1415833.95	3108382.98	690.67	688.0	2.72	10.0	5.0	10.0	7.7	12.7	683.0	678.0	5.0	2	SS	0.010	--	5.0	SL
MW-5D	URC	2/19/1991	1415844.48	3108389.68	690.35	687.7	2.67	20.0	15.0	20.0	17.7	22.7	672.7	667.7	5.0	2	SS	0.010	--	0.14	SL
MW-6S	Alluvium	2/20/1991	1415629.34	3108218.04	691.37	687.6	3.79	6.5	1.5	6.5	5.3	10.3	686.1	681.1	5.0	2	SS	0.010	--	--	--
MW-6D	URC	2/20/1991	1415638.46	3108218.93	690.54	687.8	2.78	16.0	11.0	16.0	13.8	18.8	676.8	671.8	5.0	2	SS	0.010	--	--	--
MW-7S (Abnd)	Alluvium	2/15/1991	10020.80	10048.82	696.93	Abnd	2.84	10.5	5.5	10.5	8.3	13.3	--	--	5.0	2	SS	0.010	--	--	--
MW-7D (Abnd)	URC	2/18/1991	10029.07	10050.68	696.71	Abnd	3.05	20	15.0	20.0	18.1	23.1	--	--	5.0	2	SS	0.010	--	--	--
MW-8S	Alluvium	10/18/1995	1416253.66	3108479.08	691.66	688.6	3.06	6.0	2.5	6.0	5.6	9.1	686.1	682.6	3.5	2	PVC	0.010	--	--	--
MW-8D	URC	10/18/1995	1416248.55	3108478.08	690.63	688.6	1.98	13.0	8.0	13.0	10.0	15.0	680.6	675.6	5.0	2	PVC	0.010	--	--	--
MW-9	Alluvium	9/25/2000	1417920.79	3108419.90	701.33	698.4	2.96	8.0	3.0	8.0	6.0	11.0	695.4	690.4	5.0	2	PVC	0.010	--	--	--
MW-10	Alluvium	9/25/2000	1417795.81	3108477.12	699.66	696.5	3.18	8.0	3.0	8.0	6.2	11.2	693.5	688.5	5.0	2	PVC	0.010	--	--	--
MW-11S	Alluvium	9/25/2000	1417810.83	3108571.69	700.06	696.5	--	8.0	3.0	8.0	--	--	693.5	688.5	5.0	0.5	PVC	0.010	--	--	--
MW-11D	URC	9/25/2000	1417791.13	3108601.61	699.75	696.8	2.98	19.1	9.1	19.1	12.1	22.1	687.7	677.7	10.0	2	PVC	0.010	--	--	--
MW-12S	Alluvium	10/20/2000	1416597.02	3108586.20	692.76	689.7	3.09	7.0	2.0	7.0	5.1	10.1	687.7	682.7	5.0	2	PVC	0.010	--	4.9	SL
MW-12D	URC	9/25/2000	1416604.42	3108583.74	692.91	689.8	3.13	17.3	7.3	17.3	10.4	20.4	682.5	672.5	10.0	2	PVC	0.010	--	18.1	SL
MW-13	Alluvium	10/20/2000	1416404.54	3108521.53	692.47	689.0	3.42	7.0	2.0	7.0	5.4	10.4	687.0	682.0	5.0	2	PVC	0.010	--	--	--
MW-14S	Alluvium	7/30/2003	1416679.48	3108559.76	694.15	690.9	3.26	5.75	3.0	5.75	6.3	9.0	687.9	685.1	2.8	2	PVC	0.010	--	--	--
MW-14D	URC	8/5/2003	1416678.52	3108555.85	693.80	690.8	2.97	16.5	10.5	16.5	13.5	19.5	680.3	674.3	6.0	2	PVC	0.010	--	--	--
MW-15S (Abnd)	Alluvium	7/31/2003	10065.06	10112.34	695.06	Abnd	3.12	6.0	3.0	6.0	6.1	9.1	--	--	3.0	2	PVC	0.010	--	--	--
MW-15D	URC	7/31/2003	1416544.00	3108433.43	694.81	691.7	3.07	17.0	12.0	17.0	15.1	20.1	679.7	674.7	5.0	2	PVC	0.010	--	--	--
MW-16S	Alluvium	7/31/2003	1416626.73	3108435.56	695.12	691.9	3.22	6.3	3.3	6.3	6.5	9.5	688.7	685.7	3.0	2	PVC	0.010	--	--	--
MW-16D	URC	7/31/2003	1416623.15	3108432.47	694.91	691.7	3.16	17.0	11.0	16.0	14.2	19.2	680.7	675.7	5.0	2	PVC	0.010	--	--	--
MW-17S	Alluvium	7/31/2003	1416407.52	3108396.27	694.42	691.6	2.86	8.0	3.0	8.0	5.9	10.9	688.6	683.6	5.0	2	PVC	0.010	--	67.0	SL
MW-17D	URC	8/4/2003	1416406.86	3108401.94	694.41	691.2	3.26	16.5	14.0	19.0	17.3	22.3	677.2	672.2	5.0	2	PVC	0.010	--	4.20E-04	RE
MW-18S	Alluvium	8/1/2003	1416232.85	3108430.26	692.02	688.7	3.29	7.0	4.0	7.0	7.3	10.3	684.7	681.7	3.0	2	PVC	0.010	--	42.0	SL
MW-18D	URC	8/1/2003	1416233.06	3108435.96	691.55	688.7	2.89	17.0	11.5	16.5	14.4	19.4	677.2	672.2	5.0	2	PVC	0.010	--	--	--
MW-19S	Alluvium	7/31/2003	1416179.13	3108493.41	691.06	687.7	3.36	5.0	2.0	5.0	5.4	8.4	685.7	682.7	3.0	2	PVC	0.010	--	--	--
MW-19D	URC	7/31/2003	1416179.42	3108486.81	691.29	688.0	3.29	17.0	11.5	16.5	14.8	19.8	676.5	671.5	5.0	2	PVC	0.010	--	--	--
MW-20S	Alluvium	10/24/2003	1416395.66	3108643.90	691.16	690.8	0.40	5.0	4.0	5.0	4.4	5.4	686.8	685.8	1.0	2	PVC	0.010	--	--	--
MW-20D	URC	10/27/2003	1416390.73	3108640.74	691.54	688.7	2.88	23.0	8.0	23.0	10.9	25.9	680.7	665.7	15.0	2	PVC	0.010	--	0.5	SL
MW-21S	Alluvium	10/24/2003	1416315.74	3108721.48	688.99	686.8	2.24	4.0	3.0	4.0	5.2	6.2	683.8	682.8	1.0	2	PVC	0.010	--	--	--
MW-21D	URC	10/27/2003	1416311.97	3108721.74	688.40	686.3	2.12	23.0	8.0	23.0	10.1	25.1	678.3	663.3	15.0	2	PVC	0.010	--	2.95	SL
MW-22D	URC	10/27/2003	1416204.39	3108689.19	688.35	685.2	3.11	23.0	18.0	23.0	21.1	26.1	667.2	662.2	5.0	2	PVC	0.010	--	--	--
MW-23D	URC	10/22/2003	1416052.50	3108600.72	687.96	684.7	3.28	21.0	16.0	21.0	19.3	24.3	668.7	663.7	5.0	2	PVC	0.010	--	0.091	SL
MW-24A	URC	7/24/2008	1416156.23	3108668.58	687.89	684.9	3.01	24.0	17.0	22.0	20.0	25.0	667.9	662.9	5.0	2	PVC	0.010	2.0	0.025	SL
MW-25A	URC	7/28/2008	1416376.60	3108504.38	692.65	689.5	3.12	20.5	8.5	18.5	11.6	21.6	681.0	671.0	10.0	2	PVC	0.010	2.0	--	--
MW-26A	LRC	8/5/2008	1416002.33	3108319.28	692.00	689.4	2.56	39.0	32.0	37.0	34.6	39.6	657.4	652.4	5.0	2	PVC	0.010	2.0	1.50E-05	RE
MW-27A	URC	8/7/2008	1416165.25	3108775.04	689.81	686.0	3.84	31.0	19.0	29.0	22.8	32.8	667.0	657.0	10.0	2	PVC	0.010	2.0	7.4	SL
MW-28A	BOR	1/20/2009	1415412.81	3108678.45	692.54	689.1	3.43	62.0	47.0	62.0	50.4	65.4	642.1	627.1	15.0	2	PVC	0.010	--	5.30E-05	RE
MW-28B	URC	1/20/2009	1415408.71	3108681.93	692.28	688.9	3.40	22.71	17.7	22.7	21.1	26.1	671.2	666.2	5.0	2	PVC	0.010	--	67.4	ST
MW-28C	LRC	1/20/2009	1415415.92	3108674.70	692.71	689.5	3.23	35.70	25.7	35.7	28.9	38.9	663.8	653.8	10.0	2	PVC	0.010	--	1.60E-03	RE
MW-29A	BOR	2/4/2009	1416557.65	3108416.42	696.28	692.7	3.59	72.00	57.0	72.0	60.6	75.6	635.7	620.7	15.0	2	PVC	0.010	--	1.30E-04	RE
MW-29B	LRC	2/6/2009	1416569.63	3108416.83	696.23	692.7	3.56	39.00	29.0	39.0	32.6	42.6	663.7	653.7	10.0	2	PVC	0.010	--	3.30E-04	RE

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Table 2. Well Construction Details
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID Monitoring Wells	Unit Screened	Date Completed	Northing Coordinate (ft.)	Easting Coordinate (ft.)	Measuring Point (TOC) Elev. (ft. AMSL)	Ground Surface Elev. (ft. AMSL)	TOC (manhole and protop) (ft. ags)	Depth Below Ground Surface (ft. bgs)	Depth to Screened or Open Interval (ft. bgs)		Depth to Screened Interval (from TOC)		Elev. of Screened Interval (ft. AMSL)		Screen or Open-Hole Length (ft.)	Well Diam. (in.)	Casing/Screen Type	Screen Slot Size (in.)	Sump Length (ft.)	Estimated Hydraulic Conductivity (K) (ft/day)	K Test Method
									Top	Bottom	Top	Bottom	Top	Bottom							
MW-30A	URC	10/14/2009	1415861.58	3108297.80	691.39	688.6	2.80	30.50	23.0	28.0	25.8	30.8	665.6	660.6	5.0	2	PVC	0.010	2.5	11.7	SL
MW-30B	LRC	10/16/2009	1415872.70	3108297.95	691.58	688.8	2.80	46.00	38.5	43.5	41.3	46.3	650.3	645.3	5.0	2	PVC	0.010	2.5	1.40E-04	RE
MW-31A	URC	10/20/2009	1416532.35	3108915.72	692.88	690.6	2.29	24.00	11.5	21.5	13.8	23.8	679.1	669.1	10.0	2	PVC	0.010	1.2	7.97	SL
MW-31B	BOR	10/23/2009	1416537.55	3108887.52	692.55	689.4	3.18	60.00	45.0	60.0	48.2	63.2	644.4	629.4	15.0	2	PVC	0.010	--	1.40E-04	RE
MW-31C	URC	10/26/2009	1416546.32	3108903.73	692.80	690.0	2.77	35.40	27.9	32.9	30.7	35.7	662.1	657.1	5.0	2	PVC	0.010	2.5	5.60E-05	RE
MW-32A	URC	10/28/2009	1415058.39	3108543.40	690.51	687.3	3.17	24.00	21.0	24.0	24.2	27.2	666.3	663.3	3.0	2	PVC	0.010	--	56.0	ST
MW-33A	LRC	11/4/2009	1415561.51	3108934.06	703.07	703.2	-0.16	50.00	40.0	50.0	39.8	49.8	663.2	653.2	10.0	2	PVC	0.010	--	--	--
MW-33B	BOR	11/6/2009	1415562.86	3108944.16	704.53	704.8	-0.25	70.00	55.0	70.0	54.8	69.8	649.8	634.8	15.0	2	PVC	0.010	--	--	--
MW-33C	URC	11/9/2009	1415555.16	3108940.00	704.68	705.1	-0.37	35.00	20.0	35.0	19.6	34.6	685.1	670.1	15.0	2	PVC	0.010	--	--	--
MW-34A	URC	11/18/2009	1415520.15	3108236.87	688.01	685.2	2.83	27.00	17.0	27.0	19.8	29.8	668.2	658.2	10.0	2	PVC	0.010	--	7.35	SL
MW-35A	URC	2/9/2010	1416575.29	3108250.78	706.06	702.8	3.24	26.00	16.00	26.0	19.2	29.2	686.8	676.8	10.0	2	PVC	0.010	--	13.62	SL
MW-35B	URC	2/11/2010	1416566.13	3108247.47	706.37	703.1	3.23	27.00	24.00	27.0	27.2	30.2	679.1	676.1	3.0	2	PVC	0.010	--	55.14	SL
MW-35C	LRC	2/11/2010	1416566.33	3108247.65	706.38	703.1	3.24	45.00	31.50	45.0	34.7	48.2	671.6	658.1	13.5	2	PVC	0.010	--	8.10E-06	RE
MW-36A	URC	2/15/2010	1415933.13	3108183.00	700.44	697.1	3.35	24.50	19.50	24.5	22.9	27.9	677.6	672.6	5.0	2	PVC	0.010	--	15.69	SL
MW-36B	URC	2/15/2010	1415933.15	3108183.40	700.45	697.1	3.36	34.00	27.00	32.0	30.4	35.4	670.1	665.1	5.0	2	PVC	0.010	2.0	0.52	SL
MW-36C	LRC	2/17/2010	1415923.00	3108180.16	700.85	697.6	3.30	60.00	41.00	56.0	44.3	59.3	656.6	641.6	15.0	2	PVC	0.010	4.0	1.40E-06	RE
MW-37A	URC	2/18/2010	1415245.86	3108190.35	687.29	684.4	2.90	17.00	12.00	17.0	14.9	19.9	672.4	667.4	5.0	2	PVC	0.010	--	26.45	SL
MW-37B	URC	2/18/2010	1415245.94	3108190.15	687.23	684.4	2.84	32.00	22.00	32.0	24.8	34.8	662.4	652.4	5.0	2	PVC	0.010	--	13.85	SL
MW-37C	LRC	9/7/2011	Pending Survey Data					46.00	34.00	44.0	34.0	44.0	Pending Survey Data		10.0	2	PVC	0.010	2.0	--	--
MW-38A	URC	3/22/2010	1415995.39	3108849.97	700.99	698.2	2.80	32.00	25.00	30.0	27.8	32.8	673.2	668.2	5.0	2	PVC	0.010	2.0	35.65	SL
MW-38B	URC	3/23/2010	1416000.65	3108844.61	700.55	697.7	2.83	32.00	25.00	30.0	27.8	32.8	672.7	667.7	5.0	2	PVC	0.010	2.0	25.6	SL
MW-38C	BOR	3/26/2010	1415993.30	3108824.45	700.20	697.4	2.77	65.00	50.00	65.0	52.8	67.8	647.4	632.4	15.0	2	PVC	0.010	--	6.60E-05	RE
MW-38D	LRC	3/29/2010	1415976.60	3108839.29	700.37	697.7	2.66	47.50	35.50	45.5	38.2	48.2	662.2	652.2	10.0	2	PVC	0.010	2.0	8.70E-06	RE
MW-39A	URC	3/31/2010	1416229.31	3108891.16	694.06	694.4	-0.32	38.00	28.00	33.0	27.7	32.7	666.4	661.4	5.0	2	PVC	0.010	5.0	2.80E-05	RE
MW-39B	URC	3/30/2010	1416220.07	3108890.89	693.96	694.2	-0.23	29.00	17.00	27.0	16.8	26.8	677.2	667.2	10.0	2	PVC	0.010	2.0	8.25	SL
MW-40A	LRC	4/5/2010	1416871.16	3108552.33	694.36	692.1	2.30	46.00	29.00	44.0	31.3	46.3	663.1	648.1	15.0	2	PVC	0.010	2.0	0.045	SL
MW-40B	URC	4/6/2010	1416863.82	3108558.79	694.77	692.2	2.61	26.50	16.50	26.5	19.1	29.1	675.7	665.7	10.0	2	PVC	0.010	--	0.4	SL
MW-40C	URC	4/6/2010	1416863.82	3108558.79	694.78	692.2	2.62	13.50	8.50	13.5	11.1	16.1	683.7	678.7	5.0	2	PVC	0.010	--	2.15	SL
MW-41A	URC	11/3/2010	1415966.23	3109013.23	702.57	699.5	3.04	33.00	23.00	33.0	26.0	36.0	676.5	666.5	10.0	2	PVC	0.010	--	--	--
MW-42A	URC	11/4/2010	1416196.24	3109030.66	696.11	696.7	-0.56	36.00	26.00	36.0	25.4	35.4	670.7	660.7	10.0	2	PVC	0.010	--	--	--
MW-42B	LRC	11/8/2010	1416191.14	3109029.87	696.06	696.7	-0.59	46.00	36.00	46.0	35.4	45.4	660.7	650.7	10.0	2	PVC	0.010	--	--	--
MW-43A	URC	11/9/2010	1415359.16	3018710.84	690.93	688.1	2.87	26.00	16.00	26.0	18.9	28.9	672.1	662.1	10.0	2	PVC	0.010	--	--	--
MW-44A	URC	11/12/2010	1416863.13	3108311.75	704.46	701.5	2.92	25.00	15.00	25.0	17.9	27.9	686.5	676.5	10.0	2	PVC	0.010	--	--	--
MW-45A	LRC	11/16/2010	1416234.47	3108239.05	700.80	698.1	2.70	56.00	46.00	56.0	48.7	58.7	652.1	642.1	10.0	2	PVC	0.010	--	--	--
MW-45B	LRC	11/16/2010	1416234.49	3108239.03	700.76	698.1	2.66	40.00	30.00	40.0	32.7	42.7	668.1	658.1	10.0	2	PVC	0.010	--	--	--
MW-45C	URC	11/17/2010	1416230.41	3108239.23	700.59	698.4	2.17	22.00	12.00	22.0	14.2	24.2	686.4	676.4	10.0	2	PVC	0.010	--	--	--
MW-46A	URC	11/18/2010	1415229.64	3108035.77	688.81	686.8	2.06	36.00	24.00	34.0	26.1	36.1	662.8	652.8	10.0	2	PVC	0.010	2.0	--	--
MW-47A	URC	11/22/2010	1415356.15	3108185.27	683.38	680.8	2.60	30.00	20.00	30.0	22.6	32.6	660.8	650.8	10.0	2	PVC	0.010	--	--	--
MW-48A	BOR	1/6/2011	1415765.34	3108018.31	708.53	709.2	-0.62	72.00	60.00	70.0	59.4	69.4	649.2	639.2	10.0	2	PVC	0.010	2.0	--	--
MW-48B	LRC	1/6/2011	1415765.37	3108018.59	708.52	709.2	-0.63	53.00	38.00	53.0	37.4	52.4	671.2	656.2	15.0	2	PVC	0.010	--	--	--
MW-49A	LRC	7/28/2011	1417901.17	3108296.62	707.93	705.0	2.93	62.00	50.00	60.0	52.9	62.9	655.0	645.0	10.0	2	PVC	0.010	2.0	--	--
MW-49B	URC	7/28/2011	1417901.17	3108296.62	707.90	705.0	2.90	35.00	25.00	35.0	27.9	37.9	680.0	670.0	10.0	2	PVC	0.010	--	--	--
MW-49C	URC	7/28/2011	1417896.35	3108296.87	708.01	705.0	3.01	22.00	12.00	22.0	15.0	25.0	693.0	683.0	10.0	2	PVC	0.010	--	--	--
MW-50A	LRC	8/3/2011	1414987.03	3107235.43	697.53	698.0	-0.47	72.00	60.00	70.0	59.5	69.5	638.0	628.0	10.0	2	PVC	0.010	2.0	--	--
MW-50B	LRC	8/3/2011	1414987.03	3107235.43	697.54	698.0	-0.46	55.00	45.00	55.0	44.5	54.5	653.0	643.0	10.0	2	PVC	0.010	--	--	--
MW-51A	LRC	8/8/2011	1415523.62	3108065.31	694.59	691.9	2.69	57.00	43.00	53.0	45.7	55.7	648.9	638.9	10.0	2	PVC	0.010	4.0	--	--
MW-51B	URC	8/9/2011	1415519.24	3108062.55	694.66	691.8	2.86	29.00	17.00	27.0	19.9	29.9	674.8	664.8	10.0	2	PVC	0.010	2.0	--	--
MW-52A	URC	8/11/2011	1415206.05	3108841.93	709.63	710.1	-0.47	48.00	36.00	46.0	35.5	45.5	674.1	664.1	10.0	2	PVC	0.010	2.0	--	--
MW-53A	LRC	9/1/2011	Pending Survey Data				0.00	99.00	87.00	97.0	87.0	97.0	Pending Survey Data		10.0	2	PVC	0.010	2.0	--	--
MW-53B	LRC	9/1/2011	Pending Survey Data				0.00	77.00	67.00	77.0	67.0	77.0	Pending Survey Data		10.0	2	PVC	0.010	--	--	--

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Table 2. Well Construction Details
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID Monitoring Wells	Unit Screened	Date Completed	Northing Coordinate (ft.)	Easting Coordinate (ft.)	Measuring Point (TOC) Elev. (ft. AMSL)	Ground Surface Elev. (ft. AMSL)	TOC (manhole and protop) (ft. ags)	Depth Below Ground Surface (ft. bgs)	Depth to Screened or Open Interval (ft. bgs)		Depth to Screened Interval (from TOC)		Elev. of Screened Interval (ft. AMSL)		Screen or Open-Hole Length (ft.)	Well Diam. (in.)	Casing/Screen Type	Screen Slot Size (in.)	Sump Length (ft.)	Estimated Hydraulic Conductivity (K) (ft/day)	K Test Method
									Top	Bottom	Top	Bottom	Top	Bottom							
OW-1	Alluvium	2/14/1991	1416742.47	3108412.52	695.39	692.8	2.81	7.0	2.0	7.0	4.8	9.8	690.8	685.8	5.0	2	SS	0.010	--	--	--
OW-2	Alluvium	2/14/1991	1416742.84	3108480.71	695.03	691.7	3.20	7.0	3.0	7.0	6.2	10.2	688.7	684.7	4.0	2	SS	0.010	--	--	--
OW-3	Alluvium	2/14/1991	1416772.47	3108494.13	694.72	691.9	3.25	6.7	2.5	6.5	5.8	9.8	689.4	685.4	4.0	2	SS	0.010	--	--	--
P-1 (Abnd)	Alluvium	10/16/1995	10009.30	10360.69	692.35	689.1	3.26	5.9	1.9	5.9	5.2	9.2	687.2	683.2	4.0	2	PVC	0.010	--	--	--
P-2	Alluvium	10/17/1995	10295.64	10310.82	692.98	689.7	3.40	5.0	1.5	5.0	4.9	8.4	688.2	684.7	3.5	2	PVC	0.010	--	--	--
P-3	Alluvium	10/17/1995	10551.56	10315.48	694.04	690.6	3.65	5.0	1.5	5.0	5.2	8.7	689.1	685.6	3.5	2	PVC	0.010	--	--	--
P-4	Alluvium	10/17/1995	10731.04	10324.11	695.06	691.1	1.00	5.0	1.5	5.0	2.5	6.0	689.6	686.1	3.5	2	PVC	0.010	--	--	--
P-5	Alluvium	10/17/1995	10970.88	10331.39	696.81	693.7	2.80	7.0	2.0	7.0	4.8	9.8	691.7	686.7	5.0	2	PVC	0.010	--	--	--
P-6 (Abnd)	Alluvium	10/19/1995	10138.12	10328.77	693.33	691.2	2.16	7.0	3.0	7.0	5.2	9.2	688.2	684.2	4.0	2	PVC	0.010	--	--	--
P-7 (Abnd)	Alluvium	10/18/1995	--	--	--	--	--	6.0	2.5	6.0	--	--	--	--	3.5	2	PVC	0.010	--	--	--
P-8 (Abnd)	Alluvium	10/18/1995	--	--	--	--	--	13.0	8.0	13.0	--	--	--	--	5.0	2	PVC	0.010	--	--	--
Recovery Wells																					
RW-1	URC, LRC, BOR	10/30/2009	1416556.06	3108624.43	692.10	689.0	3.09	44.00	6.5	40.0	9.6	43.1	682.5	649.0	33.5	6	Open Hole	--	4.0	1.85	SL
RW-2	URC, LRC, BOR	11/12/2009	1416168.83	3108679.75	688.19	685.2	2.98	42.5	5.0	38.5	8.0	41.5	680.2	646.7	33.5	6	Open Hole	--	4.0	18.95	SL
RW-3	URC, LRC, BOR	11/11/2009	1416216.95	3108693.99	688.83	685.5	3.32	42.5	8.5	38.5	11.8	41.8	677.0	647.0	30	4	PVC/SS	0.010	4.0	8.2	SL
RW-4	URC, LRC, BOR	11/17/2009	1416182.91	3108778.04	691.04	687.9	3.11	42.75	15.0	38.75	18.1	41.9	672.9	649.2	23.8	6	Open Hole	--	4.0	0.23	SL
RW-5	URC, LRC, BOR	11/16/2009	1416212.68	3108803.65	692.19	688.7	3.54	43.5	19.5	39.5	23.0	43.0	669.2	649.2	20	4	PVC/SS	0.010	4.0	0.0063	SL
RW-6	URC, LRC, BOR	4/7/2010	1416155.98	3108805.9	689.70	687.1	2.65	40	16.5	36.0	19.2	38.7	670.6	651.1	19.5	6	Open Hole	--	4.0	1.95	SL
RW-7	URC, LRC, BOR	11/10/2010	1416159.32	3108412.76	691.70	689.0	2.70	48.5	10.5	44.5	13.2	47.2	678.5	644.5	34.0	6	Open Hole	--	4.0	--	--

Notes: **Spreadsheet updated on 2/8/11 RW**
Elevations given in feet above Mean Sea Level (ft. AMSL), relative to the North American Vertical Datum of 1988 (NAVD88).
Coordinates referenced to the Indiana State Plane West (1302) grid; except decommissioned wells, which are referenced to the 1929 National Geodetic Vertical Datum (NGVD).
Coordinates and elevations for all wells surveyed by Cripe Architects and Engineers, Indianapolis, IN.
Abnd = well has been decommissioned.
SS = stainless steel. PVC = polyvinyl chloride.
ags = above ground surface.
ft/day = feet per day
TOC = top of well casing.
URC = Upper Ramp Creek LRC = Lower Ramp Creek BOR = Borden
SL = slug test average (slug in and slug out) RE = draw-down/recovery test ST = short duration step/draw-down test

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-1S	11/17/1994	700.84	8.03	12.65	692.81
	11/14/1995	700.84	7.84	12.65	693.00
	4/30/1996	700.84	4.71	12.65	696.13
	5/18/2000	700.84	9.37	12.65	691.47
	8/4/2000	700.84	9.12	12.65	691.72
	11/13/2000	700.84	7.44	12.65	693.40
	2/1/2001	700.84	6.77	12.65	694.07
	6/21/2001	700.84	9.45	12.65	691.39
	12/11/2001	700.84	7.98	12.65	692.86
	8/11/2003	700.84	9.62	12.65	691.22
	10/29/2003	700.84	8.66	12.65	692.18
	2/18/2004	700.84	7.44	12.65	693.40
	9/9/2004	700.84	9.29	12.65	691.55
	7/31/2006	700.84	9.46	12.65	691.38
	7/24/2007	700.84	9.30	12.67	691.54
	11/30/2007	700.84	8.78	NM	692.06
	6/8/2008	700.84	5.69	NM	695.15
	9/9/2008	700.84	8.28	NM	692.56
	11/17/2008	700.84	7.91	NM	692.93
	2/5/2009	700.84	9.46	NM	691.38
	12/9/2009	700.84	4.96	NM	695.88
	6/15/2010	700.84	4.41	NM	696.43
	9/20/2010	700.84	10.76	NM	690.08
	12/13/2010	700.84	7.00	NM	693.84
	3/7/2011	700.84	4.45	NM	696.39
	6/21/2011	700.84	7.71	NM	693.13
MW-1D	11/17/1994	700.07	7.76	20.20	692.31
	11/14/1995	700.07	7.87	20.20	692.20
	4/30/1996	700.07	4.71	20.20	695.36
	5/18/2000	700.07	8.72	20.20	691.35
	8/4/2000	700.07	8.52	20.20	691.55
	11/13/2000	700.07	7.33	20.20	692.74
	2/1/2001	700.07	6.68	20.20	693.39
	6/21/2001	700.07	8.85	20.20	691.22
	12/11/2001	700.07	8.00	20.20	692.07
	8/11/2003	700.07	9.14	20.20	690.93
	10/29/2003	700.07	8.54	20.20	691.53
	2/18/2004	700.07	7.68	20.20	692.39
	9/9/2004	700.07	9.55	20.20	690.52
	7/31/2006	700.07	9.83	20.20	690.24
	7/24/2007	700.07	9.37	20.20	690.70
	11/30/2007	700.07	8.94	NM	691.13
	6/8/2008	700.07	6.19	NM	693.88
	9/9/2008	700.07	9.93	NM	690.14
	11/17/2008	700.07	8.57	NM	691.50
	2/5/2009	700.07	9.07	NM	691.00
	12/9/2009	700.07	8.18	NM	691.89
	1/14/2010	700.07	8.81	NM	691.26
	6/15/2010	700.07	6.45	NM	693.62
	9/20/2010	700.07	10.36	NM	689.71
	12/13/2010	700.07	8.46	NM	691.61
	3/7/2011	700.07	5.55	NM	694.52
	6/21/2011	700.07	8.39	NM	691.68

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-2S	11/17/1994	696.04	7.50	9.16	688.54
	11/14/1995	696.04	7.67	9.16	688.37
	4/30/1996	696.04	6.21	9.16	689.83
	5/1/2000	696.04	8.41	9.16	687.63
	8/14/2000	696.04	7.78	9.16	688.26
	11/13/2000	696.04	7.63	9.16	688.41
	2/1/2002	696.04	7.08	9.16	688.96
	6/21/2001	696.04	8.82	9.16	687.22
	12/11/2001	696.04	7.95	9.16	688.09
	8/11/2003	696.04	8.94	9.16	687.10
	10/29/2003	696.04	7.67	9.16	688.37
	2/18/2004	696.04	7.57	9.16	688.47
	9/9/2004	696.04	8.90	9.16	687.14
	7/31/2006	696.04	9.02	9.16	687.02
	7/24/2007	696.04	8.73	9.18	687.31
	11/30/2007	696.04	8.03	NM	688.01
	6/8/2008	696.04	7.41	NM	688.63
	9/9/2008	696.04	9.20	NM	686.84
	11/17/2008	696.04	8.10	NM	687.94
	2/5/2009	696.04	7.98	NM	688.06
	2/25/2009	696.04	7.73	NM	688.31
	3/3/2009	696.04	7.72	NM	688.32
	3/11/2009	696.04	7.84	NM	688.20
	3/17/2009	696.04	6.52	NM	689.52
	3/25/2009	696.04	7.36	NM	688.68
	3/31/2009	696.04	7.51	NM	688.53
	4/20/2009	696.04	7.67	NM	688.37
	4/29/2009	696.04	7.93	NM	688.11
	5/6/2009	696.04	8.07	NM	687.97
	5/11/2009	696.04	7.98	NM	688.06
	5/20/2009	696.04	7.74	NM	688.30
	5/27/2009	696.04	8.32	NM	687.72
	6/8/2009	696.04	8.75	NM	687.29
	6/15/2009	696.04	7.84	NM	688.20
	6/25/2009	696.04	7.37	NM	688.67
	6/30/2009	696.04	7.86	NM	688.18
	7/31/2009	696.04	8.48	NM	687.56
	8/13/2009	696.04	8.55	NM	687.49
	8/26/2009	696.04	9.15	NM	686.89
	10/2/2009	696.04	7.59	NM	688.45
	10/6/2009	696.04	8.30	NM	687.74
	12/9/2009	696.04	6.86	NM	689.18
	12/18/2009	696.04	7.14	NM	688.90
	1/26/2010	696.04	6.67	NM	689.37
	2/3/2010	696.04	7.70	NM	688.34
	3/1/2010	696.04	7.43	NM	688.61
	6/15/2010	696.04	6.17	NM	689.87
	9/20/2010	696.04	9.25	9.25	686.79
	12/13/2010	696.04	7.33	NM	688.71
	2/18/2011	696.04	7.61	NM	688.43
	3/7/2011	696.04	6.09	NM	689.95
	6/21/2011	696.04	7.39	NM	688.65
MW-2D	11/17/1994	694.34	5.82	14.34	688.52
	11/14/1995	694.34	5.80	14.34	688.54

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-2D (cont.)	4/30/1996	694.34	4.95	14.34	689.39
	5/1/2000	694.34	6.79	14.34	687.55
	8/14/2000	694.34	6.53	14.34	687.81
	11/13/2000	694.34	5.77	14.34	688.57
	2/1/2001	694.34	5.71	14.34	688.63
	6/21/2001	694.34	7.05	14.34	687.29
	12/11/2001	694.34	6.20	14.34	688.14
	8/11/2003	694.34	7.19	14.34	687.15
	10/29/2003	694.34	6.17	14.34	688.17
	2/18/2004	694.34	6.26	14.34	688.08
	9/9/2004	694.34	7.19	14.34	687.15
	7/31/2006	694.34	7.10	14.34	687.24
	7/24/2007	694.34	7.00	17.45	687.34
	11/30/2007	694.34	6.37	NM	687.97
	6/8/2008	694.34	5.70	NM	688.64
	9/9/2008	694.34	7.63	NM	686.71
	11/17/2008	694.34	6.81	NM	687.53
	2/5/2009	694.34	6.76	NM	687.58
	2/25/2009	694.34	6.23	NM	688.11
	3/3/2009	694.34	6.71	NM	687.63
	3/11/2009	694.34	6.30	NM	688.04
	3/17/2009	694.34	8.07	NM	686.27
	3/25/2009	694.34	5.87	NM	688.47
	3/31/2009	694.34	6.02	NM	688.32
	4/20/2009	694.34	6.04	NM	688.30
	4/29/2009	694.34	6.35	NM	687.99
	5/6/2009	694.34	6.48	NM	687.86
	5/11/2009	694.34	6.48	NM	687.86
	5/20/2009	694.34	6.19	NM	688.15
	5/27/2009	694.34	6.74	NM	687.60
	6/8/2009	694.34	7.10	NM	687.24
	6/15/2009	694.34	5.49	NM	688.85
	6/25/2009	694.34	5.99	NM	688.35
	6/30/2009	694.34	6.95	NM	687.39
	7/31/2009	694.34	6.66	NM	687.68
	8/13/2009	694.34	6.73	NM	687.61
	8/26/2009	694.34	7.38	NM	686.96
	10/2/2009	694.34	6.42	NM	687.92
	10/6/2009	694.34	6.53	NM	687.81
	12/9/2009	694.34	5.71	NM	688.63
	12/18/2009	694.34	5.92	NM	688.42
	1/14/2010	694.34	6.70	NM	687.64
	1/26/2010	694.34	5.52	NM	688.82
	2/3/2010	694.34	6.45	NM	687.89
	3/2/2010	694.34	6.25	NM	688.09
	6/15/2010	694.34	5.13	NM	689.21
	8/30/2010	694.34	7.74	NM	686.60
	9/20/2010	694.34	7.38	NM	686.96
	12/13/2010	694.34	6.14	NM	688.20
	2/18/2011	694.34	6.58	NM	687.76
	3/7/2011	694.34	4.78	NM	689.56
	6/21/2011	694.34	6.13	NM	688.21
MW-3S	11/17/1994	692.89	5.94	10.15	686.95
	11/14/1995	692.89	4.25	10.15	688.64

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-3S (cont.)	4/30/1996	692.89	3.56	10.15	689.33
	5/18/2000	692.89	4.16	10.15	688.73
	8/14/2000	692.89	4.11	10.15	688.78
	11/13/2000	692.89	3.45	10.15	689.44
	2/1/2001	692.89	3.52	10.15	689.37
	6/21/2001	692.89	4.84	10.15	688.05
	12/11/2001	692.89	4.01	10.15	688.88
	8/11/2003	692.89	5.43	10.15	687.46
	10/29/2003	692.89	4.04	10.15	688.85
	2/18/2004	692.89	3.56	10.15	689.33
	9/9/2004	692.89	5.73	10.15	687.16
	7/31/2006	692.89	5.51	10.15	687.38
	8/15/2006	Well Decommissioned			
MW-3D	11/17/1994	691.65	4.15	17.00	687.50
	11/14/1995	691.65	4.30	17.00	687.35
	4/30/1996	691.65	3.07	17.00	688.58
	5/18/2000	691.65	3.75	17.00	687.90
	8/14/2000	691.65	3.89	17.00	687.76
	11/13/2000	691.65	3.54	17.00	688.11
	2/1/2001	691.65	3.33	17.00	688.32
	6/21/2001	691.65	3.95	17.00	687.70
	12/11/2001	691.65	3.90	17.00	687.75
	8/11/2003	691.65	4.55	17.00	687.10
	10/29/2003	691.65	3.63	17.00	688.02
	2/18/2004	691.65	3.66	17.00	687.99
	9/9/2004	691.65	5.60	17.00	686.05
	7/31/2006	691.65	4.34	17.00	687.31
	8/15/2006	Well Decommissioned			
MW-4S	11/17/1994	690.8	7.81	10.35	682.99
	11/14/1995	690.8	8.24	10.35	682.56
	4/30/1996	690.8	5.03	10.35	685.77
	8/11/2003	690.8	8.54	10.35	682.26
	10/29/2003	690.8	7.73	10.35	683.07
	2/18/2004	690.8	7.63	10.35	683.17
	9/9/2004	690.8	8.75	10.35	682.05
	7/31/2006	690.8	8.79	10.35	682.01
	7/24/2007	690.8	Obstruction	NM	NM
	11/30/2007	690.8	NM	NM	NM
	6/8/2008	690.8	NM	NM	NM
	9/9/2008	690.8	NM	NM	NM
	11/17/2008	690.8	NM	NM	NM
	2/5/2009	690.8	NM	NM	NM
	3/3/2009	690.8	NM	NM	NM
	12/9/2009	690.8	NM	NM	NM
	6/15/2010	690.8	NM	NM	NM
	9/20/2010	690.8	NM	NM	NM
	12/13/2010	690.8	NM	NM	NM
	3/7/2011	690.8	NM	NM	NM
	6/21/2011	690.8	NM	NM	NM
MW-4D	11/17/1994	690.3	6.61	19.10	683.69
	11/14/1995	690.3	7.16	19.10	683.14
	4/30/1996	690.3	4.65	19.10	685.65

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-4D (cont.)	8/11/2003	690.3	7.25	19.10	683.05
	10/29/2003	690.3	6.64	19.10	683.66
	2/18/2004	690.3	6.43	19.10	683.87
	9/9/2004	690.3	7.45	19.10	682.85
	7/31/2006	690.3	7.43	19.10	682.87
	7/24/2007	690.3	7.68	19.10	682.62
	11/30/2007	690.3	7.67	NM	682.63
	6/8/2008	690.3	5.83	NM	684.47
	9/9/2008	690.3	NM	NM	NM
	11/17/2008	690.3	7.65	NM	682.65
	2/5/2009	690.3	7.78	NM	682.52
	2/25/2009	690.3	6.79	NM	683.51
	3/3/2009	690.3	6.90	NM	683.40
	3/11/2009	690.3	7.35	NM	682.95
	3/17/2009	690.3	7.54	NM	682.76
	3/25/2009	690.3	7.52	NM	682.78
	3/31/2009	690.3	6.74	NM	683.56
	4/20/2009	690.3	6.44	NM	683.86
	4/29/2009	690.3	6.93	NM	683.37
	5/6/2009	690.3	6.50	NM	683.80
	5/11/2009	690.3	6.72	NM	683.58
	5/20/2009	690.3	6.16	NM	684.14
	5/27/2009	690.3	6.93	NM	683.37
	6/8/2009	690.3	7.29	NM	683.01
	6/15/2009	690.3	6.53	NM	683.77
	6/25/2009	690.3	5.87	NM	684.43
	6/30/2009	690.3	7.05	NM	683.25
	7/31/2009	690.3	7.12	NM	683.18
	8/13/2009	690.3	7.37	NM	682.93
	10/2/2009	690.3	7.76	NM	682.54
	10/6/2009	690.3	7.72	NM	682.58
	12/9/2009	690.3	7.00	NM	683.30
	12/18/2009	690.3	6.79	NM	683.51
	1/26/2010	690.3	6.63	NM	683.67
	2/3/2010	690.3	7.28	NM	683.02
	3/1/2010	690.3	7.11	NM	683.19
	6/15/2010	690.3	5.69	NM	684.61
	9/20/2010	690.3	9.12	NM	681.18
	12/13/2010	690.3	7.45	NM	682.85
	3/7/2011	690.3	Obstruction	NM	NM
	6/21/2011	690.3	NM	NM	NM
MW-5S	11/17/1994	690.67	9.01	12.25	681.66
	11/14/1995	690.67	8.97	12.25	681.70
	4/30/1996	690.67	6.40	12.25	684.27
	8/11/2003	690.67	8.95	12.25	681.72
	10/29/2003	690.67	8.84	12.25	681.83
	2/18/2004	690.67	8.62	12.25	682.05
	9/9/2004	690.67	9.13	12.25	681.54
	7/31/2006	690.67	9.39	12.25	681.28
	7/24/2007	690.67	9.31	12.23	681.36
	11/30/2007	690.67	9.20	12.23	681.47
	6/8/2008	690.67	8.35	12.23	682.32
	9/9/2008	690.67	NM	NM	NA
	11/17/2008	690.67	8.88	12.23	681.79

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-5S (cont.)	2/5/2009	690.67	9.12	NM	681.55
	12/9/2009	690.67	8.10	NM	682.57
	1/15/2010	690.67	8.86	NM	681.81
	6/15/2010	690.67	8.16	NM	682.51
	9/20/2010	690.67	9.25	NM	681.42
	12/13/2010	690.67	8.81	NM	681.86
	3/7/2011	690.67	8.10	NM	682.57
	6/21/2011	690.67	8.79	NM	681.88
MW-5D	11/17/1994	690.35	8.51	22.75	681.84
	11/14/1995	690.35	8.50	22.75	681.85
	4/30/1996	690.35	5.66	22.75	684.69
	8/11/2003	690.35	8.62	22.75	681.73
	10/29/2003	690.35	8.40	22.75	681.95
	2/18/2004	690.35	8.18	22.75	682.17
	9/9/2004	690.35	8.75	22.75	681.60
	7/31/2006	690.35	9.04	22.75	681.31
	7/24/2007	690.35	8.91	22.74	681.44
	11/30/2007	690.35	8.88	NM	681.47
	6/8/2008	690.35	7.86	NM	682.49
	9/9/2008	690.35	NM	NM	NA
	11/17/2008	690.35	8.45	NM	681.90
	2/5/2009	690.35	8.80	NM	681.55
	12/9/2009	690.35	7.78	NM	682.57
	1/13/2010	690.35	8.68	NM	681.67
	6/15/2010	690.35	7.73	NM	682.62
	9/20/2010	690.35	8.93	NM	681.42
	12/13/2010	690.35	8.41	NM	681.94
	3/7/2011	690.35	7.56	NM	682.79
	6/21/2011	690.35	8.39	NM	681.96
MW-6S	11/17/1994	691.37	9.80	9.80	681.57
	11/14/1995	691.37	9.54	9.80	681.83
	4/30/1996	691.37	3.99	9.80	687.38
	8/11/2003	691.37	9.65	9.80	681.72
	10/29/2003	691.37	9.50	9.80	681.87
	2/18/2004	691.37	9.06	9.80	682.31
	9/9/2004	691.37	9.65	9.80	681.72
	7/31/2006	691.37	9.58	9.80	681.79
	7/24/2007	691.37	9.59	9.86	681.78
	11/30/2007	691.37	9.66	NM	681.71
	6/8/2008	691.37	8.03	NM	683.34
	9/9/2008	691.37	NM	NM	NM
	11/17/2008	691.37	9.59	NM	681.78
	2/5/2009	691.37	9.68	NM	681.69
	12/9/2009	691.37	8.15	NM	683.22
	6/15/2010	691.37	7.39	NM	683.98
	9/20/2010	691.37	9.70	NM	681.67
	12/13/2010	691.37	9.57	NM	681.80
	3/7/2011	691.37	7.20	NM	684.17
	6/21/2011	691.37	9.43	NM	681.94
MW-6D	11/17/1994	690.54	9.03	17.89	681.51
	11/14/1995	690.54	8.91	17.89	681.63
	4/30/1996	690.54	3.02	17.89	687.52

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-6D (cont.)	8/11/2003	690.54	9.19	17.89	681.35
	10/29/2003	690.54	8.81	17.89	681.73
	2/18/2004	690.54	8.26	17.89	682.28
	9/9/2004	690.54	9.55	17.89	680.99
	7/31/2006	690.54	9.61	17.89	680.93
	7/24/2007	690.54	9.59	18.88	680.95
	11/30/2007	690.54	9.51	18.88	681.03
	6/8/2008	690.54	7.25	18.88	683.29
	9/9/2008	690.54	NM	NM	NA
	11/17/2008	690.54	8.95	18.88	681.59
	2/5/2009	690.54	9.34	NM	681.20
	12/9/2009	690.54	7.35	NM	683.19
	6/15/2010	690.54	6.65	NM	683.89
	9/20/2010	690.54	9.76	NM	680.78
	12/13/2010	690.54	8.80	NM	681.74
	3/7/2011	690.54	6.40	NM	684.14
	6/21/2011	690.54	8.60	NM	681.94
MW-7S	11/17/1994	696.93	6.05	13.34	690.88
	11/14/1995	696.93	4.38	13.34	692.55
	4/30/1996	696.93	2.85	13.34	694.08
	5/18/2000	696.93	8.07	13.34	688.86
	8/14/2000	696.93	7.39	13.34	689.54
	11/13/2000	696.93	4.66	13.34	692.27
	2/1/2001	696.93	3.34	13.34	693.59
	6/21/2001	696.93	7.45	13.34	689.48
	12/11/2001	696.93	6.18	13.34	690.75
	8/11/2003	696.93	8.70	13.34	688.23
	10/29/2003	696.93	7.43	13.34	689.50
	2/18/2004	696.93	4.58	13.34	692.35
	9/9/2004	696.93	9.07	13.34	687.86
	7/31/2006	696.93	9.56	13.34	687.37
	8/15/2006	Well Decommissioned			
MW-7D	11/17/1994	696.71	5.64	23.05	691.07
	11/14/1995	696.71	4.66	23.05	692.05
	4/30/1996	696.71	2.86	23.05	693.85
	5/18/2000	696.71	7.56	23.05	689.15
	8/14/2000	696.71	7.21	23.05	689.50
	11/13/2000	696.71	4.42	23.05	692.29
	2/1/2001	696.71	3.40	23.05	693.31
	6/21/2001	696.71	7.35	23.05	689.36
	12/11/2001	696.71	5.75	23.05	690.96
	8/11/2003	696.71	8.08	23.05	688.63
	10/29/2003	696.71	7.14	23.05	689.57
	2/18/2004	696.71	4.05	23.05	692.66
	9/9/2004	696.71	8.65	23.05	688.06
	7/31/2006	696.71	9.17	23.05	687.54
	8/15/2006	Well Decommissioned			
MW-8S	11/14/1995	691.66	6.76	8.85	684.90
	4/30/1996	691.66	4.66	8.85	687.00
	6/21/2001	691.66	7.24	8.85	684.42
	12/11/2001	691.66	6.82	8.85	684.84
	8/11/2003	691.66	7.45	8.85	684.21

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-8S (cont.)	10/29/2003	691.66	6.78	8.85	684.88
	2/18/2004	691.66	6.22	8.85	685.44
	9/9/2004	691.66	7.47	8.85	684.19
	7/31/2006	691.66	7.54	8.85	684.12
	7/24/2007	691.66	7.54	8.88	684.12
	11/30/2007	691.66	7.62	NM	684.04
	6/8/2008	691.66	5.82	NM	685.84
	9/9/2008	691.66	NM	NM	NM
	11/17/2008	691.66	7.26	NM	684.40
	2/5/2009	691.66	7.39	NM	684.27
	12/9/2009	691.66	6.62	NM	685.04
	6/15/2010	691.66	5.10	NM	686.56
	9/20/2010	691.66	8.70	NM	682.96
	12/13/2010	691.66	6.99	NM	684.67
	3/7/2011	691.66	4.81	NM	686.85
	6/21/2011	691.66	6.76	NM	684.90
MW-8D	11/14/1995	690.63	6.80	15.30	683.83
	4/30/1996	690.63	3.69	15.30	686.94
	6/21/2001	690.63	6.62	15.30	684.01
	12/11/2001	690.63	11.00	15.30	679.63
	8/11/2003	690.63	6.30	15.30	684.33
	10/29/2003	690.63	6.11	15.30	684.52
	2/18/2004	690.63	5.48	15.30	685.15
	9/9/2004	690.63	6.80	15.30	683.83
	7/31/2006	690.63	10.32	15.30	680.31
	7/24/2007	690.63	6.86	15.30	683.77
	11/30/2007	690.63	6.34	NM	684.29
	6/8/2008	690.63	4.50	NM	686.13
	9/9/2008	690.63	NM	NM	NA
	11/17/2008	690.63	6.67	NM	683.96
	2/5/2009	690.63	6.73	NM	683.90
	12/9/2009	690.63	6.33	NM	684.30
	6/15/2010	690.63	5.23	NM	685.40
	9/20/2010	690.63	8.04	NM	682.59
	12/13/2010	690.63	6.63	NM	684.00
	3/7/2011	690.63	4.26	NM	686.37
	6/21/2011	690.63	5.98	NM	684.65
MW-9	11/13/2000	701.33	8.60	11.25	692.73
	2/1/2001	701.33	7.07	11.25	694.26
	6/21/2001	701.33	10.20	11.25	691.13
	12/11/2001	701.33	9.23	11.25	692.10
	8/11/2003	701.33	10.39	11.25	690.94
	10/29/2003	701.33	9.29	11.25	692.04
	2/18/2004	701.33	9.10	11.25	692.23
	9/9/2004	701.33	10.52	11.25	690.81
	7/31/2006	701.33	10.62	11.25	690.71
	7/24/2007	701.33	10.29	11.26	691.04
	11/30/2007	701.33	9.98	NM	691.35
	6/8/2008	701.33	6.38	NM	694.95
	9/9/2008	701.33	11.00	NM	690.33
	11/17/2008	701.33	9.39	NM	691.94
	2/5/2009	701.33	10.41	NM	690.92
	12/9/2009	701.33	9.56	NM	691.77

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-9 (cont.)	6/15/2010	701.33	6.21	NM	695.12
	9/20/2010	701.33	10.99	NM	690.34
	12/13/2010	701.33	9.60	NM	691.73
	3/7/2011	701.33	6.10	NM	695.23
	6/21/2011	701.33	9.74	NM	691.59
MW-10	11/13/2000	699.66	5.55	10.88	694.11
	2/1/2001	699.66	6.00	10.88	693.66
	6/21/2001	699.66	8.54	10.88	691.12
	12/11/2001	699.66	5.65	10.88	694.01
	8/11/2003	699.66	8.88	10.88	690.78
	10/29/2003	699.66	7.00	10.88	692.66
	2/18/2004	699.66	5.83	10.88	693.83
	9/9/2004	699.66	9.14	10.88	690.52
	7/31/2006	699.66	9.64	10.88	690.02
	7/24/2007	699.66	9.38	10.87	690.28
	11/30/2007	699.66	7.72	10.87	691.94
	6/8/2008	699.66	5.51	10.87	694.15
	9/9/2008	699.66	9.85	10.87	689.81
	11/17/2008	699.66	7.62	10.87	692.04
	2/5/2009	699.66	8.34	NM	691.32
	12/9/2009	699.66	6.34	NM	693.32
	6/15/2010	699.66	5.55	NM	694.11
	9/20/2010	699.66	10.06	NM	689.60
	12/13/2010	699.66	7.00	NM	692.66
	3/7/2011	699.66	5.21	NM	694.45
	6/21/2011	699.66	6.99	NM	692.67
MW-11S	2/5/2009	700.06	Dry	NM	NA
	12/9/2009	700.06	Dry	NM	NA
	6/15/2010	700.06	Dry	NM	NA
	6/21/2011	700.06	Dry	NM	NA
MW-11D	6/21/2001	699.75	9.61	22.03	690.14
	12/11/2001	699.75	9.11	22.03	690.64
	8/11/2003	699.75	10.23	22.03	689.52
	10/29/2003	699.75	9.41	22.03	690.34
	2/18/2004	699.75	9.27	22.03	690.48
	9/9/2004	699.75	10.27	22.03	689.48
	7/31/2006	699.75	10.29	22.03	689.46
	7/24/2007	699.75	10.32	21.92	689.43
	11/30/2007	699.75	9.85	NM	689.90
	6/8/2008	699.75	8.63	NM	691.12
	9/9/2008	699.75	10.12	NM	689.63
	11/17/2008	699.75	9.69	NM	690.06
	2/5/2009	699.75	9.78	NM	689.97
	12/9/2009	699.75	9.01	NM	690.74
	6/15/2010	699.75	8.27	NM	691.48
	9/20/2010	699.75	10.05	NM	689.70
	12/13/2010	699.75	9.55	NM	690.20
	3/7/2011	699.75	7.96	NM	691.79
	6/21/2011	699.75	9.34	NM	690.41
MW-12S	11/13/2000	692.76	4.33	8.40	688.43
	2/1/2001	692.76	4.13	8.40	688.63

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-12S (cont.)	6/21/2001	692.76	5.04	8.40	687.72
	12/11/2001	692.76	4.28	8.40	688.48
	8/11/2003	692.76	5.83	8.40	686.93
	10/29/2003	692.76	4.15	8.40	688.61
	2/18/2004	692.76	3.47	8.40	689.29
	9/9/2004	692.76	5.58	8.40	687.18
	7/31/2006	692.76	6.18	8.40	686.58
	7/24/2007	692.76	4.89	9.38	687.87
	11/30/2007	692.76	4.74	9.38	688.02
	6/8/2008	692.76	4.94	9.38	687.82
	9/9/2008	692.76	7.23	9.38	685.53
	11/17/2008	692.76	4.46	9.38	688.30
	2/5/2009	692.76	4.94	NM	687.82
	3/3/2009	692.76	4.31	NM	688.45
	12/9/2009	692.76	3.76	NM	689.00
	6/15/2010	692.76	3.51	NM	689.25
	9/20/2010	692.76	8.10	NM	684.66
	12/13/2010	692.76	4.04	NM	688.72
	3/7/2011	692.76	3.40	NM	689.36
	6/21/2011	692.76	4.27	NM	688.49
MW-12D	6/21/2001	692.91	5.70	20.12	687.21
	12/11/2001	692.91	5.52	20.12	687.39
	8/11/2003	692.91	6.12	20.12	686.79
	10/29/2003	692.91	5.40	20.12	687.51
	2/18/2004	692.91	5.51	20.12	687.40
	9/9/2004	692.91	6.19	20.12	686.72
	7/31/2006	692.91	5.77	20.12	687.14
	7/24/2007	692.91	6.57	20.15	686.34
	11/30/2007	692.91	6.04	NM	686.87
	6/8/2008	692.91	3.57	NM	689.34
	9/9/2008	692.91	NM	NM	NM
	11/17/2008	692.91	5.85	NM	687.06
	2/5/2009	692.91	NM	NM	NM
	3/3/2009	692.91	5.43	NM	687.48
	3/11/2009	692.91	5.58	NM	687.33
	3/17/2009	692.91	5.96	NM	686.95
	3/25/2009	692.91	4.81	NM	688.10
	3/31/2009	692.91	5.18	NM	687.73
	4/20/2009	692.91	5.13	NM	687.78
	4/29/2009	692.91	5.46	NM	687.45
	5/6/2009	692.91	5.59	NM	687.32
	5/11/2009	692.91	5.53	NM	687.38
	5/20/2009	692.91	5.40	NM	687.51
	5/27/2009	692.91	5.81	NM	687.10
	6/8/2009	692.91	6.26	NM	686.65
	6/15/2009	692.91	5.47	NM	687.44
	6/25/2009	692.91	5.26	NM	687.65
	6/30/2009	692.91	5.93	NM	686.98
	7/31/2009	692.91	5.80	NM	687.11
	8/13/2009	692.91	6.12	NM	686.79
	8/26/2009	692.91	6.68	NM	686.23
	10/2/2009	692.91	5.49	NM	687.42
	10/6/2009	692.91	6.03	NM	686.88
	12/9/2009	692.91	5.22	NM	687.69

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-12D (cont.)	12/18/2009	692.91	5.62	NM	687.29
	1/15/2010	692.91	5.28	NM	687.63
	1/19/2010	692.91	6.00	NM	686.91
	1/26/2010	692.91	5.33	NM	687.58
	2/3/2010	692.91	6.20	NM	686.71
	2/22/2010	692.91	5.38	NM	687.53
	3/1/2010	692.91	5.93	NM	686.98
	3/8/2010	692.91	6.10	NM	686.81
	4/16/2010	692.91	6.03	NM	686.88
	6/1/2010	692.91	6.08	NM	686.83
	6/15/2010	692.91	4.59	NM	688.32
	7/6/2010	692.91	6.56	NM	686.35
	8/3/2010	692.91	6.86	NM	686.05
	8/10/2010	692.91	7.06	NM	685.85
	8/30/2010	692.91	7.21	NM	685.70
	9/20/2010	692.91	7.00	NM	685.91
	12/13/2010	692.91	5.98	NM	686.93
	2/18/2011	692.91	6.20	NM	686.71
	2/22/2011	692.91	4.73	NM	688.18
	3/4/2011	692.91	5.28	NM	687.63
	3/7/2011	692.91	4.93	NM	687.98
	6/21/2011	692.91	5.67	NM	687.24
MW-13	11/13/2000	692.47	4.55	9.10	687.92
	2/1/2001	692.47	4.53	9.10	687.94
	6/21/2001	692.47	8.74	9.10	683.73
	12/11/2001	692.47	4.78	9.10	687.69
	8/11/2003	692.47	5.80	9.10	686.67
	10/29/2003	692.47	4.78	9.10	687.69
	2/18/2004	692.47	4.48	9.10	687.99
	9/9/2004	692.47	5.82	9.10	686.65
	7/31/2006	692.47	5.91	9.10	686.56
	7/24/2007	692.47	5.87	9.10	686.60
	11/30/2007	692.47	5.25	NM	687.22
	6/8/2008	692.47	4.27	NM	688.20
	9/9/2008	692.47	NM	NM	NM
	11/17/2008	692.47	4.91	NM	687.56
	2/5/2009	692.47	5.19	NM	687.28
	12/9/2009	692.47	4.32	NM	688.15
	6/15/2010	692.47	4.43	NM	688.04
	9/20/2010	692.47	7.13	NM	685.34
	12/13/2010	692.47	4.87	NM	687.60
	3/7/2011	692.47	4.50	NM	687.97
	6/21/2011	692.47	4.89	NM	687.58
MW-14S	8/11/2003	694.15	5.00	8.40	689.15
	10/29/2003	694.15	3.29	8.40	690.86
	2/18/2004	694.15	3.48	8.40	690.67
	9/9/2004	694.15	4.52	8.40	689.63
	7/31/2006	694.15	5.74	8.40	688.41
	7/24/2007	694.15	5.78	8.37	688.37
	11/30/2007	694.15	5.13	NM	689.02
	6/8/2008	694.15	4.02	NM	690.13
	9/9/2008	694.15	7.55	NM	686.60
	11/17/2008	694.15	5.63	NM	688.52

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-14S (cont.)	2/5/2009	694.15	5.05	NM	689.10
	3/3/2009	694.15	4.68	NM	689.47
	12/9/2009	694.15	3.68	NM	690.47
	6/15/2010	694.15	3.69	NM	690.46
	9/20/2010	694.15	8.45	NM	685.70
	3/7/2011	694.15	3.79	NM	690.36
	6/21/2011	694.15	4.49	NM	689.66
MW-14D	8/11/2003	693.8	7.00	20.00	686.80
	10/29/2003	693.8	6.20	20.00	687.60
	2/18/2004	693.8	6.21	20.00	687.59
	9/9/2004	693.8	6.99	20.00	686.81
	7/31/2006	693.8	8.63	20.00	685.17
	7/24/2007	693.8	5.73	20.00	688.07
	11/30/2007	693.8	6.81	NM	686.99
	6/8/2008	693.8	5.51	NM	688.29
	9/9/2008	693.8	NM	NM	NM
	11/17/2008	693.8	6.48	NM	687.32
	2/5/2009	693.8	NM	NM	NM
	3/3/2009	693.8	6.15	NM	687.65
	3/11/2009	693.8	6.02	NM	687.78
	3/17/2009	693.8	6.91	NM	686.89
	3/25/2009	693.8	5.49	NM	688.31
	3/31/2009	693.8	5.75	NM	688.05
	4/20/2009	693.8	5.75	NM	688.05
	4/29/2009	693.8	6.04	NM	687.76
	5/6/2009	693.8	NM	NM	NM
	5/11/2009	693.8	6.11	NM	687.69
	5/20/2009	693.8	5.99	NM	687.81
	5/27/2009	693.8	7.76	NM	686.04
	6/8/2009	693.8	6.75	NM	687.05
	6/15/2009	693.8	6.01	NM	687.79
	6/25/2009	693.8	5.74	NM	688.06
	6/30/2009	693.8	6.11	NM	687.69
	7/31/2009	693.8	6.10	NM	687.70
	8/13/2009	693.8	6.32	NM	687.48
	8/26/2009	693.8	7.31	NM	686.49
	10/2/2009	693.8	5.89	NM	687.91
	10/6/2009	693.8	6.22	NM	687.58
	12/9/2009	693.8	5.10	NM	688.70
	12/18/2009	693.8	6.11	NM	687.69
	1/26/2010	693.8	5.50	NM	688.30
	2/3/2010	693.8	6.33	NM	687.47
	3/1/2010	693.8	6.07	NM	687.73
	4/16/2010	693.8	6.01	NM	687.79
	6/15/2010	693.8	4.29	NM	689.51
	8/3/2010	693.8	7.40	NM	686.40
	8/10/2010	693.8	7.72	NM	686.08
	8/30/2010	693.8	8.09	NM	685.71
	9/20/2010	693.8	8.19	NM	685.61
	12/13/2010	693.8	5.24	NM	688.56
	2/18/2011	693.8	6.55	NM	687.25
	2/22/2011	693.8	5.37	NM	688.43
	3/4/2011	693.8	5.94	NM	687.86
	3/7/2011	693.8	5.55	NM	688.25

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-14D (cont.)	3/28/2011	693.8	6.79	NM	687.01
	6/21/2011	693.8	6.25	NM	687.55
*MW-15S	8/11/2003	695.06	5.15	9.12	689.91
	10/29/2003	695.06	4.45	9.12	690.61
	2/18/2004	695.06	3.28	9.12	691.78
	9/9/2004	695.06	5.67	9.12	689.39
	7/31/2006	695.06	6.61	9.12	688.45
	10/16/2006		Well Decommissioned		
MW-15D	8/11/2003	694.81	6.46	19.95	688.35
	10/29/2003	694.81	5.04	19.95	689.77
	2/18/2004	694.81	4.45	19.95	690.36
	9/9/2004	694.81	6.32	19.95	688.49
	7/31/2006	694.81	7.10	19.95	687.71
	7/24/2007	694.81	6.56	19.95	688.25
	11/30/2007	694.81	6.21	19.95	688.60
	6/8/2008	694.81	4.43	19.95	690.38
	9/9/2008	694.81	8.20	19.95	686.61
	11/17/2008	694.81	6.03	19.95	688.78
	2/5/2009	694.81	NM	19.95	NM
	3/3/2009	694.81	5.12	NM	689.69
	3/11/2009	694.81	5.26	NM	689.55
	3/17/2009	694.81	5.95	NM	688.86
	3/25/2009	694.81	5.02	NM	689.79
	3/31/2009	694.81	4.87	NM	689.94
	4/20/2009	694.81	4.70	NM	690.11
	4/29/2009	694.81	4.96	NM	689.85
	5/6/2009	694.81	5.05	NM	689.76
	5/11/2009	694.81	5.02	NM	689.79
	5/20/2009	694.81	4.81	NM	690.00
	5/27/2009	694.81	5.14	NM	689.67
	6/8/2009	694.81	5.83	NM	688.98
	6/15/2009	694.81	5.16	NM	689.65
	6/25/2009	694.81	4.96	NM	689.85
	6/30/2009	694.81	5.60	NM	689.21
	7/31/2009	694.81	5.47	NM	689.34
	8/13/2009	694.81	5.85	NM	688.96
	8/26/2009	694.81	7.41	NM	687.40
	10/2/2009	694.81	5.85	NM	688.96
	10/6/2009	694.81	5.97	NM	688.84
	12/9/2009	694.81	5.07	NM	689.74
	12/18/2009	694.81	7.01	NM	687.80
	1/26/2010	694.81	5.54	NM	689.27
	2/3/2010	694.81	5.56	NM	689.25
	3/1/2010	694.81	5.21	NM	689.60
	4/16/2010	694.81	5.35	NM	689.46
	6/15/2010	694.81	4.88	NM	689.93
	8/3/2010	694.81	7.85	NM	686.96
	8/10/2010	694.81	8.43	NM	686.38
	8/30/2010	694.81	8.86	NM	685.95
	9/20/2010	694.81	9.32	NM	685.49
	12/13/2010	694.81	5.27	NM	689.54
	2/18/2011	694.81	5.30	NM	689.51
	2/22/2011	694.81	4.47	NM	690.34

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-15D (cont.)	3/4/2011	694.81	4.60	NM	690.21
	3/7/2011	694.81	4.12	NM	690.69
	3/28/2011	694.81	5.29	NM	689.52
	6/21/2011	694.81	5.50	NM	689.31
MW-16S	8/11/2003	695.12	4.35	10.38	690.77
	10/29/2003	695.12	3.03	10.38	692.09
	2/18/2004	695.12	2.81	10.38	692.31
	9/9/2004	695.12	4.24	10.38	690.88
	7/31/2006	695.12	5.75	10.38	689.37
	7/24/2007	695.12	4.59	10.57	690.53
	11/30/2007	695.12	3.84	NM	691.28
	6/8/2008	695.12	2.80	NM	692.32
	9/9/2008	695.12	6.75	NM	688.37
	11/17/2008	695.12	5.12	NM	690.00
	2/5/2009	695.12	4.05	NM	691.07
	3/3/2009	695.12	3.57	NM	691.55
	3/11/2009	695.12	3.56	NM	691.56
	3/17/2009	695.12	4.13	NM	690.99
	3/25/2009	695.12	3.35	NM	691.77
	3/31/2009	695.12	3.16	NM	691.96
	4/20/2009	695.12	2.96	NM	692.16
	4/29/2009	695.12	3.34	NM	691.78
	5/6/2009	695.12	3.20	NM	691.92
	5/11/2009	695.12	3.08	NM	692.04
	5/20/2009	695.12	2.97	NM	692.15
	5/27/2009	695.12	3.12	NM	692.00
	6/8/2009	695.12	3.75	NM	691.37
	6/15/2009	695.12	2.97	NM	692.15
	6/25/2009	695.12	2.92	NM	692.20
	6/30/2009	695.12	3.48	NM	691.64
	7/31/2009	695.12	3.15	NM	691.97
	8/13/2009	695.12	3.48	NM	691.64
	8/26/2009	695.12	5.08	NM	690.04
	10/2/2009	695.12	4.27	NM	690.85
	10/6/2009	695.12	3.97	NM	691.15
	12/9/2009	695.12	2.99	NM	692.13
	6/15/2010	695.12	2.59	NM	692.53
	9/20/2010	695.12	8.25	NM	686.87
	12/13/2010	695.12	3.54	NM	691.58
	3/7/2011	695.12	3.14	NM	691.98
	6/21/2011	695.12	3.00	NM	692.12
MW-16D	8/11/2003	694.91	5.33	18.93	689.58
	10/29/2003	694.91	4.30	18.93	690.61
	2/18/2004	694.91	3.87	18.93	691.04
	9/9/2004	694.91	5.71	18.93	689.20
	7/31/2006	694.91	6.34	18.93	688.57
	7/24/2007	694.91	5.83	18.92	689.08
	11/30/2007	694.91	5.31	NM	689.60
	6/8/2008	694.91	3.66	NM	691.25
	9/9/2008	694.91	7.55	NM	687.36
	11/17/2008	694.91	7.31	NM	687.60
	2/5/2009	694.91	NM	NM	NM
	3/3/2009	694.91	4.19	NM	690.72

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-16D (cont.)	3/11/2009	694.91	4.30	NM	690.61
	3/17/2009	694.91	4.52	NM	690.39
	3/25/2009	694.91	4.02	NM	690.89
	3/31/2009	694.91	3.88	NM	691.03
	4/20/2009	694.91	3.74	NM	691.17
	4/29/2009	694.91	3.93	NM	690.98
	5/6/2009	694.91	4.06	NM	690.85
	5/11/2009	694.91	4.00	NM	690.91
	5/20/2009	694.91	3.89	NM	691.02
	5/27/2009	694.91	4.05	NM	690.86
	6/8/2009	694.91	4.79	NM	690.12
	6/15/2009	694.91	4.04	NM	690.87
	6/25/2009	694.91	3.94	NM	690.97
	6/30/2009	694.91	4.59	NM	690.32
	7/31/2009	694.91	4.42	NM	690.49
	8/13/2009	694.91	4.69	NM	690.22
	8/26/2009	694.91	6.42	NM	688.49
	10/2/2009	694.91	4.87	NM	690.04
	10/6/2009	694.91	4.98	NM	689.93
	12/9/2009	694.91	4.16	NM	690.75
	12/18/2009	694.91	4.25	NM	690.66
	1/26/2010	694.91	4.15	NM	690.76
	2/3/2010	694.91	4.31	NM	690.60
	3/1/2010	694.91	4.07	NM	690.84
	4/16/2010	694.91	4.00	NM	690.91
	6/15/2010	694.91	3.53	NM	691.38
	8/3/2010	694.91	6.99	NM	687.92
	8/10/2010	694.91	7.40	NM	687.51
	8/30/2010	694.91	8.28	NM	686.63
	9/20/2010	694.91	8.80	NM	686.11
	12/13/2010	694.91	4.17	NM	690.74
	2/18/2011	694.91	4.39	NM	690.52
	2/22/2011	694.91	3.64	NM	691.27
	3/4/2011	694.91	3.67	NM	691.24
	3/7/2011	694.91	3.52	NM	691.39
	3/28/2011	694.91	4.06	NM	690.85
	6/21/2011	694.91	4.90	NM	690.01
MW-17S	8/11/2003	694.42	7.83	10.83	686.59
	10/29/2003	694.42	6.01	10.83	688.41
	2/18/2004	694.42	4.70	10.83	689.72
	9/9/2004	694.42	8.11	10.83	686.31
	7/31/2006	694.42	8.37	10.83	686.05
	7/24/2007	694.42	8.20	10.87	686.22
	11/30/2007	694.42	7.08	NM	687.34
	6/8/2008	694.42	4.24	NM	690.18
	9/9/2008	694.42	NM	NM	NM
	11/17/2008	694.42	7.11	NM	687.31
	2/5/2009	694.42	6.29	NM	688.13
	12/9/2009	694.42	4.87	NM	689.55
	1/14/2010	694.42	7.78	NM	686.64
	6/15/2010	694.42	4.73	NM	689.69
	9/20/2010	694.42	9.10	NM	685.32
	12/13/2010	694.42	6.04	NM	688.38
	3/7/2011	694.42	3.67	NM	690.75

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-17S (cont.)	6/21/2011	694.42	6.35	NM	688.07
MW-17D	8/11/2003	694.41	10.90	19.00	683.51
	10/29/2003	694.41	6.38	19.00	688.03
	2/18/2004	694.41	4.93	19.00	689.48
	9/9/2004	694.41	7.50	19.00	686.91
	7/31/2006	694.41	8.23	19.00	686.18
	7/24/2007	694.41	8.30	19.00	686.11
	11/30/2007	694.41	7.96	NM	686.45
	6/8/2008	694.41	4.14	NM	690.27
	9/9/2008	694.41	NM	NM	NM
	11/17/2008	694.41	7.55	NM	686.86
	2/5/2009	694.41	7.13	NM	687.28
	12/9/2009	694.41	6.65	NM	687.76
	1/14/2010	694.41	7.62	NM	686.79
	1/15/2010	694.41	13.77	NM	680.64
	1/18/2010	694.41	11.51	NM	682.90
	1/19/2010	694.41	10.97	NM	683.44
	1/20/2010	694.41	10.48	NM	683.93
	1/21/2010	694.41	10.08	NM	684.33
	6/15/2010	694.41	6.40	NM	688.01
	9/20/2010	694.41	8.70	NM	685.71
	12/13/2010	694.41	6.81	NM	687.60
	3/7/2011	694.41	4.13	NM	690.28
	6/21/2011	694.41	6.97	NM	687.44
MW-18S	8/11/2003	692.02	7.57	10.15	684.45
	10/29/2003	692.02	6.03	10.15	685.99
	2/18/2004	692.02	5.49	10.15	686.53
	9/9/2004	692.02	7.56	10.15	684.46
	7/31/2006	692.02	8.85	10.15	683.17
	7/24/2007	692.02	7.94	10.15	684.08
	11/30/2007	692.02	7.41	NM	684.61
	6/8/2008	692.02	5.34	NM	686.68
	9/9/2008	692.02	8.20	NM	683.82
	11/17/2008	692.02	7.55	NM	684.47
	2/5/2009	692.02	7.27	NM	684.75
	12/9/2009	692.02	4.54	NM	687.48
	1/15/2010	692.02	7.50	NM	684.52
	6/15/2010	692.02	4.40	NM	687.62
	9/20/2010	692.02	9.37	NM	682.65
	12/13/2010	692.02	6.82	NM	685.20
	3/7/2011	692.02	4.07	NM	687.95
	6/21/2011	692.02	6.51	NM	685.51
MW-18D	8/11/2003	691.55	10.09	19.49	681.46
	10/29/2003	691.55	6.91	19.49	684.64
	2/18/2004	691.55	6.24	19.49	685.31
	9/9/2004	691.55	7.57	19.49	683.98
	7/31/2006	691.55	7.58	19.49	683.97
	7/24/2007	691.55	7.68	19.48	683.87
	11/30/2007	691.55	7.65	NM	683.90
	6/8/2008	691.55	5.50	NM	686.05
	9/9/2008	691.55	NM	NM	NM
	11/17/2008	691.55	7.76	NM	683.79

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-18D (cont.)	2/5/2009	691.55	7.38	NM	684.17
	12/9/2009	691.55	7.01	NM	684.54
	6/15/2010	691.55	6.85	NM	684.70
	9/20/2010	691.55	8.72	NM	682.83
	12/13/2010	691.55	8.76	NM	682.79
	3/7/2011	691.55	5.70	NM	685.85
	6/21/2011	691.55	7.11	NM	684.44
MW-19S	8/11/2003	691.06	7.97	8.00	683.09
	10/29/2003	691.06	7.15	8.00	683.91
	2/18/2004	691.06	6.78	8.00	684.28
	9/9/2004	691.06	8.00	8.00	683.06
	7/31/2006	691.06	8.05	8.00	683.01
	7/24/2007	691.06	8.03	8.00	683.03
	11/30/2007	691.06	8.00	NM	683.06
	6/8/2008	691.06	6.20	NM	684.86
	9/9/2008	691.06	NM	NM	NM
	11/17/2008	691.06	8.00	NM	683.06
	2/5/2009	691.06	8.00	NM	683.06
	12/9/2009	691.06	7.22	NM	683.84
	6/15/2010	691.06	5.59	NM	685.47
	9/20/2010	691.06	8.00	NM	683.06
	12/13/2010	691.06	7.68	NM	683.38
	3/7/2011	691.06	5.41	NM	685.65
	6/21/2011	691.06	7.16	NM	683.90
MW-19D	8/11/2003	691.29	18.00	19.45	673.29
	10/29/2003	691.29	13.30	19.45	677.99
	2/18/2004	691.29	10.99	19.45	680.30
	9/9/2004	691.29	8.41	19.45	682.88
	7/31/2006	691.29	12.52	19.45	678.77
	7/24/2007	691.29	7.11	20.46	684.18
	11/30/2007	691.29	15.88	NM	675.41
	6/8/2008	691.29	9.71	NM	681.58
	9/9/2008	691.29	NM	NM	NM
	11/17/2008	691.29	16.89	NM	674.40
	2/5/2009	691.29	NM	NM	NM
	3/3/2009	691.29	16.31	NM	674.98
	3/11/2009	691.29	16.76	NM	674.53
	3/17/2009	691.29	17.23	NM	674.06
	3/25/2009	691.29	16.80	NM	674.49
	3/31/2009	691.29	17.62	NM	673.67
	4/20/2009	691.29	16.74	NM	674.55
	4/29/2009	691.29	16.29	NM	675.00
	5/6/2009	691.29	16.56	NM	674.73
	5/11/2009	691.29	16.87	NM	674.42
	5/20/2009	691.29	16.32	NM	674.97
	5/27/2009	691.29	16.83	NM	674.46
	6/8/2009	691.29	17.02	NM	674.27
	6/15/2009	691.29	16.72	NM	674.57
	6/25/2009	691.29	16.89	NM	674.40
	6/30/2009	691.29	16.58	NM	674.71
	7/31/2009	691.29	14.88	NM	676.41
	8/13/2009	691.29	14.93	NM	676.36
	8/26/2009	691.29	15.22	NM	676.07

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-19D (cont.)	10/2/2009	691.29	14.05	NM	677.24
	10/6/2009	691.29	14.93	NM	676.36
	12/9/2009	691.29	10.71	NM	680.58
	12/18/2009	691.29	14.94	NM	676.35
	1/26/2010	691.29	14.22	NM	677.07
	2/3/2010	691.29	14.86	NM	676.43
	3/1/2010	691.29	14.72	NM	676.57
	6/15/2010	691.29	10.29	NM	681.00
	8/3/2010	691.29	9.54	NM	681.75
	8/10/2010	691.29	10.84	NM	680.45
	8/30/2010	691.29	11.67	NM	679.62
	9/20/2010	691.29	11.23	NM	680.06
	12/13/2010	691.29	10.18	NM	681.11
	2/18/2011	691.29	12.62	NM	678.67
	2/22/2011	691.29	12.44	NM	678.85
	3/7/2011	691.29	11.40	NM	679.89
	6/21/2011	691.29	8.34	NM	682.95
MW-20S	10/29/2003	691.16	6.85	7.60	684.31
	2/18/2004	691.16	5.61	7.60	685.55
	9/9/2004	691.16	7.51	7.60	683.65
	7/31/2006	691.16	7.32	7.60	683.84
	7/24/2007	691.16	7.39	7.79	683.77
	11/30/2007	691.16	6.59	NM	684.57
	6/8/2008	691.16	5.47	NM	685.69
	9/9/2008	691.16	7.60	NM	683.56
	11/17/2008	691.16	6.83	NM	684.33
	2/5/2009	691.16	6.60	NM	684.56
	2/25/2009	691.16	5.84	NM	685.32
	3/3/2009	691.16	6.24	NM	684.92
	12/9/2009	691.16	5.97	NM	685.19
	6/15/2010	691.16	5.32	NM	685.84
	9/20/2010	691.16	7.62	NM	683.54
	12/13/2010	691.16	6.20	NM	684.96
	3/7/2011	691.16	5.34	NM	685.82
	6/21/2011	691.16	6.16	NM	685.00
MW-20D	10/29/2003	691.54	6.37	26.00	685.17
	2/18/2004	691.54	6.12	26.00	685.42
	9/9/2004	691.54	7.31	26.00	684.23
	7/31/2006	691.54	7.19	26.00	684.35
	7/24/2007	691.54	7.20	26.00	684.34
	11/30/2007	691.54	7.12	NM	684.42
	6/8/2008	691.54	6.38	NM	685.16
	9/9/2008	691.54	NM	NM	NM
	11/17/2008	691.54	6.75	NM	684.79
	2/5/2009	691.54	NM	NM	NM
	2/25/2009	691.54	6.32	NM	685.22
	3/3/2009	691.54	5.88	NM	685.66
	3/11/2009	691.54	6.45	NM	685.09
	3/17/2009	691.54	6.67	NM	684.87
	3/25/2009	691.54	6.05	NM	685.49
	3/31/2009	691.54	5.96	NM	685.58
	4/20/2009	691.54	5.80	NM	685.74
	4/29/2009	691.54	6.20	NM	685.34

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-20D (cont.)	5/6/2009	691.54	6.18	NM	685.36
	5/11/2009	691.54	6.18	NM	685.36
	5/20/2009	691.54	5.94	NM	685.60
	5/27/2009	691.54	7.26	NM	684.28
	6/8/2009	691.54	7.08	NM	684.46
	6/15/2009	691.54	6.23	NM	685.31
	6/24/2009	691.54	5.76	NM	685.78
	6/30/2009	691.54	6.84	NM	684.70
	7/31/2009	691.54	6.43	NM	685.11
	8/13/2009	691.54	6.97	NM	684.57
	8/26/2009	691.54	7.59	NM	683.95
	10/2/2009	691.54	7.05	NM	684.49
	10/6/2009	691.54	7.11	NM	684.43
	12/9/2009	691.54	6.17	NM	685.37
	12/18/2009	691.54	6.21	NM	685.33
	1/20/2010	691.54	6.83	NM	684.71
	1/26/2010	691.54	5.96	NM	685.58
	2/3/2010	691.54	7.60	NM	683.94
	3/1/2010	691.54	6.26	NM	685.28
	4/16/2010	691.54	6.33	NM	685.21
	6/15/2010	691.54	5.55	NM	685.99
	8/3/2010	691.54	7.60	NM	683.94
	8/10/2010	691.54	7.62	NM	683.92
	8/30/2010	691.54	7.65	NM	683.89
	9/20/2010	691.54	7.62	NM	683.92
	12/13/2010	691.54	6.40	NM	685.14
	2/18/2011	691.54	6.71	NM	684.83
	2/22/2011	691.54	5.47	NM	686.07
	3/4/2011	691.54	5.76	NM	685.78
	3/7/2011	691.54	5.63	NM	685.91
	3/28/2011	691.54	6.58	NM	684.96
	6/21/2011	691.54	6.19	NM	685.35
MW-21S	10/29/2003	688.99	4.41	6.90	684.58
	2/18/2004	688.99	4.43	6.90	684.56
	9/9/2004	688.99	4.91	6.90	684.08
	7/31/2006	688.99	4.78	6.90	684.21
	7/24/2007	688.99	5.00	7.08	683.99
	11/30/2007	688.99	4.66	NM	684.33
	6/8/2008	688.99	3.51	NM	685.48
	9/9/2008	688.99	5.05	NM	683.94
	11/17/2008	688.99	4.46	NM	684.53
	2/5/2009	688.99	4.75	NM	684.24
	2/25/2009	688.99	4.32	NM	684.67
	3/3/2009	688.99	4.33	NM	684.66
	12/9/2009	688.99	4.70	NM	684.29
	6/15/2010	688.99	3.67	NM	685.32
	9/20/2010	688.99	5.20	NM	683.79
	12/13/2010	688.99	4.22	NM	684.77
	6/21/2011	688.99	4.29	NM	684.70
MW-21D	10/29/2003	688.4	3.71	25.09	684.69
	2/18/2004	688.4	3.70	25.09	684.70
	9/9/2004	688.4	5.70	25.09	682.70
	7/31/2006	688.4	4.55	25.09	683.85

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-21D (cont.)	7/24/2007	688.4	4.55	25.27	683.85
	11/30/2007	688.4	4.20	NM	684.20
	6/8/2008	688.4	3.09	NM	685.31
	9/9/2008	688.4	NM	NM	NM
	11/17/2008	688.4	3.95	NM	684.45
	2/5/2009	NM	NM	NM	NM
	2/25/2009	688.4	4.60	NM	683.80
	3/3/2009	688.4	4.46	NM	683.94
	3/11/2009	688.4	4.52	NM	683.88
	3/17/2009	688.4	4.86	NM	683.54
	3/25/2009	688.4	3.95	NM	684.45
	3/31/2009	688.4	4.01	NM	684.39
	4/20/2009	688.4	3.87	NM	684.53
	4/29/2009	688.4	4.15	NM	684.25
	5/6/2009	688.4	4.10	NM	684.30
	5/11/2009	688.4	4.06	NM	684.34
	5/20/2009	688.4	3.77	NM	684.63
	5/27/2009	688.4	4.39	NM	684.01
	6/8/2009	688.4	4.93	NM	683.47
	6/15/2009	688.4	3.94	NM	684.46
	6/25/2009	688.4	3.62	NM	684.78
	6/30/2009	688.4	4.68	NM	683.72
	7/31/2009	688.4	4.58	NM	683.82
	8/13/2009	688.4	4.73	NM	683.67
	8/26/2009	688.4	5.29	NM	683.11
	10/2/2009	688.4	4.12	NM	684.28
	10/6/2009	688.4	4.49	NM	683.91
	12/9/2009	688.4	4.41	NM	683.99
	12/18/2009	688.4	4.69	NM	683.71
	1/20/2010	688.4	5.16	NM	683.24
	1/26/2010	688.4	4.54	NM	683.86
	2/3/2010	688.4	5.07	NM	683.33
	3/1/2010	688.4	4.94	NM	683.46
	4/16/2010	688.4	5.00	NM	683.40
	6/15/2010	688.4	4.32	NM	684.08
	8/3/2010	688.4	5.52	NM	682.88
	8/10/2010	688.4	5.57	NM	682.83
	8/30/2010	688.4	5.60	NM	682.80
	9/20/2010	688.4	5.66	NM	682.74
	12/13/2010	688.4	4.83	NM	683.57
	2/18/2011	688.4	5.05	NM	683.35
	2/22/2011	688.4	4.06	NM	684.34
	3/4/2011	688.4	4.33	NM	684.07
	3/7/2011	688.4	4.14	NM	684.26
	3/28/2011	688.4	5.00	NM	683.40
	6/21/2011	688.4	4.53	NM	683.87
MW-22D	10/29/2003	688.35	3.61	25.06	684.74
	2/18/2004	688.35	3.64	25.06	684.71
	9/9/2004	688.35	4.65	25.06	683.70
	7/31/2006	688.35	4.48	25.06	683.87
	7/24/2007	688.35	4.20	21.69	684.15
	11/30/2007	688.35	4.15	NM	684.20
	6/8/2008	688.35	3.08	NM	685.27
	9/9/2008	688.35	NM	NM	NM

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-22D (cont.)	11/17/2008	688.35	3.95	NM	684.40
	2/5/2009	688.35	NM	NM	NM
	3/3/2009	688.35	4.12	NM	684.23
	3/11/2009	688.35	4.14	NM	684.21
	3/17/2009	688.35	4.52	NM	683.83
	3/25/2009	688.35	3.63	NM	684.72
	3/31/2009	688.35	3.70	NM	684.65
	4/20/2009	688.35	3.54	NM	684.81
	4/29/2009	688.35	3.83	NM	684.52
	5/6/2009	688.35	3.81	NM	684.54
	5/11/2009	688.35	3.76	NM	684.59
	5/20/2009	688.35	3.43	NM	684.92
	5/27/2009	688.35	4.06	NM	684.29
	6/8/2009	688.35	4.59	NM	683.76
	6/15/2009	688.35	3.58	NM	684.77
	6/25/2009	688.35	3.28	NM	685.07
	6/30/2009	688.35	4.35	NM	684.00
	7/31/2009	688.35	4.32	NM	684.03
	8/13/2009	688.35	4.42	NM	683.93
	8/26/2009	688.35	4.97	NM	683.38
	10/2/2009	688.35	3.78	NM	684.57
	10/6/2009	688.35	4.17	NM	684.18
	12/9/2009	688.35	4.12	NM	684.23
	12/18/2009	688.35	4.34	NM	684.01
	1/20/2010	688.35	4.83	NM	683.52
	1/26/2010	688.35	4.23	NM	684.12
	2/3/2010	688.35	4.74	NM	683.61
	3/1/2010	688.35	4.62	NM	683.73
	4/16/2010	688.35	4.68	NM	683.67
	6/15/2010	688.35	3.99	NM	684.36
	8/3/2010	688.35	5.18	NM	683.17
	8/10/2010	688.35	5.24	NM	683.11
	8/30/2010	688.35	5.27	NM	683.08
	9/20/2010	688.35	5.34	NM	683.01
	12/13/2010	688.35	4.50	NM	683.85
	2/18/2011	688.35	4.74	NM	683.61
	2/22/2011	688.35	3.73	NM	684.62
	3/4/2011	688.35	4.02	NM	684.33
	3/7/2011	688.35	3.82	NM	684.53
	3/28/2011	688.35	4.62	NM	683.73
	6/21/2011	688.35	4.17	NM	684.18
MW-23D	10/29/2003	687.96	3.23	24.05	684.73
	2/18/2004	687.96	2.55	24.05	685.41
	9/9/2004	687.96	4.30	24.05	683.66
	7/31/2006	687.96	4.09	24.05	683.87
	7/24/2007	687.96	4.08	24.25	683.88
	11/30/2007	687.96	7.57	NM	680.39
	6/8/2008	687.96	2.61	NM	685.35
	9/9/2008	687.96	NM	NM	NM
	11/17/2008	687.96	3.50	NM	684.46
	2/5/2009	687.96	NM	NM	NM
	3/3/2009	687.96	3.79	NM	684.17
	3/11/2009	687.96	3.80	NM	684.16
	3/17/2009	687.96	4.10	NM	683.86

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-23D (cont.)	3/25/2009	687.96	3.28	NM	684.68
	3/31/2009	687.96	3.27	NM	684.69
	4/20/2009	687.96	3.13	NM	684.83
	4/29/2009	687.96	3.42	NM	684.54
	5/6/2009	687.96	3.50	NM	684.46
	5/11/2009	687.96	3.29	NM	684.67
	5/20/2009	687.96	3.08	NM	684.88
	5/27/2009	687.96	3.68	NM	684.28
	6/8/2009	687.96	4.15	NM	683.81
	6/15/2009	687.96	3.22	NM	684.74
	6/25/2009	687.96	2.86	NM	685.10
	6/30/2009	687.96	3.87	NM	684.09
	7/31/2009	687.96	3.92	NM	684.04
	8/13/2009	687.96	4.01	NM	683.95
	8/26/2009	687.96	4.60	NM	683.36
	10/2/2009	687.96	3.42	NM	684.54
	10/6/2009	687.96	3.77	NM	684.19
	12/9/2010	687.96	3.72	NM	684.24
	12/18/2009	687.96	3.93	NM	684.03
	1/15/2010	687.96	4.51	NM	683.45
	1/26/2010	687.96	3.83	NM	684.13
	2/3/2010	687.96	4.40	NM	683.56
	3/1/2010	687.96	4.35	NM	683.61
	6/15/2010	687.96	3.53	NM	684.43
	8/30/2010	687.96	4.88	NM	683.08
	9/20/2010	687.96	6.95	NM	681.01
	12/13/2010	687.96	4.20	NM	683.76
	2/18/2011	687.96	4.39	NM	683.57
	2/22/2011	687.96	3.32	NM	684.64
	3/7/2011	687.96	3.35	NM	684.61
	6/21/2011	687.96	3.76	NM	684.20
MW-24A	11/17/2008	687.89	3.90	27.68	683.99
	2/25/2009	687.89	3.78	NM	684.11
	3/3/2009	687.89	4.31	NM	683.58
	3/11/2009	687.89	3.80	NM	684.09
	3/17/2009	687.89	4.52	NM	683.37
	3/25/2009	687.89	3.45	NM	684.44
	3/31/2009	687.89	3.26	NM	684.63
	4/20/2009	687.89	3.08	NM	684.81
	4/29/2009	687.89	3.41	NM	684.48
	5/6/2009	687.89	3.45	NM	684.44
	5/11/2009	687.89	3.31	NM	684.58
	5/20/2009	687.89	2.98	NM	684.91
	5/27/2009	687.89	3.61	NM	684.28
	6/8/2009	687.89	4.09	NM	683.80
	6/15/2009	687.89	3.12	NM	684.77
	6/25/2009	687.89	2.74	NM	685.15
	6/30/2009	687.89	3.64	NM	684.25
	7/31/2009	687.89	4.18	NM	683.71
	8/13/2009	687.89	3.90	NM	683.99
	8/26/2009	687.89	4.53	NM	683.36
	10/2/2009	687.89	3.48	NM	684.41
	10/6/2009	687.89	3.83	NM	684.06
	12/9/2009	687.89	3.59	NM	684.30

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-24A (cont.)	12/18/2009	687.89	3.88	NM	684.01
	1/4/2010	687.89	4.33	NM	683.56
	1/6/2010	687.89	4.47	NM	683.42
	1/11/2010	687.89	4.58	NM	683.31
	1/18/2010	687.89	4.13	NM	683.76
	1/20/2010	687.89	4.33	NM	683.56
	1/25/2010	687.89	3.63	NM	684.26
	2/2/2010	687.89	4.30	NM	683.59
	2/4/2010	687.89	4.40	NM	683.49
	2/5/2010	687.89	4.31	NM	683.58
	2/22/2010	687.89	3.90	NM	683.99
	3/2/2010	687.89	4.19	NM	683.70
	3/4/2010	687.89	4.29	NM	683.60
	3/8/2010	687.89	4.19	NM	683.70
	3/11/2010	687.89	4.42	NM	683.47
	4/16/2010	687.89	4.21	NM	683.68
	4/26/2010	687.89	3.26	NM	684.63
	5/5/2010	687.89	3.88	NM	684.01
	6/1/2010	687.89	4.21	NM	683.68
	6/9/2010	687.89	4.03	NM	683.86
	6/15/2010	687.89	3.50	NM	684.39
	6/24/2010	687.89	4.14	NM	683.75
	8/3/2010	687.89	4.75	NM	683.14
	8/10/2010	687.89	4.74	NM	683.15
	8/17/2010	687.89	5.12	NM	682.77
	8/23/2010	687.89	4.64	NM	683.25
	8/30/2010	687.89	4.76	NM	683.13
	9/20/2010	687.89	4.84	NM	683.05
	9/24/2010	687.89	4.89	NM	683.00
	10/1/2010	687.89	5.04	NM	682.85
	10/5/2010	687.89	4.94	NM	682.95
	10/12/2010	687.89	5.07	NM	682.82
	10/18/2010	687.89	5.01	NM	682.88
	12/10/2010	687.89	4.30	NM	683.59
	12/13/2010	687.89	3.98	NM	683.91
	12/28/2010	687.89	4.21	NM	683.68
	1/3/2011	687.89	3.97	NM	683.92
	1/10/2011	687.89	4.70	NM	683.19
	1/17/2011	687.89	4.39	NM	683.50
	2/18/2011	687.89	4.32	NM	683.57
	2/22/2011	687.89	3.29	NM	684.60
	3/4/2011	687.89	3.52	NM	684.37
	3/7/2011	687.89	3.34	NM	684.55
	3/18/2011	687.89	3.91	NM	683.98
	3/28/2011	687.89	4.42	NM	683.47
	6/21/2011	687.89	3.72	NM	684.17
MW-25A	11/17/2008	692.65	5.20	22.18	687.45
	3/3/2009	692.65	4.78	NM	687.87
	3/11/2009	692.65	5.20	NM	687.45
	3/17/2009	692.65	5.95	NM	686.70
	3/25/2009	692.65	4.81	NM	687.84
	3/31/2009	692.65	4.58	NM	688.07
	4/20/2009	692.65	4.35	NM	688.30
	4/29/2009	692.65	4.70	NM	687.95

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-25A (cont.)	5/6/2009	692.65	4.85	NM	687.80
	5/11/2009	692.65	4.78	NM	687.87
	5/20/2009	692.65	4.42	NM	688.23
	5/27/2009	692.65	4.95	NM	687.70
	6/8/2009	692.65	5.66	NM	686.99
	6/15/2009	692.65	4.79	NM	687.86
	6/25/2009	692.65	4.64	NM	688.01
	6/30/2009	692.65	5.49	NM	687.16
	7/31/2009	692.65	5.21	NM	687.44
	8/13/2009	692.65	5.56	NM	687.09
	8/26/2009	692.65	6.74	NM	685.91
	10/2/2009	692.65	4.98	NM	687.67
	10/6/2009	692.65	5.61	NM	687.04
	12/9/2009	692.65	4.61	NM	688.04
	12/18/2009	692.65	4.58	NM	688.07
	1/26/2010	692.65	4.35	NM	688.30
	2/3/2010	692.65	5.10	NM	687.55
	3/1/2010	692.65	4.88	NM	687.77
	6/15/2010	692.65	4.10	NM	688.55
	8/3/2010	692.65	6.99	NM	685.66
	8/10/2010	692.65	7.20	NM	685.45
	9/20/2010	692.65	7.63	NM	685.02
	12/13/2010	692.65	5.25	NM	687.40
	3/7/2011	692.65	4.32	NM	688.33
	6/21/2011	692.65	5.22	NM	687.43
MW-26A	11/17/2008	692.00	36.60	40.68	655.40
	3/3/2009	692.00	33.08	NM	658.92
	3/11/2009	692.00	33.00	NM	659.00
	3/17/2009	692.00	33.28	NM	658.72
	3/25/2009	692.00	31.97	NM	660.03
	3/31/2009	692.00	33.49	NM	658.51
	4/20/2009	692.00	37.51	NM	654.49
	4/29/2009	692.00	36.79	NM	655.21
	5/6/2009	692.00	36.78	NM	655.22
	5/11/2009	692.00	35.54	NM	656.46
	5/20/2009	692.00	36.39	NM	655.61
	5/27/2009	692.00	36.45	NM	655.55
	6/8/2009	692.00	36.23	NM	655.77
	6/15/2009	692.00	35.90	NM	656.10
	6/25/2009	692.00	35.81	NM	656.19
	6/30/2009	692.00	35.56	NM	656.44
	7/31/2009	692.00	33.23	NM	658.77
	8/13/2009	692.00	33.14	NM	658.86
	8/26/2009	692.00	33.14	NM	658.86
	10/2/2009	692.00	30.76	NM	661.24
	10/6/2009	692.00	31.61	NM	660.39
	12/9/2009	692.00	25.93	NM	666.07
	12/18/2009	692.00	29.98	NM	662.02
	1/13/2010	692.00	28.94	NM	663.06
	1/14/2010	692.00	35.88	NM	656.12
	1/15/2010	692.00	35.79	NM	656.21
	1/18/2010	692.00	35.67	NM	656.33
	1/19/2010	692.00	35.64	NM	656.36
	1/20/2010	692.00	35.58	NM	656.42

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-26A (cont.)	1/26/2010	692.00	35.36	NM	656.64
	2/3/2010	692.00	35.01	NM	656.99
	3/1/2010	692.00	34.85	NM	657.15
	6/15/2010	692.00	25.05	NM	666.95
	8/3/2010	692.00	22.39	NM	669.61
	8/10/2010	692.00	23.38	NM	668.62
	9/20/2010	692.00	22.38	NM	669.62
	12/13/2010	692.00	18.20	NM	673.80
	3/7/2011	692.00	22.07	NM	669.93
	6/21/2011	692.00	23.38	NM	668.62
MW-27A	11/17/2008	691.55	7.74	34.00	683.81
	2/25/2009	691.55	7.42	NM	684.13
	3/3/2009	691.55	7.34	NM	684.21
	3/11/2009	691.55	6.34	NM	685.21
	3/17/2009	691.55	7.77	NM	683.78
	3/25/2009	691.55	6.83	NM	684.72
	3/31/2009	691.55	6.39	NM	685.16
	4/20/2009	691.55	6.73	NM	684.82
	4/29/2009	691.55	7.05	NM	684.50
	5/6/2009	691.55	7.00	NM	684.55
	5/11/2009	691.55	6.95	NM	684.60
	5/20/2009	691.55	6.64	NM	684.91
	5/27/2009	691.55	7.26	NM	684.29
	6/8/2009	691.55	7.83	NM	683.72
	6/15/2009	691.55	6.82	NM	684.73
	6/24/2009	691.55	6.48	NM	685.07
	6/30/2009	691.55	6.71	NM	684.84
	7/31/2009	691.55	7.73	NM	683.82
	8/13/2009	691.55	7.67	NM	683.88
	8/26/2009	691.55	8.24	NM	683.31
	10/2/2009	691.55	7.02	NM	684.53
	10/6/2009	691.55	7.39	NM	684.16
	12/9/2009	691.55	7.28	NM	684.27
	12/18/2009	691.55	7.53	NM	684.02
	1/4/2010	691.55	8.01	NM	683.54
	1/6/2010	691.55	8.12	NM	683.43
	1/11/2010	691.55	8.20	NM	683.35
	1/18/2010	691.55	8.02	NM	683.53
	1/21/2010	691.55	7.92	NM	683.63
	1/25/2010	691.55	7.23	NM	684.32
	2/2/2010	691.55	7.94	NM	683.61
	2/4/2010	691.55	7.76	NM	683.79
	2/5/2010	691.55	7.81	NM	683.74
	2/22/2010	691.55	7.12	NM	684.43
	3/2/2010	691.55	7.88	NM	683.67
	3/4/2010	691.55	7.91	NM	683.64
	3/8/2010	691.55	7.98	NM	683.57
	3/11/2010	691.55	7.96	NM	683.59
	3/24/2010	691.55	7.29	NM	684.26
	4/15/2010	691.55	7.75	NM	683.80
	4/19/2010	691.55	7.97	NM	683.58
	4/26/2010	691.55	7.11	NM	684.44
	5/5/2010	691.55	7.46	NM	684.09
	6/1/2010	691.55	7.93	NM	683.62
	6/9/2010	691.55	7.78	NM	683.77

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-27A (cont.)	6/15/2010	691.55	7.11	NM	684.44
	6/24/2010	691.55	7.22	NM	684.33
	7/22/2010	691.55	7.98	NM	683.57
	8/3/2010	691.55	8.39	NM	683.16
	8/10/2010	691.55	8.43	NM	683.12
	8/17/2010	691.55	8.62	NM	682.93
	8/23/2010	691.55	8.37	NM	683.18
	8/30/2010	691.55	8.49	NM	683.06
	9/20/2010	691.55	8.55	NM	683.00
	12/13/2010	691.55	7.64	NM	683.91
	2/18/2011	691.55	7.92	NM	683.63
	2/22/2011	691.55	6.90	NM	684.65
	3/7/2011	691.55	6.95	NM	684.60
	6/21/2011	691.55	7.34	NM	684.21
MW-28A	2/9/2009	692.54	51.19	66.40	641.35
	2/25/2009	692.54	34.09	NM	658.45
	3/3/2009	692.54	26.00	NM	666.54
	3/11/2009	692.54	17.57	NM	674.97
	3/17/2009	692.54	12.96	NM	679.58
	3/25/2009	692.54	8.40	NM	684.14
	3/31/2009	692.54	5.83	NM	686.71
	4/20/2009	692.54	0.71	NM	691.83
	4/29/2009	692.54	0.08	NM	692.46
	5/6/2009	692.54	0.06	NM	692.48
	5/11/2009	692.54	0.04	NM	692.50
	5/20/2009	692.54	0.09	NM	692.45
	5/27/2009	692.54	0.07	NM	692.47
	6/8/2009	692.54	0.08	NM	692.46
	6/15/2009	692.54	0.07	NM	692.47
	6/24/2009	692.54	0.15	NM	692.39
	6/30/2009	692.54	0.11	NM	692.43
	7/31/2009	692.54	0.00	NM	692.54
	8/5/2009	692.54	0.00	NM	692.54
	8/13/2009	692.54	11.68	NM	680.86
	8/26/2009	692.54	4.89	NM	687.65
	10/2/2009	692.54	0.80	NM	691.74
	10/6/2009	692.54	0.00	NM	692.54
	12/9/2009	692.54	0.00	NM	692.54
	12/28/2009	692.54	0.00	NM	692.54
	1/18/2010	692.54	0.01	NM	692.53
	1/19/2010	692.54	49.81	NM	642.73
	1/20/2010	692.54	46.95	NM	645.59
	1/21/2010	692.54	44.48	NM	648.06
	1/22/2010	692.54	42.12	NM	650.42
	1/25/2010	692.54	35.82	NM	656.72
	4/29/2010	692.54	0.00	NM	692.54
	5/17/2010	692.54	0.68	NM	691.86
	6/15/2010	692.54	0.11	NM	692.43
	8/30/2010	692.54	0.00	NM	692.54
	9/20/2010	692.54	0.08	NM	692.46
	12/13/2010	692.54	0.00	NM	692.54
	3/7/2011	692.54	0.00	NM	692.54
	6/21/2011	692.54	0.00	NM	692.54

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-28B	2/9/2009	692.28	6.97	23.62	685.31
	2/25/2009	692.28	8.55	NM	683.73
	3/3/2009	692.28	8.35	NM	683.93
	3/11/2009	692.28	8.45	NM	683.83
	3/17/2009	692.28	9.02	NM	683.26
	3/25/2009	692.28	7.99	NM	684.29
	3/31/2009	692.28	7.82	NM	684.46
	4/20/2009	692.28	7.62	NM	684.66
	4/29/2009	692.28	7.99	NM	684.29
	5/6/2009	692.28	8.14	NM	684.14
	5/11/2009	692.28	7.95	NM	684.33
	5/20/2009	692.28	7.55	NM	684.73
	5/27/2009	692.28	8.37	NM	683.91
	6/8/2009	692.28	9.19	NM	683.09
	6/15/2009	692.28	7.77	NM	684.51
	6/24/2009	692.28	7.42	NM	684.86
	6/30/2009	692.28	8.79	NM	683.49
	7/31/2009	692.28	8.85	NM	683.43
	8/5/2009	692.28	7.53	NM	684.75
	8/13/2009	692.28	8.94	NM	683.34
	8/26/2009	692.28	9.74	NM	682.54
	10/2/2009	692.28	8.09	NM	684.19
	10/6/2009	692.28	6.96	NM	685.32
	12/9/2009	692.28	7.99	NM	684.29
	12/28/2009	692.28	9.78	NM	682.50
	1/21/2010	692.28	8.67	NM	683.61
	4/29/2010	692.28	8.01	NM	684.27
	5/17/2010	692.28	7.91	NM	684.37
	6/15/2010	692.28	7.33	NM	684.95
	8/30/2010	692.28	10.39	NM	681.89
	9/20/2010	692.28	10.48	NM	681.80
	12/13/2010	692.28	8.44	NM	683.84
	2/18/2011	692.28	9.08	NM	683.20
	3/7/2011	692.28	7.23	NM	685.05
	6/21/2011	692.28	8.10	NM	684.18
MW-28C	2/9/2009	692.71	27.30	38.60	665.41
	2/25/2009	692.71	28.45	NM	664.26
	3/3/2009	692.71	24.44	NM	668.27
	3/11/2009	692.71	20.35	NM	672.36
	3/17/2009	692.71	19.15	NM	673.56
	3/25/2009	692.71	16.48	NM	676.23
	3/31/2009	692.71	14.84	NM	677.87
	4/20/2009	692.71	11.12	NM	681.59
	4/29/2009	692.71	10.54	NM	682.17
	5/6/2009	692.71	10.05	NM	682.66
	5/11/2009	692.71	9.87	NM	682.84
	5/20/2009	692.71	9.31	NM	683.40
	5/27/2009	692.71	9.19	NM	683.52
	6/8/2009	692.71	9.28	NM	683.43
	6/15/2009	692.71	9.19	NM	683.52
	6/25/2009	692.71	9.05	NM	683.66
	6/30/2009	692.71	8.92	NM	683.79
	7/31/2009	692.71	8.81	NM	683.90
	8/5/2009	692.71	8.94	NM	683.77

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Table 3. Site Monitoring Well Network Groundwater Elevations
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Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-28C (cont.)	8/13/2009	692.71	20.47	NM	672.24
	8/26/2009	692.71	15.96	NM	676.75
	10/2/2009	692.71	10.99	NM	681.72
	10/6/2009	692.71	10.87	NM	681.84
	12/9/2009	692.71	8.82	NM	683.89
	12/28/2009	692.71	14.43	NM	678.28
	1/14/2010	692.71	11.70	NM	681.01
	1/15/2010	692.71	24.96	NM	667.75
	1/18/2010	692.71	23.05	NM	669.66
	1/19/2010	692.71	22.49	NM	670.22
	1/20/2010	692.71	21.91	NM	670.80
	1/21/2010	692.71	21.38	NM	671.33
	4/29/2010	692.71	9.32	NM	683.39
	5/17/2010	692.71	8.67	NM	684.04
	6/15/2010	692.71	9.24	NM	683.47
	8/30/2010	692.71	10.51	NM	682.20
	9/20/2010	692.71	10.46	NM	682.25
	12/13/2010	692.71	9.77	NM	682.94
	2/18/2011	692.71	9.77	NM	682.94
	3/7/2011	692.71	8.85	NM	683.86
	6/21/2011	692.71	9.14	NM	683.57
MW-29A	2/9/2009	696.28	49.15	79.65	647.13
	2/25/2009	696.28	55.32	NM	640.96
	3/3/2009	696.28	16.36	NM	679.92
	3/11/2009	696.28	7.22	NM	689.06
	3/17/2009	696.28	2.81	NM	693.47
	3/25/2009	696.28	1.23	NM	695.05
	3/31/2009	696.28	1.06	NM	695.22
	4/20/2009	696.28	0.13	NM	696.15
	4/29/2009	696.28	0.17	NM	696.11
	5/6/2009	696.28	0.09	NM	696.19
	5/11/2009	696.28	0.06	NM	696.22
	5/20/2009	696.28	0.08	NM	696.20
	5/27/2009	696.28	0.00	NM	696.28
	6/8/2009	696.28	0.13	NM	696.15
	6/15/2009	696.28	0.08	NM	696.20
	6/25/2009	696.28	0.04	NM	696.24
	8/5/2009	696.28	0.00	NM	696.28
	8/13/2009	696.28	9.78	NM	686.50
	8/26/2009	696.28	1.84	NM	694.44
	10/2/2009	696.28	0.09	NM	696.19
	10/6/2009	696.28	0.16	NM	696.12
	12/9/2009	696.28	0.00	NM	696.28
	12/18/2009	696.28	4.04	NM	692.24
	1/18/2010	696.28	0.24	NM	696.04
	1/19/2010	696.28	36.72	NM	659.56
	1/20/2010	696.28	31.36	NM	664.92
	1/21/2010	696.28	28.49	NM	667.79
	1/22/2010	696.28	26.28	NM	670.00
	1/25/2010	696.28	20.14	NM	676.14
	1/26/2010	696.28	18.52	NM	677.76
	4/29/2010	696.28	0.20	NM	696.08
	5/17/2010	696.28	0.35	NM	695.93
	6/15/2010	696.28	0.38	NM	695.90

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Table 3. Site Monitoring Well Network Groundwater Elevations
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Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-29A (cont.)	8/30/2010	696.28	0.07	NM	696.21
	9/20/2010	696.28	0.00	NM	696.28
	12/13/2010	696.28	0.00	NM	696.28
	2/18/2011	696.28	0.69	NM	695.59
	3/7/2011	696.28	0.13	NM	696.15
	6/21/2011	696.28	0.20	NM	696.08
MW-29B	2/9/2009	696.23	15.63	40.70	680.60
	2/25/2009	696.23	11.63	NM	684.60
	3/3/2009	696.23	14.22	NM	682.01
	3/11/2009	696.23	10.86	NM	685.37
	3/17/2009	696.23	10.10	NM	686.13
	3/25/2009	696.23	10.79	NM	685.44
	3/31/2009	696.23	10.83	NM	685.40
	4/20/2009	696.23	6.44	NM	689.79
	4/29/2009	696.23	10.08	NM	686.15
	5/6/2009	696.23	11.08	NM	685.15
	5/11/2009	696.23	11.53	NM	684.70
	5/20/2009	696.23	10.48	NM	685.75
	5/27/2009	696.23	10.96	NM	685.27
	6/8/2009	696.23	11.15	NM	685.08
	6/15/2009	696.23	10.84	NM	685.39
	6/25/2009	696.23	10.43	NM	685.80
	6/30/2009	696.23	10.49	NM	685.74
	7/31/2009	696.23	8.84	NM	687.39
	8/5/2009	696.23	9.11	NM	687.12
	8/13/2009	696.23	10.89	NM	685.34
	8/26/2009	696.23	9.67	NM	686.56
	10/2/2009	696.23	7.93	NM	688.30
	10/6/2009	696.23	8.08	NM	688.15
	12/9/2009	696.23	6.94	NM	689.29
	12/18/2009	696.23	18.30	NM	677.93
	1/18/2010	696.23	7.96	NM	688.27
	1/19/2010	696.23	27.30	NM	668.93
	1/20/2010	696.23	22.34	NM	673.89
	1/21/2010	696.23	19.19	NM	677.04
	1/22/2010	696.23	16.66	NM	679.57
	1/25/2010	696.23	12.03	NM	684.20
	1/26/2010	696.23	11.31	NM	684.92
	2/3/2010	696.23	10.45	NM	685.78
	2/22/2010	696.23	8.22	NM	688.01
	3/1/2010	696.23	10.00	NM	686.23
	3/8/2010	696.23	9.18	NM	687.05
	4/16/2010	696.23	10.56	NM	685.67
	6/1/2010	696.23	11.58	NM	684.65
	6/15/2010	696.23	11.16	NM	685.07
	7/6/2010	696.23	10.83	NM	685.40
	8/3/2010	696.23	10.09	NM	686.14
	8/10/2010	696.23	9.82	NM	686.41
	8/30/2010	696.23	9.45	NM	686.78
	9/20/2010	696.23	8.67	NM	687.56
	12/13/2010	696.23	7.96	NM	688.27
	2/22/2011	696.23	8.32	NM	687.91
	3/4/2011	696.23	7.85	NM	688.38
	3/7/2011	696.23	8.56	NM	687.67

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Table 3. Site Monitoring Well Network Groundwater Elevations
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Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-29B (cont.)	3/28/2011	696.23	9.95	NM	686.28
	6/21/2011	696.23	11.34	NM	684.89
MW-30A	11/4/2009	691.39	6.98	33.30	684.41
	12/9/2009	691.39	7.39	NM	684.00
	1/19/2010	691.39	8.32	NM	683.07
	6/15/2010	691.39	6.78	NM	684.61
	8/30/2010	691.39	8.84	NM	682.55
	9/20/2010	691.39	8.83	NM	682.56
	12/13/2010	691.39	7.90	NM	683.49
	3/7/2011	691.39	6.52	NM	684.87
	6/21/2011	691.39	7.63	NM	683.76
MW-30B	11/4/2009	691.58	33.90	48.80	657.68
	12/9/2009	691.58	23.32	NM	668.26
	1/13/2010	691.58	17.62	49.01	673.96
	1/14/2010	691.58	40.64	NM	650.94
	1/15/2010	691.58	39.89	NM	651.69
	1/18/2010	691.58	37.88	NM	653.70
	1/19/2010	691.58	37.27	NM	654.31
	1/20/2010	691.58	36.62	NM	654.96
	6/15/2010	691.58	9.98	NM	681.60
	8/30/2010	691.58	12.62	NM	678.96
	9/20/2010	691.58	11.75	NM	679.83
	12/13/2010	691.58	11.31	NM	680.27
	3/7/2011	691.58	9.91	NM	681.67
	6/21/2011	691.58	8.60	NM	682.98
MW-31A	11/4/2009	692.88	4.87	26.29	688.01
	12/9/2009	692.88	4.13	NM	688.75
	1/19/2010	692.88	4.96	NM	687.92
	6/15/2010	692.88	3.75	NM	689.13
	8/30/2010	692.88	6.33	NM	686.55
	9/20/2010	692.88	6.38	NM	686.50
	12/13/2010	692.88	4.84	NM	688.04
	2/18/2011	692.88	5.07	NM	687.81
	3/7/2011	692.88	3.74	NM	689.14
	6/21/2011	692.88	4.81	NM	688.07
MW-31B	11/4/2009	692.55	19.25	63.18	673.30
	12/9/2009	692.55	0.08	NM	692.47
	1/18/2010	692.55	0.12	NM	692.43
	1/19/2010	692.55	40.95	NM	651.60
	1/20/2010	692.55	35.22	NM	657.33
	1/21/2010	692.55	30.61	NM	661.94
	1/22/2010	692.55	26.36	NM	666.19
	1/25/2010	692.55	16.36	NM	676.19
	4/29/2010	692.55	0.00	NM	692.55
	5/17/2010	692.55	0.16	NM	692.39
	6/15/2010	692.55	0.22	NM	692.33
	9/20/2010	692.55	2.31	NM	690.24
	12/13/2010	692.55	0.00	NM	692.55
	2/18/2011	692.55	0.00	NM	692.55
	3/7/2011	692.55	0.00	NM	692.55
	6/21/2011	692.55	0.00	NM	692.55

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Table 3. Site Monitoring Well Network Groundwater Elevations
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Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-31C	11/4/2009	692.80	32.97	35.67	659.83
	12/9/2009	692.80	28.03	NM	664.77
	1/19/2010	692.80	18.10	NM	674.70
	1/20/2010	692.80	32.37	NM	660.43
	1/21/2010	692.80	32.15	NM	660.65
	1/22/2010	692.80	31.92	NM	660.88
	1/25/2010	692.80	31.25	NM	661.55
	1/26/2010	692.80	30.71	NM	662.09
	6/15/2010	692.80	8.85	NM	683.95
	8/30/2010	692.80	9.40	NM	683.40
	9/20/2010	692.80	8.82	NM	683.98
	12/13/2010	692.80	9.03	NM	683.77
	2/18/2011	692.80	10.02	NM	682.78
	3/7/2011	692.80	9.12	NM	683.68
	6/21/2011	692.80	9.01	NM	683.79
MW-32A	11/4/2009	690.51	6.33	27.17	684.18
	12/9/2009	690.51	6.26	NM	684.25
	12/28/2009	690.51	7.56	NM	682.95
	1/14/2010	690.51	7.64	NM	682.87
	1/21/2010	690.51	7.20	NM	683.31
	6/15/2010	690.51	5.51	NM	685.00
	9/20/2010	690.51	8.88	NM	681.63
	12/13/2010	690.51	6.70	NM	683.81
	3/7/2011	690.51	5.48	NM	685.03
	6/21/2011	690.51	6.32	NM	684.19
MW-33A	11/23/2009	703.07	31.53	49.84	671.54
	12/9/2009	703.07	38.56	NM	664.51
	3/14/2010	703.07	18.74	47.70	684.33
	6/15/2010	703.07	20.81	47.70	682.26
	9/20/2010	703.07	26.42	47.70	676.65
	12/13/2010	703.07	21.09	47.70	681.98
	3/7/2011	703.07	19.00	NM	684.07
	6/21/2011	703.07	19.52	NM	683.55
MW-33B	11/23/2009	704.53	22.80	69.75	681.73
	12/9/2009	704.53	24.26	NM	680.27
	3/14/2010	704.53	13.60	69.28	690.93
	6/15/2010	704.53	18.34	69.28	686.19
	9/20/2010	704.53	12.98	69.28	691.55
	12/13/2010	704.53	12.72	69.28	691.81
	3/7/2011	704.53	11.72	NM	692.81
	6/21/2011	704.53	11.64	NM	692.89
MW-33C	11/23/2009	704.68	19.86	34.63	684.82
	12/9/2009	704.68	19.23	NM	685.45
	3/14/2010	704.68	19.22	31.12	685.46
	6/15/2010	704.68	18.26	31.12	686.42
	9/20/2010	704.68	19.50	31.12	685.18
	12/13/2010	704.68	18.25	31.12	686.43
	3/7/2011	704.68	16.72	NM	687.96
	6/21/2011	704.68	17.78	NM	686.90

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Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-34A	11/23/2009	688.01	6.01	29.83	682.00
	12/9/2009	688.01	5.26	NM	682.75
	1/13/2010	688.01	5.98	NM	682.03
	1/14/2010	688.01	6.06	NM	681.95
	6/15/2010	688.01	5.01	NM	683.00
	8/30/2010	688.01	7.15	NM	680.86
	9/20/2010	688.01	7.11	NM	680.90
	12/13/2010	688.01	5.93	NM	682.08
	2/18/2011	688.01	6.27	NM	681.74
	3/7/2011	688.01	4.49	NM	683.52
	6/21/2011	688.01	5.41	NM	682.60
MW-35A	2/24/2010	706.06	10.02	29.24	696.04
	2/25/2010	706.06	10.02	29.00	696.04
	4/22/2010	706.06	16.08	NM	689.98
	6/15/2010	706.06	8.96	NM	697.10
	9/20/2010	706.06	17.74	NM	688.32
	12/13/2010	706.06	14.50	NM	691.56
	3/7/2011	706.06	8.76	NM	697.30
	6/21/2011	706.06	11.06	NM	695.00
MW-35B	2/24/2010	706.37	10.34	29.65	696.03
	2/25/2010	706.37	10.50	29.65	695.87
	4/22/2010	706.37	16.40	NM	689.97
	6/15/2010	706.37	9.30	NM	697.07
	9/20/2010	706.37	18.06	NM	688.31
	12/13/2010	706.37	15.25	NM	691.12
	3/7/2011	706.37	9.08	NM	697.29
	6/21/2011	706.37	11.39	NM	694.98
MW-35C	2/24/2010	706.38	43.64	48.24	662.74
	2/25/2010	706.38	42.46	47.60	663.92
	4/22/2010	706.38	33.99	NM	672.39
	4/23/2010	706.38	42.45	NM	663.93
	4/26/2010	706.38	41.87	NM	664.51
	4/27/2010	706.38	41.61	NM	664.77
	6/15/2010	706.38	29.44	NM	676.94
	9/20/2010	706.38	18.89	NM	687.49
	12/13/2010	706.38	16.96	NM	689.42
	3/7/2011	706.38	16.60	NM	689.78
	6/21/2011	706.38	17.06	NM	689.32
MW-36A	2/24/2010	700.44	17.54	27.21	682.90
	2/25/2010	700.44	17.86	27.21	682.58
	4/22/2010	700.44	18.73	NM	681.71
	6/15/2010	700.44	16.68	NM	683.76
	9/20/2010	700.44	19.33	NM	681.11
	12/13/2010	700.44	18.56	NM	681.88
	3/7/2011	700.44	16.31	NM	684.13
	6/21/2011	700.44	18.45	NM	681.99
MW-36B	2/24/2010	700.45	17.53	37.36	682.92
	2/25/2010	700.45	17.81	37.70	682.64
	4/22/2010	700.45	18.72	NM	681.73
	4/23/2010	700.45	42.45	NM	658.00

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-36B (cont.)	4/26/2010	700.45	41.87	NM	658.58
	4/27/2010	700.45	41.61	NM	658.84
	6/15/2010	700.45	16.67	NM	683.78
	9/20/2010	700.45	19.33	NM	681.12
	9/24/2010	700.45	19.31	NM	681.14
	10/1/2010	700.45	19.28	NM	681.17
	10/5/2010	700.45	19.28	NM	681.17
	10/12/2010	700.45	19.29	NM	681.16
	10/18/2010	700.45	19.24	NM	681.21
	10/29/2010	700.45	18.26	NM	682.19
	12/10/2010	700.45	18.98	NM	681.47
	12/13/2010	700.45	18.56	NM	681.89
	12/28/2010	700.45	19.00	NM	681.45
	1/3/2011	700.45	18.07	NM	682.38
	1/10/2011	700.45	18.95	NM	681.50
	1/17/2011	700.45	19.01	NM	681.44
	2/18/2011	700.45	18.89	NM	681.56
	2/22/2011	700.45	15.74	NM	684.71
	3/4/2011	700.45	17.64	NM	682.81
	3/7/2011	700.45	16.40	NM	684.05
	3/18/2011	700.45	18.23	NM	682.22
	3/28/2011	700.45	18.75	NM	681.70
	6/21/2011	700.45	18.31	NM	682.14
MW-36C	2/24/2010	700.85	53.26	63.30	647.59
	2/25/2010	700.85	53.94	64.00	646.91
	4/22/2010	700.85	42.61	NM	658.24
	4/23/2010	700.85	51.09	NM	649.76
	4/26/2010	700.85	50.22	NM	650.63
	4/27/2010	700.85	49.93	NM	650.92
	4/29/2010	700.85	49.48	NM	651.37
	5/11/2010	700.85	48.22	NM	652.63
	6/1/2010	700.85	44.88	NM	655.97
	6/9/2010	700.85	43.44	NM	657.41
	6/15/2010	700.85	43.98	NM	656.87
	6/24/2010	700.85	43.66	NM	657.19
	7/6/2010	700.85	39.65	NM	661.20
	7/13/2010	700.85	39.13	NM	661.72
	7/20/2010	700.85	38.62	NM	662.23
	8/3/2010	700.85	34.97	NM	665.88
	8/10/2010	700.85	35.45	NM	665.40
	8/17/2010	700.85	35.21	NM	665.64
	8/23/2010	700.85	33.53	NM	667.32
	8/30/2010	700.85	32.09	NM	668.76
	9/20/2010	700.85	31.05	NM	669.80
	9/24/2010	700.85	38.68	NM	662.17
	10/1/2010	700.85	37.66	NM	663.19
	10/5/2010	700.85	37.69	NM	663.16
	10/12/2010	700.85	36.74	NM	664.11
	10/18/2010	700.85	36.31	NM	664.54
	10/29/2010	700.85	34.40	NM	666.45
	12/10/2010	700.85	25.85	NM	675.00
	12/13/2010	700.85	28.03	NM	672.82
	12/28/2010	700.85	32.97	NM	667.88
	1/3/2011	700.85	32.72	NM	668.13

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-36C (cont.)	1/10/2011	700.85	32.24	NM	668.61
	1/17/2011	700.85	31.77	NM	669.08
	2/18/2011	700.85	25.95	NM	674.90
	2/22/2011	700.85	25.33	NM	675.52
	3/4/2011	700.85	24.73	NM	676.12
	3/7/2011	700.85	25.49	NM	675.36
	3/18/2011	700.85	31.42	NM	669.43
	3/28/2011	700.85	32.35	NM	668.50
	6/21/2011	700.85	23.89	NM	676.96
MW-37A	2/24/2010	687.29	6.12	19.41	681.17
	2/25/2010	687.29	6.20	19.41	681.09
	4/22/2010	687.29	7.06	NM	680.23
	6/15/2010	687.29	5.81	NM	681.48
	9/20/2010	687.29	7.74	NM	679.55
	12/13/2010	687.29	7.00	NM	680.29
	3/7/2011	687.29	5.59	NM	681.70
	6/21/2011	687.29	6.69	NM	680.60
MW-37B	2/24/2010	687.23	2.96	34.84	684.27
	2/25/2010	687.23	3.09	34.71	684.14
	4/22/2010	687.23	4.25	NM	682.98
	6/15/2010	687.23	2.46	NM	684.77
	9/20/2010	687.23	5.59	NM	681.64
	12/13/2010	687.23	3.56	NM	683.67
	3/7/2011	687.23	2.39	NM	684.84
	6/21/2011	687.23	3.23	NM	684.00
MW-37C	9/12/2011	Pending Survey	43.65	NM	
MW-38A	4/14/2010	700.99	17.20	34.80	683.79
	4/21/2010	700.99	17.52	NM	683.47
	4/29/2010	700.99	17.08	NM	683.91
	5/17/2010	700.99	16.91	NM	684.08
	6/15/2010	700.99	16.59	NM	684.40
	9/20/2010	700.99	18.18	NM	682.81
	12/13/2010	700.99	17.24	NM	683.75
	3/7/2011	700.99	16.47	NM	684.52
	6/21/2011	700.99	17.02	NM	683.97
MW-38B	4/14/2010	700.55	16.78	34.83	683.77
	4/21/2010	700.55	17.10	NM	683.45
	4/29/2010	700.55	16.60	NM	683.95
	5/17/2010	700.55	16.48	NM	684.07
	6/15/2010	700.55	16.17	NM	684.38
	8/30/2010	700.55	17.65	NM	682.90
	9/20/2010	700.55	17.72	NM	682.83
	12/13/2010	700.55	16.80	NM	683.75
	2/18/2011	700.55	17.08	NM	683.47
	3/7/2011	700.55	16.04	NM	684.51
	6/21/2011	700.55	16.56	NM	683.99
MW-38C	4/14/2010	700.20	29.70	67.77	670.50
	4/21/2010	700.20	25.29	NM	674.91
	4/22/2010	700.20	49.28	NM	650.92

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-38C (cont.)	4/23/2010	700.20	46.09	NM	654.11
	4/26/2010	700.20	38.02	NM	662.18
	4/27/2010	700.20	35.37	NM	664.83
	4/29/2010	700.20	31.46	NM	668.74
	5/17/2010	700.20	16.44	NM	683.76
	6/15/2010	700.20	6.16	NM	694.04
	9/20/2010	700.20	6.63	NM	693.57
	12/13/2010	700.20	6.94	NM	693.26
	3/7/2011	700.20	4.01	NM	696.19
	6/21/2011	700.20	2.63	NM	697.57
MW-38D	4/14/2010	700.37	43.77	50.16	656.60
	4/21/2010	700.37	45.38	NM	654.99
	4/22/2010	700.37	48.15	NM	652.22
	4/23/2010	700.37	47.64	NM	652.73
	4/26/2010	700.37	47.04	NM	653.33
	4/27/2010	700.37	46.75	NM	653.62
	4/29/2010	700.37	46.31	NM	654.06
	5/17/2010	700.37	42.34	NM	658.03
	6/15/2010	700.37	34.84	NM	665.53
	9/20/2010	700.37	20.02	NM	680.35
	12/13/2010	700.37	18.04	NM	682.33
	3/7/2011	700.37	17.17	NM	683.20
	6/21/2011	700.37	17.50	NM	682.87
MW-39A	4/14/2010	694.06	31.75	37.68	662.31
	4/19/2010	694.06	35.03	NM	659.03
	4/21/2010	694.06	35.03	NM	659.03
	4/22/2010	694.06	37.18	NM	656.88
	4/23/2010	694.06	36.73	NM	657.33
	4/26/2010	694.06	35.33	NM	658.73
	4/27/2010	694.06	34.69	NM	659.37
	5/11/2010	694.06	30.59	NM	663.47
	6/1/2010	694.06	28.78	NM	665.28
	6/9/2010	694.06	29.19	NM	664.87
	6/15/2010	694.06	30.47	NM	663.59
	6/24/2010	694.06	30.35	NM	663.71
	7/6/2010	694.06	28.22	NM	665.84
	7/13/2010	694.06	27.29	NM	666.77
	7/20/2010	694.06	25.73	NM	668.33
	8/3/2010	694.06	25.69	NM	668.37
	8/10/2010	694.06	24.07	NM	669.99
	8/17/2010	694.06	26.81	NM	667.25
	8/23/2010	694.06	23.25	NM	670.81
	9/20/2010	694.06	21.30	NM	672.76
	10/1/2010	694.06	23.13	NM	670.93
	10/5/2010	694.06	25.35	NM	668.71
	10/12/2010	694.06	27.95	NM	666.11
	10/18/2010	694.06	28.04	NM	666.02
	10/29/2010	694.06	27.95	NM	666.11
	12/13/2010	694.06	15.27	NM	678.79
	12/28/2010	694.06	15.95	NM	678.11
	1/17/2011	694.06	9.50	NM	684.56
	3/7/2011	694.06	9.30	NM	684.76
	3/18/2011	694.06	13.75	NM	680.31

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-39A (cont.)	6/21/2011	694.06	10.90	NM	683.16
MW-39B	4/14/2010	693.96	10.14	28.77	683.82
	4/21/2010	693.96	10.46	NM	683.50
	6/15/2010	693.96	9.62	NM	684.34
	9/20/2010	693.96	11.00	NM	682.96
	12/13/2010	693.96	10.21	NM	683.75
	3/7/2011	693.96	9.50	NM	684.46
	6/21/2011	693.96	9.98	NM	683.98
MW-40A	4/14/2010	694.36	3.78	48.30	690.58
	4/21/2010	694.36	4.12	NM	690.24
	6/15/2010	694.36	3.75	NM	690.61
	9/20/2010	694.36	1.36	NM	693.00
	12/13/2010	694.36	0.00	NM	694.36
	2/18/2011	694.36	2.02	NM	692.34
	3/7/2011	694.36	2.09	NM	692.27
	6/21/2011	694.36	3.32	NM	691.04
MW-40B	4/14/2010	694.77	4.00	29.12	690.77
	4/21/2010	694.77	4.93	NM	689.84
	6/15/2010	694.77	3.70	NM	691.07
	9/20/2010	694.77	7.63	NM	687.14
	12/13/2010	694.77	4.75	NM	690.02
	2/18/2011	694.77	4.95	NM	689.82
	3/7/2011	694.77	3.55	NM	691.22
	6/21/2011	694.77	4.33	NM	690.44
MW-40C	4/14/2010	694.78	3.53	16.11	691.25
	4/22/2010	694.78	4.34	NM	690.44
	6/15/2010	694.78	3.02	NM	691.76
	8/30/2010	694.78	7.14	NM	687.64
	9/20/2010	694.78	7.40	NM	687.38
	12/13/2010	694.78	4.15	NM	690.63
	12/18/2011	694.78	4.36	NM	690.42
	3/7/2011	694.78	3.05	NM	691.73
	6/21/2011	694.78	3.76	NM	691.02
MW-41A	12/13/2010	702.57	18.57	36.04	684.00
	3/7/2011	702.57	17.83	NM	684.74
	6/21/2011	702.57	18.51	NM	684.06
MW-42A	12/13/2010	696.11	26.68	35.44	669.43
	3/7/2011	696.11	12.66	NM	683.45
	6/21/2011	696.11	13.61	NM	682.50
MW-42B	12/13/2010	696.06	36.76	45.41	659.30
	3/7/2011	696.06	22.21	NM	673.85
	6/21/2011	696.06	14.92	NM	681.14
MW-43A	12/13/2010	690.93	7.13	28.87	683.80
	3/7/2011	690.93	5.89	NM	685.04
	6/21/2011	690.93	6.78	NM	684.15
MW-44A	12/13/2010	704.46	10.16	27.92	694.30
	3/7/2011	704.46	5.77	NM	698.69

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Table 3. Site Monitoring Well Network Groundwater Elevations
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Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW-44A (cont.)	6/21/2011	704.46	7.58	NM	696.88
MW-45A	12/13/2010	700.80	50.24	58.70	650.56
	3/7/2011	700.80	30.34	NM	670.46
	6/21/2011	700.80	20.83	NM	679.97
MW-45B	12/13/2010	700.76	33.58	42.66	667.18
	3/7/2011	700.76	27.19	NM	673.57
	6/21/2011	700.76	24.35	NM	676.41
MW-45C	12/13/2010	700.59	18.10	24.17	682.49
	3/7/2011	700.59	15.15	NM	685.44
	6/21/2011	700.59	17.95	NM	682.64
MW-46A	12/13/2010	688.81	5.25	38.06	683.56
	3/7/2011	688.81	4.83	NM	683.98
	6/21/2011	688.81	4.90	NM	683.91
MW-47A	12/13/2010	683.38	4.60	32.60	678.78
	3/7/2011	683.38	4.32	NM	679.06
	6/21/2011	683.38	4.59	NM	678.79
MW-48A	1/11/2011	708.53	47.75	71.38	660.78
	6/21/2011	708.53	40.28	NM	668.25
MW-48B	1/11/2011	708.52	28.50	52.37	680.02
	6/21/2011	708.52	25.36	NM	683.16
MW-49A	8/16/2011	707.93	52.60	64.34	655.33
MW-49B	8/16/2011	707.90	13.53	37.47	694.37
MW-49C	8/16/2011	708.01	18.37	24.59	689.64
MW-50A	8/17/2011	697.53	63.90	71.45	633.63
MW-50B	8/17/2011	697.54	13.96	NM	683.58
MW-51A	8/17/2011	694.59	14.94	NM	679.65
MW-51B	8/17/2011	694.66	13.86	31.30	680.80
MW-52A	8/17/2011	709.63	27.34	47.27	682.29
MW-53A	9/12/2011	Pending Survey	79.49	NM	
MW-53B	9/12/2011	Pending Survey	61.52	NM	
OW-1	11/17/1994	695.39	2.90	9.81	692.49
	11/14/1995	695.39	2.84	9.81	692.55
	4/30/1996	695.39	NM	9.81	NM
	5/18/2000	695.39	3.34	9.81	692.05
	8/14/2000	695.39	2.80	9.81	692.59
	11/13/2000	695.39	2.85	9.81	692.54
	2/1/2001	695.39	2.81	9.81	692.58

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Table 3. Site Monitoring Well Network Groundwater Elevations
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Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
OW-1 (cont.)	6/21/2001	695.39	4.30	9.81	691.09
	12/11/2001	695.39	2.98	9.81	692.41
	8/11/2003	695.39	4.92	9.81	690.47
	10/29/2003	695.39	3.21	9.81	692.18
	2/18/2004	695.39	2.86	9.81	692.53
	9/9/2004	695.39	4.75	9.81	690.64
	7/31/2006	695.39	6.13	9.81	689.26
	7/24/2007	695.39	5.42	9.81	689.97
	11/30/2007	695.39	4.33	NM	691.06
	6/8/2008	695.39	2.61	NM	692.78
	9/9/2008	695.39	7.58	NM	687.81
	11/17/2008	695.39	5.51	NM	689.88
	2/5/2009	695.39	3.72	NM	691.67
	12/9/2009	695.39	3.04	NM	692.35
	6/15/2010	695.39	2.53	NM	692.86
	9/20/2010	695.39	9.07	NM	686.32
	3/7/2011	695.39	2.69	NM	692.70
	6/21/2011	695.39	2.72	NM	692.67
OW-2	11/17/1994	695.03	3.12	7.20	691.91
	11/14/1995	695.03	3.23	7.20	691.80
	4/30/1996	695.03	NM	7.20	NM
	5/18/2000	695.03	3.27	7.20	691.76
	8/14/2000	695.03	3.10	7.20	691.93
	11/13/2000	695.03	3.02	7.20	692.01
	2/1/2001	695.03	3.13	7.20	691.90
	6/21/2001	695.03	3.49	7.20	691.54
	12/11/2001	695.03	3.10	7.20	691.93
	8/11/2003	695.03	4.02	7.20	691.01
	10/29/2003	695.03	3.16	7.20	691.87
	2/18/2004	695.03	3.18	7.20	691.85
	9/9/2004	695.03	4.00	7.20	691.03
	7/31/2006	695.03	5.65	7.20	689.38
	7/24/2007	695.03	4.65	10.20	690.38
	11/30/2007	695.03	3.87	NM	691.16
	6/8/2008	695.03	3.07	NM	691.96
	9/9/2008	695.03	7.28	NM	687.75
	11/17/2008	695.03	3.68	NM	691.35
	2/5/2009	695.03	10.20	NM	684.83
	12/9/2009	695.03	3.13	NM	691.90
	6/15/2010	695.03	3.04	NM	691.99
	9/20/2010	695.03	8.35	NM	686.68
	3/7/2011	695.03	3.14	NM	691.89
	6/21/2011	695.03	3.14	NM	691.89
OW-3	11/17/1994	694.72	2.75	8.90	691.97
	11/14/1995	694.72	2.83	8.90	691.89
	4/30/1996	694.72	NM	8.90	NM
	5/18/2000	694.72	2.84	8.90	691.88
	8/14/2000	694.72	2.93	8.90	691.79
	11/13/2000	694.72	2.83	8.90	691.89
	2/1/2001	694.72	2.72	8.90	692.00
	6/21/2001	694.72	3.25	8.90	691.47
	12/11/2001	694.72	2.74	8.90	691.98
	8/11/2003	694.72	3.60	8.90	691.12

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Table 3. Site Monitoring Well Network Groundwater Elevations
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Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
OW-3 (cont.)	10/29/2003	694.72	2.75	8.90	691.97
	2/18/2004	694.72	3.60	8.90	691.12
	9/9/2004	694.72	3.57	8.90	691.15
	7/31/2006	694.72	5.24	8.90	689.48
	7/24/2007	694.72	4.16	9.95	690.56
	11/30/2007	694.72	3.32	9.95	691.40
	6/8/2008	694.72	2.73	9.95	691.99
	9/9/2008	694.72	6.85	9.95	687.87
	11/17/2008	694.72	3.07	9.95	691.65
	2/5/2009	694.72	9.95	NM	684.77
	12/9/2009	694.72	2.73	NM	691.99
	6/15/2010	694.72	2.68	NM	692.04
	9/20/2010	694.72	7.85	NM	686.87
	3/7/2011	694.72	2.76	NM	691.96
	6/21/2011	694.72	2.75	NM	691.97
MW- P-1	11/14/1995	692.35	5.09	9.16	687.26
	4/30/1996	692.35	4.64	9.16	687.71
	5/18/2000	692.35	9.23	9.16	683.12
	8/14/2000	692.35	5.82	9.16	686.53
	11/13/2000	692.35	4.89	9.16	687.46
	2/1/2001	692.35	4.92	9.16	687.43
	6/21/2001	692.35	6.89	9.16	685.46
	12/11/2001	692.35	5.23	9.16	687.12
	8/11/2003	692.35	6.93	9.16	685.42
	10/29/2003	692.35	5.85	9.16	686.50
	2/18/2004	692.35	5.98	9.16	686.37
	9/9/2004	692.35	6.96	9.16	685.39
	7/31/2006	692.35	7.02	9.16	685.33
	8/15/2006	Well Decommissioned			
MW- P-2	11/14/1995	692.98	5.50	8.50	687.48
	4/30/1996	692.98	4.87	8.50	688.11
	5/18/2000	692.98	6.18	8.50	686.80
	8/14/2000	692.98	6.13	8.50	686.85
	11/13/2000	692.98	5.10	8.50	687.88
	2/1/2001	692.98	4.92	8.50	688.06
	6/21/2001	692.98	6.44	8.50	686.54
	12/11/2001	692.98	5.45	8.50	687.53
	8/11/2003	692.98	6.50	8.50	686.48
	10/29/2003	692.98	5.70	8.50	687.28
	2/18/2004	692.98	5.51	8.50	687.47
	9/9/2004	692.98	6.57	8.50	686.41
	7/31/2006	692.98	6.43	8.50	686.55
	7/24/2007	692.98	6.39	8.40	686.59
	11/30/2007	692.98	5.99	NM	686.99
	6/8/2008	692.98	4.88	NM	688.10
	9/9/2008	692.98	6.73	NM	686.25
	11/17/2008	692.98	6.05	NM	686.93
	2/5/2009	692.98	6.16	NM	686.82
	3/3/2009	692.98	5.66	NM	687.32
	3/11/2009	692.98	5.78	NM	687.20
	3/17/2009	692.98	5.96	NM	687.02
	3/25/2009	692.98	5.10	NM	687.88
	3/31/2009	692.98	5.34	NM	687.64

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW- P-2 (cont.)	4/20/2009	692.98	5.36	NM	687.62
	4/29/2009	692.98	5.71	NM	687.27
	5/6/2009	692.98	5.73	NM	687.25
	5/11/2009	692.98	5.56	NM	687.42
	5/20/2009	692.98	5.33	NM	687.65
	5/27/2009	692.98	5.99	NM	686.99
	6/8/2009	692.98	6.35	NM	686.63
	6/15/2009	692.98	5.46	NM	687.52
	6/25/2009	692.98	4.88	NM	688.10
	6/30/2009	692.98	6.03	NM	686.95
	7/31/2009	692.98	6.81	NM	686.17
	8/13/2009	692.98	6.24	NM	686.74
	8/26/2009	692.98	6.60	NM	686.38
	10/2/2009	692.98	5.91	NM	687.07
	10/6/2009	692.98	6.12	NM	686.86
	12/9/2009	692.98	5.20	NM	687.78
	12/18/2009	692.98	5.25	NM	687.73
	1/26/2010	692.98	4.98	NM	688.00
	2/2/2010	692.98	5.85	NM	687.13
	3/1/2010	692.98	5.52	NM	687.46
	6/15/2010	692.98	3.42	NM	689.56
	9/20/2010	692.98	6.66	NM	686.32
	3/7/2011	692.98	3.83	NM	689.15
	6/21/2011	692.98	5.35	NM	687.63
MW- P-3	11/14/1995	694.04	6.30	8.65	687.74
	4/30/1996	694.04	4.22	8.65	689.82
	5/18/2000	694.04	6.69	8.65	687.35
	8/14/2000	694.04	6.64	8.65	687.40
	11/13/2000	694.04	6.19	8.65	687.85
	2/1/2001	694.04	5.66	8.65	688.38
	6/21/2001	694.04	7.04	8.65	687.00
	12/11/2001	694.04	6.32	8.65	687.72
	8/11/2003	694.04	7.25	8.65	686.79
	10/29/2003	694.04	6.24	8.65	687.80
	2/18/2004	694.04	6.12	8.65	687.92
	9/9/2004	694.04	7.33	8.65	686.71
	7/31/2006	694.04	7.32	8.65	686.72
	7/24/2007	694.04	7.28	8.65	686.76
	11/30/2007	694.04	6.31	NM	687.73
	6/8/2008	694.04	5.92	NM	688.12
	9/9/2008	694.04	7.78	NM	686.26
	11/17/2008	694.04	7.74	NM	686.30
	2/5/2009	694.04	6.44	NM	687.60
	2/25/2009	694.04	6.13	NM	687.91
	3/3/2009	694.04	6.06	NM	687.98
	3/11/2009	694.04	6.19	NM	687.85
	3/17/2009	694.04	6.34	NM	687.70
	3/25/2009	694.04	5.89	NM	688.15
	3/31/2009	694.04	5.94	NM	688.10
	4/20/2009	694.04	5.91	NM	688.13
	4/29/2009	694.04	6.18	NM	687.86
	5/6/2009	694.04	6.26	NM	687.78
	5/11/2009	694.04	6.48	NM	687.56
	5/20/2009	694.04	6.09	NM	687.95

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW- P-3 (cont.)	5/27/2009	694.04	6.46	NM	687.58
	6/8/2009	694.04	6.83	NM	687.21
	6/15/2009	694.04	6.29	NM	687.75
	6/25/2009	694.04	5.92	NM	688.12
	6/30/2009	694.04	6.82	NM	687.22
	7/31/2009	694.04	6.71	NM	687.33
	8/13/2009	694.04	6.74	NM	687.30
	8/26/2009	694.04	7.43	NM	686.61
	10/2/2009	694.04	6.07	NM	687.97
	10/6/2009	694.04	6.55	NM	687.49
	12/9/2009	694.04	5.75	NM	688.29
	12/18/2009	694.04	5.78	NM	688.26
	1/26/2010	694.04	5.44	NM	688.60
	2/3/2010	694.04	6.14	NM	687.90
	3/1/2010	694.04	5.99	NM	688.05
	6/15/2010	694.04	4.82	NM	689.22
	9/20/2010	694.04	8.00	NM	686.04
	3/7/2011	694.04	4.48	NM	689.56
	6/21/2011	694.04	6.08	NM	687.96
MW- P-4	11/14/1995	695.06	6.54	8.65	688.52
	4/30/1996	695.06	3.75	8.65	691.31
	5/18/2000	695.06	7.12	8.65	687.94
	8/4/2000	695.06	7.35	8.65	687.71
	11/13/2000	695.06	6.05	8.65	689.01
	2/1/2001	695.06	5.59	8.65	689.47
	6/21/2001	695.06	7.31	8.65	687.75
	12/11/2001	695.06	6.55	8.65	688.51
	8/11/2003	695.06	7.80	8.65	687.26
	10/29/2003	695.06	6.11	8.65	688.95
	2/18/2004	695.06	6.85	8.65	688.21
	9/9/2004	695.06	6.69	8.65	688.37
	7/31/2006	695.06	7.76	8.65	687.30
	7/24/2007	695.06	8.32	6.00	686.74
	11/30/2007	695.06	6.00	NM	689.06
	6/8/2008	695.06	5.67	NM	689.39
	9/9/2008	695.06	7.40	NM	687.66
	11/17/2008	695.06	6.85	NM	688.21
	2/5/2009	695.06	7.11	NM	687.95
	12/9/2009	695.06	6.29	NM	688.77
	6/15/2010	695.06	5.43	NM	689.63
	8/30/2010	695.06	7.34	NM	687.72
	9/20/2010	695.06	6.98	NM	688.08
	2/18/2011	695.06	6.74	NM	688.32
	3/7/2011	695.06	4.96	NM	690.10
	6/21/2011	695.06	6.55	NM	688.51
MW- P-5	11/14/1995	696.81	7.25	8.90	689.56
	4/30/1996	696.81	5.53	8.90	691.28
	5/18/2000	696.81	7.52	8.90	689.29
	8/4/2000	696.81	7.62	8.90	689.19
	11/13/2000	696.81	6.46	8.90	690.35
	2/1/2001	696.81	6.04	8.90	690.77
	6/21/2001	696.81	7.78	8.90	689.03
	12/11/2001	696.81	6.95	8.90	689.86

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
MW- P-5 (cont.)	8/11/2003	696.81	8.05	8.90	688.76
	10/29/2003	696.81	6.97	8.90	689.84
	2/18/2004	696.81	7.08	8.90	689.73
	9/9/2004	696.81	8.07	8.90	688.74
	7/31/2006	696.81	8.25	8.90	688.56
	7/24/2007	696.81	8.29	9.80	688.52
	11/30/2007	696.81	7.11	NM	689.70
	6/8/2008	696.81	5.38	NM	691.43
	9/9/2008	696.81	8.35	NM	688.46
	11/17/2008	696.81	7.81	NM	689.00
	2/5/2009	696.81	7.56	NM	689.25
	12/9/2009	696.81	7.12	NM	689.69
	6/15/2010	696.81	6.67	NM	690.14
	3/7/2011	696.81	6.05	NM	690.76
	6/21/2011	696.81	7.23	NM	689.58
MW- P-6	11/14/1995	693.33	7.58	9.80	685.75
	4/30/1996	693.33	6.92	9.80	686.41
	5/18/2000	693.33	7.58	9.80	685.75
	8/14/2000	693.33	7.63	9.80	685.70
	11/13/2000	693.33	7.05	9.80	686.28
	2/1/2001	693.33	5.56	9.80	687.77
	6/21/2001	693.33	7.64	9.80	685.69
	12/11/2001	693.33	7.45	9.80	685.88
	8/11/2003	693.33	7.61	9.80	685.72
	10/29/2003	693.33	7.05	9.80	686.28
	2/18/2004	693.33	7.22	9.80	686.11
	9/9/2004	693.33	6.96	9.80	686.37
	7/31/2006	693.33	7.02	9.16	686.31
	8/15/2006	Well Decommissioned			
RW-1	12/28/2009	692.10	4.61	47.09	687.49
	1/6/2010	692.10	5.39	NM	686.71
	1/11/2010	692.10	5.48	NM	686.62
	1/18/2010	692.10	5.41	NM	686.69
	1/20/2010	692.10	5.23	NM	686.87
	1/25/2010	692.10	4.07	NM	688.03
	2/1/2010	692.10	5.33	NM	686.77
	2/22/2010	692.10	4.40	NM	687.70
	3/8/2010	692.10	5.24	NM	686.86
	3/11/2010	692.10	5.24	NM	686.86
	4/16/2010	692.10	5.23	NM	686.87
	4/26/2010	692.10	3.62	NM	688.48
	5/5/2010	692.10	4.56	NM	687.54
	5/11/2010	692.10	4.18	NM	687.92
	6/1/2010	692.10	5.12	NM	686.98
	6/9/2010	692.10	4.98	NM	687.12
	6/15/2010	692.10	3.77	NM	688.33
	6/24/2010	692.10	5.13	NM	686.97
	7/6/2010	692.10	5.74	NM	686.36
	7/13/2010	692.10	5.89	NM	686.21
	7/20/2010	692.10	5.34	NM	686.76
	8/3/2010	692.10	6.02	NM	686.08
	8/10/2010	692.10	6.17	NM	685.93
	8/17/2010	692.10	7.31	NM	684.79

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-1 (cont.)	8/23/2010	692.10	6.08	NM	686.02
	8/30/2010	692.10	6.39	NM	685.71
	9/20/2010	692.10	6.44	NM	685.66
	9/24/2010	692.10	6.57	NM	685.53
	10/1/2010	692.10	6.80	NM	685.30
	10/5/2010	692.10	6.62	NM	685.48
	10/12/2010	692.10	6.87	NM	685.23
	10/18/2010	692.10	6.78	NM	685.32
	12/10/2010	692.10	5.55	NM	686.55
	12/13/2010	692.10	5.16	NM	686.94
	12/28/2010	692.10	5.50	NM	686.60
	1/3/2011	692.10	4.98	NM	687.12
	1/10/2011	692.10	5.52	NM	686.58
	1/17/2011	692.10	5.58	NM	686.52
	2/18/2011	692.10	5.38	NM	686.72
	2/22/2011	692.10	3.93	NM	688.17
	3/4/2011	692.10	4.41	NM	687.69
	3/7/2011	692.10	4.11	NM	687.99
	3/18/2011	692.10	4.97	NM	687.13
	3/28/2011	692.10	5.32	NM	686.78
	6/21/2011	692.10	4.84	NM	687.26
RW-2	12/28/2009	688.19	4.39	45.48	683.80
	1/6/2010	688.19	4.59	NM	683.60
	1/11/2010	688.19	4.68	NM	683.51
	1/18/2010	688.19	4.90	NM	683.29
	1/20/2010	688.19	4.55	NM	683.64
	1/25/2010	688.19	3.83	NM	684.36
	2/1/2010	688.19	4.46	NM	683.73
	2/2/2010	688.19	4.51	NM	683.68
	2/3/2010	688.19	4.50	NM	683.69
	2/4/2010	688.19	4.57	NM	683.62
	2/5/2010	688.19	4.43	NM	683.76
	2/22/2010	688.19	3.71	NM	684.48
	3/2/2010	688.19	4.10	NM	684.09
	3/4/2010	688.19	4.21	NM	683.98
	3/8/2010	688.19	5.02	NM	683.17
	3/11/2010	688.19	4.60	NM	683.59
	4/16/2010	688.19	4.45	NM	683.74
	4/26/2010	688.19	3.80	NM	684.39
	5/5/2010	688.19	4.15	NM	684.04
	6/1/2010	688.19	4.53	NM	683.66
	6/9/2010	688.19	4.31	NM	683.88
	6/15/2010	688.19	3.81	NM	684.38
	6/24/2010	688.19	4.44	NM	683.75
	7/6/2010	688.19	4.82	NM	683.37
	7/13/2010	688.19	4.97	NM	683.22
	7/20/2010	688.19	4.41	NM	683.78
	8/3/2010	688.19	5.02	NM	683.17
	8/10/2010	688.19	5.03	NM	683.16
	8/17/2010	688.19	5.27	NM	682.92
	8/23/2010	688.19	4.96	NM	683.23
	8/30/2010	688.19	5.09	NM	683.10
	9/20/2010	688.19	5.13	NM	683.06
	9/24/2010	688.19	5.20	NM	682.99

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-2 (cont.)	10/1/2010	688.19	5.35	NM	682.84
	10/5/2010	688.19	5.28	NM	682.91
	10/12/2010	688.19	5.36	NM	682.83
	10/18/2010	688.19	5.36	NM	682.83
	12/10/2010	688.19	4.65	NM	683.54
	12/13/2010	688.19	4.34	NM	683.85
	12/28/2010	688.19	4.50	NM	683.69
	1/3/2011	688.19	4.05	NM	684.14
	1/10/2011	688.19	4.60	NM	683.59
	1/17/2011	688.19	4.69	NM	683.50
	2/18/2011	688.19	3.89	NM	684.30
	2/22/2011	688.19	3.55	NM	684.64
	3/4/2011	688.19	3.86	NM	684.33
	3/7/2011	688.19	3.64	NM	684.55
	3/18/2011	688.19	4.18	NM	684.01
	3/28/2011	688.19	3.85	NM	684.34
	6/21/2011	688.19	4.01	NM	684.18
RW-3	12/28/2009	688.83	4.79	44.82	684.04
	1/6/2010	688.83	4.99	NM	683.84
	1/11/2010	688.83	5.09	NM	683.74
	1/18/2010	688.83	4.78	NM	684.05
	1/20/2010	688.83	4.94	NM	683.89
	1/25/2010	688.83	4.22	NM	684.61
	2/1/2010	688.83	4.85	NM	683.98
	2/2/2010	688.83	4.91	NM	683.92
	2/3/2010	688.83	4.95	NM	683.88
	2/4/2010	688.83	4.97	NM	683.86
	2/5/2010	688.83	4.85	NM	683.98
	2/22/2010	688.83	4.45	NM	684.38
	3/2/2010	688.83	4.78	NM	684.05
	3/4/2010	688.83	5.01	NM	683.82
	3/8/2010	688.83	5.31	NM	683.52
	3/11/2010	688.83	4.98	NM	683.85
	4/16/2010	688.83	4.87	NM	683.96
	4/26/2010	688.83	4.16	NM	684.67
	5/5/2010	688.83	4.52	NM	684.31
	6/1/2010	688.83	4.88	NM	683.95
	6/9/2010	688.83	4.69	NM	684.14
	6/15/2010	688.83	4.17	NM	684.66
	6/24/2010	688.83	4.83	NM	684.00
	7/6/2010	688.83	5.22	NM	683.61
	7/13/2010	688.83	5.34	NM	683.49
	7/20/2010	688.83	4.87	NM	683.96
	8/3/2010	688.83	5.39	NM	683.44
	8/10/2010	688.83	5.42	NM	683.41
	8/17/2010	688.83	5.63	NM	683.20
	8/23/2010	688.83	5.35	NM	683.48
	8/30/2010	688.83	5.48	NM	683.35
	9/20/2010	688.83	5.52	NM	683.31
	9/24/2010	688.83	5.58	NM	683.25
	10/1/2010	688.83	5.77	NM	683.06
	10/5/2010	688.83	5.65	NM	683.18
	10/12/2010	688.83	5.74	NM	683.09
	10/18/2010	688.83	5.74	NM	683.09

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-3 (cont.)	12/10/2010	688.83	4.95	NM	683.88
	12/13/2010	688.83	4.70	NM	684.13
	12/28/2010	688.83	4.88	NM	683.95
	1/3/2011	688.83	4.36	NM	684.47
	1/10/2011	688.83	4.83	NM	684.00
	1/17/2011	688.83	4.94	NM	683.89
	2/18/2011	688.83	4.84	NM	683.99
	2/22/2011	688.83	3.80	NM	685.03
	3/4/2011	688.83	4.08	NM	684.75
	3/7/2011	688.83	3.90	NM	684.93
	3/18/2011	688.83	4.50	NM	684.33
	3/28/2011	688.83	4.80	NM	684.03
	6/21/2011	688.83	4.39	NM	684.44
RW-4	12/4/2009	691.04	8.00	45.86	683.04
	12/7/2009	691.04	8.00	NM	683.04
	12/8/2009	691.04	8.00	NM	683.04
	12/9/2009	691.04	8.00	NM	683.04
	12/10/2009	691.04	8.00	NM	683.04
	12/11/2009	691.04	8.00	NM	683.04
	12/28/2009	691.04	7.28	NM	683.76
	12/29/2009	691.04	7.32	NM	683.72
	1/4/2010	691.04	7.54	NM	683.50
	1/5/2010	691.04	7.36	NM	683.68
	1/6/2010	691.04	7.48	NM	683.56
	1/7/2010	691.04	7.49	NM	683.55
	1/11/2010	691.04	7.56	NM	683.48
	1/18/2010	691.04	7.77	NM	683.27
	1/25/2010	691.04	6.64	NM	684.40
	2/1/2010	691.04	7.32	NM	683.72
	2/2/2010	691.04	7.47	NM	683.57
	2/4/2010	691.04	7.98	NM	683.06
	2/5/2010	691.04	7.36	NM	683.68
	2/22/2010	691.04	5.98	NM	685.06
	3/2/2010	691.04	7.33	NM	683.71
	3/4/2010	691.04	7.42	NM	683.62
	3/8/2010	691.04	7.51	NM	683.53
	3/11/2010	691.04	8.12	NM	682.92
	3/24/2010	691.04	7.09	NM	683.95
	4/15/2010	691.04	7.20	NM	683.84
	4/19/2010	691.04	7.51	NM	683.53
	4/26/2010	691.04	7.11	NM	683.93
	5/5/2010	691.04	6.96	NM	684.08
	6/1/2010	691.04	7.41	NM	683.63
	6/9/2010	691.04	7.26	NM	683.78
	6/15/2010	691.04	6.60	NM	684.44
	6/24/2010	691.04	7.30	NM	683.74
	7/6/2010	691.04	7.72	NM	683.32
	7/13/2010	691.04	7.86	NM	683.18
	7/20/2010	691.04	7.35	NM	683.69
	7/22/2010	691.04	7.50	NM	683.54
	8/3/2010	691.04	7.92	NM	683.12
	8/10/2010	691.04	7.90	NM	683.14
	8/17/2010	691.04	8.24	NM	682.80
	8/23/2010	691.04	7.88	NM	683.16

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-4 (cont.)	8/30/2010	691.04	8.01	NM	683.03
	9/20/2010	691.04	8.06	NM	682.98
	9/24/2010	691.04	8.13	NM	682.91
	10/1/2010	691.04	8.31	NM	682.73
	10/5/2010	691.04	8.20	NM	682.84
	10/12/2010	691.04	8.29	NM	682.75
	10/18/2010	691.04	8.28	NM	682.76
	10/29/2010	691.04	7.97	NM	683.07
	12/10/2010	691.04	7.60	NM	683.44
	12/13/2010	691.04	7.14	NM	683.90
	12/28/2010	691.04	7.35	NM	683.69
	1/3/2011	691.04	6.86	NM	684.18
	1/10/2011	691.04	7.46	NM	683.58
	1/17/2011	691.04	7.57	NM	683.47
	2/18/2011	691.04	7.40	NM	683.64
	2/22/2011	691.04	6.35	NM	684.69
	3/4/2011	691.04	6.65	NM	684.39
	3/7/2011	691.04	6.45	NM	684.59
	3/18/2011	691.04	6.97	NM	684.07
	3/28/2011	691.04	7.35	NM	683.69
	6/21/2011	691.04	6.82	NM	684.22
RW-5	12/28/2009	692.19	8.08	47.04	684.11
	1/6/2010	692.19	8.38	NM	683.81
	1/11/2010	692.19	8.45	NM	683.74
	1/18/2010	692.19	8.55	NM	683.64
	1/20/2010	692.19	8.42	NM	683.77
	1/25/2010	692.19	7.75	NM	684.44
	2/1/2010	692.19	8.17	NM	684.02
	2/22/2010	692.19	8.12	NM	684.07
	3/8/2010	692.19	8.14	NM	684.05
	3/11/2010	692.19	8.62	NM	683.57
	4/15/2010	692.19	8.10	NM	684.09
	4/16/2010	692.19	9.36	NM	682.83
	4/26/2010	692.19	7.80	NM	684.39
	5/5/2010	692.19	7.81	NM	684.38
	6/1/2010	692.19	8.08	NM	684.11
	6/9/2010	692.19	8.03	NM	684.16
	6/15/2010	692.19	7.30	NM	684.89
	6/24/2010	692.19	8.14	NM	684.05
	7/6/2010	692.19	8.62	NM	683.57
	7/13/2010	692.19	8.64	NM	683.55
	7/20/2010	692.19	8.62	NM	683.57
	7/22/2010	692.19	10.22	NM	681.97
	8/3/2010	692.19	8.75	NM	683.44
	8/10/2010	692.19	9.13	NM	683.06
	8/17/2010	692.19	9.31	NM	682.88
	8/23/2010	692.19	8.81	NM	683.38
	8/30/2010	692.19	8.86	NM	683.33
	9/20/2010	692.19	10.70	NM	681.49
	9/24/2010	692.19	9.26	NM	682.93
	10/1/2010	692.19	9.42	NM	682.77
	10/5/2010	692.19	10.00	NM	682.19
	10/12/2010	692.19	9.42	NM	682.77
	10/18/2010	692.19	9.50	NM	682.69

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-5 (cont.)	10/29/2010	692.19	8.91	NM	683.28
	12/10/2010	692.19	9.45	NM	682.74
	12/13/2010	692.19	8.17	NM	684.02
	12/28/2010	692.19	8.21	NM	683.98
	1/3/2011	692.19	7.70	NM	684.49
	1/10/2011	692.19	8.31	NM	683.88
	1/17/2011	692.19	8.43	NM	683.76
	2/18/2011	692.19	8.29	NM	683.90
	2/22/2011	692.19	7.19	NM	685.00
	3/4/2011	692.19	7.64	NM	684.55
	3/7/2011	692.19	7.35	NM	684.84
	3/18/2011	692.19	7.92	NM	684.27
	3/28/2011	692.19	8.29	NM	683.90
	6/21/2011	692.19	7.93	NM	684.26
RW-6	4/15/2010	689.70	5.95	42.65	683.75
	4/16/2010	689.70	6.06	NM	683.64
	4/22/2010	689.70	6.20	NM	683.50
	4/26/2010	689.70	5.25	NM	684.45
	5/5/2010	689.70	5.64	NM	684.06
	6/1/2010	689.70	6.11	NM	683.59
	6/9/2010	689.70	5.98	NM	683.72
	6/15/2010	689.70	5.32	NM	684.38
	6/24/2010	689.70	5.99	NM	683.71
	7/6/2010	689.70	6.87	NM	682.83
	7/13/2010	689.70	7.01	NM	682.69
	7/20/2010	689.70	6.08	NM	683.62
	7/22/2010	689.70	6.21	NM	683.49
	8/3/2010	689.70	6.62	NM	683.08
	8/10/2010	689.70	6.67	NM	683.03
	8/17/2010	689.70	6.84	NM	682.86
	8/23/2010	689.70	6.58	NM	683.12
	8/30/2010	689.70	6.70	NM	683.00
	9/20/2010	689.70	6.78	NM	682.92
	9/24/2010	689.70	6.85	NM	682.85
	10/1/2010	689.70	7.05	NM	682.65
	10/5/2010	689.70	6.92	NM	682.78
	10/12/2010	689.70	7.05	NM	682.65
	10/18/2010	689.70	7.02	NM	682.68
	10/29/2010	689.70	6.68	NM	683.02
	12/10/2010	689.70	6.65	NM	683.05
	12/13/2010	689.70	5.87	NM	683.83
	12/28/2010	689.70	6.05	NM	683.65
	1/3/2011	689.70	5.58	NM	684.12
	1/10/2011	689.70	6.18	NM	683.52
	1/17/2011	689.70	6.24	NM	683.46
	2/18/2011	689.70	6.12	NM	683.58
	2/22/2011	689.70	5.07	NM	684.63
	3/4/2011	689.70	5.40	NM	684.30
	3/7/2011	689.70	5.14	NM	684.56
	3/18/2011	689.70	5.74	NM	683.96
	6/21/2011	689.70	5.48	NM	684.22
RW-7	12/10/2010	691.70	8.55	NM	683.15
	12/13/2010	691.70	9.19	NM	682.51

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
RW-7 (cont.)	12/28/2010	691.70	8.31	NM	683.39
	1/3/2011	691.70	7.84	NM	683.86
	1/10/2011	691.70	8.38	NM	683.32
	1/17/2011	691.70	8.60	NM	683.10
	3/4/2011	691.70	7.15	NM	684.55
	3/7/2011	691.70	6.75	NM	684.95
	3/18/2011	691.70	7.38	NM	684.32
	3/28/2011	691.70	7.39	NM	684.31
	6/21/2011	691.70	8.26	NM	683.44
Sump	3/3/2009	693.15	4.44	NM	688.71
	3/11/2009	693.15	4.30	NM	688.85
	3/17/2009	693.15	4.94	NM	688.21
	3/25/2009	693.15	3.14	NM	690.01
	3/31/2009	693.15	3.82	NM	689.33
	4/20/2009	693.15	4.07	NM	689.08
	4/29/2009	693.15	4.76	NM	688.39
	5/6/2009	693.15	4.42	NM	688.73
	5/11/2009	693.15	4.64	NM	688.51
	5/20/2009	693.15	4.62	NM	688.53
	5/27/2009	693.15	5.36	NM	687.79
	6/8/2009	693.15	5.92	NM	687.23
	6/15/2009	693.15	4.51	NM	688.64
	6/25/2009	693.15	3.95	NM	689.20
	6/30/2009	693.15	5.16	NM	687.99
	7/31/2009	693.15	4.68	NM	688.47
	8/13/2009	693.15	5.62	NM	687.53
	8/26/2009	693.15	6.40	NM	686.75
	10/2/2009	693.15	5.10	NM	688.05
	10/6/2009	693.15	5.63	NM	687.52
	12/18/2009	693.15	4.68	NM	688.47
	1/26/2010	693.15	4.30	NM	688.85
	2/3/2010	693.15	5.91	NM	687.24
	3/1/2010	693.15	5.29	NM	687.86
	6/15/2010	693.15	2.34	NM	690.81
	8/30/2010	693.15	6.49	NM	686.66
	9/20/2010	693.15	6.49	NM	686.66
	2/18/2011	693.15	5.55	NM	687.60
	3/7/2011	693.15	3.48	NM	689.67
	6/21/2011	693.15	4.98	NM	688.17
Bridge (trail)	2/25/2009	702.51	17.74	NA	684.77
	3/3/2009	702.51	17.75	NA	684.76
	3/11/2009	702.51	17.92	NA	684.59
	3/17/2009	702.51	18.10	NA	684.41
	3/25/2009	702.51	17.25	NA	685.26
	3/31/2009	702.51	17.68	NA	684.83
	4/20/2009	702.51	17.79	NA	684.72
	4/29/2009	702.51	17.87	NA	684.64
	5/6/2009	702.51	17.90	NA	684.61
	5/11/2009	702.51	17.89	NA	684.62
	5/20/2009	702.51	17.85	NA	684.66
	5/27/2009	702.51	17.99	NA	684.52
	6/8/2009	702.51	18.10	NA	684.41
	6/15/2009	702.51	17.95	NA	684.56

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Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)
Bridge (trail) (cont.)	6/25/2009	702.51	17.68	NA	684.83
	6/30/2009	702.51	18.07	NA	684.44
	8/13/2009	702.51	17.81	NA	684.70
	8/26/2009	702.51	18.18	NA	684.33
	10/2/2009	702.51	17.80	NA	684.71
	10/6/2009	702.51	17.54	NA	684.97
	12/18/2009	702.51	17.77	NA	684.74
	1/26/2010	702.51	17.58	NA	684.93
	2/3/2010	702.51	17.73	NA	684.78
	3/1/2010	702.51	17.69	NA	684.82
	6/9/2010	702.51	17.87	NA	684.64
	6/15/2010	702.51	17.77	NA	684.74
	8/30/2010	702.51	18.25	NA	684.26
	9/20/2010	702.51	18.20	NA	684.31
	12/13/2010	702.51	18.02	NA	684.49
	2/18/2011	702.51	18.07	NA	684.44
	3/7/2011	702.51	17.65	NA	684.86
	6/21/2011	702.51	18.01	NA	684.50
Bridge (road)	6/15/2010	693.04	8.32	NA	684.72
SG-1	6/9/2010	679.60	1.10	NA	678.50
	6/15/2010	679.60	1.25	NA	678.35
	8/30/2010	679.60	0.66	NA	678.94
	9/20/2010	679.60	0.65	NA	678.95
	2/18/2011	679.60	0.89	NA	678.71
	3/7/2011	679.60	1.38	NA	678.22
	6/21/2011	679.60	1.00	NA	678.60
SG-2	6/9/2010	680.38	1.22	NA	679.16
	6/15/2010	680.38	1.42	NA	678.96
	8/30/2010	680.38	0.96	NA	679.42
	9/20/2010	680.38	0.92	NA	679.46
	2/18/2011	680.38	1.06	NA	679.32
	3/7/2011	680.38	1.28	NA	679.10
	3/7/2011	680.38	1.12	NA	679.26
SG-3	6/9/2010	683.03	0.88	NA	682.15
	6/15/2010	683.03	0.98	NA	682.05
	8/30/2010	683.03	0.56	NA	682.47
	9/20/2010	683.03	0.54	NA	682.49
	12/13/2010	683.03	0.76	NA	682.27
	2/18/2011	683.03	0.69	NA	682.34
	3/7/2011	683.03	1.14	NA	681.89
	6/21/2011	683.03	0.82	NA	682.21
SG-4	6/9/2010	690.02	1.55	NA	688.47
	6/15/2010	690.02	1.90	NA	688.12
	8/30/2010	690.02	2.66	NA	687.36
	9/20/2010	690.02	2.93	NA	687.09
	12/13/2010	690.02	1.40	NA	688.62
	2/18/2011	690.02	1.77	NA	688.25
	3/7/2011	690.02	1.97	NA	688.05
	6/21/2011	690.02	1.74	NA	688.28

Table 3. Site Monitoring Well Network Groundwater Elevations
Former Indiana Creosoting Company
Bloomington, Indiana

Well I.D.	Date	Measuring Point Elevation (feet AMSL)	Measured Depth to Water (feet below MP)	Measured Total Well Depth (feet below MP)	Water Elevation (feet AMSL)

Abbreviations:

AMSL = Above mean sea level.
MP = ng point (top of casing for wells).
NA = Not applicable.
NM = Not measured.

Notes:

1. he North American Vertical Datum of 1988 (NAVD88).
2. ta was recalculated based on the 2008 survey.

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Table 4. Falling Head Test Data
Former Indiana Creosoting Company
Bloomington, Indiana

Well ID	Ground Surface Elevation (ft. AMSL)	Screened Interval (ft. BGS)	Geologic Unit(s) Tested	Interval Tested (ft. BGS)	Elapsed Time (min)	Depth to water (ft. from top of standpipe)	Water Level Change (ft/min.)	Water Level Change (ft/sec)	Notes
MW-31A	690.59	11.5' - 21.5'	URC	9.50' - 16.50'	0	0.00	--	--	
					1	1.97	1.97	3.28E-02	
					2	2.98	1.01	1.68E-02	
					3	3.65	0.67	1.12E-02	
					4	4.00	0.35	5.83E-03	
					5	4.16	0.16	2.67E-03	Loss of circulation at 18.0'
MW-31B	689.37	45.0' - 65.0'	URC	8.0' - 16.25'	0	0.00	--	--	
					1	1.54	1.54	2.57E-02	
					2	1.94	0.4	6.67E-03	
					3	2.21	0.27	4.50E-03	
					4	2.47	0.26	4.33E-03	
					5	2.66	0.19	3.17E-03	
			URC	8.0' - 21.99'	0	0.00	--	--	
					1	2.00	2	3.33E-02	
					2	2.41	0.41	6.83E-03	
					3	2.58	0.17	2.83E-03	
					4	2.68	0.1	1.67E-03	
					5	2.72	0.04	6.67E-04	
									Perm Casing set at 22.0'
			URC, LRC	21.99' - 26.89'	0	0.00	--	--	
					1	0.00	0	0.00E+00	
					2	0.00	0	0.00E+00	
					3	0.00	0	0.00E+00	
					4	0.00	0	0.00E+00	
					5	0.00	0	0.00E+00	
			URC, LRC	21.99' - 31.80'	0	0.00	--	--	
					1	0.2	0.2	3.33E-03	
					2	0.2	0	0.00E+00	
					3	0.2	0	0.00E+00	
					4	0.2	0	0.00E+00	
					5	0.2	0	0.00E+00	
			URC, LRC	21.99' - 35.87'	0	0.00	--	--	
					1	0.5	0.5	8.33E-03	
					2	0.5	0	0.00E+00	
					3	0.5	0	0.00E+00	
					4	0.5	0	0.00E+00	
					5	0.5	0	0.00E+00	
			URC, LRC, BOR	21.99' - 40.80'	0	0.00	--	--	
					1	0.25	0.25	4.17E-03	
					2	0.25	0	0.00E+00	
					3	0.25	0	0.00E+00	
					4	0.25	0	0.00E+00	
					5	0.25	0	0.00E+00	
			URC, LRC, BOR	21.99' - 45.87'	0	0.00	--	--	
					1	0.00	0	0.00E+00	
					2	0.00	0	0.00E+00	
					3	0.00	0	0.00E+00	
					4	0.00	0	0.00E+00	
					5	0.00	0	0.00E+00	
			URC, LRC, BOR	21.99' - 50.88'	0	0.00	--	--	
					1	0.00	0	0.00E+00	
					2	0.00	0	0.00E+00	
					3	0.00	0	0.00E+00	
					4	0.00	0	0.00E+00	
					5	0.00	0	0.00E+00	
			URC, LRC, BOR	21.99' - 55.95'	0	0.00	--	--	
					1	0.00	0	0.00E+00	
					2	0.00	0	0.00E+00	
					3	0.00	0	0.00E+00	
					4	0.00	0	0.00E+00	
					5	0.00	0	0.00E+00	
			URC, LRC, BOR	21.99' - 59.98'	0	0.00	--	--	
					1	0.00	0	0.00E+00	
					2	0.00	0	0.00E+00	
					3	0.00	0	0.00E+00	
					4	0.00	0	0.00E+00	
					5	0.00	0	0.00E+00	
MW-31C	690.03	27.9' - 32.9'	LRC	20.0' - 26.75'	0	0.00	--	--	Temp. Casing set at 20.0'
					1	0.25	0.25	4.17E-03	
					2	0.25	0	0.00E+00	
					3	0.25	0	0.00E+00	
					4	0.25	0	0.00E+00	
					5	0.25	0	0.00E+00	
			LRC	20.0' - 31.75'	0	0.00	--	--	

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Table 4. Falling Head Test Data
Former Indiana Creosoting Company
Bloomington, Indiana

Well ID	Ground Surface Elevation (ft. AMSL)	Screened Interval (ft. BGS)	Geologic Unit(s) Tested	Interval Tested (ft. BGS)	Elapsed Time (min)	Depth to water (ft. from top of standpipe)	Water Level Change (ft/min.)	Water Level Change (ft/sec)	Notes
MW-31C (cont.)					1	0.25	0.25	4.17E-03	
					2	0.52	0.27	4.50E-03	
					3	1.0	0.48	8.00E-03	
					4	1.32	0.32	5.33E-03	
					5	1.58	0.26	4.33E-03	
MW-32A	687.34	21.0' - 24.0'	URC	10.5' - 16.71'	0	0.00	--	--	
					1	1.21	1.21	2.02E-02	
					2	1.27	0.06	1.00E-03	
					3	1.34	0.07	1.17E-03	
					4	1.37	0.03	5.00E-04	
					5	1.41	0.04	6.67E-04	
			URC	10.5' - 21.77'	0	0.00	--	--	
					1	1.11	1.11	1.85E-02	
					2	1.23	0.12	2.00E-03	
					3	1.32	0.09	1.50E-03	
					4	1.43	0.11	1.83E-03	
					5	1.54	0.11	1.83E-03	Loss of Circulation at 22.50'
MW-33A	703.23	40 0' - 50.0'	URC	16.80' - 21.60'	0	0.00	--	--	
					1	2.00	2	3.33E-02	
					2	2.00	0	0.00E+00	
					3	2.00	0	0.00E+00	
					4	2.00	0	0.00E+00	
					5	2.00	0	0.00E+00	
			URC	16.80' - 26.88'	0	0.00	--	--	
					1	1.11	1.11	1.85E-02	
					2	1.14	0.03	5.00E-04	
					3	1.15	0.01	1.67E-04	
					4	1.16	0.01	1.67E-04	
					5	1.17	0.01	1.67E-04	
			URC, LRC	16.80' - 31.58'	0	0.00	--	--	
					1	1.27	1.27	2.12E-02	
					2	1.32	0.05	8.33E-04	
					3	1.37	0.05	8.33E-04	
					4	1.43	0.06	1.00E-03	
					5	1.5	0.07	1.17E-03	
			URC, LRC	16.80' - 36.74'	0	0.00	--	--	
					1	0.99	0.99	1.65E-02	
					2	1.27	0.28	4.67E-03	
					3	1.54	0.27	4.50E-03	
					4	1.75	0.21	3.50E-03	
					5	2.01	0.26	4.33E-03	
			URC, LRC	16.80' - 41.67'	0	0.00	--	--	
					1	1.17	1.17	1.95E-02	
					2	1.37	0.2	3.33E-03	
					3	1.56	0.19	3.17E-03	
					4	1.72	0.16	2.67E-03	
					5	1.91	0.19	3.17E-03	
			URC, LRC	16.80' - 46.59'	0	0.00	--	--	
					1	1.41	1.41	2.35E-02	
					2	2.23	0.82	1.37E-02	
					3	3.06	0.83	1.38E-02	
					4	3.76	0.7	1.17E-02	
					5	4.38	0.62	1.03E-02	
			URC, LRC, BOR	16.80' - 51.59'	0	0.00	--	--	
					1	5.04	5.04	8.40E-02	
					2	7.54	2.5	4.17E-02	
					3	8.03	0.49	8.17E-03	
					4	8.41	0.38	6.33E-03	
					5	8.74	0.33	5.50E-03	
			LRC, BOR	46.00' - 51.59'	0	0.00	--	--	
					1	3.00	3	5.00E-02	
					2	4.4	1.4	2.33E-02	
					3	5.8	1.4	2.33E-02	
					4	6.9	1.1	1.83E-02	
					5	7.6	0.7	1.17E-02	
					6	8.23	0.63	1.05E-02	
					7	8.73	0.5	8.33E-03	
					8	9.1	0.37	6.17E-03	
					9	9.45	0.35	5.83E-03	
					10	9.72	0.27	4.50E-03	
MW-33B	704.78	55.0' - 70.0'	--	**	No Tests Completed Due to Loss of Circulation				Loss of Circulation at 8.50' Temp. Casing set at 14.5' Little return water; set temp casing at 22.3' Loss of Circulation at 22.90';

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Table 4. Falling Head Test Data
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Bloomington, Indiana

Well ID	Ground Surface Elevation (ft. AMSL)	Screened Interval (ft. BGS)	Geologic Unit(s) Tested	Interval Tested (ft. BGS)	Elapsed Time (min)	Depth to water (ft. from top of standpipe)	Water Level Change (ft/min.)	Water Level Change (ft/sec)	Notes
MW-33C	705.05	20.0' - 35.0'	URC	12.0' - 16.32'	0	0	--	--	
					1	0.76	0.76	1.27E-02	
					2	0.78	0.02	3.33E-04	
					3	0.8	0.02	3.33E-04	
					4	0.8	0	0.00E+00	
					5	0.81	0.01	1.67E-04	
			URC	12.0' - 21.55'	0	0	--	--	
					1	1.74	1.74	2.90E-02	
					2	1.74	0	0.00E+00	
					3	1.74	0	0.00E+00	
					4	1.74	0	0.00E+00	
					5	1.74	0	0.00E+00	
			URC	12.0' - 26.7'	0	0	--	--	
					1	1.21	1.21	2.02E-02	
					2	1.24	0.03	5.00E-04	
					3	1.24	0	0.00E+00	
					4	1.24	0	0.00E+00	
					5	1.24	0	0.00E+00	
			URC	12.0' - 31.65'	0	0	--	--	
					1	1.56	1.56	2.60E-02	
					2	1.61	0.05	8.33E-04	
					3	1.61	0	0.00E+00	
					4	1.61	0	0.00E+00	
					5	1.61	0	0.00E+00	
			URC, LRC	12.0' - 35.13'	0	0	--	--	
					1	3.11	0.03	5.00E-04	
					2	3.14	0	0.00E+00	
					3	3.14	0	0.00E+00	
					4	3.14	0	0.00E+00	
					5	3.14	0	0.00E+00	
MW-34A	685.18	17.0' - 27.0'	URC	9.0' - 16.88'	0	0	--	--	
					1	2.43	2.43	4.05E-02	
					2	3.14	0.71	1.18E-02	
					3	3.36	0.22	3.67E-03	
					4	3.53	0.17	2.83E-03	
					5	3.7	0.17	2.83E-03	
			URC, LRC	9.0' - 21.96'	0	0	--	--	
					1	1.75	1.75	2.92E-02	
					2	1.95	0.2	3.33E-03	
					3	2.13	0.18	3.00E-03	
					4	2.25	0.12	2.00E-03	
					5	2.33	0.08	1.33E-03	
MW-35A	702.83	16.0' - 26.0'	--	**	No Tests Completed Due to Loss of Circulation				Loss of Circulation at 17.5'
MW-35B/C	703.15	B: 24.0' - 27.0'	URC	16.00' - 21.51'	0	0	--	--	
		C: 31.5' - 45.0'			1	0.4	0.4	6.67E-03	
					2	0.4	0	0.00E+00	
					3	0.4	0	0.00E+00	
					4	0.4	0	0.00E+00	
					5	0.4	0	0.00E+00	Loss of Circulation at 25.0'
MW-36A/B	697.09	A: 19.5' - 24.5'	URC	11.70' - 16.65'	0	0	--	--	
		B: 27.0' 32.0'			1	2.13	2.13	3.55E-02	
					2	2.15	0.02	3.33E-04	
					3	2.17	0.02	3.33E-04	
					4	2.18	0.01	1.67E-04	
					5	2.19	0.01	1.67E-04	
			URC	11.70' - 21.60'	0	0	--	--	
					1	4.32	4.32	7.20E-02	
					2	8.1	3.78	6.30E-02	
					3	10.85	2.75	4.58E-02	
					4	13.8	2.95	4.92E-02	
					5	15.5	1.7	2.83E-02	
			URC	11.70' - 26.74'	0	0	--	--	Standpipe at 2.10'
					1	4.45	4.45	7.42E-02	
					2	7.75	3.3	5.50E-02	
					3	10.65	2.9	4.83E-02	
					4	12.7	2.05	3.42E-02	
					5	14.8	2.1	3.50E-02	
									Temp Casing set at 27.0'
			URC, LRC	27.00' - 32.02'	0	0	--	--	Standpipe at 2.58'
					1	0.77	0.77	1.28E-02	
					2	1.13	0.36	6.00E-03	
					3	1.33	0.2	3.33E-03	
					4	1.34	0.01	1.67E-04	
					5	1.37	0.03	5.00E-04	

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Well ID	Ground Surface Elevation (ft. AMSL)	Screened Interval (ft. BGS)	Geologic Unit(s) Tested	Interval Tested (ft. BGS)	Elapsed Time (min)	Depth to water (ft. from top of standpipe)	Water Level Change (ft/min.)	Water Level Change (ft/sec)	Notes
MW-36C	697.56	41.0' - 56.0'	URC	12.5' - 16.8'	0	0	--	--	Standpipe at 2.80'
					1	1.25	1.25	2.08E-02	
					2	2.11	0.86	1.43E-02	
					3	2.45	0.34	5.67E-03	
					4	2.51	0.06	1.00E-03	
					5	2.58	0.07	1.17E-03	
			URC	12.5' - 21.92'	0	0	--	--	Standpipe at 1.70'
					1	1.6	1.6	2.67E-02	
					2	1.67	0.07	1.17E-03	
					3	1.65	-0.02	-3.33E-04	
					4	1.64	-0.01	-1.67E-04	
					5	1.64	0	0.00E+00	
			URC	12.5' - 27.12'	0	1.5	--	--	Standpipe at 2.75'
					1	1.68	0.18	3.00E-03	
					2	1.65	-0.03	-5.00E-04	
					3	1.62	-0.03	-5.00E-04	
					4	1.61	-0.01	-1.67E-04	
					5				
			URC, LRC	12.5' - 32.07'	0	0	--	--	Standpipe at 1.75"
					1	0.82	0.82	1.37E-02	
					2	0.89	0.07	1.17E-03	
					3	0.89	0	0.00E+00	
					4	0.89	0	0.00E+00	
					5	0.89	0	0.00E+00	
			URC, LRC	12.5' - 36.81'	0	0	--	--	Standpipe at 1.75'
					1	0.56	0.56	9.33E-03	
					2	0.59	0.03	5.00E-04	
					3	0.58	-0.01	-1.67E-04	
					4	0.58	0	0.00E+00	
					5	0.58	0	0.00E+00	
			URC, LRC	12.5' - 42.10'	0	0	--	--	Standpipe at 2.70'
					1	0.79	0.79	1.32E-02	
					2	0.8	0.01	1.67E-04	
					3	0.8	0	0.00E+00	
					4	0.8	0	0.00E+00	
					5	0.8	0	0.00E+00	
									Temp. Casing set at 42.10
			URC, LRC	42.10' - 46.63'	0	0	--	--	Standpipe at 2.90'
					1	0.22	0.22	3.67E-03	
					2	0.22	0	0.00E+00	
					3	0.22	0	0.00E+00	
					4	0.22	0	0.00E+00	
					5	0.22	0	0.00E+00	
			URC, LRC	42.10' - 51.93'	0	0	--	--	
					1	0.2	0.2	3.33E-03	
					2	0.2	0	0.00E+00	
					3	0.2	0	0.00E+00	
					4	0.2	0	0.00E+00	
					5	0.2	0	0.00E+00	
MW-37A/B	684.39	A: 12.0' - 17.0' B: 22.0' - 32.0'	URC	12.0' - 21.83'	0	0	--	--	Standpipe at 3.0'
					1	4.5	4.5	7.50E-02	
					2	5.32	0.82	1.37E-02	
					3	5.62	0.3	5.00E-03	
					4	5.8	0.18	3.00E-03	
					5	5.95	0.15	2.50E-03	
									Temp. Casing set at 19.0'
			URC, LRC	19.0' - 31.69'	0	0	--	--	Standpipe at 2.80'
					1	3.25	3.25	5.42E-02	
					2	4.5	1.25	2.08E-02	
					3	4.75	0.25	4.17E-03	
					4	4.85	0.1	1.67E-03	
					5	4.92	0.07	1.17E-03	
MW-37C	Pending Survey	34.0' - 44.0'	--	**	No Tests Completed				
MW-38A	698.19	25.0' - 30.0'	--	**	No Tests Completed Due to Loss of Circulation				Attempted test, but water would not rise up standpipe Lost Circulation at 26.70'
MW-38B	697.72	25.0' - 30.0'	--	**	No Tests Completed Due to Loss of Circulation				Lost Circulation at 26.80'
MW-38C	697.43	50.0' - 65.0'	--	**	No Tests Completed				Blank Drilled to 27.0' Perm. Casing set at 30.0'; no water loss after
MW-38D	697.71	35.5' - 45.5'	LRC	30.0' - 36.7'	0	0	--	--	Blank Drilled to 27.0'
					1	0	0	0.00E+00	Perm. Casing set at 30.0'
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	

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Well ID	Ground Surface Elevation (ft. AMSL)	Screened Interval (ft. BGS)	Geologic Unit(s) Tested	Interval Tested (ft. BGS)	Elapsed Time (min)	Depth to water (ft. from top of standpipe)	Water Level Change (ft/min.)	Water Level Change (ft/sec)	Notes
MW-38D (cont.)					5	0	0	0.00E+00	
			LRC	30.0' - 41.70'	0	0	--	--	
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
			LRC, BOR	30.0' - 46.53'	0	0	--	--	
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
MW-39A	694.38	28.0' - 33.0'	URC	12.0' - 16.63'	0	0	--	--	Lost Circulation at start of run
					1	2.41	2.41	4.02E-02	
					2	2.91	0.5	8.33E-03	
					3	3.75	0.84	1.40E-02	
					4	4.58	0.83	1.38E-02	
					5	5.58	1	1.67E-02	
									Temp. Casing set at 21.5'
			URC	21.5' - 26.5'	0	0	--	--	
					1	1.88	1.88	3.13E-02	
					2	1.88	0	0.00E+00	
					3	1.88	0	0.00E+00	
					4	1.88	0	0.00E+00	
					5	1.88	0	0.00E+00	
			URC, LRC	21.5' - 31.50'	0	0	--	--	
					1	0.33	0.33	5.50E-03	
					2	0.5	0.17	2.83E-03	
					3	0.75	0.25	4.17E-03	
					4	0.83	0.08	1.33E-03	
					5	1	0.17	2.83E-03	
			URC, LRC	21.5' - 36.5'	0	0	--	--	
					1	1.15	1.15	1.92E-02	
					2	1.18	0.03	5.00E-04	
					3	1.18	0	0.00E+00	
					4	1.18	0	0.00E+00	
					5	1.22	0.04	6.67E-04	
MW-39B	694.19	17.0' - 27.0'	URC	11.8' - 16.8'	0	0	--	--	
					1	0.71	0.71	1.18E-02	
					2	1	0.29	4.83E-03	
					3	1.33	0.33	5.50E-03	
					4	1.58	0.25	4.17E-03	
					5	1.83	0.25	4.17E-03	Lost Circulation at 19.0'
MW-40A	692.06	29.0' - 44.0'	URC	8.0' - 11.25'	0	0	--	--	
					1	0.5	0.5	8.33E-03	
					2	1	0.5	8.33E-03	
					3	1.3	0.3	5.00E-03	
					4	1.4	0.1	1.67E-03	
					5	1.4	0	0.00E+00	
									Temp Casing set at 16.5'
			URC	16.5' - 26.17'	0	0	--	--	Standpipe at 2.0'
					1	0.79	0.79	1.32E-02	
					2	1.1	0.31	5.17E-03	
					3	1.26	0.16	2.67E-03	
					4	1.45	0.19	3.17E-03	
					5	1.61	0.16	2.67E-03	
			URC, LRC	16.5' - 31.23'	0	0	--	--	Stamdpipe at 3.2'
					1	0.7	0.7	1.17E-02	
					2	0.75	0.05	8.33E-04	
					3	0.8	0.05	8.33E-04	
					4	0.86	0.06	1.00E-03	
					5	0.92	0.06	1.00E-03	
			URC, LRC	16.5' - 41.16'	0	0	--	--	Standpipe at 3.7'
					1	0.5	0.5	8.33E-03	
					2	0.5	0	0.00E+00	
					3	0.5	0	0.00E+00	
					4	0.5	0	0.00E+00	
					5	0.5	0	0.00E+00	
MW-40B/C	692.16	B: 16.5' - 26.5' C: 8.5' - 13.5'	--	**	No Tests Completed				No Water Loss During Drilling
RW-6	687.07	16.5' - 36.0'	URC	6.02' - 8.84'	0	0	--	--	Open Borehole
					1	1.16	1.16	1.93E-02	
					2	1.19	0.03	5.00E-04	

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Well ID	Ground Surface Elevation (ft. AMSL)	Screened Interval (ft. BGS)	Geologic Unit(s) Tested	Interval Tested (ft. BGS)	Elapsed Time (min)	Depth to water (ft. from top of standpipe)	Water Level Change (ft/min.)	Water Level Change (ft/sec)	Notes
RW-6 (cont.)					3	1.21	0.02	3.33E-04	
					4	1.21	0	0.00E+00	
					5	1.36	0.15	2.50E-03	Lost Circulation at 9.9'
MW-41A	702.57	23.0' - 33.0'	URC	17.02' - 25.68'	0	0	--	--	
					1	4.3	4.3	7.17E-02	
					2	6.5	2.2	3.67E-02	
					3	7.8	1.3	2.17E-02	
					4	8.75	0.95	1.58E-02	
					5	9.4	0.65	1.08E-02	
MW-42A	696.11	26.0' - 36.0'	LRC	29.0' - 35.90'	0	0	--	--	
					1	11.2	11.2	1.87E-01	
					2	11.91	0.71	1.18E-02	
					3	12.02	0.11	1.83E-03	
					4	12.1	0.08	1.33E-03	
					5	12.13	0.03	5.00E-04	
MW-42B	696.06	36.0' - 46.0'	--	**	No Tests Completed				
MW-43A	690.93	16.0' - 26.0'	URC	9.14' - 15.88'	0	0	--	--	
					1	1.78	1.78	2.97E-02	
					2	3	1.22	2.03E-02	
					3	3.75	0.75	1.25E-02	
					4	4.4	0.65	1.08E-02	
					5	4.85	0.45	7.50E-03	
			URC	9.14' - 20.94'	0	0	--	--	
					1	7.2	7.2	1.20E-01	
					2	8.9	1.7	2.83E-02	
					3	9.5	0.6	1.00E-02	
					4	9.7	0.2	3.33E-03	
					5	9.8	0.1	1.67E-03	
RW-7	698.0	10.5' - 44.5'	URC	9.75' - 16.03'	0	0	--	--	
					1	1.91	1.91	3.18E-02	
					2	1.91	0	0.00E+00	
					3	1.94	0.03	5.00E-04	
					4	1.94	0	0.00E+00	
					5	1.94	0	0.00E+00	
			URC	9.75' - 21.18'	0	0	--	--	
					1	5.65	5.65	9.42E-02	
					2	7.15	1.5	2.50E-02	
					3	8.16	1.01	1.68E-02	
					4	8.53	0.37	6.17E-03	
					5	8.61	0.08	1.33E-03	
MW-44A	701.5	15.0' - 25.0'	URC	9.94' - 15.95'	0	0	--	--	
					1	1.92	1.92	3.20E-02	
					2	1.92	0	0.00E+00	
					3	1.92	0	0.00E+00	
					4	1.92	0	0.00E+00	
					5	1.92	0	0.00E+00	
			URC	9.94' - 21.05'	0	0	--	--	
					1	2.46	2.46	4.10E-02	
					2	2.46	0	0.00E+00	
					3	2.46	0	0.00E+00	
					4	2.46	0	0.00E+00	
					5	2.46	0	0.00E+00	
			URC, LRC	9.94' - 25.24'	0	0	--	--	
					1	1.29	1.29	2.15E-02	
					2	1.29	0	0.00E+00	
					3	1.29	0	0.00E+00	
					4	1.29	0	0.00E+00	
					5	1.29	0	0.00E+00	
MW-45A/B	698.1	A: 46.0' - 56.0' B: 30.0' - 40.0'	URC	10.50' - 20.84'	0	0	--	--	
					1	2.18	2.18	3.63E-02	
					2	2.19	0.01	1.67E-04	
					3	2.19	0	0.00E+00	
					4	2.19	0	0.00E+00	
					5	2.19	0	0.00E+00	
			URC, LRC	10.50' - 30.66'	0	0	--	--	
					1	2.49	2.49	4.15E-02	
					2	3.8	1.31	2.18E-02	
					3	4.62	0.82	1.37E-02	
					4	5.32	0.7	1.17E-02	
					5	5.95	0.63	1.05E-02	
			URC, LRC	10.50' - 35.96'	0	0	--	--	
					1	2.35	2.35	3.92E-02	

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Table 4. Falling Head Test Data
Former Indiana Creosoting Company
Bloomington, Indiana

Well ID	Ground Surface Elevation (ft. AMSL)	Screened Interval (ft. BGS)	Geologic Unit(s) Tested	Interval Tested (ft. BGS)	Elapsed Time (min)	Depth to water (ft. from top of standpipe)	Water Level Change (ft/min.)	Water Level Change (ft/sec)	Notes
MW-45A/B (cont.)					2	3.5	1.15	1.92E-02	
					3	4.3	0.8	1.33E-02	
					4	4.9	0.6	1.00E-02	
					5	5.45	0.55	9.17E-03	
			URC, LRC	10.50' - 40.80'	0	0	--	--	
					1	2.1	2.1	3.50E-02	
					2	3.7	1.6	2.67E-02	
					3	4.6	0.9	1.50E-02	
					4	5.2	0.6	1.00E-02	
					5	5.75	0.55	9.17E-03	
			URC, LRC	10.50' - 45.72'	0	0	--	--	
					1	2	2	3.33E-02	
					2	3.2	1.2	2.00E-02	
					3	4	0.8	1.33E-02	
					4	4.65	0.65	1.08E-02	
					5	5.35	0.7	1.17E-02	
			URC, LRC	10.50' - 50.76	0	0	--	--	
					1	2.15	2.15	3.58E-02	
					2	3.45	1.3	2.17E-02	
					3	4.3	0.85	1.42E-02	
					4	5	0.7	1.17E-02	
					5	5.6	0.6	1.00E-02	
			URC, LRC, BOR	10.50' - 55.75'	0	0	--	--	
					1	1.4	1.4	2.33E-02	
					2	2.65	1.25	2.08E-02	
					3	3.55	0.9	1.50E-02	
					4	4.15	0.6	1.00E-02	
					5	4.65	0.5	8.33E-03	
MW-45C	698.4	12.0' - 22.0'	URC	10.5' - 16.0'	0	0	--	--	
					1	0.5	0.5	8.33E-03	
					2	0.6	0.1	1.67E-03	
					3	0.7	0.1	1.67E-03	
					4	0.88	0.18	3.00E-03	
					5	1	0.12	2.00E-03	
			URC	10.5' - 20.91'	0	0	--	--	
					1	1.65	1.65	2.75E-02	
					2	1.65	0	0.00E+00	
					3	1.65	0	0.00E+00	
					4	1.65	0	0.00E+00	
					5	1.65	0	0.00E+00	
MW-46A	686.8	24.0' - 34.0'	URC	11.5' - 16.0	0	0	--	--	
					1	3.05	3.05	5.08E-02	
					2	3.15	0.1	1.67E-03	
					3	3.15	0	0.00E+00	
					4	3.15	0	0.00E+00	
					5	3.15	0	0.00E+00	
			URC	11.5' - 20.90'	0	0	--	--	
					1	2.15	2.15	3.58E-02	
					2	2.4	0.25	4.17E-03	
					3	2.7	0.3	5.00E-03	
					4	2.9	0.2	3.33E-03	
					5	3.1	0.2	3.33E-03	
			URC, LRC	11.5' - 26.10'	0	0	--	--	
					1	3.05	3.05	5.08E-02	
					2	3.5	0.45	7.50E-03	
					3	3.85	0.35	5.83E-03	
					4	4.25	0.4	6.67E-03	
					5	4.45	0.2	3.33E-03	
			URC, LRC	11.5' - 35.85'	0	0	--	--	
					1	2.25	2.25	3.75E-02	
					2	2.85	0.6	1.00E-02	
					3	3.3	0.45	7.50E-03	
					4	3.7	0.4	6.67E-03	
					5	4.05	0.35	5.83E-03	
MW-47A	680.8	20.0' - 30.0'	URC	7.5' - 11.0'	0	0	--	--	
					1	0.8	0.8	1.33E-02	
					2	1.35	0.55	9.17E-03	
					3	1.75	0.4	6.67E-03	
					4	2.05	0.3	5.00E-03	
					5	2.3	0.25	4.17E-03	
			URC	7.5' - 15.93'	0	0	--	--	
					1	2.18	2.18	3.63E-02	
					2	2.18	0	0.00E+00	

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Table 4. Falling Head Test Data
Former Indiana Creosoting Company
Bloomington, Indiana

Well ID	Ground Surface Elevation (ft. AMSL)	Screened Interval (ft. BGS)	Geologic Unit(s) Tested	Interval Tested (ft. BGS)	Elapsed Time (min)	Depth to water (ft. from top of standpipe)	Water Level Change (ft/min.)	Water Level Change (ft/sec)	Notes
MW-47A (cont.)					3	2.18	0	0.00E+00	
					4	2.18	0	0.00E+00	
					5	2.18	0	0.00E+00	
			URC, LRC	7.5' - 25.67'	0	0	--	--	
					1	2.75	2.75	4.58E-02	
					2	3.55	0.8	1.33E-02	
					3	4.2	0.65	1.08E-02	
					4	4.6	0.4	6.67E-03	
					5	4.85	0.25	4.17E-03	
			URC, LRC	7.5' - 30.55'	0	0	--	--	
					1	3.05	3.05	5.08E-02	
					2	4.05	1	1.67E-02	
					3	4.65	0.6	1.00E-02	
					4	5.1	0.45	7.50E-03	
					5	5.45	0.35	5.83E-03	
MW-48A/B	709.2	A: 60.0' - 70.0'	URC, LRC	31.0' - 35.92'	0	0	--	--	
		B: 38.0' - 53.0'			1	0.6	0.6	1.00E-02	
					2	0.6	0	0.00E+00	
					3	0.6	0	0.00E+00	
					4	0.6	0	0.00E+00	
					5	0.6	0	0.00E+00	
			URC, LRC	31.0' - 45.75'	0	0	--	--	
					1	1.3	1.3	2.17E-02	
					2	1.4	0.1	1.67E-03	
					3	1.55	0.15	2.50E-03	
					4	1.7	0.15	2.50E-03	
					5	1.95	0.25	4.17E-03	
			URC, LRC	31.0' - 50.83'	0	0	--	--	Artesian
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
			URC, LRC	31.0' - 55.95'	0	0	--	--	Artesian
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0.15	0.15	2.50E-03	
			URC, LRC	31.0' - 66.07	0	0	--	--	Artesian
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
MW-49A/B	705.0	A: 50.0' - 60.0'	URC, LRC	21.36' - 31.25'	0	0	--	--	Temp casing set at 21.36'
		B: 25.0' - 35.0'			1	0.16	0.16	2.67E-03	
					2	0.16	0	0.00E+00	
					3	0.16	0	0.00E+00	
					4	0.16	0	0.00E+00	
					5	0.16	0	0.00E+00	
			URC, LRC	21.36' - 36.17'	0	0	--	--	Artesian
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
MW-49C	705.0	12.0' - 22.0'	URC	14.0' - 16.26'	0	0	--	--	Temp casing set at 14.0'
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
MW-50A/B	698.0	A: 60.0' - 70.0'	URC	11.0' - 25.87'	0	0	--	--	Temp casing set at 11.0'
		B: 45.0' - 55.0'			1	7.4	7.4	1.23E-01	
					2	10.25	2.85	4.75E-02	
					3	11.45	1.2	2.00E-02	
					4	11.9	0.45	7.50E-03	
					5	12.7	0.8	1.33E-02	
									Temp casing set at 26.0'
			URC, LRC	26.0' - 40.88'	0	0	--	--	Artesian
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	

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Table 4. Falling Head Test Data
Former Indiana Creosoting Company
Bloomington, Indiana

Well ID	Ground Surface Elevation (ft. AMSL)	Screened Interval (ft. BGS)	Geologic Unit(s) Tested	Interval Tested (ft. BGS)	Elapsed Time (min)	Depth to water (ft. from top of standpipe)	Water Level Change (ft/min.)	Water Level Change (ft/sec)	Notes
MW-50A/B (cont.)					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
			URC, LRC	26.0' - 50.62'	0	0	--	--	
					1	4.16	4.16	6.93E-02	
					2	4.7	0.54	9.00E-03	
					3	5.4	0.7	1.17E-02	
					4	6.08	0.68	1.13E-02	
					5	6.45	0.37	6.17E-03	
									Temp casing set at 56.0'
			LRC	56.0' - 65.91'	0	0	0	0.00E+00	
					1	0.95	0.95	1.58E-02	
					2	0.95	0	0.00E+00	
					3	0.95	0	0.00E+00	
					4	0.95	0	0.00E+00	
					5	0.95	0	0.00E+00	
MW-51A	691.9	43.0' - 53.0'	URC	14.0' - 20.7'	0	0	--	--	Temp casing set at 14.0'
					1	3.75	3.75	6.25E-02	
					2	5.05	1.3	2.17E-02	
					3	5.95	0.9	1.50E-02	No water loss occurred while drilling 14.0' - 20.7' run; the falling head test was preformed because of numerous fractures in the core.
					4	6.84	0.89	1.48E-02	
					5	7.8	0.96	1.60E-02	
					6	8.76	0.96	1.60E-02	
									Temp casing set at 21.0'
			URC	21.0' - 25.71'	0	0	--	--	
					1	6.38	6.38	1.06E-01	
					2	7.75	1.37	2.28E-02	
					3	8.54	0.79	1.32E-02	
					4	9.06	0.52	8.67E-03	
					5	9.47	0.41	6.83E-03	
					6	9.83	0.36	6.00E-03	
					7	10.13	0.3	5.00E-03	
					8	10.37	0.24	4.00E-03	
									Temp casing set at 26.0'
			URC, LRC	26.0' - 35.98'	0	0	--	--	
					1	2.35	2.35	3.92E-02	
					2	3.85	1.5	2.50E-02	
					3	5.0	1.15	1.92E-02	
					4	6.05	1.05	1.75E-02	
					5	6.9	0.85	1.42E-02	
			URC, LRC	26.0' - 45.82'	0	0	--	--	
					1	0.5	0.5	8.33E-03	
					2	0.6	0.1	1.67E-03	
					3	0.6	0	0.00E+00	
					4	0.6	0	0.00E+00	
					5	0.6	0	0.00E+00	
			URC, LRC	26.0' - 50.92'	0	0	--	--	
					1	0.7	0.7	1.17E-02	
					2	1.15	0.45	7.50E-03	
					3	1.5	0.35	5.83E-03	
					4	1.9	0.4	6.67E-03	
					5	2.25	0.35	5.83E-03	
MW-51B	691.8	17.0' - 27.0'	URC	13.5' - 20.71'	0	0	--	--	Temp casing set at 13.5'
					1	2.95	2.95	4.92E-02	
					2	3.0	0.05	8.33E-04	
					3	3.08	0.08	1.33E-03	
					4	3.16	0.08	1.33E-03	
					5	3.22	0.06	1.00E-03	
MW-52A	710.1	36.0' - 46.0'	URC	21.0' - 25.80'	0	0	--	--	Temp casing set at 21.0'
					1	0.1	0.1	1.67E-03	
					2	0.2	0.1	1.67E-03	
					3	0.3	0.1	1.67E-03	
					4	0.35	0.05	8.33E-04	
					5	0.4	0.05	8.33E-04	
MW-53A/B	Pending Survey	A: 87.0' - 97.0'	URC	14.13' - 25.88'	0	0	--	--	Temp casing set at 14.13'
		B: 67.0' - 77.0'			1	0.25	0.25	4.17E-03	
					2	0.4	0.15	2.50E-03	
					3	0.6	0.2	3.33E-03	
					4	0.75	0.15	2.50E-03	
					5	0.9	0.15	2.50E-03	
			URC	14.13' - 35.99'	0	0	--	--	Artesian
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
			URC	14.13' - 46.14'	0	0	--	--	Artesian

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Table 4. Falling Head Test Data
Former Indiana Creosoting Company
Bloomington, Indiana

Well ID	Ground Surface Elevation (ft. AMSL)	Screened Interval (ft. BGS)	Geologic Unit(s) Tested	Interval Tested (ft. BGS)	Elapsed Time (min)	Depth to water (ft. from top of standpipe)	Water Level Change (ft/min.)	Water Level Change (ft/sec)	Notes
MW-53A/B (cont.)					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
			URC, LRC	14.13' - 51.04'	0	0	--	--	
					1	2.0	2.0	3.33E-02	
					2	2.0	0	0.00E+00	
					3	2.0	0	0.00E+00	
					4	2.0	0	0.00E+00	
					5	2.0	0	0.00E+00	
			URC, LRC	14.13' - 61.44'	0	0	--	--	
					1	1.45	1.45	2.42E-02	
					2	2.25	0.8	1.33E-02	
					3	2.95	0.7	1.17E-02	
					4	3.65	0.7	1.17E-02	
					5	4.35	0.7	1.17E-02	
			URC, LRC	14.13' - 71.30'	0	0	--	--	
					1	3.55	3.55	5.92E-02	
					2	4.6	1.05	1.75E-02	
					3	5.6	1	1.67E-02	
					4	6.5	0.9	1.50E-02	
					5	7.4	0.9	1.50E-02	
									Temp casing set at 71.0'
			LRC	71.0' - 81.62'	0	0	--	--	Artesian
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
			LRC	71.0' - 86.40'	0	0	--	--	Artesian
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
			LRC	71.0' - 90.39'	0	0	--	--	Artesian
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	
			LRC, BOR	71.0' - 100.44'	0	0	--	--	Artesian
					1	0	0	0.00E+00	
					2	0	0	0.00E+00	
					3	0	0	0.00E+00	
					4	0	0	0.00E+00	
					5	0	0	0.00E+00	

Notes:
URC = Upper Ramp Creek
LRC = Lower Ramp Creek
BOR = Borden

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Table 5. Packer Test Data
Former Indiana Creosoting Company
Bloomington, Indiana

Well ID	Date	Packer Interval (ft. BGS)	Depth to Pump (ft BGS)	Pump Time (min)	Gallons Pumped	Gallons/Min	Notes
MW-26A	7/31/2008	13.16' - 18.61'	11.56'	3.5	0.75	0.21	Pumped dry
	7/31/2008	21.67' - 27.12'	18.31'	20	2.3	0.12	Odor
	7/31/2008	30.67' - 36.12'	27.12'	27	4	0.15	Creosote, sheen, odor
	8/1/2008	30.67' - 36.12'	27.12'	26	4	0.15	Creosote, sheen, odor
	8/1/2008	48.67' - 61.08'	45.76'	36.5	7	0.19	Sheen, odor (from above intervals)
	8/1/2008	42.67' - 48.12'	39.39'	27	6	0.22	Slow drawdown, sl odor (from above intervals)
MW-28A	1/8/2009	52.0' - 62.0'	57.0'	18	10	0.56	Sl odor (from above intervals)
	1/8/2009	42.5' - 52.0'	47.0'	6	8	1.33	Pumped dry, sl odor (from above intervals)
	1/8/2009	33.0' - 42.5'	37.0'	22	20	0.91	Sl odor, sl sheen
	1/9/2009	23.5' - 33.0'	28.0'	35	11	0.31	Pumped dry, odor
	1/9/2009	15.28' - 24.78'	20.0'	82	111	1.35	Odor
MW-28B	1/14/2009	15.0' - 23.0'	15.90'	38	85	2.24	Odor
	1/14/2009	11.0' - 15.0'	10.75'	31	75	2.42	Odor
MW-31A	10/19/2009	11.0' - 16.5'	8.00'	20	20	1.0	--
	10/20/2009	16.0' - 22.65'	13.00'	18	8	0.44	Pumped dry
MW-32A	10/28/2009	20.0' - 23.85'	18.00'	28	25	0.89	Sl odor at 15 gal
	10/28/2009	10.5' - 20.0'	12.60'	42	12	0.29	--
MW-33A	11/3/2009	16.8' - 31.58'	15.86'	2	2	1.0	Pumped dry
	11/3/2009	31.0' - 41.67'	29.20'	9	4.5	0.50	--
	11/4/2009	46.0' - 51.59'	43.83'	10	10	1.0	Pumped as fast as possible; tracked recharge
	11/4/2009	41.0' - 51.59'	39.05'	7	5	0.71	Pumped as fast as possible; tracked recharge
MW-35B/C	2/10/2010	35.0' 44.84'	33.0'	3.3	10	3.03	Pumped dry; no recharge over 15 min
	2/10/2010	31.0' - 235.0'	29.0'	7.3	20	2.74	Pumped dry; tracked recharge
MW-36A/B	2/12/2010	20.0' - 26.74'	18.0'	20	60	3.0	Water level stabilized; quick recharge

Table 6. Hydraulic Testing Data
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID Monitoring Wells	Ground Surface Elev. (ft. AMSL)	Hydraulic Conductivity (K) (ft/day)	K Test Method	Unit Screened
MW-1D	698.0	0.88	SL	URC
MW-2D	692.4	0.6	SL	URC
MW-5S	688.0	5	SL	Alluvium
MW-5D	687.7	0.14	SL	URC
MW-12S	689.7	4.9	SL	Alluvium
MW-12D	689.8	18.1	SL	URC
MW-17S	691.6	67	SL	Alluvium
MW-17D	691.2	4.20E-04	RE	URC
MW-18S	688.7	42	SL	Alluvium
MW-20D	688.7	0.5	SL	URC
MW-21D	686.3	2.95	SL	URC
MW-23D	684.7	0.091	SL	URC
MW-24A	684.9	0.025	SL	URC
MW-26A	689.4	1.50E-05	RE	LRC
MW-27A	686.0	7.4	SL	URC
MW-28A	689.1	5.30E-05	RE	BOR
MW-28B	688.9	67.4	ST	URC
MW-28C	689.5	1.60E-03	RE	LRC
MW-29A	692.7	1.30E-04	RE	BOR
MW-29B	692.7	3.30E-04	RE	LRC
MW-30A	688.6	11.7	SL	URC
MW-30B	688.8	1.40E-04	RE	LRC
MW-31A	690.6	7.97	SL	URC
MW-31B	689.4	1.40E-04	RE	BOR
MW-31C	690.0	5.60E-05	RE	URC
MW-32A	687.3	56	ST	URC
MW-34A	685.2	7.35	SL	URC
MW-35A	702.8	13.62	SL	URC
MW-35B	703.1	55.14	SL	URC
MW-35C	703.1	8.10E-06	RE	LRC
MW-36A	697.1	15.69	SL	URC
MW-36B	697.1	0.52	SL	URC
MW-36C	697.6	1.40E-06	RE	LRC
MW-37A	684.4	26.45	SL	URC
MW-37B	684.4	13.85	SL	URC
MW-38A	698.2	35.65	SL	URC
MW-38B	697.7	25.6	SL	URC
MW-38C	697.4	6.60E-05	RE	BOR

Table 6. Hydraulic Testing Data
Former Indiana Creosoting Company
Bloomington, Indiana

Location ID Monitoring Wells	Ground Surface Elev. (ft. AMSL)	Hydraulic Conductivity (K) (ft/day)	K Test Method	Unit Screened
MW-38D	697.7	8.70E-06	RE	LRC
MW-39A	694.4	2.80E-05	RE	URC
MW-39B	694.2	8.25	SL	URC
MW-40A	692.1	0.045	SL	LRC
MW-40B	692.2	0.4	SL	URC
MW-40C	692.2	2.15	SL	URC

Notes:
ft/day = feet per day
URC = Upper Ramp Creek
LRC = Lower Ramp Creek
BOR = Borden
SL = slug test average (slug in and slug out)
RE = draw-down/recovery test
ST = short duration step/draw-down test

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Table 7. Free Product Recovery Data
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
P-1	8/4/2000	--	--	OBS	--	--	--	DNAPL at bottom
P-1	11/13/2000	--	--	0.00	--	--	--	Clear water, sheen present, odor
P-1	2/1/2001	--	--	OBS	--	--	--	sheen present, brown, odor, globules seen in bailer
P-1	12/11/2001	--	--	0.00	--	--	--	Cloudy, sheen present, odor
* Well abandoned 08/2006 for construction								
MW-3S	8/4/2000	--	--	OBS	--	--	--	Clear water, odor, some DNAPL sheen present
MW-3S	11/13/2000	--	--	OBS	--	--	--	DNAPL on bottom of bailer
MW-3S	2/1/2001	--	--	0.33	--	--	--	DNAPL on bottom of bailer
MW-3S	12/11/2001	--	--	0.33	--	--	--	
MW-3S	8/11/2003	--	--	0.50	--	--	--	DNAPL on bottom of bailer
MW-3S	9/9/2004	--	--	0.00	--	--	--	Cloudy, sheen present, odor
* Well abandoned 08/2006 for construction								
MW-3D	8/4/2000	--	--	OBS	--	--	--	DNAPL at bottom of bailer, Clear water, odor
MW-3D	11/13/2000	--	--	0.00	--	--	--	Grey, sheen present, odor
MW-3D	2/1/2001	--	--	0.00	--	--	--	Clear water, odor, sheen present
MW-3D	12/11/2001	--	--	0.00	--	--	--	Clear water, odor
MW-3D	8/11/2003	--	--	0.16	--	--	--	DNAPL on bottom of bailer
MW-3D	9/9/2004	--	--	OBS	--	--	--	Cloudy, sheen present, strong odor, trace DNAPL in bailer
* Well abandoned 08/2006 for construction								
MW-12D	8/4/2000	--	--	NM	--	--	--	
MW-12D	11/13/2000	--	--	NM	--	--	--	
MW-12D	2/1/2001	--	--	NM	--	--	--	
MW-12D	6/21/2001	5.70	--	0.00	--	--	--	Cloudy, sheen present, odor
MW-12D	12/11/2001	5.52	--	OBS	--	--	--	DNAPL noted in well after purging 5 gallons of water
MW-12D	8/11/2003	6.12	--	0.00	--	--	--	Odor, DNAPL globules in bailer
MW-12D	10/29/2003	5.40	--	1.00	--	--	--	
MW-12D	2/17/2004	--	--	0.65	--	--	--	
MW-12D	9/9/2004	6.19	--	1.00	--	--	--	Clear water to yellow, sheen present , odor
MW-12D	6/28/2007	--	--	NM	--	--	--	
MW-12D	7/5/2007	--	--	1.00	--	--	--	
MW-12D	7/24/2007	6.57	--	0.85	--	--	--	Red globules and sheen present in bailer
MW-12D	8/6/2007	--	--	1.50	--	--	--	
MW-12D	8/9/2007	--	--	NM	--	--	--	
MW-12D	10/15/2007	--	--	0.80	--	--	--	
MW-12D	10/17/2007	--	--	0.13	--	--	--	Clear water of DNAPL at 4.0 gal of purging; no drawdown in
MW-12D	10/19/2007	--	--	0.05	--	--	--	
MW-12D	11/30/2007	6.04	--	0.04	--	--	--	
MW-12D	3/5/2008	4.43	--	0.20	--	--	--	Clear water, sheen present, odor remaining after 1.0 gal of DNAPL/water purged
MW-12D	4/10/2008	--	--	0.33	--	--	--	
MW-12D	9/9/2008	--	--	0.70	0.05	0.15	0.050	
MW-12D	9/12/2008	--	--	0.50	0.05	0.15	0.100	
MW-12D	9/12/2008	--	--	0.50	0.05	0.15	0.150	
MW-12D	9/18/2008	--	--	0.30	0.10	0.15	0.250	
MW-12D	9/24/2008	--	--	0.20	0.05	0.20	0.300	
MW-12D	9/26/2008	--	--	0.25	0.05	0.20	0.350	
MW-12D	9/30/2008	--	--	0.10	0.01	0.15	0.360	
MW-12D	10/1/2008	--	--	0.20	0.05	0.15	0.410	
MW-12D	10/2/2008	--	--	0.05	0.05	0.15	0.460	Recorded 0.05' DNAPL
MW-12D	10/3/2008	--	--	0.05	0.05	0.15	0.510	Recorded 0.05' DNAPL
MW-12D	10/14/2008	--	--	0.05	0.05	0.15	0.560	Recorded 0.05' DNAPL
MW-12D	10/17/2008	--	--	0.05	0.05	0.40	0.610	Recorded 0.05' DNAPL
MW-12D	10/21/2008	--	--	0.05	0.05	0.24	0.660	Recorded 0.05' DNAPL
MW-12D	10/24/2008	--	--	0.05	0.05	0.24	0.710	Recorded 0.05' DNAPL
MW-12D	10/28/2008	--	--	0.00	0.00	0.25	0.710	Trace DNAPL on outside of bailer
MW-12D	11/21/2008	--	--	0.05	0.05	0.24	0.760	Recorded 0.05' DNAPL
MW-12D	11/25/2008	--	--	0.00	0.00	0.25	0.760	Trace DNAPL on bailer
MW-12D	12/2/2008	--	--	0.00	0.00	0.25	0.760	Trace DNAPL on bailer
MW-12D	12/4/2008	--	--	0.00	0.00	0.25	0.760	Trace DNAPL on bailer
MW-12D	12/9/2008	--	--	0.00	0.00	0.25	0.760	Trace DNAPL staining on bailer
MW-12D	12/18/2008	--	--	0.00	0.00	0.25	0.760	Slight DNAPL staining on bailer on bottom of bailer
MW-12D	12/30/2008	--	--	0.00	0.00	0.25	0.760	Slight DNAPL staining on bailer on bottom of bailer
MW-12D	1/2/2009	5.54	--	0.00	0.00	0.25	0.760	Slight DNAPL staining on bailer on bottom of bailer
MW-12D	1/7/2009	--	--	0.00	0.00	0.25	0.760	Slight DNAPL staining on bailer on bottom of bailer, ~1.0' of dark grey water in bailer, globules in bailer
MW-12D	1/14/2009	--	--	0.01	0.01	0.24	0.770	DNAPL staining on bailer, globules on bottom of bailer
MW-12D	1/20/2009	--	--	0.00	0.00	0.25	0.770	DNAPL staining on bailer bottom
MW-12D	1/23/2009	--	--	0.01	0.00	0.24	0.770	Trace DNAPL staining on bailer
MW-12D	1/26/2009	--	--	0.01	0.00	0.24	0.770	DNAPL staining on bailer
MW-12D	1/27/2009	--	--	0.00	0.00	0.25	0.770	DNAPL staining on bailer
MW-12D	1/28/2009	--	--	0.00	0.00	0.25	0.770	DNAPL staining on bailer
MW-12D	2/5/2009	--	--	0.00	0.00	0.25	0.770	DNAPL staining on bailer
MW-12D	3/3/2009	5.43	--	0.30	0.06	0.44	0.830	
MW-12D	3/11/2009	5.58	5.64	0.12	0.05	0.45	0.880	

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Table 7. Free Product Recovery Data
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-12D	3/17/2009	5.96	6.07	0.18	0.05	0.70	0.930	
MW-12D	3/25/2009	4.81	4.87	0.30	0.05	0.70	0.980	
MW-12D	3/31/2009	5.18	5.25	0.10	0.01	0.49	0.990	
MW-12D	4/20/2009	5.13	5.22	0.01	0.00	0.50	0.990	
MW-12D	4/29/2009	5.46	5.52	0.05	0.00	0.50	0.990	
MW-12D	5/6/2009	5.59	5.62	0.10	0.00	0.50	0.991	
MW-12D	5/11/2009	5.53	5.59	0.00	0.00	0.25	0.991	DNAPL staining on bailer
MW-12D	5/20/2009	5.40	5.45	0.05	0.01	0.24	1.001	
MW-12D	5/27/2009	5.81	5.85	0.01	0.01	0.24	1.011	
MW-12D	6/15/2009	5.47	5.53	0.10	0.01	0.24	1.021	
MW-12D	6/24/2009	5.26	5.57	0.18	0.04	0.46	1.061	
MW-12D	6/30/2009	5.93	6.07	0.15	0.05	0.95	1.111	
MW-12D	7/31/2009	5.80	5.90	0.03	0.01	0.24	1.121	
MW-12D	8/13/2009	6.12	6.17	0.15	0.02	0.48	1.141	Light grey in color
MW-12D	8/26/2009	6.68	6.76	0.25	0.10	0.40	1.241	
MW-12D	10/2/2009	5.49	5.56	0.30	0.10	0.24	1.341	
MW-12D	10/6/2009	6.03	6.10	0.15	0.03	0.47	1.371	
MW-12D	12/18/2009	5.62	5.67	0.20	0.02	0.48	1.391	
MW-12D	1/26/2010	5.33	5.38	0.20	0.04	0.71	1.431	
MW-12D	2/3/2010	6.20	6.28	0.20	0.05	0.70	1.481	
MW-12D	2/22/2010	5.38	9.54	0.20	0.05	0.70	1.531	
MW-12D	3/1/2010	5.92	6.01	0.20	0.05	0.70	1.581	
MW-12D	3/9/2010	6.10	6.16	0.20	0.03	0.72	1.611	
MW-12D	4/16/2010	6.03	6.11	0.33	0.04	0.71	1.651	
MW-12D	6/1/2010	6.08	6.12	0.33	0.04	0.71	1.691	
MW-12D	7/6/2010	6.56	6.64	0.25	0.05	0.95	1.741	
MW-12D	8/3/2010	6.86	6.93	0.01	0.01	0.49	1.751	
MW-12D	8/10/2010	7.06	7.06	0.00	0.00	0.25	1.751	DNAPL staining on bailer
MW-12D	8/30/2010	7.21	--	0.05	--	NB	1.751	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-12D	2/18/2011	6.20	--	1.25	--	NB	1.751	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-12D	2/22/2011	4.73	--	1.81	0.21	0.55	1.956	
MW-12D	3/4/2011	5.28	--	0.20	0.02	0.48	1.976	
MW-12D	4/4/2011	4.59	--	0.00	0.00	0.25	1.976	DNAPL staining on bailer
MW-12D	4/12/2011	4.59	--	0.70	0.15	0.35	2.126	
MW-12D	4/19/2011	4.55	--	0.10	0.00	0.08	2.126	0.5' DNAPL on outside of bailer; Bottom at 19.92
MW-12D	4/25/2011	4.12	--	0.50	0.05	0.45	2.176	
MW-12D	5/9/2011	5.50	--	0.25	0.02	0.23	2.196	
MW-12D	5/18/2011	5.73	--	0.20	0.02	0.23	2.216	Bottom at 19.88'
MW-12D	6/6/2011	6.28	--	0.60	--	NB	2.216	Bottom at 19.88'; Measured for DNAPL with tape
MW-12D	6/7/2011	6.27	--	0.60	0.05	0.20	2.266	
MW-12D	6/16/2011	--	--	0.30	0.03	0.22	2.296	
MW-12D	6/20/2011	5.44	--	0.20	0.01	0.24	2.306	
MW-12D	6/27/2011	4.72	--	0.40	0.01	0.24	2.316	
MW-12D	7/8/2011	--	--	0.20	0.02	0.25	2.336	
MW-12D	7/13/2011	6.60	--	0.50	0.05	0.11	2.384	
MW-12D	7/18/2011	6.73	--	0.20	0.0025	0.2475	2.387	
MW-12D	7/25/2011	6.50	--	0.20	0.0025	0.2475	2.389	
MW-12D	8/5/2011	6.93	--	0.04	0.003	0.247	2.392	
MW-12D	8/24/2011	6.75	--	0.20	0.0025	0.2475	2.395	
MW-14D	8/4/2000	--	--	NM	--	--	--	
MW-14D	11/13/2000	--	--	NM	--	--	--	
MW-14D	2/1/2001	--	--	NM	--	--	--	
MW-14D	6/21/2001	--	--	NM	--	--	--	
MW-14D	12/11/2001	--	--	NM	--	--	--	
MW-14D	8/11/2003	7.00	--	N OBS	--	--	--	Cloudy, odor
MW-14D	10/29/2003	6.20	--	NM	--	--	--	
MW-14D	2/17/2004	--	--	0.01	--	--	--	
MW-14D	9/9/2004	6.99	--	N OBS	--	--	--	Clear water, odor
MW-14D	6/28/2007	--	--	NM	--	--	--	
MW-14D	7/5/2007	--	--	0.79	--	--	--	
MW-14D	7/24/2007	5.73	--	0.01	--	--	--	Odor, slight black flocculants seen in bailer
MW-14D	8/6/2007	--	--	0.05	--	--	--	
MW-14D	8/9/2007	--	--	NM	--	--	--	
MW-14D	10/15/2007	--	--	1.00	--	--	--	
MW-14D	10/17/2007	--	--	NM	--	--	--	
MW-14D	10/19/2007	--	--	0.50	--	--	--	Clear water of DNAPL after purging 3.0 gallons
MW-14D	11/30/2007	6.81	--	0.90	--	--	--	
MW-14D	3/5/2008	5.17	--	0.00	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-14D	4/10/2008	--	--	0.05	--	--	--	
MW-14D	9/9/2008	--	--	0.30	0.05	0.15	0.05	
MW-14D	9/12/2008	--	--	0.20	0.05	0.15	0.10	Water in bailer was pink in color due to tracer study
MW-14D	9/18/2008	--	--	0.20	0.10	0.15	0.20	
MW-14D	9/24/2008	--	--	0.15	0.05	0.15	0.25	
MW-14D	9/26/2008	--	--	0.10	0.01	0.24	0.26	
MW-14D	9/26/2008	--	--	0.10	0.01	0.24	0.27	
MW-14D	10/1/2008	--	--	0.10	0.05	0.15	0.32	
MW-14D	10/2/2008	--	--	0.10	0.05	0.15	0.37	Water in bailer was pink in color due to tracer study
MW-14D	10/3/2008	--	--	0.10	0.05	0.15	0.42	Water in bailer was pink in color due to tracer study
MW-14D	10/14/2008	--	--	0.10	0.05	0.15	0.47	

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Former Indiana Creosoting Company
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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-14D	10/17/2008	--	--	0.25	0.05	0.40	0.52	
MW-14D	10/21/2008	--	--	0.05	0.05	0.24	0.57	Recorded 0.05' DNAPL
MW-14D	10/24/2008	--	--	0.05	0.05	0.24	0.62	Recorded 0.05' DNAPL
MW-14D	10/27/2008	--	--	0.05	0.05	0.24	0.67	water in bailer was pink in color due to tracer study; recorded 0.05' DNAPL
MW-14D	11/21/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer, water color pinkish due to tracer study
MW-14D	11/25/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer, water color pinkish due to tracer study
MW-14D	12/2/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer, water color pinkish due to tracer study
MW-14D	12/4/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer, water color pinkish due to tracer study
MW-14D	12/9/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer, water color pinkish due to tracer study
MW-14D	12/18/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer
MW-14D	12/30/2008	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer
MW-14D	1/2/2009	6.09	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer
MW-14D	1/7/2009	--	--	0.00	0.00	0.25	0.67	DNAPL staining on the bottom outside of bailer
MW-14D	1/14/2009	--	--	0.00	0.00	0.25	0.67	DNAPL staining on bailer, few globules on bottom of bailer
MW-14D	1/20/2009	--	--	0.00	0.00	0.25	0.67	Slight DNAPL staining on bailer bottom
MW-14D	1/23/2009	--	--	0.00	0.00	0.25	0.67	DNAPL on bailer, , odor
MW-14D	1/26/2009	--	--	0.01	0.00	0.25	0.67	DNAPL staining on bailer
MW-14D	1/27/2009	--	--	0.00	0.00	0.25	0.67	Slight DNAPL staining on outside of bailer
MW-14D	1/28/2009	--	--	0.00	0.00	0.25	0.67	DNAPL staining on bailer
MW-14D	2/5/2009	--	--	0.00	0.00	0.25	0.67	DNAPL staining on bailer
MW-14D	3/3/2009	6.15	--	0.05	0.01	0.49	0.68	
MW-14D	3/11/2009	6.02	7.24	0.00	0.00	0.25	0.68	Slight DNAPL staining on outside of bailer
MW-14D	3/17/2009	6.91	7.85	0.00	0.00	0.25	0.68	Slight DNAPL staining on outside of bailer
MW-14D	3/25/2009	5.49	7.81	0.05	0.01	0.75	0.69	
MW-14D	3/31/2009	5.75	6.82	0.00	0.00	0.25	0.69	DNAPL staining on bailer
MW-14D	4/20/2009	5.75	7.18	0.00	0.00	0.25	0.69	
MW-14D	4/29/2009	6.04	7.44	0.00	0.00	0.25	0.69	Slight DNAPL staining on bailer
MW-14D	5/6/2009	NM	7.82	0.00	0.00	0.25	0.69	incorrectly
MW-14D	5/11/2009	6.11	7.51	0.00	0.00	0.25	0.69	
MW-14D	5/20/2009	5.99	7.35	0.00	0.00	0.25	0.69	DNAPL staining on bailer
MW-14D	5/27/2009	7.76	8.35	0.00	0.00	0.25	0.69	DNAPL staining on bailer
MW-14D	6/15/2009	6.01	7.45	0.00	0.00	0.25	0.69	DNAPL staining on bailer
MW-14D	6/24/2009	5.74	8.27	0.00	0.00	0.25	0.69	Slight DNAPL staining on bailer
MW-14D	6/30/2009	6.11	8.47	0.00	0.00	0.25	0.69	Slight DNAPL staining on bailer
MW-14D	7/31/2009	6.10	7.54	0.00	0.00	0.25	0.69	
MW-14D	8/13/2009	6.32	7.85	0.05	0.01	0.24	0.70	DNAPL staining on bailer
MW-14D	8/26/2009	7.31	8.70	0.01	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	10/2/2009	5.89	7.36	0.00	0.00	0.25	0.70	
MW-14D	10/6/2009	6.22	7.78	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	12/18/2009	6.11	7.51	0.00	0.00	0.25	0.70	DNAPL staining on bailer, few DNAPL globules present in bottom of bailer
MW-14D	1/26/2010	5.50	7.07	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	2/3/2010	6.33	7.82	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	3/1/2010	6.07	7.57	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	4/16/2010	6.01	7.60	0.00	0.00	0.25	0.70	DNAPL staining on bailer, few DNAPL globules present in bottom of bailer
MW-14D	8/3/2010	7.40	-	0.00	0.00	0.25	0.70	Slight DNAPL staining on bailer
MW-14D	8/10/2010	7.72	9.28	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	8/30/2010	8.09	--	0.00	--	NB	0.70	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-14D	2/18/2011	6.55	--	0.00	--	NB	0.70	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-14D	2/22/2011	5.37	--	0.00	--	NB	0.70	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-14D	3/4/2011	5.94	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	3/28/2011	6.7	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	4/4/2011	6.89	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	4/12/2011	5.26	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	4/19/2011	5.24	--	0.00	0.00	0.08	0.70	DNAPL staining on bailer; Bottom at 20.05
MW-14D	5/18/2011	6.18	--	0.00	--	0.00	0.70	Bottom at 19.76'; Measured for DNAPL with tape
MW-14D	6/16/2011	--	--	0.00	--	0.00	0.70	Measured for DNAPL with tape
MW-14D	6/27/2011	5.44	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-14D	7/13/2011	7.18	--	0.00	0.00	0.08	0.70	DNAPL staining on bailer
MW-14D	7/18/2011	7.48	--	0.00	0.00	0.25	0.70	DNAPL globules in bailer
MW-14D	7/25/2011	7.33	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer and silt in bailer
MW-14D	8/4/2011	7.75	--	0.00	0.00	0.25	0.70	Slight DNAPL staining on bailer
MW-14D	8/24/2011	7.62	--	0.00	0.00	0.25	0.70	DNAPL staining on bailer
MW-15D	8/4/2000	NM	--	NM	--	--	--	
MW-15D	11/13/2000	NM	--	NM	--	--	--	
MW-15D	2/1/2001	NM	--	NM	--	--	--	
MW-15D	6/21/2001	NM	--	NM	--	--	--	Cloudy, odor
MW-15D	12/11/2001	NM	--	NM	--	--	--	
MW-15D	8/11/2003	6.46	--	0.00	--	--	--	

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Table 7. Free Product Recovery Data
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-15D	10/29/2003	5.04	--	OBS	--	--	--	Cloudy, odor
MW-15D	2/17/2004	NM	--	0.00	--	--	--	
MW-15D	9/9/2004	6.32	--	0.00	--	--	--	Odor, sheen present
MW-15D	6/28/2007	NM	--	NM	--	--	--	Trace DNAPL
MW-15D	7/24/2007	6.56	--	0.01	--	--	--	
MW-15D	8/6/2007	NM	--	0.01	--	--	--	Purged dry at 2.5 gal
MW-15D	8/9/2007	NM	--	NM	--	--	--	Not bailed
MW-15D	10/15/2007	NM	--	0.10	--	--	--	Purged dry @ 2.5 gal, well under pressure
MW-15D	10/17/2007	NM	--	0.00	--	--	--	
MW-15D	10/19/2007	NM	--	0.00	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-15D	11/30/2007	6.21	--	0.00	--	--	--	
MW-15D	3/5/2008	4.11	--	0.00	--	--	--	Recorded <0.01' DNAPL
MW-15D	4/10/2008	--	--	0.00	--	--	--	
MW-15D	9/24/2008	--	--	0.05	0.05	0.20	0.05	
MW-15D	9/26/2008	8.09	--	0.01	0.01	0.24	0.06	DNAPL staining on bailer bottom
MW-15D	9/30/2008	8.18	--	0.01	0.01	0.24	0.07	DNAPL staining on bailer bottom
MW-15D	10/1/2008	--	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom. Globules on WLI probe-tip.
MW-15D	10/2/2008	8.24	--	OBS	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	10/3/2008	8.29	--	OBS	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	10/14/2008	8.18	--	OBS	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	10/17/2008	8.18	--	0.00	0.00	0.25	0.07	
MW-15D	10/21/2008	8.31	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	10/24/2008	8.20	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	10/27/2008	8.19	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	11/21/2008	6.27	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	11/25/2008	6.14	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	12/2/2008	5.88	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	12/4/2008	5.87	--	0.00	0.00	0.25	0.07	
MW-15D	12/9/2008	5.35	--	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer bottom
MW-15D	12/18/2008	5.25	--	0.00	0.00	0.25	0.07	DNAPL staining on bottom of bailer, some globules on inside of bailer
MW-15D	12/30/2008	4.53	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	1/2/2009	4.83	--	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer bottom
MW-15D	1/7/2009	4.84	--	0.00	0.00	0.25	0.07	
MW-15D	1/14/2009	4.94	--	0.00	0.00	0.25	0.07	DNAPL on bailer, odor
MW-15D	1/20/2009	5.67	--	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	1/23/2009	4.73	--	0.00	0.00	0.25	0.07	Slight DNAPL staining on inside of bailer
MW-15D	1/26/2009	5.94	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	1/27/2009	6.06'	--	0.01	0.00	0.25	0.07	DNAPL staining on bailer bottom
MW-15D	1/28/2009	5.90'	--	0.01	0.00	0.25	0.07	
MW-15D	2/5/2009	5.52	--	0.00	0.00	0.25	0.07	Clear water
MW-15D	3/3/2009	5.12	--	0.00	0.00	0.25	0.07	Very Slight DNAPL staining on bailer
MW-15D	3/11/2009	5.26	6.80	0.00	0.00	0.25	0.07	
MW-15D	3/17/2009	5.95	7.15	0.00	0.00	0.25	0.07	
MW-15D	3/25/2009	5.02	7.93	0.00	0.00	0.50	0.07	
MW-15D	3/31/2009	4.87	6.37	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	4/20/2009	4.70	6.21	0.00	0.00	0.25	0.07	
MW-15D	4/29/2009	4.96	6.48	0.00	0.00	0.25	0.07	
MW-15D	5/6/2009	5.05	NM	0.00	0.00	0.25	0.07	
MW-15D	5/11/2009	5.02	6.47	0.00	0.00	0.25	0.07	
MW-15D	5/20/2009	4.81	6.31	0.00	0.00	0.25	0.07	
MW-15D	5/20/2009	5.14	6.64	0.00	0.00	0.25	0.07	
MW-15D	6/15/2009	5.16	6.67	0.00	0.00	0.25	0.07	
MW-15D	6/24/2009	4.96	7.91	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	6/30/2009	5.60	8.25	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	8/13/2009	5.85	7.38	0.00	0.00	0.00	0.07	DNAPL staining on bailer
MW-15D	8/26/2009	7.41	8.88	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	10/2/2009	5.85	7.32	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	10/6/2009	5.97	7.53	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	12/18/2009	7.01	8.48	0.00	0.00	0.25	0.07	DNAPL staining on bailer, globules present in bailer
MW-15D	1/26/2010	5.54	6.98	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	2/3/2010	5.56	7.05	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	3/1/2010	5.21	6.68	0.00	0.00	0.25	0.07	Slight DNAPL staining on bailer
MW-15D	4/16/2010	5.35	6.87	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	8/3/2010	7.85	9.35	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	8/10/2010	8.43	9.93	0.00	0.00	0.25	0.07	
MW-15D	8/30/2010	8.86	--	0.00	--	NB	0.07	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-15D	2/18/2011	5.30	--	0.00	--	NB	0.07	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-15D	2/22/2011	4.47	--	0.00	--	NB	0.07	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-15D	3/4/2011	4.60	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	3/18/2011	5.29	--	0.00	0.00	0.25	0.07	
MW-15D	4/4/2011	5.57	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	4/12/2011	4.11	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-15D	4/19/2011	4.33	--	0.00	0.00	0.08	0.07	DNAPL staining on bailer; Bottom at 19.75
MW-15D	5/18/2011	4.78	--	0.00	--	NB	0.07	Bottom at 19.71'; Measured for DNAPL with tape
MW-15D	6/16/2011	--	--	0.00	--	NB	0.07	Measured for DNAPL with tape
MW-15D	6/27/2011	6.64	--	0.00	0.00	0.25	0.07	
MW-15D	7/18/2011	7.42	--	0.10	0.00	0.25	0.07	DNAPL staining on bailer

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-15D	7/25/2011	7.65	--	0.00	0.00	0.50	0.07	DNAPL staining on bailer
MW-15D	8/5/2011	7.83	--	0.00	0.00	0.25	0.07	
MW-15D	8/24/2011	8.48	--	0.00	0.00	0.25	0.07	DNAPL staining on bailer
MW-16D	8/4/2000	NM	--	NM	--	--	--	
MW-16D	11/13/2000	NM	--	NM	--	--	--	
MW-16D	2/1/2001	NM	--	NM	--	--	--	
MW-16D	6/21/2001	NM	--	NM	--	--	--	Grey water, odor
MW-16D	12/11/2001	NM	--	NM	--	--	--	
MW-16D	8/11/2003	5.33	--	0.00	--	--	--	
MW-16D	10/29/2003	4.30	--	NM	--	--	--	Purged dry
MW-16D	2/17/2004	NM	--	OBS	--	--	--	
MW-16D	9/9/2004	5.71	--	0.10	--	--	--	
MW-16D	6/28/2007	NM	--	NM	--	--	--	Red flocculent present in bailer along with slight sheen
MW-16D	7/5/2007	NM	--	0.60	--	--	--	
MW-16D	7/24/2007	5.83	--	0.01	--	--	--	
MW-16D	8/6/2007	NM	--	0.01	--	--	--	Clear water
MW-16D	8/9/2007	NM	--	NM	--	--	--	Did not bail
MW-16D	10/15/2007	NM	--	0.00	--	--	--	Purged dry @ 2.75 gal, well under pressure
MW-16D	10/17/2007	NM	--	0.00	--	--	--	
MW-16D	10/19/2007	NM	--	0.00	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-16D	11/30/2007	5.31	--	0.00	--	--	--	
MW-16D	3/5/2008	3.77	--	0.00	--	--	--	
MW-16D	4/10/2008	NM	--	0.00	--	--	--	Recorded <0.01' DNAPL
MW-16D	9/18/2008	--	--	0.00	0.00	0.25	0.00	DNAPL on bailer
MW-16D	9/24/2008	--	--	0.05	0.05	0.20	0.05	DNAPL on bailer
MW-16D	9/26/2008	7.46	--	0.00	0.00	0.25	0.05	DNAPL on bailer
MW-16D	9/30/2008	7.62	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer bottom
MW-16D	10/1/2008	NM	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer bottom
MW-16D	10/2/2008	7.73	--	OBS	0.00	0.25	0.05	DNAPL staining on bailer bottom
MW-16D	10/3/2008	7.76	--	OBS	0.00	0.25	0.05	
MW-16D	10/14/2008	9.29	--	OBS	0.00	0.25	0.05	
MW-16D	10/17/2008	7.86	--	0.00	0.00	0.25	0.05	
MW-16D	10/21/2008	8.00	--	0.00	0.00	0.25	0.05	
MW-16D	10/24/2008	7.95	--	0.00	0.00	0.25	0.05	
MW-16D	10/27/2008	7.98	--	0.00	0.00	0.25	0.05	
MW-16D	11/21/2008	8.87	--	0.00	0.00	0.25	0.05	
MW-16D	11/25/2008	9.25	--	0.00	0.00	0.25	0.05	
MW-16D	12/2/2008	5.06	--	0.00	0.00	0.25	0.05	
MW-16D	12/4/2008	4.98	--	0.00	0.00	0.25	0.05	
MW-16D	12/9/2008	4.47	--	0.00	0.00	0.25	0.05	Clear water
MW-16D	12/18/2008	4.43	--	0.00	0.00	0.25	0.05	Odor
MW-16D	12/30/2008	3.94	--	0.00	0.00	0.25	0.05	Odor
MW-16D	1/2/2009	4.04	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	1/7/2009	3.99	--	0.00	0.00	0.25	0.05	
MW-16D	1/14/2009	4.11	--	0.00	0.00	0.25	0.05	Clear water, slight odor
MW-16D	1/20/2009	5.84	--	0.00	0.00	0.25	0.05	Clear water
MW-16D	1/23/2009	4.78	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	1/26/2009	5.08	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	1/27/2009	5.26	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer bottom
MW-16D	1/28/2009	5.13	--	0.00	0.00	0.25	0.05	
MW-16D	2/5/2009	4.60	--	0.00	0.00	0.25	0.05	Clear water
MW-16D	3/3/2009	4.19	--	0.00	0.00	0.25	0.05	Clear water
MW-16D	3/11/2009	4.30	5.41	0.00	0.00	0.25	0.05	
MW-16D	3/17/2009	4.52	6.03	0.00	0.00	0.25	0.05	
MW-16D	3/25/2009	4.02	6.96	0.00	0.00	0.50	0.05	
MW-16D	3/31/2009	3.88	5.37	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	4/20/2009	3.74	5.26	0.00	0.00	0.25	0.05	
MW-16D	4/29/2009	3.93	5.42	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	5/6/2009	4.06	5.55	0.00	0.00	0.25	0.05	
MW-16D	5/11/2009	4.00	5.52	0.00	0.00	0.25	0.05	
MW-16D	5/20/2009	3.89	5.40	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	5/27/2009	4.05	5.56	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	6/15/2009	4.04	5.56	0.00	0.00	0.25	0.05	
MW-16D	6/24/2009	3.94	5.83	0.00	0.00	0.25	0.05	
MW-16D	6/30/2009	4.59	6.37	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	7/31/2009	4.42	5.94	0.00	0.00	0.25	0.05	Clear water
MW-16D	8/13/2009	4.69	6.23	0.00	0.00	0.00	0.05	DNAPL staining on bailer
MW-16D	8/26/2009	6.42	7.93	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	10/2/2009	4.87	6.41	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	10/6/2009	4.98	6.47	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	12/18/2009	4.25	5.76	0.00	0.00	0.25	0.05	DNAPL staining on bailer, globules present
MW-16D	1/26/2010	4.15	5.66	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	2/3/2010	4.31	5.87	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	3/1/2010	4.07	5.53	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	4/16/2010	4.00	5.16	0.01	0.00	0.25	0.05	DNAPL staining on bailer and globules present
MW-16D	8/3/2010	6.99	8.51	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	8/10/2010	7.40	8.90	0.00	0.00	0.25	0.05	Slight DNAPL staining on bailer
MW-16D	8/30/2010	8.28	--	0.00	--	NB	0.05	Recovery Program Temporarily suspended; Measured for DNAPL with tape

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-16D	2/18/2011	4.39	--	0.00	--	NB	0.05	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-16D	2/22/2011	3.64	--	0.00	--	NB	0.05	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-16D	3/4/2011	3.67	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	3/18/2011	4.06	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	4/4/2011	4.30	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	4/12/2011	3.45	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	4/19/2011	3.43	--	0.00	0.00	0.08	0.05	DNAPL staining on bailer; Bottom at 18.70
MW-16D	5/18/2011	3.77	--	0.00	--	NB	0.05	Bottom at 18.70'; Measured for DNAPL with tape
MW-16D	6/16/2011	--	--	0.00	--	NB	0.05	Measured for DNAPL with tape
MW-16D	6/27/2011	3.72	--	0.00	0.00	0.25	0.05	DNAPL staining on bailer
MW-16D	7/13/2011	5.98	--	0.00	0.00	0.08	0.05	Odor
MW-16D	7/18/2011	6.50	--	0.00	0.00	0.25	0.05	Bottom at 18.75'
MW-16D	7/25/2011	6.95	--	0.00	0.00	0.25	0.05	
MW-16D	8/5/2011	7.53	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bottom of bailer
MW-16D	8/24/2011	8.17	--	0.00	0.00	0.25	0.05	Slight DNAPL staining on bottom of bailer
MW-19D	8/4/2000	NM	--	NM	--	--	--	
MW-19D	11/13/2000	NM	--	NM	--	--	--	
MW-19D	2/1/2001	NM	--	NM	--	--	--	
MW-19D	6/21/2001	NM	--	NM	--	--	--	Not enough water to purge
MW-19D	12/11/2001	NM	--	NM	--	--	--	
MW-19D	8/11/2003	18.00	--	0.00	--	--	--	
MW-19D	10/29/2003	13.30	--	NM	--	--	--	Trace DNAPL
MW-19D	2/17/2004	NM	--	NM	--	--	--	
MW-19D	9/9/2004	8.41	--	0.01	--	--	--	
MW-19D	6/28/2007	NM	--	NM	--	--	--	Odor, black flocculants present in bailer
MW-19D	7/5/2007	NM	--	1.04	--	--	--	
MW-19D	7/24/2007	7.11	--	0.00	--	--	--	
MW-19D	8/6/2007	NM	--	0.01	--	--	--	Clear water
MW-19D	8/9/2007	NM	--	NM	--	--	--	Did not bail
MW-19D	10/15/2007	NM	--	0.00	--	--	--	Purged dry @ 1.75 gal, grey
MW-19D	10/17/2007	NM	--	0.00	--	--	--	
MW-19D	10/19/2007	NM	--	0.00	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-19D	11/30/2007	15.88	--	0.00	--	--	--	
MW-19D	3/5/2008	9.71	--	0.00	--	--	--	
MW-19D	4/10/2008		--	0.00	0.00	0.25	0.00	
MW-19D	9/18/2008	--	--	0.00	0.00	0.25	0.00	
MW-19D	9/24/2008	--	--	0.00	0.00	0.25	0.00	
MW-19D	9/26/2008	11.33	--	0.00	0.00	0.25	0.00	
MW-19D	9/30/2008	12.49	--	0.00	0.00	0.25	0.00	Odor to water in bailer
MW-19D	10/1/2008		--	0.00	0.00	0.25	0.00	Small DNAPL globules in bailer; odor
MW-19D	10/2/2008	14.77	--	0.00	0.00	0.25	0.00	DNAPL staining on bailer bottom
MW-19D	10/3/2008	15.32	--	OBS	0.00	0.25	0.00	DNAPL staining on bailer bottom
MW-19D	10/14/2008	15.46	--	OBS	0.00	0.25	0.00	
MW-19D	10/17/2008	16.06	--	0.00	0.00	0.25	0.00	
MW-19D	10/21/2008	16.73	--	0.00	0.00	0.25	0.00	
MW-19D	10/24/2008	17.26	--	0.00	0.00	0.25	0.00	Trace bentonite in water at bottom of bailer
MW-19D	10/27/2008	17.69	--	0.00	0.00	0.25	0.00	
MW-19D	11/21/2008	19.03	--	0.00	0.00	0.25	0.00	
MW-19D	11/25/2008	18.79	--	0.00	0.00	0.25	0.00	
MW-19D	12/2/2008	18.50	--	0.00	0.00	0.25	0.00	
MW-19D	12/4/2008	18.69	--	0.00	0.00	0.25	0.00	
MW-19D	12/9/2008	18.50	--	0.00	0.00	0.25	0.00	Tan
MW-19D	12/18/2008	17.76	--	0.00	0.00	0.25	0.00	Slight odor
MW-19D	12/30/2008	16.54	--	0.00	0.00	0.25	0.00	Clear water, dark grey at bottom 1.0' of bailer
MW-19D	1/2/2009	17.12	--	0.00	0.00	0.25	0.00	Clear water, dark grey at bottom 1.0' of bailer
MW-19D	1/7/2009	17.20	--	0.00	0.00	0.25	0.00	
MW-19D	1/14/2009	17.39	--	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	1/20/2009	17.65	--	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	1/23/2009	17.95	--	0.00	0.00	0.25	0.00	grey
MW-19D	1/26/2009	18.40'	--	0.00	0.00	0.25	0.00	grey
MW-19D	1/27/2009	18.29'	--	0.00	0.00	0.25	0.00	1' of grey water in bailer
MW-19D	1/28/2009	18.54'	--	0.00	0.00	0.25	0.00	
MW-19D	2/5/2009	18.08	--	0.00	0.00	0.25	0.00	Clear water
MW-19D	3/3/2009	16.31	--	0.00	0.00	0.25	0.00	Clear water
MW-19D	3/11/2009	16.76	17.92	0.00	0.00	0.25	0.00	
MW-19D	3/17/2009	17.23	18.41	0.00	0.00	0.25	0.00	
MW-19D	3/25/2009	16.80	18.24	0.00	0.00	0.50	0.00	
MW-19D	3/31/2009	17.62	18.27	0.00	0.00	0.25	0.00	
MW-19D	4/20/2009	16.74	17.41	0.00	0.00	0.25	0.00	
MW-19D	4/29/2009	16.29	17.23	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	5/6/2009	16.56	17.61	0.00	0.00	0.25	0.00	
MW-19D	5/11/2009	16.87	17.60	0.00	0.00	0.25	0.00	
MW-19D	5/20/2009	16.36	17.35	0.00	0.00	0.25	0.00	Clear water
MW-19D	5/27/2009	16.83	17.81	0.00	0.00	0.25	0.00	
MW-19D	6/15/2009	16.72	17.76	0.00	0.00	0.25	0.00	
MW-19D	6/24/2009	16.89	18.02	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	6/30/2009	16.58	18.31	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	7/31/2009	14.88	15.80	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	8/13/2009	14.93	15.98	0.00	0.00	0.25	0.00	DNAPL staining on bailer

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Table 7. Free Product Recovery Data
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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-19D	8/26/2009	15.22	16.19	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	10/2/2009	14.05	15.22	0.00	0.00	0.25	0.00	
MW-19D	10/6/2009	14.93	16.19	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-19D	12/18/2009	14.94	15.96	0.00	0.00	0.25	0.00	DNAPL staining on bailer, globules present
MW-19D	1/26/2010	14.22	15.31	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-19D	2/3/2010	14.86	15.82	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-19D	3/1/2010	14.72	15.81	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-19D	8/3/2010	9.54	11.01	0.00	0.00	0.25	0.00	
MW-19D	8/10/2010	10.84	12.31	0.00	0.00	0.25	0.00	Slight DNAPL staining on bailer
MW-19D	8/30/2010	11.67	--	0.00	--	NB	0.00	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-19D	2/18/2011	12.62	--	0.00	--	NB	0.00	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-19D	2/22/2011	12.44	--	0.00	--	NB	0.00	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-19D	7/8/2011	8.21	--	0.00	--	NB	0.00	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-19D	7/13/2011	8.34	--	0.10	0.00	0.08	0.004	
MW-19D	8/24/2011	8.79	--	0.00	0.00	0.08	0.004	Slight DNAPL staining on bailer and globules
MW-20D	8/4/2000	--	--	NM	--	--	--	
MW-20D	11/13/2000	--	--	NM	--	--	--	
MW-20D	2/1/2001	--	--	NM	--	--	--	
MW-20D	6/21/2001	--	--	NM	--	--	--	
MW-20D	12/11/2001	--	--	NM	--	--	--	
MW-20D	8/11/2003	--	--	NM	--	--	--	
MW-20D	10/29/2003	6.37		NM	--	--	--	Cloudy, sheen present, odor
MW-20D	2/17/2004	--	--	0.50	--	--	--	
MW-20D	9/9/2004	7.31		1.50	--	--	--	
MW-20D	6/28/2007	--	--	NM	--	--	--	Grey, odor, sheen
MW-20D	7/20/2007	--	--	0.75	--	--	--	
MW-20D	7/24/2007	7.20	--	0.09	--	--	--	
MW-20D	8/6/2007	--	--	0.30	--	--	--	Clear water of DNAPL at 1.5 gal, no drawdown
MW-20D	8/9/2007	--	--	NM	--	--	--	Clear water of DNAPL at 2.0 gal, no drawdown
MW-20D	10/15/2007	--	--	0.20	--	--	--	Clear water of DNAPL at 1.0 gal
MW-20D	10/17/2007	--	--	0.10	--	--	--	
MW-20D	10/19/2007	--	--	0.08	--	--	--	Clear water, sheen present, odor remaining after purge of 0.75 gal
MW-20D	11/30/2007	7.12	--	0.01	--	--	--	
MW-20D	3/5/2008	4.99	--	0.05	--	--	--	DNAPL/grey water
MW-20D	4/10/2008	--	--	0.33	--	--	--	DNAPL/grey water
MW-20D	9/8/2008	--	--	0.50	0.10	0.90	0.10	DNAPL/grey water
MW-20D	9/9/2008	--	--	0.80	0.05	0.15	0.15	DNAPL/grey water
MW-20D	9/10/2008	--	--	1.20	0.10	0.15	0.25	
MW-20D	9/12/2008	--	--	1.00	0.05	0.15	0.30	
MW-20D	9/16/2008	--	--	0.50	0.10	0.15	0.40	
MW-20D	9/18/2008	--	--	0.10	0.10	0.15	0.50	
MW-20D	9/24/2008	--	--	0.10	0.05	0.15	0.55	
MW-20D	9/26/2008	--	--	0.20	0.10	0.40	0.65	
MW-20D	9/30/2008	--	--	0.10	0.01	0.24	0.66	~ 1' of grey water in bailer
MW-20D	10/1/2008	--	--	0.10	0.05	0.15	0.71	~ 0.7' of grey water in bailer
MW-20D	10/2/2008	--	--	0.15	0.05	0.15	0.76	Recorded <0.01' DNAPL
MW-20D	10/3/2008	--	--	0.10	0.05	0.15	0.81	DNAPL staining on bailer on bottom of bailer
MW-20D	10/14/2008	--	--	0.05	0.05	0.15	0.86	DNAPL staining on bailer on bottom of bailer
MW-20D	10/17/2008	--	--	0.00	0.00	0.25	0.86	DNAPL staining on bailer on bottom of bailer
MW-20D	10/21/2008	--	--	0.05	0.05	0.24	0.91	DNAPL staining on bailer on bottom of bailer
MW-20D	10/24/2008	--	--	0.05	0.05	0.24	0.96	DNAPL staining on bailer on bottom of bailer
MW-20D	10/27/2008	--	--	0.00	0.00	0.25	0.96	DNAPL staining on bailer on bottom of bailer
MW-20D	11/21/2008	--	--	0.00	0.00	0.24	0.96	DNAPL staining on bailer on bottom of bailer
MW-20D	11/25/2008	--	--	0.05	0.05	0.24	1.01	DNAPL staining on bailer on bottom of bailer
MW-20D	12/2/2008	--	--	0.00	0.00	0.25	1.01	DNAPL staining on bailer on bottom of bailer
MW-20D	12/4/2008	--	--	0.00	0.00	0.25	1.01	Slight DNAPL staining on outside of bailer of bailer
MW-20D	12/9/2008	--	--	0.00	0.00	0.25	1.01	Slight DNAPL staining on outside of bailer of bailer
MW-20D	12/18/2008	--	--	0.00	0.00	0.25	1.01	DNAPL staining on bailer on outside and bottom of bailer
MW-20D	12/30/2008	--	--	0.00	0.00	0.25	1.01	Slight DNAPL staining on outside of bailer and bottom of bailer
MW-20D	1/2/2009	6.20		0.00	0.00	0.25	1.01	DNAPL staining on bailer, 0.05' of globules, dark water
MW-20D	1/7/2009	--	--	0.00	0.00	0.25	1.01	
MW-20D	1/14/2009	--	--	0.05	0.00	0.25	1.01	
MW-20D	1/20/2009	--	--	0.00	0.00	0.25	1.01	DNAPL staining on bailer
MW-20D	1/23/2009	--	--	NM	0.00	0.25	1.01	DNAPL staining on bailer
MW-20D	1/26/2009	--	--	0.00	0.00	0.25	1.01	Slight DNAPL staining on bailer
MW-20D	1/27/2009	--	--	0.00	0.00	0.25	1.01	Black water with sheen present and globules
MW-20D	1/28/2009	--	--	0.00	0.00	0.25	1.01	
MW-20D	2/5/2009	--	--	0.00	0.00	0.25	1.01	Slight DNAPL staining on outside of bailer of bailer
MW-20D	3/3/2009	5.88	--	0.01	0.01	0.24	1.02	Slight DNAPL staining on bailer on bottom of bailer
MW-20D	3/11/2009	6.45	7.85	0.00	0.00	0.25	1.02	
MW-20D	3/17/2009	6.67	8.04	0.00	0.00	0.25	1.02	
MW-20D	3/25/2009	6.05	6.17	0.10	0.05	0.70	1.07	
MW-20D	3/31/2009	5.96	7.23	0.05	0.01	0.24	1.08	
MW-20D	4/20/2009	5.80	5.91	0.00	0.00	0.25	1.08	DNAPL staining on bailer
MW-20D	4/29/2009	6.20	9.38	0.10	0.00	0.75	1.08	Greyish black water
MW-20D	5/6/2009	6.18	6.21	0.00	0.00	0.25	1.08	Slight DNAPL staining on bailer

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-20D	5/11/2009	6.18	7.55	0.00	0.00	0.25	1.08	Very Slight DNAPL staining on bailer
MW-20D	5/20/2009	5.94	7.19	0.00	0.00	0.25	1.08	Clear water
MW-20D	5/27/2009	6.56	7.80	0.00	0.00	0.25	1.08	Slight DNAPL staining on bailer
MW-20D	6/15/2009	6.23	7.57	0.00	0.00	0.25	1.08	
MW-20D	6/24/2009	5.76	7.32	0.00	0.00	0.25	1.08	Slight DNAPL staining on bailer
MW-20D	6/30/2009	6.84	8.31	0.00	0.00	0.25	1.08	
MW-20D	7/31/2009	6.43	7.69	0.00	0.00	0.25	1.08	
MW-20D	8/13/2009	6.97	8.29	0.02	0.01	0.49	1.09	Clear water
MW-20D	8/26/2009	7.59	8.81	0.00	0.00	0.25	1.09	DNAPL staining on bailer, Clear water
MW-20D	10/2/2009	7.05	8.34	0.00	0.00	0.25	1.09	Slight DNAPL staining on bailer
MW-20D	10/6/2009	7.11	8.37	0.00	0.00	0.25	1.09	Slight DNAPL staining on bailer
MW-20D	12/18/2009	6.21	7.65	0.00	0.00	0.25	1.09	DNAPL staining on bailer, DNAPL on bottom of bailer
MW-20D	1/26/2010	5.96	7.21	0.00	0.00	0.25	1.09	DNAPL staining on bailer
MW-20D	2/3/2010	7.60	7.79	0.00	0.00	0.25	1.09	DNAPL staining on bailer
MW-20D	3/1/2010	6.26	6.41	0.00	0.00	0.25	1.09	DNAPL staining on bailer
MW-20D	4/16/2010	6.33	7.68	0.00	0.00	0.25	1.09	Globules present; DNAPL staining on bailer
MW-20D	8/3/2010	7.60	8.72	0.05	0.01	0.24	1.10	
MW-20D	8/10/2010	7.62	8.82	0.00	0.00	0.25	1.10	DNAPL staining on bailer
MW-20D	8/30/2010	7.65	--	0.00	--	NB	1.10	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-20D	2/18/2011	6.71	--	0.68	--	NB	1.10	Recovery Program Temporarily suspended; Measured for DNAPL with tape
MW-20D	2/22/2011	5.48	--	0.75	--	NB	1.10	DNAPL level hard to decipher; Measured for DNAPL with tape
MW-20D	3/4/2011	5.76	--	0.00	0.00	0.25	1.10	DNAPL staining on bailer
MW-20D	3/18/2011	6.58	--	0.00	0.00	0.25	1.10	DNAPL staining on bailer
MW-20D	4/4/2011	6.21	--	0.00	0.00	0.25	1.10	
MW-20D	4/12/2011	5.50	--	0.20	0.00	0.00	1.10	
MW-20D	4/19/2011	5.10	--	0.10	0.01	0.07	1.11	Bottom at 25.85'
MW-20D	5/18/2011	6.36	--	0.15	0.02	0.23	1.13	Bottom at 25.84'
MW-20D	6/6/2011	7.06	--	0.40	--	NB	1.13	Bottom at 25.84'; Measured for DNAPL with tape
MW-20D	6/7/2011	7.00	--	0.30	0.03	0.22	1.16	
MW-20D	6/20/2011	6.10	--	0.10	0.01	0.25	1.17	
MW-20D	6/27/2011	6.02	--	0.20	0.01	0.24	1.18	
MW-20D	7/8/2011	7.25	--	0.10	0.01	0.24	1.19	
MW-20D	7/13/2011	7.48	--	0.20	0.01	0.49	1.20	
MW-20D	7/18/2011	7.54	--	0.00	0.00	0.25	1.20	DNAPL staining on bailer
MW-20D	7/25/2011	7.46	--	0.20	0.00	0.25	1.20	
MW-20D	8/5/2011	7.63	--	0.00	0.00	0.25	1.20	
MW-20D	8/15/2011	7.53	--	0.10	0.00	0.43	1.20	
MW-20D	8/24/2011	7.64	--	0.10	0.0025	0.498	1.21	
MW-20D	9/6/2011	7.82	--	0.00	0.00	0.080	1.21	DNAPL staining on bailer
MW-20D	9/12/2011	7.82	--	0.00	0.00	0.25	1.21	DNAPL staining on bailer
MW-20D	9/19/2011	7.64	--	0.00	0.00	0.25	1.21	DNAPL staining on bailer
MW-21D	8/4/2000	--	--	NM	--	--	--	
MW-21D	11/13/2000	--	--	NM	--	--	--	
MW-21D	2/1/2001	--	--	NM	--	--	--	
MW-21D	6/21/2001	--	--	NM	--	--	--	
MW-21D	12/11/2001	--	--	NM	--	--	--	
MW-21D	8/11/2003	--	--	NM	--	--	--	
MW-21D	10/29/2003	3.71	--	NM	--	--	--	Clear water, sheen present odor
MW-21D	2/17/2004	--	--	0.00	--	--	--	
MW-21D	9/9/2004	5.70	--	1.50	--	--	--	
MW-21D	6/28/2007	--	--	NM	--	--	--	Odor, sheen present
MW-21D	7/5/2007	--	--	1.04	--	--	--	
MW-21D	7/24/2007	4.55	--	0.60	--	--	--	
MW-21D	8/6/2007	--	--	2.50	--	--	--	Clear water of DNAPL at 6.0 gal, no drawdown, sheen present
MW-21D	8/9/2007	--	--	1.50	--	--	--	Clear water of DNAPL at 5.5 gal, no drawdown
MW-21D	10/15/2007	--	--	1.20	--	--	--	Clear water of DNAPL at 2.75 gal
MW-21D	10/17/2007	--	--	1.05	--	--	--	
MW-21D	10/19/2007	--	--	0.75	--	--	--	Trace DNAPL, sheen present, odor remaining after purge of 4.0 gal
MW-21D	11/30/2007	4.20	--	0.45	--	--	--	
MW-21D	3/5/2008	2.61	--	1.75	--	--	--	
MW-21D	4/10/2008	--	--	0.66	--	--	--	
MW-21D	9/5/2008	--	--	0.75	1.50	1.00	1.50	
MW-21D	9/5/2008	--	--	0.50	0.20	0.45	1.70	
MW-21D	9/5/2008	--	--	0.16	0.05	0.70	1.75	
MW-21D	9/8/2008	--	--	1.80	0.50	1.25	2.25	
MW-21D	9/9/2008	--	--	0.85	0.05	0.15	2.30	
MW-21D	9/10/2008	--	--	1.20	0.10	0.15	2.40	
MW-21D	9/12/2008	--	--	1.30	0.25	1.50	2.65	
MW-21D	9/16/2008	--	--	1.80	0.20	0.05	2.85	
MW-21D	9/18/2008	--	--	1.80	0.20	1.05	3.05	
MW-21D	9/24/2008	--	--	1.90	0.20	0.05	3.25	
MW-21D	9/26/2008	--	--	2.50	0.35	0.80	3.60	
MW-21D	9/26/2008	--	--	0.20	0.10	0.40	3.70	
MW-21D	9/30/2008	--	--	0.60	0.20	1.05	3.90	
MW-21D	10/1/2008	--	--	1.20	0.10	0.15	4.00	
MW-21D	10/2/2008	--	--	0.80	0.10	0.90	4.10	
MW-21D	10/3/2008	--	--	0.80	0.10	0.65	4.20	

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MW-21D	10/14/2008	--	--	0.30	0.20	1.80	4.40	
MW-21D	10/17/2008	--	--	2.60	0.50	1.50	4.90	
MW-21D	10/17/2008	--	--	0.10	0.05	0.40	4.95	
MW-21D	10/21/2008	--	--	2.00	0.25	1.00	5.20	
MW-21D	10/24/2008	--	--	1.30	0.13	0.87	5.33	
MW-21D	10/27/2008	--	--	0.50	0.10	0.15	5.43	
MW-21D	11/21/2008	--	--	2.00	1.00	0.75	6.43	
MW-21D	11/25/2008	--	--	1.20	0.15	1.35	6.58	
MW-21D	12/2/2008	--	--	0.60	0.15	0.85	6.73	
MW-21D	12/4/2008	--	--	0.60	0.05	0.70	6.78	
MW-21D	12/9/2008	--	--	0.30	0.05	0.74	6.83	
MW-21D	12/18/2008	--	--	1.50	0.25	1.00	7.08	
MW-21D	12/30/2008	--	--	1.50	0.20	0.55	7.28	DNAPL staining on bailer on outside and bottom of bailer
MW-21D	1/2/2009	3.69	--	2.20	0.50	0.75	7.78	DNAPL staining on bailer, few globules at bottom of bailer
MW-21D	1/7/2009	--	--	0.00	0.00	0.25	7.78	
MW-21D	1/14/2009	--	--	0.05	0.01	0.25	7.79	Slight DNAPL staining on bailer
MW-21D	1/20/2009	--	--	0.00	0.00	0.25	7.79	DNAPL staining on bailer, sheen present
MW-21D	1/23/2009	--	--	0.00	0.00	0.25	7.79	DNAPL staining on bailer
MW-21D	1/26/2009	--	--	0.01	0.01	0.49	7.80	DNAPL staining on bailer
MW-21D	1/27/2009	--	--	0.00	0.00	0.25	7.80	0.2' of grey water in bailer
MW-21D	1/28/2009	--	--	0.00	0.00	0.25	7.80	
MW-21D	2/5/2009	--	--	0.00	0.00	0.25	7.80	Clear water, Slight DNAPL staining on outside of bailer of bailer, took 1.5 minutes to recharge
MW-21D	3/3/2009	4.46	--	0.00	0.00	0.25	7.80	Clear water, Slight DNAPL staining on outside of bailer of bailer
MW-21D	3/11/2009	4.52	4.54	0.00	0.00	0.25	7.80	
MW-21D	3/17/2009	4.86	6.82	0.00	0.00	0.25	7.80	
MW-21D	3/25/2009	3.95	4.12	0.00	0.00	0.50	7.80	DNAPL staining on bailer
MW-21D	3/31/2009	4.01	4.15	0.00	0.00	0.25	7.80	
MW-21D	4/20/2009	3.87	3.99	0.00	0.00	0.25	7.80	
MW-21D	4/29/2009	4.15	4.45	0.00	0.00	0.25	7.80	
MW-21D	5/6/2009	4.10	4.10	0.00	0.00	0.25	7.80	
MW-21D	5/11/2009	4.06	4.64	0.00	0.00	0.25	7.80	Clear water,
MW-21D	5/20/2009	3.77	3.96	0.00	0.00	0.25	7.80	1.0' grey water; cloudy
MW-21D	5/27/2009	4.39	4.59	0.00	0.00	0.25	7.80	Slight DNAPL staining on bailer
MW-21D	6/15/2009	3.94	4.01	0.00	0.00	0.25	7.80	
MW-21D	6/24/2009	3.62	3.80	0.00	0.00	0.25	7.80	
MW-21D	6/30/2009	4.68	4.68	0.00	0.00	0.25	7.80	
MW-21D	7/31/2009	4.58	6.61	0.00	0.00	0.25	7.80	
MW-21D	8/13/2009	4.73	5.34	0.00	0.00	0.25	7.80	
MW-21D	8/26/2009	5.29	5.45	0.00	0.00	0.25	7.80	0.5' grey water in bailer
MW-21D	10/2/2009	4.12	4.46	0.00	0.00	0.25	7.80	
MW-21D	10/6/2009	4.49	4.72	0.00	0.00	0.25	7.80	Slight DNAPL staining on bailer
MW-21D	12/18/2009	4.69	5.28	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	1/26/2010	4.54	4.83	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	2/3/2010	5.07	5.17	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	3/1/2010	4.94	5.01	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	4/16/2010	5.00	5.00	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	8/3/2010	5.52	5.60	0.00	0.00	0.25	7.80	
MW-21D	8/10/2010	5.57	5.62	0.00	0.00	0.25	7.80	
MW-21D	8/30/2010	5.60	--	0.00	--	NB	7.80	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-21D	2/18/2011	5.05	--	0.00	--	NB	7.80	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-21D	2/22/2011	4.06	--	0.00	--	NB	7.80	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-21D	3/4/2011	4.33	--	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	3/18/2011	5.00	--	0.00	0.00	0.25	7.80	DNAPL staining on bailer
MW-21D	4/4/2011	3.69	--	0.00	0.00	0.25	7.80	
MW-21D	4/12/2011	4.05	--	0.20	0.10	0.40	7.90	
MW-21D	4/19/2011	3.80	--	0.80	0.03	0.13	7.93	Bottom at 26.11'
MW-21D	4/25/2011	3.46	--	0.75	0.13	0.37	8.06	
MW-21D	5/9/2011	4.55	--	1.00	0.10	0.40	8.16	
MW-21D	5/18/2011	4.63	--	0.10	0.00	0.25	8.16	Bottom at 26.04'
MW-21D	6/6/2011	4.08	--	1.40	--	NB	8.16	Bottom at 26.06'; Measured for DNAPL with tape
MW-21D	6/7/2011	4.05	--	1.50	0.21	0.54	8.37	
MW-21D	6/20/2011	4.39	--	0.90	0.07	0.43	8.44	
MW-21D	6/27/2011	3.98	--	0.70	0.01	0.24	8.45	
MW-21D	6/28/2011	4.34	--	0.50	0.04	0.21	8.49	
MW-21D	7/8/2011	4.10	--	0.15	0.01	0.24	8.50	
MW-21D	7/13/2011	5.27	--	0.90	0.03	0.47	8.53	
MW-21D	7/18/2011	5.34	--	0.40	0.04	0.46	8.57	
MW-21D	7/25/2011	6.21	--	0.50	0.04	0.46	8.606	
MW-21D	8/5/2011	5.46	--	0.05	0.00	0.25	8.608	
MW-21D	8/15/2011	5.42	--	0.70	0.08	0.43	8.683	
MW-21D	8/24/2011	5.42	--	0.90	0.05	0.45	8.733	
MW-21D	9/6/2011	5.67	--	0.70	0.08	0.43	8.813	
MW-21D	9/12/2011	5.69	--	0.80	0.0125	0.2475	8.826	
MW-21D	9/19/2011	5.00	--	0.60	0.0125	0.2475	8.838	
MW-22D	8/4/2000	--	--	NM	--	--	--	
MW-22D	11/13/2000	--	--	NM	--	--	--	
MW-22D	2/1/2001	--	--	NM	--	--	--	

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Table 7. Free Product Recovery Data
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-22D	6/21/2001	--	--	NM	--	--	--	
MW-22D	12/11/2001	--	--	NM	--	--	--	
MW-22D	8/11/2003	--	--	NM	--	--	--	
MW-22D	10/29/2003	3.61	--	NM	--	--	--	
MW-22D	2/17/2004	--	--	4.00	--	--	--	
MW-22D	9/9/2004	4.65	--	4.00	--	--	--	
MW-22D	6/28/2007	--	--	0.05	--	--	--	Grey, cloudy, sheen present
MW-22D	7/5/2007	--	--	NM	--	--	--	
MW-22D	7/24/2007	4.20	--	0.60	--	--	--	
MW-22D	8/6/2007	--	--	2.00	--	--	--	Clear water of DNAPL at 1.5 gal, no drawdown
MW-22D	8/9/2007	--	--	0.50	--	--	--	Clear water of DNAPL at 2.0 gal, no drawdown
MW-22D	10/15/2007	--	--	0.20	--	--	--	Clear water of DNAPL at 1.0 gal
MW-22D	10/17/2007	--	--	0.17	--	--	--	
MW-22D	10/19/2007	--	--	0.09	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-22D	11/30/2007	4.15	--	0.02	--	--	--	
MW-22D	3/5/2008	2.58	--	0.00	--	--	--	
MW-22D	4/10/2008	--	--	1.00	--	--	--	
MW-22D	9/5/2008	--	--	1.00	0.10	0.65	0.10	in bailer
MW-22D	9/5/2008	--	--	1.00	0.01	0.49	0.11	
MW-22D	9/5/2008	--	--	0.00	0.00	0.25	0.11	
MW-22D	9/8/2008	--	--	0.30	0.05	0.74	0.16	
MW-22D	9/9/2008	--	--	0.05	0.00	0.25	0.16	
MW-22D	9/10/2008	--	--	0.10	0.00	0.25	0.16	
MW-22D	9/12/2008	--	--	0.10	0.05	0.20	0.21	
MW-22D	9/16/2008	--	--	0.10	0.05	0.20	0.26	
MW-22D	9/18/2008	--	--	0.10	0.05	0.20	0.31	
MW-22D	9/24/2008	--	--	0.10	0.05	0.20	0.36	
MW-22D	9/26/2008	--	--	0.10	0.01	0.24	0.37	
MW-22D	9/30/2008	--	--	0.10	0.01	0.24	0.38	
MW-22D	10/1/2008	--	--	0.10	0.05	0.20	0.43	
MW-22D	10/2/2008	--	--	0.10	0.05	0.20	0.48	Recorded <0.01' DNAPL
MW-22D	10/3/2008	--	--	0.10	0.05	0.20	0.53	
MW-22D	10/14/2008	--	--	0.05	0.05	0.20	0.58	
MW-22D	10/17/2008	--	--	0.01	0.05	0.40	0.63	
MW-22D	10/21/2008	--	--	0.01	0.05	0.24	0.68	Recorded <0.01' DNAPL
MW-22D	10/24/2008	--	--	0.15	0.05	0.24	0.73	DNAPL staining on bottom of bailer
MW-22D	10/27/2008	--	--	0.05	0.05	0.24	0.78	DNAPL staining on bottom of bailer
MW-22D	11/21/2008	--	--	0.00	0.00	0.25	0.78	DNAPL staining on bottom of bailer
MW-22D	11/25/2008	--	--	0.00	0.00	0.25	0.78	DNAPL staining on bottom of bailer
MW-22D	12/2/2008	--	--	0.00	0.00	0.25	0.78	Trace DNAPL staining on bailer
MW-22D	12/4/2008	--	--	0.00	0.00	0.25	0.78	Trace DNAPL staining on bailer
MW-22D	12/9/2008	--	--	0.00	0.00	0.25	0.78	DNAPL staining on bottom and outside of bailer
MW-22D	12/18/2008	--	--	0.00	0.00	0.25	0.78	DNAPL staining on bottom and outside of bailer
MW-22D	1/2/2009	3.63	--	0.00	0.00	0.25	0.78	
MW-22D	1/7/2009	--	--	0.00	0.00	0.25	0.78	
MW-22D	1/14/2009	--	--	0.05	0.05	0.24	0.83	Slight DNAPL staining on bailer
MW-22D	1/20/2009	--	--	0.00	0.00	0.25	0.83	DNAPL staining on bailer,
MW-22D	1/23/2009	--	--	0.00	0.00	0.25	0.83	DNAPL staining on bailer
MW-22D	1/26/2009	--	--	0.01	0.00	0.25	0.83	DNAPL staining on bailer
MW-22D	1/27/2009	--	--	0.00	0.00	0.25	0.83	DNAPL staining on bailer
MW-22D	1/28/2009	--	--	0.00	0.00	0.25	0.83	
MW-22D	2/5/2009	--	--	0.00	0.00	0.25	0.83	Slight DNAPL staining on outside of bailer of bailer
MW-22D	3/3/2009	4.12	--	0.01	0.01	0.24	0.84	Slight DNAPL staining on outside of bailer of bailer
MW-22D	3/11/2009	4.14	4.16	0.00	0.00	0.25	0.84	
MW-22D	3/17/2009	4.52	4.53	0.00	0.00	0.25	0.84	
MW-22D	3/25/2009	3.63	3.65	0.01	0.05	0.50	0.89	Slight DNAPL staining on outside of bailer
MW-22D	3/31/2009	3.70	3.70	0.00	0.00	0.25	0.89	DNAPL staining on bailer
MW-22D	4/20/2009	3.54	3.59	0.00	0.00	0.25	0.89	DNAPL staining on bailer
MW-22D	4/29/2009	3.83	3.81	0.00	0.00	0.25	0.89	
MW-22D	5/6/2009	3.81	3.84	0.00	0.00	0.25	0.89	
MW-22D	5/11/2009	3.76	3.82	0.00	0.00	0.25	0.89	
MW-22D	5/20/2009	3.43	3.48	0.00	0.00	0.25	0.89	
MW-22D	5/27/2009	4.06	4.06	0.00	0.00	0.25	0.89	
MW-22D	6/15/2009	3.58	3.60	0.00	0.00	0.25	0.89	
MW-22D	6/24/2009	3.28	3.37	0.00	0.00	0.25	0.89	Slight DNAPL staining on bailer
MW-22D	6/30/2009	4.35	4.42	0.00	0.00	0.25	0.89	
MW-22D	7/31/2009	4.32	4.40	0.00	0.00	0.25	0.89	
MW-22D	8/13/2009	4.42	4.43	0.04	0.03	0.47	0.92	Yellow-green water from fluorescents
MW-22D	8/26/2009	4.97	4.96	0.10	0.05	0.45	0.97	
MW-22D	10/2/2009	3.78	3.81	0.10	0.01	0.24	0.98	
MW-22D	10/6/2009	4.17	4.27	0.00	0.00	0.25	0.98	
MW-22D	12/18/2009	4.34	4.40	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	1/26/2010	4.23	4.24	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	2/3/2010	4.74	4.77	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	3/1/2010	4.62	4.64	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	4/16/2010	4.68	4.70	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	8/3/2010	5.18	5.21	0.00	0.00	0.25	0.98	
MW-22D	8/10/2010	5.24	5.27	0.00	0.00	0.25	0.98	
MW-22D	8/30/2010	5.27	--	0.00	--	NB	0.98	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-22D	2/18/2011	4.74	--	0.00	--	NB	0.98	Recovery Program Temporarily Suspended; Measured for DNAPL with tape

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-22D	2/22/2011	3.73	--	0.00	--	NB	0.98	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-22D	3/4/2011	4.02	--	0.00	0.00	0.25	0.98	
MW-22D	3/18/2011	4.60	--	0.00	0.00	0.25	0.98	
MW-22D	4/4/2011	3.40	--	0.00	0.00	0.25	0.98	
MW-22D	4/12/2011	3.71	--	0.00	0.00	0.25	0.98	
MW-22D	4/19/2011	3.47	--	0.00	--	NB	0.98	Bottom at 20.40'; Measured for DNAPL with tape
MW-22D	5/18/2011	4.30	--	0.00	--	NB	0.98	Bottom at 20.44'; Measured for DNAPL with tape
MW-22D	6/27/2011	3.61	--	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-22D	7/8/2011	3.87	--	0.00	0.00	0.25	0.98	
MW-22D	7/13/2011	5.92	--	0.00	0.00	0.25	0.98	
MW-22D	7/18/2011	5.01	--	0.00	0.00	0.25	0.98	
MW-22D	7/25/2011	4.82	--	0.00	0.00	0.25	0.98	Trace DNAPL staining on bailer
MW-22D	8/5/2011	5.13	--	0.00	0.00	0.25	0.98	Trace DNAPL staining on bailer
MW-22D	8/24/2011	5.04	--	0.00	0.00	0.25	0.98	DNAPL staining on bailer
MW-23D	8/4/2000	--	--	NM	--	--	--	
MW-23D	11/13/2000	--	--	NM	--	--	--	
MW-23D	2/1/2001	--	--	NM	--	--	--	
MW-23D	6/21/2001	--	--	NM	--	--	--	
MW-23D	12/11/2001	--	--	NM	--	--	--	Purged dry @ 5.0 gal, strong odor
MW-23D	8/11/2003	--	--	NM	--	--	--	Odor, black flocculants present in bailer
MW-23D	10/23/2003	3.23	--	NM	--	--	--	
MW-23D	9/9/2004	4.30	--	0.00	--	--	--	Grey
MW-23D	7/24/2007	4.08	--	OBS	--	--	--	Did not bail
MW-23D	10/15/2007	--	--	0.00	--	--	--	Purged dry @ 5.0 gal, grey
MW-23D	10/17/2007	--	--	0.00	--	--	--	
MW-23D	10/19/2007	--	--	0.00	--	--	--	Purged 0.5 gallons, (Checked for DNAPL Twice)
MW-23D	11/30/2007	7.57	--	0.00	--	--	--	
MW-23D	3/5/2008	3.04	--	0.00	--	--	--	
MW-23D	4/10/2008	--	--	0.00	--	--	--	
MW-23D	9/18/2008	--	--	0.00	0.00	0.25	0.00	
MW-23D	9/24/2008	--	--	0.00	0.00	0.25	0.00	
MW-23D	9/26/2008	4.42	--	0.00	0.00	0.25	0.00	
MW-23D	9/30/2008	4.57	--	0.00	0.00	0.25	0.00	
MW-23D	10/1/2008	--	--	0.00	0.00	0.25	0.00	
MW-23D	10/2/2008	4.65	--	0.00	0.00	0.25	0.00	
MW-23D	10/3/2008	4.67	--	0.00	0.00	0.25	0.00	
MW-23D	10/14/2008	4.53	--	0.00	0.00	0.25	0.00	
MW-23D	10/17/2008	4.52	--	0.00	0.00	0.25	0.00	
MW-23D	10/21/2008	4.64	--	0.00	0.00	0.25	0.00	
MW-23D	10/24/2008	4.28	--	0.00	0.00	0.25	0.00	
MW-23D	10/27/2008	4.33	--	0.00	0.00	0.25	0.00	
MW-23D	11/21/2008	4.14	--	0.00	0.00	0.25	0.00	Odor
MW-23D	11/25/2008	4.08	--	0.00	0.00	0.25	0.00	Odor
MW-23D	12/2/2008	3.88	--	0.00	0.00	0.25	0.00	Odor
MW-23D	12/4/2008	3.89	--	0.00	0.00	0.25	0.00	
MW-23D	12/9/2008	3.22	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	12/18/2008	3.67	--	0.00	0.00	0.25	0.00	Slight odor
MW-23D	12/30/2008	2.88	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/2/2009	3.26	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/7/2009	3.29	--	0.00	0.00	0.25	0.00	
MW-23D	1/14/2009	3.50'	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/20/2009	3.89	--	0.00	0.00	0.25	0.00	Slight DNAPL staining on outside of bailer
MW-23D	1/23/2009	4.28	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/26/2009	4.34'	--	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-23D	1/27/2009	4.34	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/28/2009	4.31	--	0.00	0.00	0.25	0.00	
MW-23D	2/5/2009	4.13	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	3/3/2009	3.79	--	0.00	0.00	0.25	0.00	Clear water
MW-23D	3/11/2009	3.80	5.29	0.00	0.00	0.25	0.00	
MW-23D	3/17/2009	4.10	5.68	0.00	0.00	0.25	0.00	
MW-23D	3/25/2009	3.28	6.22	0.00	0.00	0.50	0.00	Clear water
MW-23D	3/31/2009	3.27	4.76	0.00	0.00	0.25	0.00	
MW-23D	4/20/2009	3.13	3.27	0.00	0.00	0.25	0.00	
MW-23D	4/29/2009	3.42	4.94	0.00	0.00	0.25	0.00	
MW-23D	5/6/2009	3.50	4.98	0.00	0.00	0.25	0.00	
MW-23D	5/11/2009	3.29	4.86	0.00	0.00	0.25	0.00	
MW-23D	5/20/2009	3.08	4.54	0.00	0.00	0.25	0.00	Clear water
MW-23D	5.27/2009	3.68	5.19	0.00	0.00	0.25	0.00	
MW-23D	6/15/2009	3.22	4.63	0.00	0.00	0.25	0.00	
MW-23D	6/24/2009	2.86	5.61	0.00	0.00	0.25	0.00	
MW-23D	6/30/2009	3.87	5.07	0.00	0.00	0.25	0.00	
MW-23D	7/31/2009	3.92	5.10	0.00	0.00	0.25	0.00	
MW-23D	8/13/2009	4.01	6.62	0.00	0.00	0.25	0.00	
MW-23D	8/26/2009	4.60	6.13	0.00	0.00	0.25	0.00	Clear water
MW-23D	10/2/2009	3.42	4.90	0.00	0.00	0.25	0.00	
MW-23D	10/6/2009	3.77	5.19	0.00	0.00	0.25	0.00	
MW-23D	12/18/2009	3.93	5.52	0.00	0.00	0.25	0.00	Clear water
MW-23D	1/26/2010	3.83	5.32	0.00	0.00	0.25	0.00	
MW-23D	2/3/2010	4.40	5.85	0.00	0.00	0.25	0.00	
MW-23D	3/1/2010	4.35	5.92	0.00	0.00	0.25	0.00	

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Table 7. Free Product Recovery Data
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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-23D	8/30/2010	4.88	--	0.00	--	NB	0.00	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-23D	2/18/2011	4.39	--	0.00	0.00	NB	0.00	
MW-23D	2/22/2011	3.32	--	0.00	0.00	NB	0.00	
MW-23D	7/13/2011	4.58	--	0.00	0.00	0.08	0.00	
MW-23D	8/24/2011	4.70	--	0.00	0.00	0.08	0.00	Odor
MW-24A	3/5/2008	--	--	--	--	--	--	
MW-24A	4/10/2008	--	--	--	--	--	--	
MW-24A	9/5/2008	--	--	0.20	2.00	0.50	2.00	
MW-24A	9/5/2008	--	--	1.50	2.00	0.55	4.00	
MW-24A	9/5/2008	--	--	1.00	0.10	0.40	4.10	
MW-24A	9/5/2008	--	--	0.04	0.01	0.49	4.11	
MW-24A	9/8/2008	--	--	2.25	0.75	1.50	4.86	
MW-24A	9/9/2008	--	--	1.25	0.15	0.10	5.01	
MW-24A	9/10/2008	--	--	2.80	0.25	0.00	5.26	
MW-24A	9/12/2008	--	--	2.00	0.25	1.25	5.51	
MW-24A	9/18/2008	--	--	1.20	0.30	0.12	5.81	
MW-24A	9/24/2008	--	--	1.40	0.15	0.95	5.96	
MW-24A	9/26/2008	--	--	2.70	0.50	0.10	6.46	
MW-24A	9/26/2008	--	--	0.25	0.10	0.50	6.56	
MW-24A	9/30/2008	--	--	1.80	0.40	0.40	6.96	
MW-24A	9/30/2008	--	--	0.60	0.10	0.85	7.06	
MW-24A	9/16/2008	--	--	1.50	0.13	0.40	7.19	Bailed twice this day.
MW-24A	10/1/2008	--	--	1.00	0.10	0.15	7.29	
MW-24A	10/2/2008	--	--	0.50	0.15	0.85	7.44	Bailed twice this day.
MW-24A	10/2/2008	--	--	0.20	0.05	0.40	7.49	
MW-24A	10/3/2008	--	--	0.50	0.10	0.65	7.59	Bailed twice this day.
MW-24A	10/3/2008	--	--	0.10	0.05	0.90	7.64	
MW-24A	10/14/2008	--	--	1.50	0.55	1.70	8.19	Bailed 3 times this day.
MW-24A	10/14/2008	--	--	0.80	0.20	0.80	8.39	
MW-24A	10/17/2008	--	--	1.80	0.80	0.95	9.19	
MW-24A	10/17/2008	--	--	0.75	0.10	0.40	9.29	
MW-24A	10/17/2008	--	--	0.00	0.00	0.25	9.29	Bailed twice this day.
MW-24A	10/21/2008	--	--	2.80	0.80	0.95	10.09	
MW-24A	10/21/2008	--	--	0.50	0.10	0.65	10.19	
MW-24A	10/24/2008	--	--	0.50	0.20	1.55	10.39	
MW-24A	10/27/2008	4.20	--	1.50	0.15	0.10	10.54	
MW-24A	11/21/2008	--	--	3.00	1.50	0.75	12.04	
MW-24A	11/25/2008	--	--	1.50	0.25	1.25	12.29	Bailed twice this day.
MW-24A	12/2/2008	--	--	1.00	0.20	1.05	12.49	
MW-24A	12/2/2008	--	--	1.50	0.15	0.85	12.64	
MW-24A	12/4/2008	--	--	1.25	0.15	0.85	12.79	
MW-24A	12/9/2008	--	--	0.70	0.05	0.95	12.84	
MW-24A	12/18/2008	--	--	3.00	0.50	1.00	13.34	Bailed twice this day.
MW-24A	12/30/2008	--	--	1.90	0.25	0.75	13.59	
MW-24A	12/30/2008	--	--	1.00	0.15	0.60	13.74	
MW-24A	1/2/2009	3.21	--	2.10	0.65	0.85	14.39	
MW-24A	1/7/2009	--	--	1.20	0.40	0.60	14.79	
MW-24A	1/14/2009	--	--	1.50	0.25	1.00	15.04	
MW-24A	1/20/2009	--	--	1.80	0.25	1.00	15.29	
MW-24A	1/20/2009	--	--	0.20	0.10	0.65	15.39	DNAPL present
MW-24A	1/23/2009	--	--	1.20	0.20	1.05	15.59	DNAPL present
MW-24A	1/26/2009	--	--	1.00	0.10	1.15	15.69	DNAPL present
MW-24A	1/27/2009	--	--	0.50	0.10	0.90	15.79	DNAPL present; Bailed twice this day.
MW-24A	1/28/2009	--	--	0.80	0.10	0.90	15.89	
MW-24A	2/5/2009	--	--	0.10	0.25		16.14	DNAPL present
MW-24A	3/3/2009	4.31	--	1.00	0.10	0.65	16.24	DNAPL present
MW-24A	3/11/2009	3.80	6.83	0.30	0.05	0.95	16.29	
MW-24A	3/17/2009	4.05	8.52	0.30	0.05	1.20	16.34	
MW-24A	3/25/2009	3.45	10.65	0.10	0.05	1.20	16.39	
MW-24A	3/31/2009	3.26	6.35	0.15	0.10	0.49	16.49	
MW-24A	4/20/2009	3.08	6.12	0.20	0.05	0.70	16.54	
MW-24A	4/29/2009	3.41	9.19	0.60	0.10	0.90	16.64	
MW-24A	5/6/2009	3.45	6.48	0.01	0.00	1.25	16.64	
MW-24A	5/11/2009	3.31	4.74	0.00	0.00	0.25	16.64	DNAPL staining on bailer
MW-24A	5/20/2009	2.96	8.83	0.05	0.04	0.96	16.68	
MW-24A	5/27/2009	3.61	9.53	0.05	0.04	0.96	16.72	
MW-24A	6/15/2009	3.12	9.12	0.30	0.15	0.85	16.87	
MW-24A	6/24/2009	2.74	10.66	0.18	0.08	0.67	16.95	
MW-24A	6/30/2009	3.64	8.50	1.00	0.15	1.10	17.10	
MW-24A	7/31/2009	4.18	5.76	2.00	0.30	0.70	17.40	
MW-24A	8/13/2009	3.90	15.62	2.80	0.45	0.80	17.85	
MW-24A	8/26/2009	4.53	14.52	1.50	0.75	1.00	18.60	
MW-24A	10/2/2009	3.28	7.98	0.05	0.10	0.65	18.70	Tan water
MW-24A	10/6/2009	3.83	16.42	3.00	1.05	1.20	19.75	
MW-24A	12/18/2009	3.88	12.29	7.00	0.90	0.85	20.65	4.0' of DNAPL up rope tied on bailer
MW-24A	12/21/2009	3.62	8.21	1.50	0.22	0.78	20.87	
MW-24A	1/4/2010	4.33	14.38	0.08	0.62	1.38	21.49	Did not hit bottom until 3rd bailer was thrown down wel
MW-24A	1/6/2010	4.47	12.21	1.25	0.24	1.01	21.73	
MW-24A	1/11/2010	4.58	12.53	1.50	0.30	0.95	22.03	
MW-24A	1/18/2010	4.13	9.81	2.60	0.22	0.53	22.25	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-24A	1/25/2010	3.63	12.72	2.50	0.27	0.73	22.52	
MW-24A	2/2/2010	4.30	12.35	1.50	0.16	0.84	22.68	
MW-24A	2/2/2010	7.42	14.04	0.50	0.03	0.97	22.71	
MW-24A	2/4/2010	4.40	12.80	1.50	0.16	0.84	22.87	
MW-24A	2/4/2010	6.25	13.29	0.50	0.03	0.97	22.90	
MW-24A	2/5/2010	4.31	NM	1.00	0.23	1.52	23.13	
MW-24A	2/22/2010	3.90	15.20	1.50	0.22	1.28	23.35	
MW-24A	3/2/2010	4.19	16.97	1.00	0.23	1.77	23.58	
MW-24A	3/2/2010	9.13	17.92	0.30	0.02	0.98	23.60	
MW-24A	3/4/2010	4.29	12.31	0.50	0.12	0.88	23.72	
MW-24A	3/8/2010	4.19	12.95	1.25	0.21	1.04	23.93	
MW-24A	3/11/2010	4.42	11.77	1.00	0.16	0.84	24.09	
MW-24A	4/16/2010	4.21	11.83	1.00	0.10	0.65	24.19	
MW-24A	4/26/2010	3.26	13.12	0.50	0.08	0.92	24.27	
MW-24A	5/5/2010	3.88	13.21	0.50	0.16	1.34	24.43	
MW-24A	6/1/2010	4.21	6.95	0.00	0.00	0.25	24.43	
MW-24A	6/9/2010	4.03	6.51	0.00	0.00	0.25	24.43	
MW-24A	8/17/2010	5.12	--	0.25	--	NB	24.43	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-24A	8/23/2010	4.64	--	1.15	--	NB	24.43	Recovery Program Temporarily Suspended, Bottom at 26.90'; Measured for DNAPL with tape
MW-24A	8/30/2010	4.76	--	1.70	--	NB	24.43	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-24A	9/17/2010	4.75	--	5.50	--	NB	24.43	Bottom at 26.92'; Measured for DNAPL with tape
MW-24A	9/24/2010	4.89	24.00	5.50	2.66	1.59	27.09	
MW-24A	10/1/2010	5.04	23.00	2.00	1.62	2.13	28.71	
MW-24A	10/5/2010	4.94	24.00	1.25	0.82	2.93	29.53	
MW-24A	10/12/2010	5.07	22.00	2.00	0.93	2.57	30.46	
MW-24A	10/18/2010	5.01	--	2.00	1.04	1.46	31.50	Bottom at 26.92'
MW-24A	12/10/2010	4.30	--	5.00	2.15	1.85	33.65	
MW-24A	12/28/2010	4.21	--	6.00	1.56	1.19	35.21	
MW-24A	1/3/2011	3.97	--	1.50	0.60	1.15	35.81	
MW-24A	1/10/2011	4.70	--	1.50	0.24	0.76	36.05	
MW-24A	1/17/2011	4.39	--	2.00	0.19	0.56	36.24	
MW-24A	1/28/2011	--	--	2.25	--	NB	36.24	Did not bail; Measured for DNAPL with tape
MW-24A	2/18/2011	4.32	--	0.49	0.19	0.56	36.43	
MW-24A	2/22/2011	3.73	--	1.15	--	NB	36.43	Did not bail; Measured for DNAPL with tape
MW-24A	3/4/2011	3.52	--	0.60	0.09	0.41	36.52	
MW-24A	3/18/2011	3.91	--	1.00	0.12	0.63	36.64	Sand at bottom
MW-24A	3/28/2011	4.42	--	0.70	0.01	0.49	36.65	
MW-24A	4/4/2011	3.52	--	0.10	0.01	0.24	36.66	
MW-24A	4/12/2011	3.29	--	0.10	0.00	0.25	36.66	
MW-24A	4/19/2011	3.00	--	0.10	0.01	0.07	36.67	Bottom at 26.50'
MW-24A	4/25/2011	2.81	--	0.10	--	NB	36.67	Did not bail; Measured for DNAPL with tape
MW-24A	5/9/2011	3.70	--	0.30	0.03	0.22	36.70	
MW-24A	5/18/2011	3.87	--	0.15	0.00	0.25	36.70	Bottom at 26.50'
MW-24A	6/6/2011	4.31	--	0.40	--	NB	36.70	Bottom at 26.50'; Measured for DNAPL with tape
MW-24A	6/7/2011	4.25	--	0.40	0.03	0.22	36.73	
MW-24A	6/20/2011	3.60	--	0.30	0.01	0.24	36.74	
MW-24A	6/27/2011	3.07	--	0.60	0.03	0.22	36.77	
MW-24A	6/28/2011	3.57	--	0.30	0.02	0.06	36.79	
MW-24A	7/8/2011	3.33	--	0.50	0.05	0.70	36.84	
MW-24A	7/11/2011	4.43	--	0.20	0.01	0.49	36.85	
MW-24A	7/13/2011	4.49	--	0.60	0.04	0.46	36.89	
MW-24A	7/18/2011	4.60	--	1.50	0.14	0.36	37.03	
MW-24A	7/25/2011	4.38	--	1.50	0.15	0.35	37.18	
MW-24A	8/5/2011	4.70	--	1.30	0.50	0.50	37.68	
MW-24A	8/15/2011	4.58	--	2.30	0.44	0.56	38.12	
MW-24A	8/24/2011	4.60	--	2.80	0.48	0.56	38.59	
MW-24A	9/6/2011	6.14	--	2.50	0.59	0.41	39.18	
MW-24A	9/12/2011	4.89	--	2.00	0.5	1.5	39.68	
MW-24A	9/19/2011	6.20	--	1.00	0.5	0.5	40.14	
MW-25A	3/5/2008	--	--	--	--	--	--	
MW-25A	4/10/2008	--	--	--	--	--	--	
MW-25A	9/5/2008	--	--	0.00	0.00	0.25	0.00	
MW-25A	9/9/2008	--	--	0.00	0.00	0.25	0.00	
MW-25A	9/18/2008	--	--	0.00	0.00	0.25	0.00	
MW-25A	9/24/2008	--	--	0.00	0.00	0.25	0.00	
MW-25A	9/26/2008	6.60	--	0.00	0.00	0.25	0.00	
MW-25A	9/30/2008	6.73	--	0.00	0.00	0.25	0.00	
MW-25A	10/1/2008	--	--	0.00	0.00	0.25	0.00	
MW-25A	10/2/2008	6.80	--	0.00	0.00	0.25	0.00	
MW-25A	10/3/2008	6.87	--	0.00	0.00	0.25	0.00	
MW-25A	10/14/2008	6.24	--	0.00	0.00	0.25	0.00	
MW-25A	10/17/2008	6.27	--	0.00	0.00	0.25	0.00	
MW-25A	10/21/2008	6.35	--	0.00	0.00	0.25	0.00	
MW-25A	10/24/2008	6.93	--	0.00	0.00	0.25	0.00	
MW-25A	10/27/2008	6.04	--	0.00	0.00	0.25	0.00	
MW-25A	11/21/2008	6.24	--	0.00	0.00	0.25	0.00	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-25A	11/25/2008	5.48	--	0.00	0.00	0.25	0.00	
MW-25A	12/2/2008	5.28	--	0.00	0.00	0.25	0.00	
MW-25A	12/4/2008	5.29	--	0.00	0.00	0.25	0.00	
MW-25A	12/9/2008	4.36	--	0.00	0.00	0.25	0.00	Tan water
MW-25A	12/18/2008	4.88	--	0.00	0.00	0.25	0.00	Slight odor
MW-25A	12/30/2008	4.04	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	1/2/2009	4.48	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	1/7/2009	4.50	--	0.00	0.00	0.25	0.00	
MW-25A	1/14/2009	4.67	--	0.00	0.00	0.25	0.00	Slight odor
MW-25A	1/20/2009	5.41	--	0.00	0.00	0.25	0.00	Light brown water
MW-25A	1/23/2009	4.28	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	1/26/2009	6.89	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	1/27/2009	5.83	--	0.00	0.00	0.25	0.00	Light-yellow colored water in bailer
MW-25A	1/29/2009	5.85	--	0.00	0.00	0.25	0.00	
MW-25A	2/5/2009	5.57	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	3/3/2009	4.78	--	0.00	0.00	0.25	0.00	Clear water
MW-25A	3/11/2009	5.20	6.38	0.00	0.00	0.25	0.00	
MW-25A	3/17/2009	5.95	6.86	0.00	0.00	0.25	0.00	
MW-25A	3/25/2009	4.81	6.76	0.00	0.00	0.50	0.00	
MW-25A	3/31/2009	4.58	5.76	0.00	0.00	0.25	0.00	
MW-25A	4/20/2009	4.35	5.48	0.00	0.00	0.25	0.00	
MW-25A	4/29/2009	4.70	5.29	0.00	0.00	0.25	0.00	
MW-25A	5/6/2009	4.85	5.95	0.00	0.00	0.25	0.00	
MW-25A	5/11/2009	4.78	6.04	0.00	0.00	0.25	0.00	
MW-25A	5/20/2009	4.42	5.63	0.00	0.00	0.25	0.00	
MW-25A	5/27/2009	4.95	6.22	0.00	0.00	0.25	0.00	
MW-25A	6/15/2009	4.79	5.63	0.00	0.00	0.25	0.00	
MW-25A	6/24/2009	4.64	5.79	0.00	0.00	0.25	0.00	
MW-25A	6/30/2009	5.49	6.21	0.00	0.00	0.25	0.00	
MW-25A	7/31/2009	5.21	6.48	0.00	0.00	0.25	0.00	
MW-25A	8/13/2009	5.56	6.85	0.00	0.00	0.25	0.00	
MW-25A	8/26/2009	6.74	7.95	0.00	0.00	0.25	0.00	
MW-25A	10/2/2009	4.98	5.96	0.00	0.00	0.25	0.00	
MW-25A	10/6/2009	5.61	6.50	0.00	0.00	0.25	0.00	
MW-25A	12/18/2009	4.58	5.95	0.00	0.00	0.25	0.00	
MW-25A	1/26/2010	4.35	5.55	0.00	0.00	0.25	0.00	
MW-25A	2/3/2010	5.10	6.31	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-25A	3/1/2010	4.88	6.25	0.00	0.00	0.25	0.00	DNAPL staining on bailer
MW-25A	8/3/2010	6.99	8.08	0.00	0.00	0.25	0.00	
MW-25A	8/10/2010	7.20	8.27	0.00	0.00	0.25	0.00	
MW-25A	8/24/2011	NM	--	0.00	0.00	0.25	0.00	Silt in bailer
MW-26A	3/5/2008	--	--	--	--	--	--	
MW-26A	4/10/2008	--	--	--	--	--	--	
MW-26A	9/5/2008	--	--	0.00	0.00	0.25	0.00	
MW-26A	9/8/2008	37.48	--	0.00	0.00	0.25	0.00	
MW-26A	9/9/2008	--	--	0.00	0.00	0.25	0.00	
MW-26A	9/18/2008	--	--	0.00	0.00	0.25	0.00	
MW-26A	9/24/2008	--	--	0.00	0.00	0.25	0.00	
MW-26A	9/26/2008	37.33	--	0.00	0.00	0.25	0.00	
MW-26A	9/30/2008	37.24	--	0.00	0.00	0.25	0.00	
MW-26A	10/1/2008	--	--	0.00	0.00	0.25	0.00	
MW-26A	10/2/2008	37.63	--	0.00	0.00	0.25	0.00	
MW-26A	10/3/2008	38.43	--	0.00	0.00	0.25	0.00	
MW-26A	10/14/2008	37.32	--	0.00	0.00	0.25	0.00	Brown water
MW-26A	10/17/2008	37.62	--	0.00	0.00	0.25	0.00	
MW-26A	10/21/2008	37.74	--	0.00	0.00	0.25	0.00	
MW-26A	10/24/2008	38.27	--	0.00	0.00	0.25	0.00	
MW-26A	10/27/2008	38.43	--	0.00	0.00	0.25	0.00	
MW-26A	11/21/2008	37.75	--	0.00	0.00	0.25	0.00	
MW-26A	11/25/2008	37.84	--	0.00	0.00	0.25	0.00	
MW-26A	12/2/2008	37.58	--	0.00	0.00	0.25	0.00	
MW-26A	12/4/2008	38.19	--	0.00	0.00	0.25	0.00	
MW-26A	12/9/2008	38.47	--	0.00	0.00	0.25	0.00	
MW-26A	12/18/2008	37.29	--	0.00	0.00	0.25	0.00	
MW-26A	12/30/2008	36.09	--	0.00	0.00	0.25	0.00	Clear water/ tan at bottom
MW-26A	1/2/2009	35.86	--	0.00	0.00	0.25	0.00	Light brown to clear water
MW-26A	1/7/2009	35.43	--	0.00	0.00	0.25	0.00	
MW-26A	1/14/2009	35.25	--	0.00	0.00	0.25	0.00	Cloudy water
MW-26A	1/20/2009	35.36	--	0.00	0.00	0.25	0.00	Clear water
MW-26A	1/23/2009	38.59	--	0.00	0.00	0.25	0.00	Clear water/light brown
MW-26A	1/26/2009	35.40	--	0.00	0.00	0.25	0.00	Grey water
MW-26A	1/27/009	35.85	--	0.00	0.00	0.25	0.00	Clear water
MW-26A	1/28/2009	35.61	--	0.00	0.00	0.25	0.00	
MW-26A	2/5/2009	35.65	--	0.00	0.00	0.25	0.00	Clear water
MW-26A	3/3/2009	33.08	--	0.00	0.00	0.25	0.00	Clear water
MW-26A	3/11/2009	33.00	34.36	0.00	0.00	0.25	0.00	
MW-26A	3/17/2009	33.28	34.81	0.00	0.00	0.25	0.00	
MW-26A	3/25/2009	31.97	34.56	0.00	0.00	0.50	0.00	
MW-26A	3/31/2009	33.49	34.83	0.00	0.00	0.25	0.00	
MW-26A	4/20/2009	37.51	38.86	0.00	0.00	0.25	0.00	

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Table 7. Free Product Recovery Data
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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-26A	4/29/2009	36.79	37.54	0.00	0.00	0.25	0.00	
MW-26A	5/6/2009	36.78	NM	0.00	0.00	0.25	0.00	
MW-26A	5/11/2009	35.54	37.24	0.00	0.00	0.25	0.00	Clear water
MW-26A	5/20/2009	36.39	37.07	0.00	0.00	0.26	0.00	Clear water
MW-26A	5/27/2009	36.45	37.13	0.00	0.00	0.25	0.00	
MW-26A	6/15/2009	35.90	36.40	0.00	0.00	0.25	0.00	
MW-26A	6/24/2009	35.81	37.96	0.00	0.00	0.25	0.00	
MW-26A	6/30/2009	35.56	37.71	0.00	0.00	0.25	0.00	
MW-26A	7/31/2009	33.23	34.54	0.00	0.00	0.25	0.00	
MW-26A	8/13/2009	33.14	34.93	0.00	0.00	0.25	0.00	Clear water
MW-26A	8/26/2009	33.14	34.45	0.00	0.00	0.25	0.00	Clear water
MW-26A	10/2/2009	0.39	32.07	0.00	0.00	0.25	0.00	
MW-26A	10/6/2009	31.61	33.21	0.00	0.00	0.25	0.00	
MW-26A	12/18/2009	29.98	31.41	0.00	0.00	0.25	0.00	Clear water
MW-26A	1/26/2010	35.36	NM	0.00	0.00	0.00	0.00	
MW-26A	2/3/2010	35.01	NM	0.00	0.00	0.00	0.00	
MW-26A	3/1/2010	34.85	NM	0.00	0.00	0.00	0.00	
MW-26A	8/3/2010	22.39	23.81	0.00	0.00	0.25	0.00	
MW-26A	8/10/2010	23.38	24.77	0.00	0.00	0.25	0.00	
MW-26A	7/13/2011	NM	--	0.00	0.00	0.08	0.00	
MW-26A	8/24/2011	NM	--	0.00	0.00	0.25	0.00	
MW-27A	3/5/2008	--	--	--	--	--	--	Not Measured
MW-27A	4/10/2008	--	--	--	--	--	--	Not Measured
MW-27A	9/4/2008	--	--	0.80	3.00	49.50	3.00	
MW-27A	9/5/2008	--	--	4.40	2.00	0.50	5.00	
MW-27A	9/5/2008	--	--	1.50	0.25	0.50	5.25	
MW-27A	9/5/2008	--	--	1.00	0.20	0.80	5.45	
MW-27A	9/5/2008	--	--	1.50	0.25	0.75	5.70	
MW-27A	9/5/2008	--	--	1.00	0.15	0.60	5.85	
MW-27A	9/8/2008	--	--	3.58	2.50	0.40	8.35	
MW-27A	9/9/2008	--	--	1.00	0.10	0.15	8.45	
MW-27A	9/10/2008	--	--	4.50	0.35	0.15	8.80	
MW-27A	9/16/2008	--	--	2.70	0.25	0.00	9.05	
MW-27A	9/18/2008	--	--	3.00	1.25	1.25	10.30	
MW-27A	9/24/2008	--	--	4.00	0.30	0.00	10.60	
MW-27A	9/24/2008	--	--	2.60	1.50	0.75	12.10	
MW-27A	9/26/2008	--	--	3.50	1.10	0.65	13.20	
MW-27A	9/26/2008	--	--	1.00	0.20	0.80	13.40	
MW-27A	9/30/2008	--	--	3.10	1.00	1.00	14.40	2.5' up rope from the bailer (~5.5' from the bottom of well), there was a 6" creosote DNAPL staining on bailer on the rope.
MW-27A	9/30/2008	--	--	1.00	0.25	0.75	14.65	Bailer valve noted as malfunctioning; sticking due to DNAPL build-up. Bailed twice this day.
MW-27A	10/1/2008	--	--	4.00	0.25	0.00	14.90	
MW-27A	10/2/2008	--	--	3.50	0.70	1.40	15.60	Bailed twice this day.
MW-27A	10/2/2008	--	--	0.50	0.10	0.40	15.70	
MW-27A	10/3/2008	--	--	1.50	0.50	0.75	16.20	Bailed twice this day. Took 4 bailers with a trace of DNAPL in all. Not sure if was making it to the bottom of well or not.
MW-27A	10/3/2008	--	--	0.50	0.05	0.65	16.25	
MW-27A	10/14/2008	--	--	2.50	1.00	1.50	17.25	Bailed 3 times this day.
MW-27A	10/14/2008	--	--	0.10	0.05	0.40	17.30	
MW-27A	10/17/2008	--	--	2.80	2.10	0.40	19.40	
MW-27A	10/17/2008	--	--	1.20	0.15	0.60	19.55	Bailed twice this day
MW-27A	10/17/2008	--	--	0.60	0.10	0.40	19.65	
MW-27A	10/21/2008	--	--	3.00	2.00	1.25	21.65	
MW-27A	10/21/2008	--	--	1.00	0.15	0.50	21.80	
MW-27A	10/24/2008	--	--	1.00	0.15	1.35	21.95	
MW-27A	10/27/2008	8.05	--	1.20	0.10	0.15	22.05	
MW-27A	11/21/2008	--	--	2.80	2.00	1.00	24.05	
MW-27A	11/25/2008	--	--	2.00	0.50	1.50	24.55	Bailed twice this day
MW-27A	12/2/2008	--	--	2.50	0.60	0.90	25.15	
MW-27A	12/2/2008	--	--	0.15	0.05	0.74	25.20	
MW-27A	12/4/2008	--	--	1.00	0.15	0.85	25.35	
MW-27A	12/9/2008	--	--	3.00	0.40	1.10	25.75	
MW-27A	12/18/2008	--	--	3.00	0.50	1.00	26.25	Bailed twice this day
MW-27A	12/30/2008	--	--	2.80	0.50	0.75	26.75	
MW-27A	12/30/2008	--	--	1.50	0.15	0.85	26.90	
MW-27A	1/2/2009	6.83	--	3.00	2.00	1.00	28.90	
MW-27A	1/7/2009	--	--	2.90	0.60	0.90	29.50	
MW-27A	1/14/2009	--	--	2.50	1.50	0.50	31.00	
MW-27A	1/20/2009	--	--	3.50	1.00	0.75	32.00	
MW-27A	1/20/2009	--	--	3.00	0.45	0.30	32.45	DNAPL thickness greater than 3.0'
MW-27A	1/23/2009	--	--	2.00	0.20	0.80	32.65	DNAPL thickness greater than 3.0'
MW-27A	1/26/2009	--	--	3.00	2.00	0.50	34.65	DNAPL present
MW-27A	1/27/2009	--	--	3.00	2.75	0.75	37.40	DNAPL present. Bailed twice this day.
MW-27A	1/28/2009	--	--	2.00	0.25	1.25	37.65	
MW-27A	2/5/2009	--	--	1.30	3.00		40.65	DNAPL present. Bailed twice this day.
MW-27A	3/3/2009	7.34	--	6.00	2.50	1.00	43.15	
MW-27A	3/11/2009	6.34	7.42	2.80	1.20	1.30	44.35	DNAPL present
MW-27A	3/11/2009	--	--	1.00	0.13	1.37	44.48	
MW-27A	3/17/2009	7.77	7.84	3.00	0.55	1.95	45.03	
MW-27A	3/25/2009	6.83	6.84	3.00	0.75	0.80	45.78	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-27A	3/31/2009	6.39	6.95	3.00	1.85	1.15	47.63	
MW-27A	4/20/2009	6.73	7.25	2.80	0.75	1.50	48.38	
MW-27A	4/29/2009	7.05	7.05	3.00	1.50	1.50	49.88	
MW-27A	5/6/2009	7.00	7.06	3.00	1.50	1.75	51.38	
MW-27A	5/6/2009	NM	NM	3.00	0.75	1.00	52.13	
MW-27A	5/6/2009	NM	NM	0.80	0.20	0.80	52.33	
MW-27A	5/11/2009	6.95	6.95	3.00	1.25	2.00	53.58	
MW-27A	5/20/2009	6.64	6.70	2.50	1.25	3.75	54.83	
MW-27A	5/27/2009	7.26	7.30	1.20	0.15	1.10	54.98	
MW-27A	5/27/2009	NM	NM	2.00	0.15	0.85	55.13	
MW-27A	6/15/2009	6.82	6.85	0.10	0.25	1.00	55.38	
MW-27A	6/24/2009	6.48	6.61	1.50	0.40	1.10	55.78	
MW-27A	6/30/2009	6.71	6.93	2.50	0.85	1.90	56.63	
MW-27A	7/31/2009	7.73	10.04	3.00	2.00	1.25	58.63	
MW-27A	8/13/2009	7.67	8.27	3.00	2.20	0.80	60.83	
MW-27A	8/26/2009	8.24	8.22	0.10	1.25	1.50	62.08	
MW-27A	10/2/2009	7.02	7.02	2.50	0.75	1.75	62.83	
MW-27A	10/6/2009	7.39	7.48	1.50	1.55	1.45	64.38	
MW-27A	12/18/2009	7.53	7.81	5.50	2.15	1.10	66.53	
MW-27A	12/21/2009	7.39	7.57	1.50	0.55	0.95	67.08	
MW-27A	1/4/2010	8.01	9.23	0.67	1.97	2.53	69.05	
MW-27A	1/6/2010	8.12	8.31	2.50	0.88	1.37	69.93	
MW-27A	1/11/2010	8.20	8.92	3.00	1.05	1.20	70.98	
MW-27A	1/18/2010	8.02	8.73	5.00	1.93	1.32	72.91	DNAPL staining present on bailer
MW-27A	1/25/2010	7.23	7.49	9.50	1.35	1.15	74.26	DNAPL staining present on bailer
MW-27A	2/2/2010	7.94	9.87	11.00	1.69	1.56	75.95	
MW-27A	2/2/2010	7.94	9.08	5.00	0.70	1.55	76.65	
MW-27A	2/4/2010	7.98	8.97	8.00	1.09	1.16	77.74	
MW-27A	2/4/2010	7.97	8.50	3.00	0.18	1.57	77.92	
MW-27A	2/5/2010	7.81	9.07	5.00	0.69	1.81	78.61	
MW-27A	2/22/2010	7.12	8.31	11.00	1.45	1.80	80.06	
MW-27A	3/2/2010	7.88	9.09	10.00	1.43	2.07	81.49	
MW-27A	3/2/2010	7.93	9.17	2.00	0.23	1.02	81.72	
MW-27A	3/4/2010	7.91	NM	9.00	1.23	2.02	82.95	
MW-27A	3/4/2010	8.53	11.32	1.00	0.14	1.11	83.09	
MW-27A	3/8/2010	7.98	9.18	9.50	1.20	0.80	84.29	
MW-27A	3/11/2010	7.96	9.27	8.00	1.05	1.20	85.34	
MW-27A	3/24/2010	7.29	6.70	7.75	0.90	1.35	86.24	
MW-27A	4/16/2010	7.51	8.63	11.00	1.24	0.51	87.48	
MW-27A	4/26/2010	7.11	7.32	4.00	0.27	0.73	87.75	
MW-27A	5/5/2010	7.46	7.54	0.00	0.00	0.50	87.75	DNAPL Globules and coarse sand present in bailer
MW-27A	6/1/2010	7.93	8.32	0.00	0.00	0.25	87.75	
MW-27A	6/9/2010	7.78	7.87	0.00	0.00	0.25	87.75	
MW-27A	8/3/2010	8.39	--	0.00	--	0.00	87.75	Measured for DNAPL with tape
MW-27A	8/10/2010	8.43	--	0.00	--	0.00	87.75	Measured for DNAPL with tape
MW-27A	8/17/2010	8.62	--	0.00	--	0.00	87.75	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-27A	8/23/2010	8.37	--	0.40	--	NB	87.75	Bottom at 26.35' (to sand); Measured for DNAPL with tape
MW-27A	8/30/2010	8.49	--	0.00	--	0.00	87.75	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-27A	9/17/2010	8.47	--	0.00	--	0.00	87.75	Sand at 26.31'; Measured for DNAPL with tape
MW-27A	2/18/2011	7.92	--	2.29	--	NB	87.75	Measured for DNAPL with tape
MW-27A	2/22/2011	6.90	--	0.50	0.13	0.38	87.88	Sand at 24.75'
MW-27A	4/19/2011	6.63	--	1.50	--	NB	87.88	Sand at 25.50'
MW-27A	6/27/2011	6.88	--	2.10	--	NB	87.88	Sand in well
MW-29B	2/19/2009	--	--	2.00	0.25	1.00	0.25	Neon green water from tracer study, DNAPL present
MW-29B	3/3/2009	14.22	--	0.50	0.08	0.67	0.33	Neon green water from tracer study, DNAPL present
MW-29B	3/11/2009	10.86	15.33	0.25	0.08	0.92	0.41	
MW-29B	3/17/2009	10.10	14.06	0.30	0.10	0.90	0.51	
MW-29B	3/25/2009	10.79	17.94	0.50	0.05	1.00	0.56	Neon green water from tracer study
MW-29B	3/31/2009	10.83	15.34	0.80	0.10	0.65	0.66	
MW-29B	4/20/2009	6.44	11.44	0.01	0.00	0.75	0.66	Neon green water from tracer study
MW-29B	4/29/2009	10.08	14.56	0.10	0.00	0.75	0.66	
MW-29B	5/6/2009	11.08	15.45	0.00	0.00	0.25	0.66	
MW-29B	5/11/2009	11.53	13.06	0.00	0.00	0.25	0.66	DNAPL staining on bailer
MW-29B	5/20/2009	10.48	11.98	0.01	0.01	0.24	0.67	Yellow water from tracer study
MW-29B	5/27/2009	10.96	12.29	0.01	0.01	0.24	0.68	Neon green water from tracer study
MW-29B	6/15/2009	10.84	12.17	0.00	0.00	0.25	0.68	Neon green water from tracer study
MW-29B	6/24/2009	10.43	13.48	0.12	0.03	0.47	0.71	
MW-29B	6/30/2009	10.49	12.28	0.05	0.01	0.24	0.72	
MW-29B	7/31/2009	8.84	10.47	0.00	0.00	0.25	0.72	DNAPL staining on bailer
MW-29B	8/13/2009	10.89	15.51	0.30	0.04	0.71	0.76	
MW-29B	8/26/2009	9.67	11.20	0.01	0.00	0.25	0.76	Yellow water from tracer study
MW-29B	10/2/2009	7.93	9.45	0.10	0.01	0.24	0.77	0.3' dk. Grey water, yellow water from tracer study
MW-29B	10/6/2009	8.08	9.62	0.00	0.00	0.25	0.77	DNAPL on bottom of bailer
MW-29B	12/18/2009	18.30	20.04	0.00	0.00	0.25	0.77	DNAPL staining on bailer
MW-29B	12/28/2009	NM	NM	0.25	0.06	0.18	0.83	
MW-29B	1/26/2010	11.31	18.77	0.20	0.10	1.15	0.93	
MW-29B	2/3/2010	10.45	12.87	0.00	0.00	0.25	0.93	DNAPL staining on bailer
MW-29B	2/22/2010	8.22	13.80	0.25	0.03	0.97	0.96	
MW-29B	3/8/2010	9.18	10.93	0.10	0.01	0.49	0.97	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-29B	4/16/2010	10.56	18.72	0.10	0.02	0.73	0.99	
MW-29B	6/1/2010	11.58	14.60	0.25	0.02	0.48	1.01	
MW-29B	7/6/2010	10.83	13.96	0.16	0.02	0.48	1.03	
MW-29B	8/3/2010	10.09	11.61	0.00	0.00	0.25	1.03	
MW-29B	8/10/2010	9.82	11.77	0.00	0.00	0.25	1.03	
MW-29B	8/30/2010	9.45	--	0.00	--	0.00	1.03	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-29B	2/22/2011	8.32	--	0.00	--	0.00	1.03	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-29B	3/4/2011	7.85	--	0.01	0.01	0.24	1.04	
MW-29B	3/28/2011	9.95	--	0.75	0.15	0.60	1.19	
MW-29B	4/4/2011	10.80	--	0.90	0.01	0.50	1.20	
MW-29B	4/12/2011	10.76	--	0.80	0.10	0.40	1.30	
MW-29B	4/19/2011	11.05	--	0.90	0.01	0.07	1.31	0.7' DNAPL staining on bailer on outside of bailer; Bottom at 37.05'
MW-29B	4/25/2011	10.36	--	0.50	0.06	0.44	1.37	
MW-29B	5/9/2011	10.36	--	0.30	0.01	0.25	1.38	
MW-29B	5/18/2011	11.07	--	0.20	0.00	0.25	1.38	Bottom at 36.96'
MW-29B	6/6/2011	11.18	--	0.90	--	NB	--	Bottom at 36.99'; Measured for DNAPL with tape
MW-29B	6/7/2011	11.17	--	0.90	0.04	0.21	1.42	
MW-29B	6/20/2011	10.62	--	0.20	0.01	0.24	1.43	
MW-29B	6/27/2011	11.99	--	0.50	0.05	0.45	1.48	
MW-29B	7/8/2011	--	--	0.20	0.02	0.23	1.50	
MW-29B	7/13/2011	10.49	--	0.30	0.02	0.48	1.52	
MW-29B	7/18/2011	10.65	--	0.10	0.0025	0.2475	1.52	
MW-29B	7/25/2011	10.52	--	0.20	0.0025	0.2475	1.53	
MW-29B	8/5/2011	18.20	--	0.01	0.00	0.25	1.525	Trace amount of DNAPL
MW-29B	8/15/2011	9.99	--	0.20	0.0025	0.2475	1.528	
MW-29B	8/24/2011	9.55	--	0.20	0.0025	0.2475	1.530	
MW-29B	9/6/2011	9.37	--	0.20	0.0025	0.2475	1.533	
MW-29B	9/12/2011	9.63	--	0.20	0.0025	0.2475	1.535	
MW-29B	9/19/2011	9.32	--	0.00	0.0025	0.2475	1.538	DNAPL staining on bailer
MW-36B	9/23/2010	--	--	0.20	0.02	0.23	0.02	
MW-36B	9/24/2010	19.31	--	0.20	0.02	0.23	0.04	
MW-36B	10/1/2010	19.28	--	0.33	0.03	0.22	0.07	
MW-36B	10/5/2010	19.28	20.85	0.40	0.04	0.21	0.11	
MW-36B	10/12/2010	19.29	20.26	0.40	0.04	0.21	0.15	
MW-36B	10/18/2010	19.24	20.24	0.40	0.04	0.21	0.19	
MW-36B	10/29/2010	18.26	--	0.40	--	NB	0.19	Measured for DNAPL with tape
MW-36B	12/10/2010	18.98	--	1.00	0.09	0.41	0.28	
MW-36B	12/28/2010	19.00	--	1.25	0.04	0.71	0.32	
MW-36B	1/3/2011	18.07	--	0.40	0.04	0.46	0.36	
MW-36B	1/10/2011	18.95	--	0.20	0.02	0.48	0.38	
MW-36B	1/17/2011	19.01	--	0.15	0.01	0.24	0.39	
MW-36B	1/28/2011	--	--	0.20	--	NB	0.39	Measured for DNAPL with tape
MW-36B	2/18/2011	18.89	--	0.51	--	NB	0.39	Measured for DNAPL with tape
MW-36B	2/22/2011	15.74	--	0.40	0.185	0.07	0.58	
MW-36B	3/4/2011	17.64	--	0.10	0.01	0.24	0.59	
MW-36B	3/18/2011	18.23	--	0.60	0.05	0.45	0.64	
MW-36B	3/28/2011	18.75	--	0.01	0.00	0.25	0.64	
MW-36B	4/4/2011	16.35	--	0.01	0.00	0.25	0.64	
MW-36B	4/12/2011	15.00	--	0.00	0.00	0.25	0.64	DNAPL staining on bailer
MW-36B	4/19/2011	11.42	--	0.01	0.01	0.07	0.65	Bottom at 36.80'
MW-36B	5/9/2011	17.81	--	0.05	0.01	0.24	0.66	
MW-36B	5/18/2011	18.28	--	0.00	--	0.00	0.66	Bottom at 36.82'; Measured for DNAPL with tape
MW-36B	6/6/2011	18.91	--	0.30	--	NB	0.66	Bottom at 36.78'; Measured for DNAPL with tape
MW-36B	6/7/2011	18.84	--	0.20	0.02	0.23	0.68	
MW-36B	6/15/2011	18.79		0.10	0.01	0.24	0.7	
MW-36B	6/20/2011	18.03	--	0.30	0.01	0.24	0.695	
MW-36B	6/27/2011	15.80	--	0.20	0.01	0.24	0.705	
MW-36B	7/8/2011	18.90	--	0.10	0.008	0.242	0.713	Fluorescents present in well due to tracer study
MW-36B	7/11/2011	18.99	--	0.50	0.04	0.46	0.753	
MW-36B	7/13/2011	19.07	--	0.20	0.003	0.490	0.756	
MW-36B	7/18/2011	19.12	--	0.30	0.0075	0.2425	0.764	
MW-36B	7/25/2011	18.87	--	0.30	0.00	0.25	0.766	
MW-36B	8/5/2011	19.30	--	0.10	0.005	0.25	0.771	
MW-36B	8/15/2011	19.15	--	0.50	0.013	0.49	0.784	
MW-36B	8/24/2011	19.10	--	0.40	0.0125	0.2375	0.796	
MW-36B	9/6/2011	19.39	--	0.40	0.0125	0.2375	0.809	
MW-36B	9/12/2011	19.31	--	0.20	0.0025	0.2475	0.811	
MW-36B	9/19/2011	18.56	--	0.20	0.08	0.17	0.891	
MW-36C	4/29/2010	49.48	NM	0.25	0.04	0.71	0.04	
MW-36C	5/11/2010	48.22	49.49	0.33	0.03	0.47	0.07	
MW-36C	6/1/2010	44.88	50.12	0.33	0.03	0.47	0.10	
MW-36C	6/9/2010	43.44	49.56	0.17	0.01	0.49	0.11	2" DNAPL staining on bailer
MW-36C	6/24/2010	43.66	48.73	0.33	0.01	0.49	0.12	
MW-36C	7/6/2010	39.65	44.13	0.25	0.02	0.48	0.14	
MW-36C	7/13/2010	39.13	43.92	0.25	0.02	0.48	0.16	
MW-36C	7/20/2010	38.62	41.12	0.08	0.01	0.24	0.17	
MW-36C	8/3/2010	34.97	37.42	0.20	0.02	0.48	0.19	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
MW-36C	8/10/2010	35.45	36.70	0.01	0.00	0.25	0.19	
MW-36C	8/17/2010	35.21	--	0.00	--	0.00	0.19	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-36C	8/23/2010	33.53	--	1.00	--	NB	0.19	Bottom at 63.50'; Measured for DNAPL with tape
MW-36C	8/30/2010	32.09	--	0.00	--	0.00	0.19	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-36C	9/17/2010	29.14	31.81	0.25	0.02	0.48	0.21	
MW-36C	9/24/2010	38.68	--	0.20	0.02	0.23	0.23	
MW-36C	10/1/2010	37.66	38.95	0.00	0.00	0.25	0.23	DNAPL staining on bailer
MW-36C	10/5/2010	37.69	39.00	0.00	0.00	0.25	0.23	DNAPL staining on bailer
MW-36C	10/12/2010	36.74	--	0.00	0.00	0.25	0.23	DNAPL staining on bailer; bottom at 63.58
MW-36C	10/18/2010	36.31	--	0.00	0.00	0.25	0.23	DNAPL staining on bailer
MW-36C	10/29/2010	34.40	--	0.00	--	0.00	0.23	Measured for DNAPL with tape
MW-36C	12/10/2010	25.85	--	0.00	--	0.00	0.23	Measured for DNAPL with tape
MW-36C	12/28/2010	32.97	--	0.20	0.01	0.24	0.24	
MW-36C	1/3/2011	18.07	--	0.10	0.01	0.24	0.25	
MW-36C	1/10/2011	32.24	--	0.00	0.01	0.24	0.26	
MW-36C	1/17/2011	31.77	--	0.00	0.00	0.25	0.26	DNAPL globules present in bailer
MW-36C	1/28/2011	--	--	0.00	--	0.00	0.26	Measured for DNAPL with tape
MW-36C	2/18/2011	25.95	--	0.78	--	NB	0.26	Measured for DNAPL with tape
MW-36C	2/22/2011	25.33	--	0.14	0.01	0.24	0.27	
MW-36C	3/4/2011	24.73	--	0.00	0.00	0.25	0.27	DNAPL staining on bailer
MW-36C	3/18/2011	31.42	--	0.00	0.01	0.24	0.28	
MW-36C	3/28/2011	32.35	--	0.00	0.00	0.25	0.28	
MW-36C	4/4/2011	29.83	--	0.00	0.00	0.25	0.28	DNAPL staining on bailer
MW-36C	4/12/2011	29.19	--	0.00	0.00	0.25	0.28	DNAPL staining on bailer
MW-36C	4/19/2011	28.79	--	0.00	--	0.00	0.28	Bottom at 63.04'; Measured for DNAPL with tape
MW-36C	5/9/2011	24.76	--	0.15	0.01	0.24	0.28	
MW-36C	5/18/2011	25.93	--	0.00	--	0.00	0.28	Measured for DNAPL with tape
MW-36C	6/6/2011	23.28	--	0.00	--	0.00	0.28	Measured for DNAPL with tape
MW-36C	6/7/2011	22.15	--	0.00	0.00	0.25	0.28	
MW-36C	6/15/2011	21.04	--	0.00	--	0.00	0.28	Measured for DNAPL with tape
MW-36C	6/20/2011	22.75	--	0.00	0.00	0.25	0.28	
MW-36C	6/27/2011	27.03	--	0.00	0.00	0.50	0.28	DNAPL staining on bailer
MW-36C	7/8/2011	26.85	--	0.00	0.00	0.25	0.28	DNAPL staining on bailer
MW-36C	7/11/2011	28.08	--	0.00	0.00	0.25	0.28	
MW-36C	7/18/2011	28.20	--	0.00	0.00	0.25	0.28	DNAPL staining on bailer
MW-36C	7/25/2011	29.09	--	0.00	0.00	0.25	0.28	DNAPL staining on bailer
MW-36C	8/5/2011	28.42	--	0.00	0.00	0.25	0.28	Trace amount of DNAPL in bailer
MW-36C	8/24/2011	26.51	--	0.20	0.0008	0.079	0.28	
MW-39A	4/14/2010	31.75	NM	2.00	0.25	1.00	0.25	
MW-39A	4/21/2010	35.03	37.60	0.50	0.10	0.15	0.35	
MW-39A	5/11/2010	30.59	35.67	3.33	0.57	0.68	0.92	
MW-39A	6/1/2010	28.78	35.78	3.25	0.66	0.84	1.58	
MW-39A	6/9/2010	29.19	35.91	2.00	0.21	0.79	1.79	
MW-39A	6/24/2010	30.35	36.01	3.50	0.59	0.66	2.38	
MW-39A	7/6/2010	28.22	34.61	3.00	0.29	0.46	2.67	
MW-39A	7/13/2010	27.97	35.01	3.00	0.33	0.67	3.00	
MW-39A	7/20/2010	25.73	34.01	3.00	0.38	0.62	3.38	
MW-39A	8/3/2010	25.69	28.19	1.00	0.09	0.41	3.47	
MW-39A	8/10/2010	24.07	29.16	1.50	0.29	0.96	3.76	
MW-39A	8/17/2010	26.81	--	1.25	--	NB	3.76	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
MW-39A	8/23/2010	23.25	--	2.50	--	NB	3.76	Bottom at 37.75'; Measured for DNAPL with tape
MW-39A	9/17/2010	15.62	20.32	2.70	0.53	0.72	4.29	
MW-39A	10/1/2010	23.13	--	3.25	0.51	0.74	4.80	
MW-39A	10/5/2010	25.35	31.12	2.25	0.58	0.92	5.38	
MW-39A	10/12/2010	27.95	--	3.40	0.63	0.62	6.01	
MW-39A	10/18/2010	28.04	--	3.00	0.65	0.85	6.66	
MW-39A	10/29/2010	27.95	--	3.50	--	NB	6.66	Bottom at 37.75'; Measured for DNAPL with tape
MW-39A	12/28/2010	15.95	--	3.50	0.55	0.70	7.21	
MW-39A	1/17/2011	9.50	--	4.25	0.43	0.57	7.64	
MW-39A	1/28/2011	--	--	2.00	--	NB	7.64	Measured for DNAPL with tape
MW-39A	3/18/2011	13.75	--	4.25	0.58	0.42	8.22	
MW-39A	4/4/2011	11.97	--	0.30	0.20	0.30	8.42	
MW-39A	4/12/2011	11.53	--	1.50	0.25	0.25	8.67	
MW-39A	4/19/2011	13.52	--	2.50	0.31	0.44	8.98	Bottom at 37.45'
MW-39A	5/9/2011	13.45	--	2.70	0.41	0.34	9.39	
MW-39A	5/16/2011	15.94	--	1.50	0.15	0.60	9.54	
MW-39A	6/16/2011	--	--	2.20	0.34	0.41	9.88	
MW-39A	6/20/2011	6.56	--	2.00	0.21	0.54	10.09	
MW-39A	6/27/2011	13.69	--	0.40	0.01	0.24	10.10	
MW-39A	7/8/2011	10.00	--	0.30	0.04	0.21	10.14	
MW-39A	7/11/2011	12.81	--	0.40	0.02	0.49	10.15	
MW-39A	7/13/2011	15.40	--	0.40	0.05	0.45	10.20	
MW-39A	7/18/2011	17.17	--	0.70	0.08	0.43	10.28	
MW-39A	7/25/2011	18.18	--	0.90	0.11	0.64	10.39	
MW-39A	8/5/2011	19.38	--	1.20	0.80	1.20	11.19	
MW-39A	8/15/2011	20.06	--	2.00	0.14	0.61	11.33	
MW-39A	8/24/2011	19.92	--	1.20	0.13	0.63	11.45	
MW-39A	9/6/2011	18.31	--	1.30	0.28	0.23	11.73	

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MW-39A	9/12/2011	19.64	--	1.00	0.21	0.54	11.94	
MW-39A	9/19/2011	NM	--	--	--	--	11.94	Location underwater
MW-48A	1/11/2011	47.75	--	2.25	0.19	0.06	0.19	
MW-48A	1/12/2011	--	--	1.00	0.08	0.17	0.27	
MW-48A	4/18/2011	23.65	33.80	3.80	0.68	1.07	0.95	Bottom at 71.05'
MW-48A	4/18/2011	33.70	38.00	1.00	0.10	0.65	1.05	
MW-48A	4/18/2011	37.85	40.70	0.00	0.00	0.50	1.05	
MW-48A	4/18/2011	40.30	41.50	0.00	0.00	0.25	1.05	
MW-48A	4/18/2011	41.30	42.60	0.00	0.00	0.25	1.05	Bailed five times this day
MW-48A	4/19/2011	38.60	44.40	1.50	0.20	0.80	1.25	
MW-48A	4/19/2011	44.05	45.45	0.20	0.02	0.23	1.27	
MW-48A	4/19/2011	45.00	46.15	0.10	0.01	0.24	1.28	
MW-48A	4/19/2011	45.80	47.00	0.10	0.01	0.24	1.29	Bailed four times this day
MW-48A	4/20/2011	42.70	46.95	0.50	0.07	0.68	1.36	
MW-48A	4/20/2011	46.45	49.05	0.10	0.02	0.48	1.38	
MW-48A	4/20/2011	48.55	49.70	0.00	0.00	0.25	1.38	Bailed three times this day
MW-48A	4/21/2011	45.40	48.30	1.00	0.09	0.41	1.47	
MW-48A	4/25/2011	38.12	--	3.25	0.50	1.00	1.97	
MW-48A	4/26/2011	43.70	--	1.60	0.26	1.24	2.23	
MW-48A	4/27/2011	46.95	--	1.30	0.17	0.83	2.40	
MW-48A	4/29/2011	43.62	--	2.20	0.38	0.87	2.78	
MW-48A	5/4/2011	34.95	--	2.70	0.45	1.30	3.23	
MW-48A	5/9/2011	34.10	--	3.50	0.57	1.18	3.80	
MW-48A	5/10/2011	39.79	--	1.00	0.11	0.64	3.91	
MW-48A	5/11/2011	41.43	--	1.00	0.11	0.64	4.02	
MW-48A	5/12/2011	41.90	--	0.80	0.12	1.13	4.14	
MW-48A	5/13/2011	45.53	--	0.80	0.13	1.12	4.27	
MW-48A	5/16/2011	38.92	--	1.50	0.23	0.77	4.50	
MW-48A	5/19/2011	35.59	--	2.10	0.53	0.22	5.03	
MW-48A	5/24/2011	30.71	--	1.50	0.23	0.77	5.26	
MW-48A	5/31/2011	29.71	--	1.80	0.28	0.72	5.54	
MW-48A	6/2/2011	31.99	--	0.60	0.10	0.90	5.64	
MW-48A	6/7/2011	30.58	--	1.70	0.21	0.79	5.85	
MW-48A	6/9/2011	--	--	0.75	0.14	0.86	5.99	
MW-48A	6/14/2011	30.99	--	0.75	0.15	1.10	6.14	
MW-48A	6/15/2011	35.88	--	1.00	0.15	0.85	6.29	
MW-48A	6/16/2011	39.05	--	0.40	0.07	0.93	6.36	
MW-48A	6/20/2011	34.74	--	3.00	0.28	0.72	6.64	Bailed twice this day
MW-48A	6/20/2011	39.65	--	0.50	0.03	0.47	6.67	
MW-48A	6/21/2011	40.28	--	0.50	0.07	0.93	6.74	Bailed twice this day
MW-48A	6/21/2011	51.84	--	0.30	0.03	0.47	6.77	
MW-48A	6/22/2011	54.10	--	0.40	0.03	0.47	6.80	
MW-48A	6/23/2011	47.79	--	1.00	0.11	0.89	6.91	
MW-48A	6/24/2011	47.58	--	0.10	0.01	0.49	6.92	
MW-48A	6/27/2011	38.55	--	1.70	0.17	0.83	7.09	Bailed twice this day
MW-48A	6/27/2011	--	--	0.00	0.00	0.25	7.09	
MW-48A	6/28/2011	41.45	--	2.30	0.33	0.67	7.42	Bailed twice this day
MW-48A	6/28/2011	--	--	0.50	0.03	0.22	7.45	
MW-48A	6/29/2011	45.60	--	1.50	0.20	1.05	7.65	
MW-48A	6/30/2011	46.84	--	0.85	0.11	0.89	7.76	
MW-48A	7/1/2011	47.49	--	0.90	0.07	0.68	7.83	Bailed twice this day
MW-48A	7/1/2011	50.85	--	0.20	0.01	0.49	7.84	Last time to bail well, per home owner
MW-50B	8/17/2011	NM	--	0.00	0.00	0.25	0.00	
MW-50B	8/18/2011	NM	--	0.00	0.00	0.25	0.00	
MW-50B	8/24/2011	NM	--	0.00	0.00	0.25	0.00	
MW-50B	8/29/2011	NM	--	0.00	0.00	0.08	0.00	Odor
MW-51A	8/17/2011	14.94	--	2.50	0.38	0.62	0.62	
MW-51A	8/18/2011	11.05	--	2.70	0.85	0.90	1.52	
MW-51A	8/24/2011	10.64	--	3.25	0.75	0.50	2.02	
MW-51A	8/29/2011	10.82	--	NM	3.45	1.55	3.57	
MW-51A	9/6/2011	10.90	--	2.80	1.25	0.75	4.32	
MW-51A	9/12/2011	10.92	--	4.0	0.88	0.63	4.95	
MW-51A	9/19/2011	10.59	--	2.5	0.99	0.51	5.46	
MW-51B	8/17/2011	NM	--	0.00	0.00	0.25	0.00	
MW-51B	8/18/2011	NM	--	0.00	0.00	0.25	0.00	
MW-51B	8/24/2011	NM	--	0.00	0.00	0.08	0.00	
MW-51B	8/29/2011	NM	--	0.00	0.00	0.08	0.00	Odor
RW-1	12/28/2009	4.61	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-1	1/6/2010	5.39	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-1	1/11/2010	5.48	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-1	1/18/2010	5.41	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-1	1/25/2010	4.07	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-1	2/1/2010	5.33	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-1	2/22/2010	4.40	4.56	0.20	0.20	0.98	0.20	
RW-1	3/8/2010	5.24	5.30	0.05	0.01	0.24	0.21	DNAPL staining on bailer
RW-1	3/11/2010	5.24	5.38	0.25	0.04	0.71	0.25	
RW-1	4/16/2010	5.23	6.30	0.33	0.18	3.32	0.43	

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Table 7. Free Product Recovery Data
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-1	4/26/2010	3.62	4.31	0.20	0.11	3.39	0.54	
RW-1	5/5/2010	4.56	5.38	0.15	0.09	3.41	0.63	
RW-1	5/11/2010	4.18	4.96	0.50	0.40	4.85	1.03	
RW-1	6/1/2010	5.12	6.35	0.05	0.19	5.06	1.22	
RW-1	6/9/2010	4.98	6.12	0.10	0.25	5.00	1.47	
RW-1	6/24/2010	5.13	6.11	0.20	0.18	5.07	1.65	
RW-1	7/6/2010	5.74	6.57	1.00	0.84	4.41	2.49	
RW-1	7/13/2010	5.89	6.51	1.00	0.68	4.57	3.17	
RW-1	7/20/2010	5.34	5.91	1.25	1.05	4.20	4.22	
RW-1	8/3/2010	6.02	7.78	0.50	0.54	8.21	4.76	
RW-1	8/10/2010	6.17	6.98	0.01	0.11	3.39	4.87	
RW-1	8/17/2010	7.31	--	0.00	--	0.00	4.87	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-1	8/23/2010	6.08	--	0.50	--	NB	4.87	Bottom at 42.35'; Measured for DNAPL with tape
RW-1	8/30/2010	6.39	--	1.00	--	NB	4.87	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-1	9/17/2010	6.33	--	0.50	--	NB	4.87	Bottom at 42.55'; Measured for DNAPL with tape
RW-1	9/24/2010	6.57	--	1.40	--	NB	4.87	Bottom at 43.60'; Measured for DNAPL with tape
RW-1	10/1/2010	6.80	--	1.00	--	NB	4.87	Bottom at 42.80'; Measured for DNAPL with tape
RW-1	10/5/2010	6.62	--	1.25	--	NB	4.87	Bottom at 42.91'; Measured for DNAPL with tape
RW-1	10/12/2010	6.87	--	1.50	--	NB	4.87	Bottom at 42.96'; Measured for DNAPL with tape
RW-1	10/18/2010	6.78	--	1.50	--	NB	4.87	Bottom at 43.32'; Measured for DNAPL with tape
RW-1	12/10/2010	5.55	--	2.25	0.17	2.83	5.04	Bottom at 43.67'
RW-1	12/28/2010	5.50	--	1.00	--	NB	5.04	Bottom at 43.63'; Measured for DNAPL with tape
RW-1	1/3/2011	4.98	--	2.10	--	NB	5.04	Bottom at 43.70'; Measured for DNAPL with tape
RW-1	1/10/2011	5.52	--	1.50	--	NB	5.04	Measured for DNAPL with tape
RW-1	1/17/2011	5.58	--	0.80	--	NB	5.04	Bottom at 43.55'; Measured for DNAPL with tape
RW-1	1/28/2011	--	--	1.25	--	NB	5.04	Measured for DNAPL with tape
RW-1	2/18/2011	5.38	--	1.22	--	NB	5.04	Measured for DNAPL with tape
RW-1	2/22/2011	3.93	--	1.50	0.10	1.90	5.14	
RW-1	3/4/2011	4.41	--	0.05	--	NB	5.14	Measured for DNAPL with tape
RW-1	3/18/2011	4.97	--	0.65	--	NB	5.14	Bottom at 42.25'; Measured for DNAPL with tape
RW-1	3/28/2011	5.32	--	0.00	0.00	0.25	5.14	Bottom at 43.55'
RW-1	4/4/2011	4.48	--	0.00	0.00	0.25	5.14	
RW-1	4/12/2011	3.78	--	0.45	0.10	0.40	5.24	Bottom at 42.21'
RW-1	4/19/2011	3.74	--	0.60	0.01	0.07	5.25	Bottom at 42.07'
RW-1	4/25/2011	3.48	--	0.50	--	NB	5.25	Bottom at 42.15'; Measured for DNAPL with tape
RW-1	5/9/2011	5.50	--	0.50	0.10	0.90	5.35	Bottom at 42.11'
RW-1	5/18/2011	4.93	--	0.10	0.00	0.25	5.35	Bottom at 42.2'
RW-1	6/6/2011	5.38	--	0.00	--	0.00	5.35	Bottom at 42.05'; Measured for DNAPL with tape
RW-1	6/15/2011	4.52	--	0.00	--	0.00	5.35	Bottom at 41.95'; Measured for DNAPL with tape
RW-1	6/20/2011	4.58	--	0.60	0.01	0.99	5.36	Bottom at 42.05'
RW-1	6/27/2011	3.90	--	0.80	0.01	0.99	5.37	Bottom at 42.05'
RW-1	6/28/2011	4.45	--	0.70	--	NB	5.37	Measured for DNAPL with tape
RW-1	7/11/2011	5.65	--	0.60	0.01	0.99	5.38	Bottom at 41.96'
RW-1	7/13/2011	5.71	--	0.80	0.25	1.75	5.63	Bottom at 42.0'
RW-1	7/18/2011	5.94	--	0.50	0.03	0.97	5.66	Bottom at 42.0'
RW-1	7/25/2011	5.68	--	0.30	0.01	0.99	5.67	Bottom at 42.0'
RW-1	8/5/2011	6.92	--	0.00	0.00	1.00	5.67	Trace amount of DNAPL
RW-1	8/15/2011	5.86	--	0.00	0.01	0.99	5.68	Bottom at 42.1'
RW-1	8/24/2011	5.94	--	0.00	0.00	1.00	5.68	Bottom at 42.08'
RW-1	9/6/2011	6.36	--	0.30	--	NB	5.68	Bottom at 42.01'
RW-1	9/12/2011	6.40	--	0.00	--	0.00	5.68	Bottom at 42.10'
RW-1	9/19/2011	5.78	--	0.00	--	0.00	5.68	Bottom at 42.15'
RW-2	12/28/2009	4.39	--	5.00	--	NB	--	Used weighted tape to gauge for DNAPL; obstruction at top of sump; did not bail
RW-2	1/6/2010	4.59	--	4.90	--	NB	--	Obstruction at top of sump; Bottom at 40.65'; did not bail; Measured for DNAPL with tape
RW-2	1/11/2010	4.68	--	4.90	--	NB	--	Obstruction at top of sump; Bottom at 40.65'; did not bail; Measured for DNAPL with tape
RW-2	1/18/2010	4.90	--	4.90	--	NB	--	Obstruction at top of sump; Bottom at 40.65'; did not bail; Measured for DNAPL with tape
RW-2	1/25/2010	3.83	--	4.00	--	NB	--	Obstruction at 41.91'; did not bail; Measured for DNAPL with tape
RW-2	2/1/2010	4.46		4.00	--	NB	--	Obstruction at 41.94'; did not bail; Measured for DNAPL with tape
RW-2	2/2/2010	4.51	4.53	0.50	0.02	0.98	0.02	Obstruction at 41.94'
RW-2	2/2/2010	4.52	4.53	0.50	0.02	0.98	0.04	Obstruction at 41.94'
RW-2	2/3/2010	4.50	4.51	0.50	0.01	0.74	0.05	Obstruction at 41.94'
RW-2	2/4/2010	4.57	4.58	0.20	0.01	0.74	0.06	Obstruction at 41.94'
RW-2	2/4/2010	4.59	4.60	0.20	0.01	0.74	0.07	Obstruction at 41.94'
RW-2	2/5/2010	4.43	4.44	0.20	0.01	0.74	0.08	Obstruction at 41.94'
RW-2	2/22/2010	3.71	3.71	0.20	0.01	0.74	0.09	2" well inserted
RW-2	3/2/2010	4.10	4.12	0.20	0.02	0.98	0.11	
RW-2	3/4/2010	4.21	4.21	0.01	0.01	0.24	0.12	DNAPL staining on bailer
RW-2	3/8/2010	5.02	5.04	0.05	0.01	0.49	0.13	DNAPL staining on bailer
RW-2	3/11/2010	4.60	4.82	0.00	0.00	0.50	0.13	DNAPL staining on bailer
RW-2	4/16/2010	4.45	4.45	0.00	0.00	0.50	0.13	
RW-2	4/26/2010	3.80	3.87	0.00	0.00	0.25	0.13	DNAPL globules present in bailer
RW-2	5/5/2010	4.15	4.19	0.00	0.00	0.25	0.13	DNAPL globules present in bailer
RW-2	6/1/2010	4.53	4.55	1.00	0.10	0.65	0.23	

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Table 7. Free Product Recovery Data
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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-2	6/9/2010	4.31	4.34	1.00	0.10	0.65	0.33	
RW-2	6/24/2010	4.44	4.45	0.75	0.08	0.67	0.41	
RW-2	7/6/2010	4.82	4.86	1.25	0.19	0.81	0.60	
RW-2	7/13/2010	4.97	5.00	1.50	0.23	0.77	0.83	
RW-2	7/20/2010	4.41	4.43	0.00	0.00	0.25	0.83	
RW-2	8/3/2010	5.02	5.18	0.00	0.00	0.25	0.83	
RW-2	8/10/2010	5.03	5.11	0.40	0.24	1.01	1.07	
RW-2	8/17/2010	5.27	--	0.50	--	NB	1.07	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-2	8/23/2010	4.96	--	1.50	--	NB	1.07	Bottom at 43.65'; Measured for DNAPL with tape
RW-2	8/30/2010	5.09	--	1.50	--	NB	1.07	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-2	9/17/2010	5.08	--	2.50	--	NB	1.07	Bottom at 43.66'; Measured for DNAPL with tape
RW-2	9/24/2010	5.20	--	3.20	--	NB	1.07	Bottom at 43.81'; Measured for DNAPL with tape
RW-2	10/1/2010	5.35	--	3.60	--	NB	1.07	Bottom at 43.68'; Measured for DNAPL with tape
RW-2	10/5/2010	5.28	--	3.70	--	NB	1.07	Bottom at 43.85'; Measured for DNAPL with tape
RW-2	10/12/2010	5.36	--	4.30	0.50	0.75	1.57	
RW-2	10/18/2010	5.36	--	5.00	0.51	0.49	2.08	Bottom at 43.90'
RW-2	12/10/2010	4.65	--	5.00	0.45	0.55	2.53	
RW-2	12/28/2010	4.50	--	2.75	0.35	0.40	2.88	
RW-2	1/3/2011	4.05	--	1.00	0.12	0.63	3.00	
RW-2	1/10/2011	4.60	--	1.00	0.10	0.40	3.10	
RW-2	1/17/2011	4.69	--	0.15	0.03	0.72	3.13	
RW-2	1/28/2011	--	--	0.50	--	NB	3.13	Measured for DNAPL with tape
RW-2	2/18/2011	3.89	--	0.24	--	NB	3.13	Measured for DNAPL with tape
RW-2	2/22/2011	3.55	--	0.50	--	NB	3.13	Measured for DNAPL with tape
RW-2	3/4/2011	3.86	--	--	--	NB	3.13	Silt and sand at bottom of well
RW-2	3/18/2011	4.18	--	0.15	0.01	0.24	3.14	
RW-2	3/28/2011	3.85	--	0.00	0.00	0.25	3.14	Bottom at 43.40'
RW-2	4/4/2011	3.33	--	--	--	NB	3.14	Obstruction at 21.9'
RW-2	4/12/2011	3.55	--	--	--	NB	3.14	Obstruction at 21.89'
RW-2	4/19/2011	3.29	--	--	--	NB	3.14	Obstruction at 22.0'
RW-2	4/25/2011	2.99	--	--	--	NB	3.14	Did not bail, 2" well broken
RW-3	12/28/2009	4.79	--	2.00	--	NB	--	Used weighted tape to gauge for DNAPL; did not bai
RW-3	1/6/2010	4.99	--	2.00	--	NB	--	Did not bail; Measured for DNAPL with tape
RW-3	1/11/2010	5.09	--	2.00	--	NB	--	Did not bail; Measured for DNAPL with tape
RW-3	1/18/2010	4.78	--	2.00	--	NB	--	Did not bail; Measured for DNAPL with tape
RW-3	1/25/2010	4.22	--	2.00	--	NB	--	Did not bail; Measured for DNAPL with tape
RW-3	2/1/2010	4.85	--	2.00	--	NB	--	Did not bail; Measured for DNAPL with tape
RW-3	2/2/2010	4.91	4.93	1.00	0.02	0.98	0.02	
RW-3	2/2/2010	4.93	4.95	0.50	0.02	0.98	0.04	
RW-3	2/3/2010	4.95	4.96	0.50	0.02	0.98	0.06	
RW-3	2/4/2010	4.97	4.98	0.20	0.01	0.74	0.07	
RW-3	2/4/2010	4.97	5.03	0.20	0.01	0.99	0.08	
RW-3	2/5/2010	4.85	4.88	0.20	0.02	0.98	0.10	
RW-3	2/22/2010	4.45	4.46	0.50	0.06	0.94	0.16	
RW-3	3/2/2010	4.78	4.81	0.50	0.03	0.97	0.19	
RW-3	3/4/2010	5.01	5.04	0.20	0.04	0.96	0.23	
RW-3	3/8/2010	5.31	5.34	0.33	0.18	1.32	0.41	
RW-3	3/11/2010	4.98	5.03	1.00	0.36	1.89	0.77	
RW-3	4/16/2010	4.87	8.29	2.00	1.85	5.15	2.62	
RW-3	4/26/2010	4.16	4.23	1.25	0.84	4.41	3.46	
RW-3	5/5/2010	4.52	4.58	0.75	0.79	6.21	4.25	
RW-3	6/1/2010	4.88	6.02	2.50	3.50	7.00	7.75	
RW-3	6/9/2010	4.69	5.89	1.75	1.62	7.13	9.37	
RW-3	6/24/2010	4.83	6.39	2.75	3.61	8.64	12.98	
RW-3	7/6/2010	5.22	9.37	2.70	3.24	7.26	16.22	
RW-3	7/13/2010	5.34	9.82	2.50	2.98	5.77	19.20	
RW-3	7/20/2010	4.87	6.21	3.00	3.24	5.51	22.44	
RW-3	8/3/2010	5.39	5.45	0.90	0.72	6.28	23.16	
RW-3	8/10/2010	5.42	5.52	0.50	0.90	7.85	24.06	
RW-3	8/17/2010	5.63	--	0.50	--	NB	24.06	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-3	8/23/2010	5.35	--	3.90	--	NB	24.06	Bottom at 44.60'; Measured for DNAPL with tape
RW-3	8/30/2010	5.48	--	4.89	--	NB	24.06	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-3	9/17/2010	5.46	--	6.90	6.13	4.37	30.19	Bottom at 44.52'
RW-3	9/24/2010	5.58	--	4.40	2.93	3.07	33.12	Bottom at 44.68'
RW-3	10/1/2010	5.77	5.77	2.60	1.20	3.30	34.32	Bottom at 44.42'
RW-3	10/5/2010	5.65	--	2.00	--	NB	34.32	Bottom at 44.54'; Measured for DNAPL with tape
RW-3	10/12/2010	5.74	--	2.40	0.68	3.82	35.00	Bottom at 44.53'
RW-3	10/18/2010	5.74	--	2.25	0.00	NB	35.00	Bottom at 44.48'
RW-3	12/10/2010	4.95	--	5.00	3.38	2.62	38.38	Bottom at 44.5'
RW-3	12/28/2010	4.88	--	2.50	1.05	7.95	39.43	Bottom at 44.51'
RW-3	1/3/2011	4.36	--	1.80	0.23	2.77	39.66	
RW-3	1/10/2011	4.83	--	1.80	0.23	2.77	39.89	
RW-3	1/17/2011	4.94	--	1.60	0.09	1.16	39.98	Bottom at 44.35'
RW-3	1/28/2011	--	--	2.00	--	NB	39.98	Measured for DNAPL with tape
RW-3	2/18/2011	4.84	--	1.24	--	NB	39.98	Measured for DNAPL with tape
RW-3	2/22/2011	3.80	--	1.13	--	NB	39.98	Measured for DNAPL with tape
RW-3	3/4/2011	4.08	--	0.60	0.02	1.48	39.99	

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WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-3	3/18/2011	4.50	--	0.70	0.08	1.42	40.07	Bottom at 43.45, silt at bottom
RW-3	3/28/2011	4.80	--	0.50	0.01	0.24	40.08	
RW-3	4/4/2011	3.57	--	0.10	0.20	0.05	40.28	Bottom at 43.41'
RW-3	4/12/2011	3.84	--	0.10	0.00	0.25	40.28	Bottom at 43.55'
RW-3	4/19/2011	3.53	--	0.20	0.01	0.07	40.29	Bottom at 43.33'
RW-3	4/25/2011	3.25	--	0.20	--	NB	40.29	Bottom at 43.35'; Measured for DNAPL with tape
RW-3	5/9/2011	4.35	--	0.30	--	NB	40.29	Bottom at 43.20'; Measured for DNAPL with tape
RW-3	5/18/2011	4.48	--	0.70	0.10	0.24	40.39	Bottom at 43.32'
RW-3	6/6/2011	4.94	--	0.60	--	NB	40.39	Bottom at 43.22'; Measured for DNAPL with tape
RW-3	6/20/2011	4.24	--	0.70	0.01	0.99	40.40	Bottom at 43.3'
RW-3	6/27/2011	3.81	--	1.10	0.06	1.94	40.46	Bottom at 43.25'
RW-3	6/28/2011	4.22	--	0.70	0.01	0.99	40.47	
RW-3	7/8/2011	4.95	--	0.80	0.09	1.91	40.56	Bottom at 43.30'
RW-3	7/13/2011	5.14	--	0.60	0.05	0.95	40.61	Bottom at 43.26'
RW-3	7/18/2011	5.21	--	0.90	0.05	0.95	40.66	Bottom at 43.30'
RW-3	7/25/2011	4.05	--	1.20	0.08	0.01	40.74	Bottom at 43.20'
RW-3	8/5/2011	5.32	--	0.10	0.00	0.25	40.74	
RW-3	8/15/2011	5.20	--	1.40	0.65	3.35	41.39	Bottom at 43.20'
RW-3	8/24/2011	5.26	--	0.80	0.01	0.99	41.40	Bottom at 43.31'
RW-3	9/6/2011	5.51	--	0.90	0.20	0.80	41.60	Bottom at 43.27'
RW-3	9/12/2011	5.53	--	0.70	0.10	0.90	41.70	Bottom at 44.34'
RW-3	9/19/2011	4.99	--	0.20	0.50	0.95	42.20	Bottom at 43.34'
RW-4	12/4/2009	8.00	NM	23.00	5.00	10.00	5.00	Used bailer to gauge for DNAPL
RW-4	12/7/2009	8.00	NM	22.00	20.00	0.00	25.00	Used bailer to gauge for DNAPL
RW-4	12/8/2009	8.00	20.00	21.00	20.00	0.00	45.00	Used bailer to gauge for DNAPL
RW-4	12/28/2009	7.28	22.00	15.00	31.00	7.25	76.00	Used weighted tape to gauge for DNAPL
RW-4	12/29/2009	7.32	15.00	6.70	8.16	3.84	84.16	Used weighted tape to gauge for DNAPL
RW-4	1/4/2010	7.54	13.28	2.25	1.36	3.64	85.52	Used weighted tape to gauge for DNAPL
RW-4	1/5/2010	7.36	12.17	2.75	0.81	3.19	86.33	Used weighted tape to gauge for DNAPL
RW-4	1/6/2010	7.48	--	2.00	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	1/8/2010	7.49	--	2.50	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	1/11/2010	7.56	--	2.25	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	1/18/2010	7.77	--	4.40	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	1/25/2010	6.64	--	5.75	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	2/1/2010	7.32	--	5.80	--	NB	86.33	Did not bail, observing recharge of DNAPL via tape
RW-4	2/2/2010	7.46	13.03	8.00	4.40	7.60	90.73	
RW-4	2/2/2010	7.62	12.98	3.00	1.47	9.53	92.20	
RW-4	2/4/2010	7.76	13.65	6.00	1.47	10.53	93.67	
RW-4	2/4/2010	7.49	13.85	3.00	1.39	11.61	95.06	
RW-4	2/5/2010	7.36	13.32	1.50	1.95	9.05	97.01	
RW-4	2/22/2010	5.98	11.56	5.00	5.86	8.14	102.87	
RW-4	3/2/2010	7.33	12.93	7.00	6.16	8.84	109.03	
RW-4	3/2/2010	7.68	12.73	3.00	1.51	8.49	110.54	
RW-4	3/4/2010	7.42	14.01	5.00	4.35	10.65	114.89	
RW-4	3/4/2010	8.01	13.31	1.00	0.86	6.14	115.75	
RW-4	3/8/2010	7.51	16.17	5.00	5.05	3.70	120.80	
RW-4	3/11/2010	8.12	16.97	1.50	1.80	6.20	122.60	
RW-4	3/24/2010	7.09	10.55	5.00	2.10	4.90	124.70	
RW-4	4/16/2010	7.51	18.37	5.00	6.21	9.54	130.91	
RW-4	4/26/2010	6.58	13.32	1.75	1.53	7.22	132.44	
RW-4	5/5/2010	6.96	13.91	1.75	2.36	6.39	134.80	
RW-4	6/1/2010	7.41	18.37	5.25	6.39	9.36	141.19	
RW-4	6/9/2010	7.26	17.65	2.25	3.89	6.61	145.08	
RW-4	6/24/2010	7.3	19.12	5.50	7.70	8.05	152.78	
RW-4	7/6/2010	7.72	18.12	5.00	9.01	6.74	161.79	
RW-4	7/13/2010	7.86	19.01	4.50	7.61	8.14	169.40	
RW-4	7/20/2010	7.35	19.17	3.00	5.86	9.89	175.26	
RW-4	8/3/2010	7.92	11.04	0.30	0.79	6.21	176.05	
RW-4	8/10/2010	7.9	13.87	0.40	1.40	12.60	177.45	
RW-4	8/17/2010	8.24	--	0.50	--	NB	177.45	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-4	8/23/2010	7.88	--	6.75	--	NB	177.45	Bottom at 45.25'; Measured for DNAPL with tape
RW-4	8/30/2010	8.01	--	7.30	--	NB	177.45	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-4	9/17/2010	7.96	--	11.10	8.66	1.84	186.11	Bottom at 45.30', did not bail all DNAPL out
RW-4	9/24/2010	8.13	--	9.70	12.98	0.52	199.09	Bottom at 45.30',
RW-4	10/1/2010	8.31	--	3.70	4.50	4.50	203.59	Bottom at 45.22'
RW-4	10/5/2010	8.2	--	2.10	--	NB	203.59	Bottom at 45.20'; Measured for DNAPL with tape
RW-4	10/12/2010	8.29	--	4.70	5.25	3.75	208.84	Bottom at 45.23; did not bail all DNAPL out
RW-4	10/18/2010	8.28	--	3.85	3.90	3.60	212.74	Bottom at 45.21'
RW-4	10/29/2010	7.97	--	4.68	--	NB	212.74	Bottom at 45.22'; Measured for DNAPL with tape
RW-4	12/10/2010	7.6	--	11.00	9.75	0.75	222.49	Bottom at 45.25'
RW-4	12/28/2010	7.35	--	9.00	9.90	0.60	232.39	Bottom at 45.25'
RW-4	1/3/2011	6.86	--	4.60	4.50	3.00	236.89	
RW-4	1/10/2011	7.46	--	2.10	2.63	4.87	239.52	
RW-4	1/17/2011	7.57	--	2.50	1.88	4.12	241.40	Bottom at 45.25'
RW-4	1/28/2011	--	--	3.25	--	NB	241.40	Measured for DNAPL with tape
RW-4	2/18/2011	7.4	--	4.42	--	NB	241.40	Measured for DNAPL with tape
RW-4	2/22/2011	6.35	--	5.30	1.60	2.00	243.00	
RW-4	3/4/2011	6.65	--	5.30	3.38	4.12	246.38	
RW-4	3/18/2011	6.97	--	4.60	2.93	6.07	249.31	Bottom at 44.90'

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Table 7. Free Product Recovery Data
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-4	3/28/2011	7.35	--	4.80	0.50	2.50	249.81	Bottom at 45.36'
RW-4	4/4/2011	6.22	--	4.80	0.60	0.15	250.41	Bottom at 44.9'
RW-4	4/12/2011	6.34	--	2.40	0.30	0.45	250.71	Bottom at 44.9'
RW-4	4/19/2011	6.06	--	5.90	2.24	1.76	252.95	Bottom at 45.05'
RW-4	4/25/2011	5.76	--	5.00	4.65	1.35	257.60	Bottom at 44.90'
RW-4	5/9/2011	6.76	--	2.00	2.05	1.95	259.65	Bottom at 44.95'
RW-4	5/16/2011	6.82	--	1.50	0.55	1.15	260.20	Bottom at 44.95'
RW-4	6/6/2011	7.42	--	2.40	--	NB	260.20	Bottom at 44.88'
RW-4	6/7/2011	7.35	--	2.40	3.65	2.35	263.85	
RW-4	6/20/2011	6.73	--	2.50	0.65	1.35	264.50	Bottom at 45.03'
RW-4	6/27/2011	6.33	'-	2.90	2.25	2.75	266.75	Bottom at 44.9'
RW-4	6/28/2011	4.64	--	1.00	0.10	0.90	266.85	
RW-4	7/8/2011	7.45	--	1.70	0.85	2.15	267.70	Bottom at 45.05'
RW-4	7/11/2011	7.58	--	1.20	1.25	1.75	268.95	Bottom at 44.90'
RW-4	7/13/2011	7.62	--	1.20	0.45	1.55	269.40	Bottom at 44.86'
RW-4	7/18/2011	7.75	--	1.60	0.80	2.20	270.20	Bottom at 44.9'
RW-4	7/25/2011	7.56	--	1.60	1.70	2.30	271.90	Bottom at 45.0'
RW-4	8/5/2011	7.84	--	1.40	1.40	2.60	273.30	
RW-4	8/15/2011	7.78	--	2.80	1.25	3.75	274.55	Bottom at 45.1'
RW-4	8/24/2011	7.78	--	3.00	2.65	2.35	277.20	Bottom at 45.05'
RW-4	9/6/2011	8.05	--	3.30	2.20	1.80	279.40	Bottom at 43.93'
RW-4	9/12/2011	8.08	--	3.20	3.00	2.00	282.40	Bottom at 45.00'
RW-4	9/16/2011	7.29	--	2.80	2.10	2.90	284.50	Bottom at 45.10'
RW-5	12/28/2009	8.08	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-5	1/6/2010	8.38	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-5	1/11/2010	8.45	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-5	1/18/2010	8.55	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-5	1/25/2010	7.75	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-5	2/1/2010	8.17	--	0.00	--	0.00	--	Used weighted tape to gauge for DNAPL
RW-5	2/22/2010	8.12	9.46	0.20	0.02	0.98	0.02	
RW-5	3/8/2010	8.14	10.62	0.33	0.06	0.69	0.08	
RW-5	3/11/2010	8.62	9.11	0.05	0.01	0.49	0.09	DNAPL staining on bailer
RW-5	4/16/2010	9.36	15.12	0.33	0.19	3.31	0.28	
RW-5	4/26/2010	7.80	22.13	2.50	2.12	6.63	2.40	
RW-5	5/5/2010	7.81	26.82	3.00	5.43	6.82	7.83	
RW-5	6/1/2010	8.08	22.31	4.00	6.56	3.94	14.39	
RW-5	6/9/2010	8.03	20.37	3.75	5.93	4.57	20.32	
RW-5	6/24/2010	8.14	21.96	4.25	7.53	8.22	27.85	
RW-5	7/6/2010	8.62	16.13	2.50	2.80	4.20	30.65	
RW-5	7/13/2010	8.64	17.98	2.50	3.33	5.42	33.98	
RW-5	7/20/2010	8.62	14.39	1.50	2.19	4.81	36.17	
RW-5	8/3/2010	8.75	17.18	0.80	1.07	7.68	37.24	
RW-5	8/10/2010	9.13	17.60	1.40	1.16	5.84	38.40	
RW-5	8/17/2010	9.31	--	1.50	--	NB	38.40	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-5	8/23/2010	8.81	--	5.60	--	NB	38.40	Bottom at 46.65'; Measured for DNAPL with tape
RW-5	8/30/2010	8.86	--	5.78	--	NB	38.40	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-5	9/17/2010	8.83	--	5.72	7.26	3.24	45.66	Bottom at 45.55'
RW-5	9/24/2010	9.26	--	5.65	5.67	3.33	51.33	Bottom at 46.67'
RW-5	10/1/2010	9.42	--	5.40	4.50	4.50	55.83	Bottom at 46.55'
RW-5	10/5/2010	10.00	--	5.40	4.43	4.57	60.26	Bottom at 46.55'
RW-5	10/12/2010	9.42	--	5.00	3.98	5.02	64.24	Bottom at 46.57'
RW-5	10/18/2010	9.50	--	4.45	2.85	4.65	67.09	Bottom at 46.57'
RW-5	10/29/2010	8.91	--	4.49	--	NB	67.09	Bottom at 46.51'
RW-5	12/10/2010	9.45	--	5.20	4.65	2.85	71.74	Bottom at 46.6'
RW-5	12/28/2010	8.21	--	4.60	4.43	3.07	76.17	Bottom at 46.5'
RW-5	1/3/2011	7.70	--	4.50	3.00	3.00	79.17	
RW-5	1/10/2011	8.31	--	2.30	1.89	4.11	81.06	
RW-5	1/17/2011	8.43	--	1.75	1.13	3.37	82.19	Bottom at 46.6'
RW-5	1/28/2011	--	--	2.00	--	NB	82.19	Measured for DNAPL with tape
RW-5	2/18/2011	8.29	--	1.76	--	NB	82.19	Measured for DNAPL with tape
RW-5	2/22/2011	7.19	--	1.53	--	NB	82.19	Measured for DNAPL with tape
RW-5	3/4/2011	7.64	--	2.25	0.83	3.67	83.02	
RW-5	3/18/2011	7.92	--	1.90	--	NB	83.02	Bottom at 46.20'; Measured for DNAPL with tape
RW-5	3/28/2011	8.29	--	0.90	0.13	1.87	83.15	Bottom at 46.72'
RW-5	4/4/2011	7.95	--	1.50	0.15	0.35	83.30	Bottom at 46.15'
RW-5	4/12/2011	7.24	--	1.80	0.15	0.35	83.45	Bottom at 46.16'
RW-5	4/19/2011	6.74	--	2.40	1.38	1.62	84.83	Bottom at 46.13'
RW-5	4/25/2011	6.54	--	1.30	0.90	1.10	85.73	Bottom at 46.15'
RW-5	5/9/2011	7.75	--	0.80	0.35	1.65	86.08	Bottom at 46.15'
RW-5	5/16/2011	7.76	--	0.50	0.26	1.74	86.34	Bottom at 46.15'
RW-5	6/6/2011	8.34	--	1.40	--	NB	86.34	Bottom at 46.15'; Measured for DNAPL with tape
RW-5	6/7/2011	8.33	--	1.40	1.10	1.90	87.44	
RW-5	6/20/2011	7.60	--	1.70	0.70	1.30	88.14	Bottom at 46.16'
RW-5	6/27/2011	7.52	--	1.50	0.85	2.15	88.99	Bottom at 46.2'
RW-5	6/28/2011	7.74	--	1.00	0.10	0.90	89.09	
RW-5	7/8/2011	8.39	--	2.40	1.09	2.91	90.18	Bottom at 46.30'
RW-5	7/11/2011	8.52	--	1.10	0.50	1.50	90.68	Bottom at 46.25'
RW-5	7/13/2011	8.60	--	1.30	0.60	1.40	91.28	Bottom at 46.22'
RW-5	7/18/2011	8.65	--	2.30	1.15	1.85	92.43	Bottom at 46.20'

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Table 7. Free Product Recovery Data
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-5	7/25/2011	8.52	--	2.00	1.65	2.35	94.08	Bottom at 46.3'
RW-5	8/5/2011	8.76	--	2.10	1.55	2.45	95.63	
RW-5	8/15/2011	8.65	--	2.10	1.05	2.95	96.68	Bottom at 46.3'
RW-5	8/24/2011	8.74	--	2.10	1.45	2.55	98.13	Bottom at 46.3'
RW-5	9/6/2011	8.95	--	2.20	1.35	1.65	99.48	Bottom at 46.18'
RW-5	9/12/2011	9.01	--	1.60	0.95	2.05	100.43	Bottom at 46.30'
RW-5	9/19/2011	8.63	--	1.80	1.45	3.55	101.88	Bottom at 46.30'
RW-6	4/16/2010	6.06	6.10	0.05	0.01	0.24	0.01	
RW-6	4/26/2010	5.25	5.97	0.00	0.00	1.75	0.01	Globules present in bailer
RW-6	5/5/2010	5.64	6.30	0.00	0.00	1.75	0.01	Globules present in bailer
RW-6	6/1/2010	6.11	6.55	0.00	0.00	1.75	0.01	Sheen and globules present in bailer
RW-6	6/9/2010	5.98	6.34	0.00	0.00	1.75	0.01	Sheen and globules present in bailer
RW-6	6/24/2010	5.99	6.13	0.00	0.00	0.25	0.01	
RW-6	7/6/2010	6.87	6.93	0.00	0.00	0.25	0.01	
RW-6	7/13/2010	7.01	7.13	0.00	0.00	0.25	0.01	
RW-6	7/20/2010	6.08	6.11	0.00	0.00	0.25	0.01	Globules and DNAPL staining on bailer
RW-6	8/3/2010	6.62	7.83	0.05	0.09	3.41	0.10	
RW-6	8/10/2010	6.67	7.46	0.00	0.00	0.25	0.10	
RW-6	8/17/2010	6.84	--	0.00	--	0.00	0.10	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-6	8/23/2010	6.58	--	0.00	--	0.00	0.10	Bottom at 38.55'; Measured for DNAPL with tape
RW-6	8/30/2010	6.70	--	0.00	--	0.00	0.10	Recovery Program Temporarily Suspended; Measured for DNAPL with tape
RW-6	9/17/2010	6.69	--	0.00	--	0.00	0.10	Bottom at 38.51'; Measured for DNAPL with tape
RW-6	9/24/2010	6.85	--	0.00	--	0.00	0.10	Bottom at 38.53'; Measured for DNAPL with tape
RW-6	10/1/2010	7.05	--	0.00	--	0.00	0.10	Bottom at 38.56'; Measured for DNAPL with tape
RW-6	10/5/2010	6.92	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	10/12/2010	7.05	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	10/18/2010	7.02	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	10/29/2010	6.68	--	0.00	--	0.00	0.10	Bottom at 38.45'; Measured for DNAPL with tape
RW-6	12/10/2010	6.65	--	0.00	--	0.00	0.10	38.5'; Measured for DNAPL with tape
RW-6	12/28/2010	6.05	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	1/3/2011	5.58	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	1/10/2011	6.18	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	1/17/2011	6.24	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	1/28/2011	--	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	2/18/2011	6.12	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	2/22/2011	5.07	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	3/4/2011	5.40	--	0.00	--	0.00	0.10	Measured for DNAPL with tape
RW-6	3/18/2011	5.74	--	0.00	--	0.00	0.10	Bottom at 38.50'; Measured for DNAPL with tape
RW-6	4/19/2011	4.84	--	0.00	--	0.00	0.10	Bottom at 38.18'; Measured for DNAPL with tape
RW-6	5/9/2011	5.55	--	0.00	--	0.00	0.10	Bottom at 38.15'; Measured for DNAPL with tape
RW-6	5/16/2011	5.55	--	0.00	--	0.00	0.10	Bottom at 38.15'; Measured for DNAPL with tape
RW-6	6/6/2011	6.10	--	0.00	--	0.00	0.10	Bottom at 38.1'; Measured for DNAPL with tape
RW-6	6/20/2011	6.43	--	0.00	--	0.00	0.10	Bottom at 38.1'; Measured for DNAPL with tape
RW-6	6/27/2011	5.08	--	0.00	--	0.00	0.10	Bottom at 38.05'; Measured for DNAPL with tape
RW-6	7/8/2011	6.17	--	0.00	--	0.00	0.10	Bottom at 38.05'; Measured for DNAPL with tape
RW-6	7/13/2011	6.33	--	0.00	--	0.00	0.10	Bottom at 38.12'; Measured for DNAPL with tape
RW-6	7/18/2011	6.49	--	0.00	0.00	0.25	0.10	Bottom at 38.30'
RW-6	7/25/2011	6.28	--	0.00	--	0.00	0.10	Bottom at 38.30'; Measured for DNAPL with tape
RW-6	8/5/2011	7.60	--	0.00	0.00	1.00	0.10	
RW-6	8/24/2011	6.51	--	0.00	0.00	0.00	0.10	Bottom at 38.19'
RW-7	12/10/2010	8.55	--	3.60	0.95	3.55	0.95	Obstructions at 46.6' and 48.0'
RW-7	12/28/2010	8.31	--	2.50	0.75	3.75	1.70	Obstructions at 46.6' and 48.0'
RW-7	1/3/2011	7.84	--	2.00	0.30	2.70	2.00	Obstructions at 46.6' and 48.0'
RW-7	1/10/2011	8.38	--	2.00	0.38	4.12	2.38	Obstructions at 46.6' and 48.0'
RW-7	1/17/2011	8.60	--	1.50	--	NB	2.38	Measured for DNAPL with tape
RW-7	1/28/2011	--	--	1.75	--	NB	2.38	Obstructions at 46.6 and 48.0' Measured for DNAPL with tape
RW-7	3/4/2011	7.15	--	0.90	0.15	1.35	2.53	Obstruction at 46.4'
RW-7	3/18/2011	7.38	--	0.80	--	NB	2.53	Obstruction at 46.30'; Measured for DNAPL with tape
RW-7	3/28/2011	7.39	--	0.90	0.06	0.44	2.59	Bottom at 46.85'
RW-7	4/4/2011	7.77	--	0.80	0.10	0.40	2.69	Bottom at 46.31'
RW-7	4/12/2011	7.06	--	0.70	0.10	0.40	2.79	Bottom at 46.22'
RW-7	4/19/2011	7.19	--	0.90	0.03	0.05	2.82	Bottom at 46.30', obstruction
RW-7	4/25/2011	7.35	--	0.50	0.08	0.42	2.90	Bottom at 46.30', obstruction
RW-7	5/9/2011	6.11	--	0.80	0.20	0.55	3.10	Bottom at 46.30', obstruction
RW-7	5/18/2011	6.81	--	1.00	0.20	0.30	3.30	Bottom at 46.3, obstruction
RW-7	6/6/2011	7.49	--	0.90	--	NB	3.30	Bottom at 46.28', obstruction; Measured for DNAPL with tape
RW-7	6/7/2011	7.40	--	0.90	0.10	0.90	3.40	Bottom at 46.30', obstruction
RW-7	6/20/2011	7.76	--	0.80	0.01	0.99	3.41	Bottom at 46.34', obstruction
RW-7	6/27/2011	8.06	--	1.00	0.10	1.90	3.51	Bottom at 46.3', obstruction
RW-7	6/28/2011	8.70	--	0.60	--	NB	3.51	Measured for DNAPL with tape
RW-7	7/8/2011	8.25	--	0.40	0.09	0.91	3.60	Bottom at 46.29'
RW-7	7/11/2011	8.73	--	0.70	0.10	0.90	3.70	Bottom at 46.21'
RW-7	7/13/2011	9.06	--	1.20	0.20	0.80	3.90	Bottom at 47.50'
RW-7	7/18/2011	9.10	--	0.90	0.08	0.92	3.98	Bottom at 46.6'
RW-7	7/25/2011	8.95	--	0.80	0.05	0.10	4.03	Bottom at 46.22'
RW-7	8/5/2011	8.69	--	0.20	0.15	1.85	4.18	
RW-7	8/15/2011	9.14	--	0.40	0.05	0.95	4.23	Bottom at 46.3'
RW-7	8/24/2011	8.64	--	0.50	0.00	1.00	4.23	Bottom at 46.4'

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Table 7. Free Product Recovery Data
Former Indiana Creosoting Company
Bloomington, Indiana

WELL ID	DATE	Initial DTW (fbtoc)	Final DTW (fbtoc)	DNAPL Thickness (feet)	DNAPL Removed (gal.)	Groundwater Removed (gal.)	Cumulative Volume of DNAPL Removed (gal.)	Remarks
RW-7	9/6/2011	9.30	--	0.80	0.05	0.95	4.28	Bottom at 46.32
RW-7	9/12/2011	9.42	--	0.40	0.05	0.95	4.33	Bottom at 46.40'
RW-7	9/19/2011	9.37	--	1.50	0.20	1.80	4.53	Bottom at 47.65'

Notes:
fbtoc = feet below top of casing.
OBS = evidence of DNAPL observed but thickness not measured.
DTW = depth to water.
NM = not measured.

Table 8. Summary of Enountered Voids and High Angled Fractures
Former Indiana Creosoting Company
Bloomington, Indiana

Well	Surface Elevation (ft. amsl)	Depth to Top of Feature (ft. bgs)	Depth to Bottom of Feature (ft. bgs)	Elevation of Top of Feature (ft. amsl)	Elevation of Bottom of Feature (ft. amsl)	Feature Width (ft.)	Lithologic Unit	Description
MW-27A	685.97	9.8	10.8	676.17	675.17	1.0	URC	Bit drop / void
MW-27A	685.97	24.95	28.5	661.02	657.47	3.5	LRC	High angle fracture
MW-28C	689.49	20.36	20.5	669.13	668.99	0.1	URC	Bit drop / void
MW-30B	688.78	26.91	27.04	661.87	661.74	0.1	URC	Bit drop / void
MW-33B	704.78	8.64	10.43	696.14	694.35	1.8	URC	Bit drop / void
MW-33B	704.78	12.1	12.25	692.68	692.53	0.1	URC	Bit drop / void
MW-35A	702.83	14.76	14.83	688.07	688	0.1	URC	Void
MW-35A	702.83	16.89	17.83	685.94	685	0.9	URC	Oxidation zone, high angle fracture
MW-35B/C	703.15	25.08	25.38	678.07	677.77	0.3	URC	Bit drop / void
MW-36C	697.56	22.16	23.7	675.4	673.86	1.5	URC	High angle fracture, oxidation
MW-36C	697.56	33.21	35.41	664.35	662.15	2.2	URC	High angle fracture
MW-39A	694.19	29.71	31.27	664.48	662.92	1.6	LRC	High angle fracture
MW-41A	699.53	15.5	16.0	684.03	683.53	0.5	URC	Void
MW-42B	696.67	16.04	16.92	680.63	679.75	0.9	URC	High angle fracture
MW-45C	698.42	11.58	14.6	686.84	683.82	3.0	URC	High angle fractures, oxidation
MW-48A/B	709.15	21	22	688.15	687.15	1.0	URC	Void
RW-7	689	16.03	16.31	672.97	672.69	0.3	URC	High angle fracture

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Table 9. Vertical Gradient Calculations
Former Indiana Creosoting Company
Bloomington, Indiana

Nested Pairs	Ground Elevation (FT AMSL)	Top of Casing Elevation (FT AMSL)	Top of Screen Elevation (FT AMSL)	Bottom of Screen Elevation (FT AMSL)	Middle of Screen Elevation (FT AMSL)	Screen Length (ft)	Geologic Unit	DTW (Ft Below Top of Casing)	Potentiometric Surface Elevation (FT AMSL)	Date	Calculated Vertical Gradient (ft/ft)	Direction
MW-1S	697.8	700.84	692.8	687.8	690.3	5	Alluvium	7.71	693.13	6/21/2011	0.17	Down
MW-1D	698.04	700.07	685	678.5	681.75	6.5	Ramp	8.39	691.68	6/21/2011	--	--
MW-2S	692.18	696.04	691.2	686.2	688.7	5	Alluvium	7.39	688.65	6/21/2011	0.05	Down
MW-2D	692.37	694.34	681.9	676.9	679.4	5	Ramp	6.13	688.21	6/21/2011	--	--
MW-5S	687.95	690.67	683	678	680.5	5	Alluvium	8.79	681.88	6/21/2011	-0.01	Up
MW-5D	687.68	690.35	672.7	667.7	670.2	5	Ramp	8.39	681.96	6/21/2011	--	--
MW-6S	687.58	691.37	686.1	681.1	683.6	5	Alluvium	9.43	681.94	6/21/2011	0.00	Stable
MW-6D	687.76	690.54	676.8	671.8	674.3	5	Ramp	8.60	681.94	6/21/2011	--	--
MW-8S	688.6	691.66	686.1	682.6	684.35	3.5	Alluvium	6.76	684.90	6/21/2011	0.04	Down
MW-8D	688.65	690.63	680.6	675.6	678.1	5	Ramp	5.98	684.65	6/21/2011	--	--
MW-12S	689.67	692.76	687.7	682.7	685.2	5	Alluvium	4.27	688.49	6/21/2011	0.16	Down
MW-12D	689.79	692.91	682.5	672.5	677.5	10	Ramp	5.67	687.24	6/21/2011	--	--
MW-20S	690.76	691.16	686.8	685.8	686.3	1	Alluvium	6.16	685.00	6/21/2011	-0.03	Up
MW-20D	688.66	691.54	680.7	665.7	673.2	15	Ramp	6.19	685.35	6/21/2011	--	--
MW-21S	686.75	688.99	683.8	682.8	683.3	1	Alluvium	4.29	684.70	6/21/2011	0.07	Down
MW-21D	686.28	688.4	678.3	663.3	670.8	15	Ramp	4.53	683.87	6/21/2011	--	--
MW-28B	688.88	692.28	671.2	666.2	668.68	5	Ramp Creek	7.91	684.36	5/17/2010	0.03	Down
MW-28C	689.48	692.71	663.8	653.8	658.78	10	Ramp Creek	8.67	684.04	5/17/2010	-0.32	Up
MW-28A	689.11	692.54	642.1	627.1	634.61	15	Borden	0.68	691.86	5/17/2010	--	--
MW-29B	692.67	696.23	663.7	653.7	658.67	10	Ramp Creek	7.96	688.27	1/18/2010	-0.25	Up
MW-29A	692.69	696.28	635.7	620.7	628.19	15	Borden	0.24	696.04	1/18/2010	--	--
MW-30A	688.59	691.39	665.6	660.6	663.09	5	Ramp Creek	7.63	683.76	6/21/2011	0.05	Down
MW-30B	688.78	691.58	650.3	645.3	647.78	5	Ramp Creek	8.60	682.98	6/21/2011	--	--
MW-31A	690.59	692.88	679.1	669.1	674.09	10	Ramp Creek	4.81	688.07	6/21/2011	0.30	Down
MW-31C	690.03	692.8	662.1	657.1	659.63	5	Ramp Creek	9.01	683.79	6/21/2011	-0.38	Up
MW-31B	689.37	692.55	644.4	629.4	636.87	15	Borden	0.00	692.55	6/21/2011	--	--
MW-33C	705.05	704.68	685.1	670.1	677.55	15	Ramp Creek	19.22	685.46	3/14/10	0.06	Down
MW-33A	703.23	703.07	663.2	653.2	658.23	10	Ramp Creek	18.74	684.33	3/14/10	-0.41	Up
MW-33B	704.78	704.53	649.8	634.8	642.28	15	Borden	13.60	690.93	3/14/10	--	--
MW-35A	702.82	706.26	686.8	676.8	681.827	10	Ramp Creek	11.06	695.20	6/21/2011	0.05	Down
MW-35B	703.15	706.37	679.1	676.1	677.645	3	Ramp Creek	11.39	694.98	6/21/2011	0.44	Down
MW-35C	703.15	706.38	671.6	658.1	664.895	13.5	Ramp Creek	17.06	689.32	6/21/2011	--	--
MW-37A	684.39	687.29	672.4	667.4	669.892	5	Harrodsburg	7.06	680.23	4/22/10	-0.22	
MW-37B	684.39	687.23	662.4	652.4	657.392	5	Ramp Creek	4.25	682.98	4/22/10	--	--
MW-38A	698.19	700.99	673.2	668.2	670.69	5	Ramp Creek	17.02	683.97	6/21/2011	0.08	Down
MW-38D	697.71	700.37	662.2	652.2	657.21	10	Ramp Creek	17.50	682.87	6/21/2011	-0.85	Up
MW-38C	697.43	700.2	647.4	632.4	639.93	15	Borden	2.63	697.57	6/21/2011	--	--
MW-39B	694.19	693.96	677.2	667.2	672.19	10	Ramp Creek	9.98	683.98	6/21/2011	0.10	Down
MW-39A	694.38	694.06	666.4	661.4	663.88	5	Ramp Creek	10.90	683.16	6/21/2011	--	--
MW-40C	692.16	694.77	683.7	678.7	681.16	5	Harrodsburg	4.34	690.43	4/21/10	0.06	Down
MW-40B	692.16	694.78	675.7	665.7	670.66	10	Ramp Creek	4.93	689.85	4/21/10	-0.03	Up
MW-40A	692.06	694.36	663.1	648.1	655.56	15	Ramp Creek	4.12	690.24	4/21/10	--	--
MW-42A	696.65	696.11	670.7	660.7	665.7	10	Ramp Creek	13.61	682.50	6/21/2011	0.14	Down
MW-42B	696.67	696.06	660.7	650.7	655.7	10	Ramp Creek	14.92	681.14	6/21/2011	--	--
MW-45C	698.42	700.59	686.4	676.4	681.4	10	Ramp Creek	17.95	682.64	6/21/2011	0.34	Down
MW-45B	698.1	700.76	668.1	658.1	663.1	10	Ramp Creek	24.35	676.41	6/21/2011	-0.22	Up
MW-45A	698.1	700.8	652.1	642.1	647.1	10	Ramp Creek	20.83	679.97	6/21/2011	--	--
MW-48B	709.15	708.52	671.2	656.2	663.7	15	Ramp Creek	25.36	683.16	6/21/2011	0.76	Down
MW-48A	709.15	708.53	649.2	639.2	644.2	10	Ramp Creek	40.28	668.25	6/21/2011	--	--

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Table 10. Apparent Dye Velocity Calculations
Former Indiana Creosoting Company
Bloomington, Indiana

Location	Dye	Distance From Injection Well	Days to First Dye Arrival, Maximum	Apparent Velocity Feet/Day
MW-12D	Eosine (5/6/2008)	80	10 (5/16/2008)	8
MW-20S	Eosine (5/6/2008)	300	31 (6/6/2008)	10
MW-20D	Eosine (5/6/2008)	300	10 (5/16/2008)	30
MW-21S	Eosine (5/6/2008)	415	62 (7/7/2008)	7
MW-22D	Eosine (5/6/2008)	500	197 (11/19/2008)	3
MW-23D	Eosine (5/6/2008)	640	84 (7/29/2008)	8
Sump	Eosine (5/6/2008)	165	31 (6/6/2008)	5
MW-5D	Fluorescein (5/11/2010)	720	45 (6/25/2010)	16
MW-20S	Fluorescein (5/11/2010)	420	22 (6/2/2010)	19
MW-34A	Fluorescein (5/11/2010)	1010	45 (6/25/2010)	22
MW-35A	Fluorescein (5/11/2010)	10	.003 (5/11/2010)	3333
Sump	Fluorescein (5/11/2010)	390	32 (6/12/2010)	12
Dye resurgances in Clear Creek near MW-5D	Fluorescein (5/11/2010)	735	0.146 (5/11/2010)	5034*
Dye resurgances from minor spring near MW-34A	Fluorescein (5/11/2010)	1040	0.146 (5/11/2010)	7123*

*Calculated apparent velocites represent minimum velocities.

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-1S	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	8/4/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-1S	8/11/2003	0.001	0.006	0.008	0.008	NA	NA	NA	NA
MW-1S	10/29/2003	<0.001	<0.002	0.001	<0.006	NA	NA	NA	NA
MW-1S	2/17/2004	<0.001	<0.002	0.0016 J	0.003 J	0.011	<0.0050	<0.0050	<0.0050
MW-1S	9/9/2004	0.00086 J	<0.002	0.003	0.0022 J	<0.0050	NA	<0.0050	NA
MW-1S	8/1/2006	<0.001	0.00056 J	0.003	0.003	NA	NA	NA	NA
MW-1S	11/19/2008	<0.0010	<0.0010	<0.0010	<0.003	<0.010	NA	<0.010	NA
MW-1S	12/10/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.01	NA	<0.0050	NA
MW-1D	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	8/4/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-1D	8/11/2003	0.004	0.007	0.030	0.031	NA	NA	NA	NA
MW-1D	10/1/2003	NA	NA	NA	NA	0.009	<0.0050	0.014	<0.0050
MW-1D	10/29/2003	< 0.01	0.010	0.034	0.046	NA	NA	NA	NA
MW-1D	2/17/2004	**0.005**	0.007	0.031	0.043	<0.0050	<0.0050	<0.0050	<0.0050
MW-1D	9/9/2004	0.0031 J	0.005 J	0.024	0.0233 J	<0.0050	NA	< 0.01	NA
MW-1D	8/2/2006	<0.001	<0.001	0.00069 J	<0.003	NA	NA	NA	NA
MW-1D	7/24/2007	0.0016 J	0.003	0.019	0.017	NA	NA	NA	NA
MW-1D	11/19/2008	<0.0050	0.0027 J	0.0201	0.0149 J	<0.010	NA	<0.010	NA
MW-1D	12/9/2009	<0.025	<0.025	<0.025	<0.075	<0.010	NA	<0.010	NA
MW-1D	12/14/2010	<0.0050	<0.0050	0.0181	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-2S	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-2S	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-2S	2/26/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-2S	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-2S	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-2S	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-2S	2/17/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-2S	11/1/2008	Insufficient water supply to fill all containers							
MW-2S	12/9/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-2S	6/22/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-2D	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-2D	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-2D	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-2D	2/17/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-2D	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-2D	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-2D	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-2D	11/19/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-2D	12/10/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-2D	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-3S	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-3S	8/11/2003	**0.107**	0.130	0.151	0.397	NA	NA	NA	NA
MW-3S	10/30/2003	**0.059**	0.098	0.094	0.238	NA	NA	NA	NA
MW-3S	2/18/2004	**0.025**	0.039	0.048	0.116	**0.050**	<0.0050	**0.033**	<0.0050

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-3S	8/1/2006	**0.027**	0.035	0.032	0.081	NA	NA	NA	NA
MW-3S	7/24/2008	Well Abandoned August 2006 for installation of City walk path							
MW-3D	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-3D	8/11/2003	**0.398**	0.345	0.179	0.445	NA	NA	NA	NA
MW-3D	10/30/2003	**0.316**	0.354	0.173	0.431	NA	NA	NA	NA
MW-3D	2/18/2004	**0.229**	0.229	0.176	0.446	0.013	<0.0050	<0.0050	<0.0050
MW-3D	9/10/2004	**0.493**	0.423	0.228	0.530	<0.0050	NA	<0.0050	NA
MW-3D	8/2/2006	**0.354**	0.350	0.157	0.408	NA	NA	NA	NA
MW-3D	7/24/2008	Well Abandoned August 2006 for installation of City walk path							
MW-4S	8/12/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-4S	10/1/2003	NA	NA	NA	NA	**0.067**	<0.0050	**0.029**	<0.0050
MW-4S	10/31/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-4S	2/19/2004	<0.001	<0.002	<0.002	<0.006	0.020	<0.0050	0.006	<0.0050
MW-4D	8/12/2003	**0.114**	0.053	0.042	0.099	NA	NA	NA	NA
MW-4D	10/31/2003	**0.117**	0.049	0.054	0.155	NA	NA	NA	NA
MW-4D	2/19/2004	**0.172**	0.057	0.037	0.184	0.043	<0.0050	**0.086**	<0.0050
MW-4D	9/9/2004	**0.368**	0.214	0.184	0.477	<0.0050	NA	< 0.01	NA
MW-4D	8/2/2006	**0.153**	0.111	0.085	0.214	NA	NA	NA	NA
MW-4D	7/24/2007	**0.142**	0.085	0.077	0.183	NA	NA	NA	NA
MW-4D	11/17/2008	**0.0814**	0.0852	0.0451	0.117	<0.010	NA	<0.0050	NA
MW-4D	12/16/2009	**0.0721**	0.0078	0.0413	0.0844	<0.010	NA	<0.0050	NA
MW-5S	8/12/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-5S	10/1/2003	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
MW-5S	10/31/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-5S	2/19/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-5S	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-5S	8/2/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-5S	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-5S	11/17/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.0050	NA
MW-5S	12/16/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-5S	6/22/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.10	<0.10	0.0065	<0.0050
MW-5D	8/12/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-5D	10/31/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-5D	2/19/2004	<0.001	<0.002	0.00096 J	<0.006	<0.0050	<0.0050	0.007	<0.0050
MW-5D	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-5D	8/2/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-5D	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-5D	11/17/2008	<0.001	<0.001	<0.001	<0.003	0.0153	NA	0.0054	NA
MW-5D	12/16/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-5D	12/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-6S	2/19/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	**0.066**	<0.0050
MW-6S	11/17/2008	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-6S	12/16/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	0.0073	NA
MW-6D	8/12/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-6D	8/14/2003	NA	NA	NA	NA	NA	NA	NA	NA
MW-6D	10/31/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-6D	2/19/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.008	<0.0050
MW-6D	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	0.006	NA
MW-6D	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-6D	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-6D	11/17/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.0050	NA
MW-6D	12/16/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-6D	6/24/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-7S	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-7S	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-7S	10/1/2003	NA	NA	NA	NA	**0.096**	<0.0050	**0.042**	<0.0050
MW-7S	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-7S	2/18/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-7S	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-7S	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-7S	7/24/2008	Well Abandoned August 2006 for installation of City walk path							
MW-7D	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-7D	8/11/2003	0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-7D	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-7D	2/18/2004	<0.001	<0.002	<0.002	<0.006	0.006	<0.0050	**0.024**	<0.0050
MW-7D	9/9/2004	0.00088 J	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-7D	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-7D	7/24/2008	Well Abandoned August 2006 for installation of City walk path							
MW-8S	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-8S	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-8S	8/12/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-8S	10/1/2003	NA	NA	NA	NA	<0.0050	<0.0050	0.010	<0.0050
MW-8S	10/31/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-8S	2/19/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.013	<0.0050
MW-8S	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-8S	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-8S	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-8S	11/18/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-8S	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-8S	12/14/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-8D	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-8D	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-8D	8/12/2003	**0.100**	0.020	0.036	0.074	NA	NA	NA	NA
MW-8D	10/31/2003	**0.074**	0.037	0.025	0.141	NA	NA	NA	NA
MW-8D	2/19/2004	**0.098**	0.019	0.020	0.095	<0.0050	<0.0050	0.011	<0.0050
MW-8D	9/9/2004	**0.192**	0.046	0.045	0.173	<0.0050	NA	< 0.01	NA
MW-8D	8/1/2006	**0.109**	0.026	0.042	0.079	NA	NA	NA	NA
MW-8D	7/24/2007	**0.095**	0.025	0.026	0.080	NA	NA	NA	NA
MW-8D	11/18/2008	**0.0847**	0.0304	0.0242	0.089	<0.010	NA	<0.010	NA
MW-8D	12/15/2009	**0.0801**	0.0472	0.0323	0.123	<0.010	<0.010	<0.0050	<0.0050
MW-8D	6/24/2011	**0.092**	0.0492	0.044	0.147	<0.010	<0.010	<0.0050	<0.0050
MW-9	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-9	10/29/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-9	2/17/2004	<0.001	<0.002	<0.002	<0.006	0.005	<0.0050	0.010	<0.0050

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-9	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-9	7/31/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-9	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-9	11/19/2008	<0.001	<0.001	<0.001	<0.003	<0.020	NA	**0.0279**	NA
MW-9	12/9/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	**0.027**	NA
MW-9	12/13/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	0.011	NA
MW-10	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-10	10/29/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-10	2/17/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.008	<0.0050
MW-10	9/9/2004	0.005	0.011	0.007	0.010	<0.0050	NA	<0.0050	NA
MW-10	7/31/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-10	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-10	11/19/2008	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-10	12/9/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-10	6/22/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0084	<0.0050
MW-11D	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-11D	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-11D	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-11D	10/1/2003	NA	NA	NA	NA	0.019	<0.0050	**0.068**	<0.0050
MW-11D	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-11D	2/17/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.014	<0.0050
MW-11D	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-11D	7/31/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-11D	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-11D	11/19/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-11D	12/9/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-11D	6/23/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050
MW-12S	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-12S	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-12S	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-12S	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-12S	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-12S	10/30/2003	<0.001	<0.002	0.075	<0.006	NA	NA	NA	NA
MW-12S	2/17/2004	<0.001	<0.002	<0.002	<0.006	0.022	<0.0050	**0.039**	<0.0050
MW-12S	9/10/2004	<0.0010	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-12S	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-12S	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-12S	11/20/2008	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-12S	12/11/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-12S	12/14/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-12D	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-12D	8/11/2003	**0.369**	0.408	0.205	0.580	NA	NA	NA	NA
MW-12D	10/30/2003	**0.778**	0.525	0.151	0.494	NA	NA	NA	NA
MW-12D	2/18/2004	**0.237**	0.310	0.194	0.523	<0.0050	<0.0050	<0.0050	<0.0050
MW-12D	9/10/2004	**0.305**	0.340	0.190	0.503	<0.0050	NA	<0.0050	NA
MW-12D	8/2/2006	**0.464**	0.424	0.145	0.474	NA	NA	NA	NA
MW-12D	7/24/2007	**0.278**	0.314	0.161	0.423	NA	NA	NA	NA
MW-12D	11/20/2008	**0.308**	0.360	0.140	0.343	<0.020	NA	<0.010	NA
MW-12D	12/17/2009	**0.372**	0.399	0.171	0.436	<0.010	NA	<0.0050	NA
MW-12D	12/21/2010	**0.372**	0.415	0.176	0.448	<0.010	NA	<0.0050	NA
MW-13	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-13	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-13	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-13	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-13	8/12/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-13	10/31/2003	**0.012**	0.015	0.043	0.073	NA	NA	NA	NA
MW-13	2/18/2004	0.004	0.004	0.010	0.018	0.021	<0.0050	**0.044**	<0.0050
MW-13	9/9/2004	**0.013**	0.014 J	0.039	0.0484 J	<0.0050	NA	< 0.01	NA
MW-13	8/1/2006	<0.001	<0.001	<0.00091	<0.003	NA	NA	NA	NA
MW-13	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-13	11/18/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-13	12/15/2009	<0.0050	0.0052	0.0172	0.0253	<0.010	NA	<0.0050	NA
MW-13	6/22/2011	<0.0050	<0.0050	0.0087	<0.0015	0.0123	<0.010	<0.0050	<0.0050
MW-14S	8/11/2003	0.003	0.005	0.014	0.034	NA	NA	NA	NA
MW-14S	10/31/2003	0.001	0.001	0.011	0.027	NA	NA	NA	NA
MW-14S	2/17/2004	< 0.02	< 0.04	0.0222 J	0.0492 J	0.016	<0.0050	**0.030**	<0.0050
MW-14S	9/9/2004	<0.001	< 0.02	0.0183 J	0.0263 J	<0.0050	NA	<0.0050	NA
MW-14S	8/1/2006	0.001	0.001	0.014	0.028	NA	NA	NA	NA
MW-14S	7/24/2007	<0.001	<0.001	0.003	0.004	NA	NA	NA	NA
MW-14S	11/20/2008	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-14S	12/11/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-14S	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-14D	8/11/2003	**0.155**	0.211	0.159	0.419	NA	NA	NA	NA
MW-14D	10/31/2003	**0.245**	0.288	0.211	0.552	NA	NA	NA	NA
MW-14D	2/17/2004	**0.227**	0.286	0.153	0.373	<0.0050	<0.0050	<0.0050	<0.0050
MW-14D	9/9/2004	**0.314**	0.329	0.190	0.487	<0.0050	NA	<0.0050	NA
MW-14D	8/2/2006	**0.084**	0.062	0.045	0.129	NA	NA	NA	NA
MW-14D	7/24/2007	**0.207**	0.242	0.138	0.363	NA	NA	NA	NA
MW-14D	11/20/2008	**0.078**	0.115	0.0888	0.203	<0.020	NA	<0.010	NA
MW-14D	12/17/2009	**0.0915**	0.124	0.0861	0.217	<0.010	NA	<0.0050	NA
MW-14D	12/21/2010	**0.0225**	0.0635	0.0682	0.171	<0.010	NA	<0.0050	NA
MW-15S	8/11/2003	**0.189**	0.156	0.112	0.300	NA	NA	NA	NA
MW-15S	10/30/2003	**0.103**	0.099	0.084	0.216	NA	NA	NA	NA
MW-15S	2/17/2004	**0.348**	0.285	0.144	0.345	0.026	NA	**0.034**	NA
MW-15S	2/17/2004	NA	NA	NA	NA	NA	<0.0050	NA	<0.0050
MW-15S	9/9/2004	**0.025**	0.016	0.016	0.035	<0.0050	NA	< 0.01	NA
MW-15S	8/1/2006	**0.109**	0.110	0.106	0.294	NA	NA	NA	NA
MW-15S	7/24/2007	Well destroyed during walk path construction in October 2006							
MW-15D	8/11/2003	**0.045**	0.043	0.017	0.046	NA	NA	NA	NA
MW-15D	10/30/2003	**0.427**	0.500	0.233	0.623	NA	NA	NA	NA
MW-15D	2/18/2004	**0.423**	0.516	0.252	0.728	0.045	<0.0050	**0.0782**	<0.0050
MW-15D	9/9/2004	**0.565**	0.519	0.240	0.678	<0.0050	NA	< 0.01	NA
MW-15D	8/1/2006	**0.217**	0.235	0.129	0.373	NA	NA	NA	NA
MW-15D	7/24/2007	**0.234**	0.291	0.137	0.377	NA	NA	NA	NA
MW-15D	11/20/2008	**0.260**	0.269	0.141	0.337	<0.020	NA	<0.010	NA
MW-15D	12/17/2009	**0.143**	0.215	0.127	0.342	<0.010	NA	<0.0050	NA
MW-15D	12/21/2010	**0.283**	0.31	0.184	0.443	<0.010	<0.010	<0.0050	<0.0050
MW-16S	8/11/2003	< 0.01	<0.02	0.027	0.053	NA	NA	NA	NA
MW-16S	10/30/2003	<0.0025	0.004	0.016	0.037	NA	NA	NA	NA
MW-16S	2/18/2004	0.00094 J	0.006	0.016	0.039	0.033	<0.0050	**0.0622**	<0.0050
MW-16S	9/9/2004	<0.001	0.008 J	0.0171 J	0.0389 J	0.007	NA	<0.0050	NA
MW-16S	8/1/2006	<0.001	0.0064 J	0.013	0.032	NA	NA	NA	NA
MW-16S	7/25/2007	<0.001	0.002	0.004	0.008	NA	NA	NA	NA
MW-16S	11/20/2008	<0.0010	0.0017	0.0054	0.0117	<0.020	NA	<0.010	NA
MW-16S	12/11/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-16S	12/14/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0132	<0.010	<0.0050	<0.0050
MW-16D	8/11/2003	**0.050**	0.098	0.082	0.177	NA	NA	NA	NA
MW-16D	10/30/2003	**0.095**	0.174	0.132	0.344	NA	NA	NA	NA
MW-16D	2/18/2004	**0.083**	0.197	0.193	0.559	<0.0050	<0.0050	<0.0050	<0.0050
MW-16D	9/9/2004	**0.0836 J**	0.209	0.167 J	0.434 J	<0.0050	NA	<0.0050	NA

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-16D	8/2/2006	**0.029**	0.057	0.055	0.142	NA	NA	NA	NA
MW-16D	7/25/2007	**0.040**	0.092	0.098	0.239	NA	NA	NA	NA
MW-16D	11/19/2008	**0.0298**	0.0579	0.0676	0.139	<0.010	NA	<0.010	NA
MW-16D	12/17/2009	<0.050	0.0879	0.0871	0.201	<0.010	NA	<0.0050	NA
MW-16D	12/21/2010	**0.0285**	0.0742	0.0998	0.235	<0.010	<0.010	<0.0050	<0.0050
MW-17S	8/12/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-17S	10/31/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-17S	2/18/2004	<0.001	<0.002	<0.002	<0.006	0.026	<0.0050	**0.094**	<0.0050
MW-17S	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-17S	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-17S	7/26/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-17S	11/18/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-17S	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-17S	6/22/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0206	<0.0050
MW-17D	8/12/2003	**0.292**	0.250	0.070	0.205	NA	NA	NA	NA
MW-17D	10/31/2003	**0.290**	0.262	0.084	0.267	NA	NA	NA	NA
MW-17D	2/18/2004	**0.268**	0.219	0.075	0.225	**0.055**	<0.0050	**0.047**	<0.0050
MW-17D	9/9/2004	**0.322**	0.270	0.101	0.302	<0.0050	NA	< 0.01	NA
MW-17D	8/1/2006	**0.123**	0.099	0.037	0.105	NA	NA	NA	NA
MW-17D	7/26/2007	**0.091**	0.083	0.033	0.104	NA	NA	NA	NA
MW-17D	11/18/2008	**0.0098**	0.0033	0.00091 J	<0.0030	<0.010	NA	<0.010	NA
MW-17D	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-17D	6/24/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-18S	8/12/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-18S	10/31/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-18S	2/18/2004	<0.001	<0.002	<0.002	<0.006	0.034	<0.0050	**0.133**	<0.0050
MW-18S	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-18S	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-18S	7/25/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-18S	11/18/2008	<0.001	<0.001	<0.001	<0.003	0.0102	NA	<0.010	NA
MW-18S	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.050	NA
MW-18S	6/22/2011	<0.0050	<0.0050	<0.0050	<0.015	0.0114	<0.010	0.008	<0.0050
MW-18D	8/12/2003	**0.005**	0.011	0.010	0.027	NA	NA	NA	NA
MW-18D	10/31/2003	0.011	0.024	0.017	0.049	NA	NA	NA	NA
MW-18D	2/18/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-18D	8/1/2006	0.001	0.001	<0.001	0.0021 J	NA	NA	NA	NA
MW-18D	7/25/2007	0.001	0.001	<0.001	<0.003	NA	NA	NA	NA
MW-18D	11/18/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-18D	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-18D	6/24/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-19S	10/1/2003	NA	NA	NA	NA	**0.062**	<0.0050	**0.077**	<0.0050
MW-19S	10/31/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-19S	2/18/2004	<0.001	<0.002	<0.002	<0.006	0.006	<0.0050	**0.017**	<0.0050
MW-19S	2/18/2004	<0.001	<0.002	<0.002	<0.006	0.0064	<0.0050	**0.0172**	<0.0050
MW-19S	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	**0.0154**	NA
MW-19S	6/22/2011	<0.0050	<0.0050	<0.0050	<0.0015	**0.246**	<0.010	**0.0245**	<0.0050
MW-19D	8/12/2003	**0.014**	0.018	0.008	0.018	NA	NA	NA	NA
MW-19D	10/31/2003	**0.061**	0.059	0.012	0.094	NA	NA	NA	NA
MW-19D	2/18/2004	**0.061**	0.041	0.003	0.066	0.047	<0.0050	**87.2**	<0.0050
MW-19D	9/9/2004	**0.243**	0.252	0.060	0.327	<0.0050	NA	< 0.01	NA
MW-19D	8/1/2006	**0.076**	0.106	0.029	0.151	NA	NA	NA	NA
MW-19D	7/25/2007	**0.140**	0.165	0.053	0.177	NA	NA	NA	NA
MW-19D	11/18/2008	**0.0624**	0.0408	0.005	0.0388	<0.010	NA	<0.0050	NA
MW-19D	12/17/2009	**0.151**	0.247	0.0577	0.373	<0.010	NA	<0.0050	NA
MW-19D	12/16/2010	**0.0998**	0.191	0.0567	0.291	<0.010	<0.010	<0.0050	<0.0050
MW-20S	11/13/2003	**0.018**	0.007	0.013	0.022	NA	NA	NA	NA

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-20S	2/19/2004	0.003	0.00053 J	0.002	0.0019 J	<0.0050	<0.0050	**0.094**	<0.0050
MW-20S	11/18/2008	**0.0098**	0.0014	0.0058	0.0053	0.0143	NA	**0.177**	NA
MW-20S	12/16/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	**0.0494**	NA
MW-20S	12/14/2010	**0.0172**	<0.0050	0.005	<0.015	<0.010	<0.010	**0.045**	<0.0050
MW-20D	11/13/2003	**0.158**	0.164	0.146	0.343	NA	NA	NA	NA
MW-20D	2/18/2004	**0.346**	0.631	0.384	1.070	0.008	0.005	<0.0050	<0.0050
MW-20D	9/10/2004	**0.155**	0.343	0.198	0.525	<0.0050	NA	<0.0050	NA
MW-20D	8/1/2006	**0.123**	0.164	0.134	0.322	NA	NA	NA	NA
MW-20D	7/26/2007	**0.085**	0.076	0.135	0.299	NA	NA	NA	NA
MW-20D	11/18/2008	**0.0426**	0.0289	0.0613	0.115	<0.010	NA	<0.010	NA
MW-20D	12/17/2009	**0.0957**	0.0661	0.0988	0.213	<0.010	NA	<0.0050	NA
MW-20D	12/21/2010	**0.0257**	0.0205	0.0758	0.15	<0.010	NA	<0.0050	NA
MW-21S	11/13/2003	0.001	0.002	0.002	0.004	NA	NA	NA	NA
MW-21S	2/18/2004	<0.001	<0.002	<0.002	<0.006	0.022	<0.0050	**0.076**	<0.0050
MW-21S	9/10/2004	<.001	<.002	<.002	<.006	<0.0050	NA	<0.0050	NA
MW-21S	8/2/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-21S	7/26/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-21S	11/18/2008	<0.0010	<0.0010	<0.0010	<0.003	0.0113	NA	<0.010	NA
MW-21S	12/16/2009	<0.0050	<0.0050	<0.0050	<0.015	**0.0683**	NA	0.0108	NA
MW-21S	12/14/2010	<0.0050	<0.0050	<0.0050	<0.015	0.041	NA	0.0062	NA
MW-21D	11/13/2003	**0.037**	0.079	0.181	0.461	NA	NA	NA	NA
MW-21D	2/18/2004	**0.058**	0.071	0.178	0.460	<0.0050	<0.0050	<0.0050	<0.0050
MW-21D	8/2/2006	**0.029**	0.019	0.087	0.200	NA	NA	NA	NA
MW-21D	7/26/2007	**0.030**	0.013	0.088	0.185	NA	NA	NA	NA
MW-21D	11/18/2008	**0.0217**	0.0124	0.0785	0.16	<0.010	NA	<0.010	NA
MW-21D	12/17/2009	**0.0192**	0.0191	0.0779	0.176	<0.010	<0.010	<0.0050	<0.0050
MW-21D	12/21/2010	**0.0286**	0.0289	0.0846	0.186	<0.010	<0.010	0.007	<0.0050
MW-22D	11/13/2003	**0.036**	0.031	0.018	0.043	NA	NA	NA	NA
MW-22D	2/18/2004	**0.007**	0.007	0.003	0.008	<0.0050	<0.0050	<0.0050	<0.0050
MW-22D	9/10/2004	**0.024**	0.020	0.011	0.035	<0.0050	NA	<0.0050	NA
MW-22D	8/2/2006	**0.189**	0.279	0.107	0.318	NA	NA	NA	NA
MW-22D	7/26/2007	0.001	0.004	0.004	0.010	NA	NA	NA	NA
MW-22D	11/18/2008	**0.01**	0.0229	0.0156	0.0405	<0.010	NA	<0.0050	NA
MW-22D	12/17/2009	**0.0186**	0.0229	0.0184	0.0643	**0.0702**	<0.010	**0.0532**	<0.0050
MW-22D	12/21/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-23D	11/13/2003	**0.377**	0.360	0.177	0.394	NA	NA	NA	NA
MW-23D	2/18/2004	**0.376**	0.373	0.174	0.404	0.011	<0.0050	**0.086**	<0.0050
MW-23D	9/10/2004	**0.467**	0.463	0.203	0.474	0.005	NA	<0.0050	NA
MW-23D	8/2/2006	**0.147**	0.178	0.075	0.157	NA	NA	NA	NA
MW-23D	7/26/2007	**0.228**	0.249	0.099	0.223	NA	NA	NA	NA
MW-23D	11/18/2008	**0.08**	0.104	0.0399	0.107	<0.010	NA	<0.0050	NA
MW-23D	12/16/2009	**0.0669**	0.0911	0.0785	0.116	<0.010	NA	<0.0050	NA
MW-23D	12/17/2010	**0.0258**	0.268	0.0163	0.0401	<0.010	NA	<0.0050	NA
MW-24A	11/17/2008	Not Sampled do the presence of Free-product							
MW-24A	3/3/2009	**0.353**	0.476	0.195	0.544	<0.010	<0.010	<0.010	<0.010
MW-24A	12/17/2009	**0.275**	0.431	0.169	0.468	<0.010	NA	<0.0050	NA
MW-24A	12/21/2010	**0.341**	0.483	0.186	0.517	<0.010	NA	<0.0050	NA
MW-24A	3/11/2011	**0.431**	0.643	0.228	0.639	<0.010	<0.010	<0.0050	<0.0050
MW-24A	6/24/2011	**0.287**	0.432	0.168	0.471	<0.010	<0.010	<0.0050	<0.0050
MW-25A	11/18/2008	0.0047 J	0.0037 J	0.0067	0.0087 J	<0.010	NA	<0.010	NA
MW-25A	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-25A	12/17/2010	**0.0641**	0.0404	0.0176	0.0315	<0.010	<0.010	0.0062	<0.0050
MW-25A	3/7/2011	**0.736**	0.0407	0.0224	0.0428	<0.010	<0.010	<0.0050	<0.0050
MW-25A	6/23/2011	**0.177**	0.0707	0.0263	<0.075	<0.010	<0.010	<0.0050	<0.0050
MW-26A	11/18/2008	0.002	0.0029	0.0019 J	0.0038 J	0.0118	NA	0.0085	NA

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Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-26A	12/16/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-26A	12/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-26A	3/7/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-26A	6/24/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-27A	11/17/2008	Not Sampled do the presence of Free-product							
MW-27A	3/3/2009	**0.167**	0.308	0.167	0.478	<0.010	<0.010	<0.010	<0.010
MW-27A	12/17/2009	**0.25**	0.443	<0.25	<0.75	<0.010	NA	<0.0050	NA
MW-27A	4/15/2010	**0.208**	0.436	0.204	0.57	<0.010	<0.010	<0.010	<0.010
MW-28A	2/12/2009	**0.0089**	0.0058	0.0055	0.005	<0.010	NA	<0.010	NA
MW-28A	8/5/2009	0.0028	0.0016	0.0011	<0.0030	<0.010	NA	<0.0050	NA
MW-28A	6/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28A	9/21/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28A	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28A	6/22/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28B	2/12/2009	**0.069**	0.0015	0.0476	0.0344	0.0258	NA	**0.0367**	NA
MW-28B	8/5/2009	**0.0951**	0.0017	0.0743	0.0533	<0.010	NA	<0.0050	NA
MW-28B	12/16/2009	**0.0923**	<0.0050	0.0633	0.0428	<0.010	NA	<0.0050	NA
MW-28B	6/16/2010	**0.0849**	<0.0050	0.0133	0.015	<0.010	NA	<0.0050	NA
MW-28B	9/21/2001	**0.0917**	<0.0050	0.0499	0.0428	<0.010	NA	<0.0050	NA
MW-28B	12/15/2010	**0.0842**	<0.010	0.0512	0.0406	<0.010	<0.010	<0.0050	<0.0050
MW-28B	3/8/2011	**0.0787**	<0.0050	0.019	0.0283	<0.010	<0.010	<0.0050	<0.0050
MW-28B	6/22/2011	**0.0757**	<0.0050	0.0071	0.0155	<0.010	<0.010	<0.0050	<0.0050
MW-28C	2/12/2009	<0.0010	<0.0010	<0.0010	<0.003	<0.010	NA	<0.010	NA
MW-28C	8/5/2009	<0.0010	<0.0010	<0.0010	<0.003	<0.010	NA	<0.0050	NA
MW-28C	12/16/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28C	6/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28C	9/21/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28C	12/15/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-28C	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-28C	6/22/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-29A	2/12/2009	0.0019	0.0022	0.0019	0.0059	0.0278	NA	**0.0172**	NA
MW-29A	8/5/2009	0.0018	0.0012	0.00098 J	0.003	<0.010	NA	<0.0050	NA
MW-29A	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-29A	6/17/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-29A	9/21/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-29A	3/11/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-29A	6/24/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-29B	3/3/2009	**0.371**	0.423	0.203	0.558	**0.0702**	**0.0613**	<0.010	<0.010
MW-29B	8/5/2009	**0.158**	0.264	0.163	0.430	0.0399	NA	<0.0050	NA
MW-29B	12/17/2009	**0.0932**	0.17	0.119	0.315	0.0358	NA	<0.0050	NA
MW-29B	6/17/2010	**0.1**	0.193	0.16	0.410	0.0129	0.0364	0.0171	<0.0050
MW-29B	9/21/2010	**0.0860**	0.146	0.125	0.350	0.0437	0.0401	<0.0050	<0.0050
MW-29B	12/21/2010	**0.1370**	0.193	0.155	0.378	0.0445	NA	<0.0050	NA
MW-29B	3/11/2011	**0.1040**	0.191	0.146	0.394	0.0435	0.0403	<0.0050	<0.0050
MW-29B	6/24/2011	**0.1200**	0.221	0.176	0.443	**0.0521**	0.042	<0.0050	<0.0050
MW-30A	11/4/2009	**0.315**	0.253	0.171	0.359	<0.010	<0.010	<0.010	<0.010
MW-30A	12/16/2009	**0.273**	0.204	0.149	0.322	<0.010	NA	<0.0050	NA
MW-30A	6/16/2010	**0.149**	0.1	0.0824	0.189	<0.010	NA	<0.0050	NA
MW-30A	9/23/2010	**0.307**	<0.25	<0.25	<0.75	<0.010	<0.010	<0.0050	<0.0050
MW-30A	12/16/2010	**0.244**	0.12	0.159	0.34	<0.010	<0.010	<0.0050	<0.0050
MW-30A	3/8/2011	**0.265**	0.0759	0.144	0.3	<0.010	<0.010	<0.0050	<0.0050
MW-30A	6/24/2011	**0.208**	0.0349	0.113	0.252	<0.010	NA	<0.0050	NA
MW-30B	11/4/2009	0.00088 J	0.0009 J	0.00054 J	<0.0030	<0.020	<0.020	<0.010	<0.010
MW-30B	12/16/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-30B	6/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-30B	9/23/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-30B	12/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-30B	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-30B	6/24/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31A	11/4/2009	<0.00100	<0.00100	<0.00100	<0.0030	**0.0527**	<0.010	**0.061**	<0.010
MW-31A	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31A	6/18/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	9/21/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31A	12/17/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0148	<0.010	**0.0205**	<0.0050
MW-31A	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31A	6/24/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31B	11/4/2009	0.00047 J	0.00042 J	<0.00100	<0.0030	0.011	<0.010	<0.010	<0.010
MW-31B	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31B	6/18/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31B	9/21/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31B	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31B	6/24/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-31C	11/4/2009	<0.00100	0.00054 J	<0.00100	<0.0030	**0.116**	<0.010	**0.115**	<0.010
MW-31C	12/15/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-31C	6/18/2010	<0.0050	<0.0050	<0.0050	<0.015	**0.0796**	**0.0734**	<0.0050	<0.0050
MW-31C	9/21/2010	<0.0050	<0.0050	<0.0050	<0.015	**0.0622**	NA	<0.0050	NA
MW-31C	12/17/2010	<0.0050	<0.0050	<0.0050	<0.015	**0.0504**	NA	<0.0050	NA
MW-31C	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	0.0368	0.0395	<0.0050	<0.0050
MW-31C	6/24/2011	<0.0050	<0.0050	<0.0050	<0.015	0.0368	0.0384	<0.0050	<0.0050
MW-32A	11/4/2009	<0.00100	<0.00100	<0.00100	<0.0030	<0.010	<0.010	<0.010	<0.010
MW-32A	12/16/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-32A	6/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-32A	9/21/2010	0.0282	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-32A	12/15/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-32A	3/7/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-32A	6/22/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	11/23/2009	<0.0050	<0.0050	<0.0050	<0.015	0.0127	<0.010	<0.010	<0.010
MW-33A	12/17/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-33A	3/14/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-33A	6/15/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	9/20/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	12/13/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	12/13/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	3/7/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33A	6/21/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	11/23/2009	<0.0050	<0.0050	<0.0050	<0.015	0.0157	<0.010	<0.010	<0.010
MW-33B	12/17/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	3/14/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	0.0055	NA
MW-33B	6/15/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	9/20/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	12/13/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	12/13/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	3/7/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33B	6/21/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33C	11/23/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-33C	12/17/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33C	3/14/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-33C	6/15/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.005	<0.0050
MW-33C	9/20/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33C	12/13/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0058	<0.0050
MW-33C	12/13/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0058	<0.0050

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-33C	3/7/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-33C	6/21/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-34A	11/23/2009	0.0153	0.0194	0.029	0.092	<0.010	<0.010	0.0118	<0.010
MW-34A	12/16/2009	**0.025**	0.0218	0.0328	0.094	0.0129	<0.010	0.0139	<0.0050
MW-34A	6/16/2010	**0.0500**	0.0243	0.0402	0.095	<0.010	<0.010	<0.0050	<0.0050
MW-34A	9/23/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-34A	12/16/2010	**0.0475**	<0.025	0.0336	0.0863	0.0263	<0.010	**0.0159**	<0.0050
MW-34A	3/7/2011	**0.0551**	0.0231	0.0434	0.101	<0.010	<0.010	<0.0050	<0.0050
MW-34A	6/23/2011	**0.0521**	0.0175	0.039	0.0876	<0.010	<0.010	<0.0050	<0.0050
MW-35A	2/24/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-35A	6/18/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	9/22/2010	**0.0078**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	12/22/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-35A	3/10/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35A	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	2/25/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA
MW-35B	6/18/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	9/22/2010	**0.018**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	3/10/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35B	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	2/25/2010	<0.0050	<0.0050	<0.0050	<0.015	0.305	<0.010	**0.0469**	<0.010
MW-35C	6/18/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	9/22/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	12/22/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	3/10/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-35C	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	6/18/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	9/22/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	12/20/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-36A	3/10/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36A	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-36B	2/25/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-36B	6/18/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0109	<0.010	<0.0050	<0.0050
MW-36B	9/22/2010	<0.0050	0.0175	0.0212	0.055	0.0124	<0.010	<0.0050	<0.0050
MW-36B	12/20/2010	**0.0074**	0.0657	0.0799	0.2	0.0163	0.0123	<0.0050	<0.0050
MW-36B	3/10/2011	**0.005**	0.0418	0.0389	0.134	<0.010	<0.010	<0.0050	<0.0050
MW-36B	6/24/2011	**0.0133**	0.103	0.102	0.261	0.0203	0.0195	<0.0050	<0.0050
MW-36C	2/25/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0452	<0.010	**0.0451**	<0.010
MW-36C	6/18/2010	**0.0533**	0.139	0.0878	0.266	<0.010	<0.010	<0.0050	<0.0050
MW-36C	9/22/2010	**0.0662**	0.174	0.0822	0.255	<0.010	<0.010	<0.0050	<0.0050
MW-36C	12/20/2010	**0.0575**	0.143	0.0742	0.218	<0.010	<0.010	<0.0050	<0.0050
MW-36C	3/10/2011	**0.0652**	0.165	0.0807	0.248	<0.010	<0.010	<0.0050	<0.0050
MW-36C	6/24/2011	**0.0305**	0.0735	0.0321	0.107	<0.010	<0.010	<0.0050	<0.0050
MW-37A	2/25/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-37A	6/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	9/23/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	12/17/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-37A	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37A	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37B	2/25/2010	**0.0897**	<0.0050	0.0431	0.0159	<0.010	NA	<0.010	NA
MW-37B	6/16/2010	**0.075**	<0.0050	0.0338	0.0173	<0.010	<0.010	0.0079	<0.0050
MW-37B	9/23/2010	**0.095**	<0.0050	0.0503	0.0205	<0.010	NA	<0.0050	NA
MW-37B	12/17/2010	**0.0918**	<0.0050	0.0327	0.0154	<0.010	NA	<0.0050	NA
MW-37B	3/9/2011	**0.0893**	<0.0050	0.025	0.0158	<0.010	<0.010	<0.0050	<0.0050

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Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-37B	6/23/2011	**0.0769**	<0.0050	0.0155	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-37C	9/12/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38A	4/14/2010	**0.0779**	0.0548	0.0881	0.223	<0.010	<0.010	<0.010	<0.010
MW-38A	6/16/2010	**0.0753**	0.0329	0.089	0.182	<0.010	NA	<0.0050	NA
MW-38A	9/22/2010	**0.138**	0.114	0.127	0.289	<0.010	NA	<0.0050	NA
MW-38A	12/17/2010	**0.108**	0.103	0.123	0.27	<0.010	NA	<0.0050	NA
MW-38A	3/8/2011	**0.0747**	0.05	0.102	0.22	<0.010	<0.010	<0.0050	<0.0050
MW-38A	6/23/2011	**0.0875**	0.0275	0.0912	0.205	<0.010	<0.010	<0.0050	<0.0050
MW-38B	4/14/2010	**0.0811**	0.015	0.0682	0.142	<0.010	<0.010	<0.010	<0.010
MW-38B	6/17/2010	**0.0566**	0.0104	0.045	0.113	0.0105	NA	<0.0050	NA
MW-38B	9/22/2010	**0.107**	0.0941	0.107	0.238	<0.0050	NA	<0.0050	NA
MW-38B	12/17/2010	**0.097**	0.0899	0.118	0.257	<0.0050	NA	<0.0050	NA
MW-38B	3/8/2011	**0.102**	0.0612	0.119	0.247	<0.010	<0.010	<0.0050	<0.0050
MW-38B	6/23/2011	**0.0863**	0.025	0.106	0.23	<0.010	NA	<0.0050	NA
MW-38C	4/14/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0102	NA	<0.010	NA
MW-38C	6/16/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0149	NA	<0.0050	NA
MW-38C	9/22/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	12/15/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0131	NA	<0.0050	NA
MW-38C	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38C	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	4/14/2010	<0.0050	<0.0050	<0.0050	<0.015	**0.0274**	NA	**0.018**	NA
MW-38D	6/17/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	9/22/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	12/15/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-38D	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-38D	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-39A	4/14/2010	*<0.25*	0.54	0.252	<0.75	**0.0482**	NA	**0.0492**	NA
MW-39A	6/17/2010	**0.239**	0.457	0.183	0.548	<0.010	<0.010	<0.0050	<0.0050
MW-39A	9/23/2010	**0.275**	0.493	<0.25	<0.75	<0.010	<0.010	<0.0050	<0.0050
MW-39A	12/21/2010	**0.216**	0.357	0.147	0.426	<0.010	NA	<0.0050	NA
MW-39A	3/11/2011	**0.193**	0.394	0.172	0.499	<0.010	<0.010	<0.0050	<0.0050
MW-39A	6/24/2011	**0.0906**	0.241E[a]	0.139	0.411	<0.010	<0.010	<0.0050	<0.0050
MW-39B	4/14/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0128	NA	<0.010	NA
MW-39B	6/17/2010	<0.0050	<0.0050	<0.0050	<0.015	0.045	<0.010	<0.0050	<0.0050
MW-39B	9/23/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-39B	12/15/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0052	<0.0050
MW-39B	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0089	<0.0050
MW-39B	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	4/14/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-40A	6/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	9/23/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40A	3/7/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0075	<0.0050
MW-40A	6/22/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40B	4/14/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-40B	6/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-40B	9/23/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40B	12/14/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0094	<0.0050
MW-40B	3/7/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40B	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40C	4/14/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.010	<0.010
MW-40C	6/16/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-40C	9/23/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40C	12/17/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-40C	3/7/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-40C	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-41A	12/15/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0329	<0.010	**0.0293**	<0.0050
MW-41A	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-41A	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	0.0129	NA	0.0122	NA
MW-42A	12/15/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42A	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42A	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	12/15/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	3/8/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-42B	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-43A	12/15/2010	**0.0517**	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.007	<0.0050
MW-43A	3/8/2011	**0.0149**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-43A	6/22/2011	**0.0226**	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	12/22/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	3/10/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-44A	6/23/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	12/22/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0133	<0.010	**0.0153**	<0.0050
MW-45A	3/10/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45A	6/21/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45B	12/22/2010	<0.0050	<0.0050	<0.0050	<0.015	**0.0607**	<0.010	**0.0999**	<0.0050
MW-45B	3/10/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0081	<0.0050
MW-45B	6/21/2011	<0.0050	<0.0050	<0.0050	<0.015	0.0289	<0.010	0.0468	<0.0050
MW-45C	12/22/2010	<0.0050	<0.0050	<0.0050	<0.015	0.0196	<0.010	**0.0293**	<0.0050
MW-45C	3/10/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-45C	6/22/2011	<0.0050	<0.0050	0.0077	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-46A	12/22/2010	**0.0583**	0.09	0.0393	0.116	<0.010	<0.010	<0.0050	<0.0050
MW-46A	3/10/2011	**0.0458**	**0.0726**	0.0305	0.0926	<0.010	<0.010	<0.0050	<0.0050
MW-46A	6/22/2011	<0.050	0.0668	<0.050	<0.15	<0.010	<0.010	<0.0050	<0.0050
MW-47A	12/22/2010	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0057	<0.0050
MW-47A	3/10/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-47A	6/22/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-48A	1/11/2011	**0.0885**	0.197	0.0903	0.25	<0.010	<0.010	<0.0050	<0.0050
MW-48A	6/21/2011	**0.264**	0.466	0.169	0.55	<0.010	<0.010	<0.0050	<0.0050
MW-48B	1/11/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-48B	6/21/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49A	8/16/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.01	<0.0050
MW-49B	8/16/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-49C	8/16/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.0109	<0.0050
MW-50A	8/17/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-50B	8/17/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	0.008	<0.0050
MW-51A	8/17/2011	**0.106**	0.196	0.0706	0.211	<0.010	<0.010	<0.0050	<0.0050
MW-51B	8/17/2011	<0.0050	<0.0050	<0.0050	0.017	<0.010	<0.010	<0.0050	<0.0050

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-52A	8/17/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53A	9/12/2011	<0.0050	<0.0050	<0.0050	<0.015	<0.010	<0.010	<0.0050	<0.0050
MW-53B	9/12/2011	<0.0050	<0.0050	<0.0050	<0.015	0.252	<0.010	0.312	<0.0050
MW-OW1	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW1	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-OW1	10/1/2003	NA	NA	NA	NA	0.015	<0.0050	**0.025**	<0.0050
MW-OW1	10/30/2003	<0.001	<0.002	0.001	0.002	NA	NA	NA	NA
MW-OW1	2/17/2004	<0.001	<0.002	0.002	0.0045 J	0.009	<0.0050	**0.034**	<0.0050
MW-OW1	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-OW1	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW1	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW1	11/19/2008	<0.001	0.00038 J	0.0018	0.0033	<0.010	NA	<0.010	NA
MW-OW1	12/11/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-OW2	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	12/28/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW2	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-OW2	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-OW2	2/17/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-OW2	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-OW2	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW2	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW2	11/19/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-OW2	12/10/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-OW3	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-OW3	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-OW3	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-OW3	2/18/2004	<0.001	<0.002	<0.002	<0.006	**0.063**	<0.0050	**0.056**	<0.0050
MW-OW3	9/9/2004	<0.001	<0.002	<0.002	<0.006	0.027	NA	<0.0050	NA
MW-OW3	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW3	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-OW3	11/19/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-OW3	12/10/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.0050	NA
MW-P1	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	8/12/2003	**0.006**	0.015	0.034	0.048	NA	NA	NA	NA
MW-P1	10/30/2003	NA	NA	NA	NA	NA	NA	NA	NA
MW-P1	11/6/2003	0.002	0.003	0.012	0.019	NA	NA	NA	NA
MW-P1	2/18/2004	0.004	0.005	0.019	0.026	0.006	<0.0050	**0.028**	<0.0050

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-P1	9/10/2004	0.005	0.006	0.019	0.022	<0.0050	NA	<0.0050	NA
MW-P1	8/1/2006	**0.009**	0.005	0.025	0.020	NA	NA	NA	NA
MW-P1	7/24/2007	Well abandoned August 2006 in preparation for Creek Liner Installation in August 2007							
MW-P2	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P2	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P2	10/1/2003	NA	NA	NA	NA	0.011	<0.0050	<0.0050	<0.0050
MW-P2	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P2	2/17/2004	<0.001	<0.002	<0.002	<0.006	0.005	<0.0050	0.013	<0.0050
MW-P2	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	<0.0050	NA
MW-P2	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P2	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P2	11/20/2008	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-P2	12/10/2009	<0.0050	<0.0050	<0.0050	<0.015	**0.0811**	NA	**0.035**	NA
MW-P3	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P3	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P3	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P3	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P3	8/11/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P3	10/1/2003	NA	NA	NA	NA	<0.0050	<0.0050	**0.021**	<0.0050
MW-P3	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P3	2/17/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.013	<0.0050
MW-P3	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-P3	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P3	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P3	11/19/2008	<0.001	<0.001	<0.001	<0.003	<0.010	NA	<0.010	NA
MW-P3	12/10/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	**0.0255**	NA
MW-P4	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	8/4/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P4	8/11/2003	<0.001	0.001	0.003	0.003	NA	NA	NA	NA
MW-P4	10/1/2003	NA	NA	NA	NA	<0.0050	<0.0050	0.009	<0.0050
MW-P4	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P4	2/18/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	0.006	<0.0050
MW-P4	9/9/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	NA	< 0.01	NA
MW-P4	8/1/2006	<0.001	<0.001	0.00055 J	<0.003	NA	NA	NA	NA
MW-P4	7/24/2007	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P4	11/19/2008	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-P4	12/9/2009	<0.0050	<0.0050	<0.0050	<0.015	0.014	NA	**0.0514**	NA
MW-P5	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	8/4/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P5	10/1/2003	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
MW-P5	10/30/2003	<0.001	<0.002	<0.002	<0.006	NA	NA	NA	NA
MW-P5	2/17/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-P5	11/19/2008	<0.001	<0.001	<0.001	<0.003	<0.020	NA	<0.010	NA
MW-P5	12/9/2009	<0.0050	<0.0050	<0.0050	<0.015	<0.010	NA	<0.010	NA

Table 11. Summary of Historic Groundwater BTEX, Arsenic & Lead Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		Benzene	Toluene	Ethylbenzene	Total Xylenes	Arsenic, Total	Arsenic, Dissolved	Lead, Total	Lead, Dissolved
	Unit of Measure	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.005	0.70	1.00	10.00	0.050	0.050	0.015 **	0.015 **
1996 VRP Tier II Non-Residential		0.099	10.20	20.40	204.00	0.050	0.050	0.015 **	0.015 **
Location ID	Sample Date								
MW-P6	5/18/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	8/14/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	11/13/2000	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	2/1/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	6/21/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	12/11/2001	NA	NA	NA	NA	NA	NA	NA	NA
MW-P6	8/11/2003	0.001	<0.002	0.076	<0.006	NA	NA	NA	NA
MW-P6	10/30/2003	0.002	<0.002	0.001	0.002	NA	NA	NA	NA
MW-P6	2/17/2004	<0.001	<0.002	<0.002	<0.006	<0.0050	<0.0050	<0.0050	<0.0050
MW-P6	9/10/2004	<.001	<.002	<.002	<.006	<0.0050	NA	<0.0050	NA
MW-P6	8/1/2006	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA
MW-P6	7/24/2007	Well abandoned August 2006 in preparation for Creek Liner Installation in August 2007							
RW-4	4/15/2010	**0.407**	0.559	0.200	0.574	<0.010	<0.010	<0.010	<0.010
RW-5	4/15/2010	**0.236**	**0.465**	0.185	0.565	<0.010	<0.010	<0.010	<0.010
RW-6	4/15/2010	**0.194**	**0.324**	0.124	0.346	<0.010	<0.010	<0.010	<0.010

0.68	BOLD - Concentration exceeds 1996 IDEM VRP Tier II Default Residential Closure Levels
770	BOLD/SHADE - Concentration exceeds 1996 IDEM VRP Tier II Default Non-residential (Industrial) Closure Levels
<	Analyte not detected above the laboratory's Run Detection Limit, displayed as ND (Non-detect) in laboratory analytical data packages.
<0.050	*Italics* - Analyte not detected above the labortory's Run Detection Limit, however Detection Limit is above VRP Closure Level
NA	Not Analyzed
**	Lead closure levels are from the January 26, 1996 IDEM Non-rule Policy (ID# W-0048), *Guidance for Lead cleanup levels for Voluntary Remediation Program* Tier II sites.

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-1S	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.1	0.18	<0.010	<0.050	0.34	<0.010	0.07	0.051	0.022	0.022	0.0082	0.025	0.049	<0.010	0.27	0.25	0.0088	<0.010	0.23	0.55	0.22
MW-1S	8/4/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.07	0.21	<0.010	<0.050	0.5	<0.010	0.084	0.074	0.034	0.03	0.012	0.031	0.077	<0.010	0.3	0.26	0.013	<0.010	0.0068	1	0.29
MW-1S	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.013	0.068	<0.010	<0.050	0.11	<0.010	0.019	0.021	0.0086	0.0096	<0.010	0.0076	0.017	<0.010	0.12	0.084	<0.010	<0.010	<0.010	0.2	0.092
MW-1S	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.035	0.089	<0.010	<0.050	0.17	<0.010	0.02	0.019	0.0099	0.012	<0.010	0.0082	0.021	<0.010	0.11	0.11	<0.010	<0.010	0.078	0.19	0.079
MW-1S	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.11	0.3	<0.010	<0.050	0.54	<0.010	0.058	0.081	0.034	0.035	0.01	0.031	0.065	<0.010	0.45	0.31	0.012	<0.010	0.27	0.91	0.34
MW-1S	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.025	<0.010	<0.050	0.055	<0.010	0.0049	0.0053	<0.010	<0.010	<0.010	<0.010	0.0067	<0.010	0.036	0.026	<0.010	<0.010	0.095	0.052	0.026
MW-1S	8/11/2003	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	0.104	0.676	<0.022	<0.110	1.07	<0.11	0.334	0.403	0.209	0.299	0.0795	0.103	0.34	0.0203	2.35	0.947	0.0991	<0.110	0.0932	3.49	1.31
MW-1S	10/29/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0163	0.123	<0.005	<0.020	0.213	<0.020	0.0635	0.0726	0.0401	0.0446	0.0192	0.0287	0.0673	0.0039	0.384	0.185	0.0227	<0.020	0.0358	0.614	0.266
MW-1S	2/17/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0071	0.001	<0.0051	0.0086	0.0265	0.0026 J	0.0029 J	0.0035	0.0067	0.0073	0.0067	0.0039	0.0102	0.00088	0.0091	0.0099	0.0069	0.0014 J	0.104	0.0092	0.0059
MW-1S	9/9/2004	<0.0048	<0.0048	<0.0048	0.0136	<0.0048	<0.0048	<0.0048	0.0596	0.0933	<0.0048	< 0.0095	0.165	0.0083 J	0.0226	0.0218	0.0273	0.0274	0.0181	0.0155	0.0364	0.0038	0.0853	0.0954	0.0211	< 0.0095	0.0031 J	0.143	0.0535
MW-1S	8/1/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0079	0.0799	<0.005	<0.008	0.203	<0.008	0.0041 J	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0167	0.089	<0.0010	0.0107	0.0184	0.0572	0.008
MW-1S	11/19/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	0.00010 J	0.00027	0.00032	0.00025	0.000096 J	0.00056	<0.00019	<0.00097	<0.00097	0.00028	<0.00097	<0.00097	<0.00097	<0.00097
MW-1S	12/10/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	0.00021	0.0008	0.0011	0.00097	0.00028	0.00070	<0.00019	<0.00097	<0.00097	0.00098	<0.00097	<0.00097	<0.00097	<0.00097
MW-1S	6/22/2011	Not sampled due to obstruction in well.																											
MW-1D	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.15	0.19	<0.010	0.0086	0.52	<0.010	0.018	0.0053	<0.010	<0.010	<0.010	<0.010	0.0051	<0.010	0.058	0.21	<0.010	0.14	3.4	0.18	0.045
MW-1D	8/4/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.15	0.17	<0.010	0.015	0.35	<0.010	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.038	0.17	<0.010	0.16	3.2	0.16	0.025
MW-1D	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.18	0.19	<0.010	<0.050	0.35	<0.010	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.037	0.18	<0.010	0.17	2.6	0.16	0.024
MW-1D	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.17	0.19	<0.010	<0.050	0.49	<0.010	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.035	0.2	<0.010	0.2	3	0.16	0.022
MW-1D	6/21/2001	NA	NA	<0.050	NA	<0.050	<0.050	<0.050	0.15	0.19	<0.050	<0.25	0.49	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.19	<0.050	0.1	2.4	0.14	<0.050
MW-1D	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.14	0.18	<0.010	<0.050	0.34	<0.010	0.0071	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.029	0.15	<0.010	0.044	2	0.13	0.016
MW-1D	8/11/2003	<0.020	<0.020	<0.020	<.002	<0.020	<0.020	<0.020	0.152	0.225	<0.020	0.0094	0.485	<0.010	0.0133	0.0031	0.0014	0.0021	<0.002	<0.002	0.0027	<0.002	0.05	0.205	<0.002	0.151	3.02	0.179	0.0246
MW-1D	10/29/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.168	0.207	<0.005	<0.02	0.474	<0.020	0.189	0.0038	<0.004	<0.004	<0.004	<0.004	0.003	<0.004	0.0602	0.224	<0.004	0.162	2.68	0.189	0.0351
MW-1D	2/17/2004	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.14	0.202	<0.021	<0.021	0.471	<0.021	0.015 J	0.0033 J	<0.0042	<0.0042	<0.0042	<0.0042	0.0026 J	<0.0042	0.0516	0.223	<0.0042	0.155	2.78	0.201	0.0289
MW-1D	9/9/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0204	0.0371	<0.0051	<0.0041	0.0669	<0.0041	.0028 J	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	0.0059	0.0336	<0.00082	0.0116	0.229	0.0264	0.0031 J
MW-1D	8/1/2006	<0.053	<0.053	<0.053	<0.053	<0.053	<0.0053	<0.053	<0.0053	0.0012 J	<0.0053	0.00032 J	0.0086	0.0016	0.0018	0.0012	0.0031	0.003	0.0032	0.0015	0.0035	0.00054	0.0029	0.0013	0.0036	<0.0010	0.00047 J	0.0038	0.0018
MW-1D	7/24/2007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	0.172	<0.05	< 0.038	0.367	< 0.038	< 0.038	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	0.038	0.176	<0.0077	0.103	1.09	0.122	0.02 J
MW-1D	11/19/2008	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	0.167	0.167	<0.024	<0.019	0.314	<0.019	<0.019	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	0.0188 J	0.138	<0.0039	0.0672	1.17	0.139	0.0093 J
MW-1D	12/9/2009	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.147	0.174	<0.050	<0.020	0.346	<0.020	<0.020	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.020	0.148	<0.0040	0.0673	1.24	0.112	<0.020
MW-1D	12/14/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.107	0.142	<0.0048	<0.019	0.317	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	0.0251	0.154	<0.0038	0.0622	0.699	0.127	<0.019
MW-2S	5/18/2000	NA	NA	<0.018	NA	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	< 0.091	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
MW-2S	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2S	2/26/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2S	6/21/2001	NA	NA	<0.014	NA	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	< 0.072	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
MW-2S	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2S	10/30/2003	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2S	2/17/2004	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2S	11/20/2008	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2S	12/9/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	0.00028	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-2S	6/22/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-2D	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2D	8/14/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	0.012
MW-2D	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2D	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2D	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2D	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-2D	8/11/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.0017	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2D	10/30/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.0093	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00085	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	0.00051
MW-2D	2/17/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2D	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0025	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-2D	8/1/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.002	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-2D	7/24/2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0022	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-2D	11/19/2008	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0035	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-2D	12/10/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0085	<.00095	<.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-2D	6/23/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0015	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-3S	5/18/2000	NA	NA	0.017	NA	0.0065	<0.010	<0.010	0.27	0.56	<0.010	0.0078	0.79	0.023	0.12	0.16	0.092	0.092	0.036	0.092	0.14	0.0054	0.59	0.57	0.039	0.96	12.00	1.00	< 1.0
MW-3S	8/11/2003	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	31	288	<5.0	<25.0	288	<25.0	83	63	35.60	48.40	13	16.90	51.50	4.37	323	282	17	346	1,160	723	174
MW-3S	10/30/2003	<0.053	0.138	0.0664	0.0405	<0.053	<0.053	<0.053	0.31	0.544	<0.053	<0.110	0.768	<0.110	0.117	0.0674	0.036	0.0374	0.0128	0.0312	0.0586	<0.021	0.352	0.567	0.0157	1.23	14.90	0.934	0.222
MW-3S	2/18/2004	<0.053	0.0443 J	<0.053	<0.053	<0.053	<0.053	<0.053	0.184	0.332	<0.053	<0.043	0.53	<0.043	0.0421 J	0.0263	0.0194	0.0208	0.0084 J	0.0178	0.0258	<0.0085	0.149	0.331	0.0093	0.369	9.27	0.438	0.092
MW-3S	9/10/2004	<.051	0.269	0.138	0.0972	0.0212	<0.051	<0.051	0.316	0.385	<0.051	<0.041	0.489	<0.041	0.0288	0.0079	0.0042	0.0046	<0.0084	<0.0082	0.0061	<0.0082	0.057	0.294	0.0059	0.521	7.44	0.304	0.0319
MW-3S	8/1/2006	<0.1	0.158	0.0715 J	0.0638 J	<0.1	<0.1	<0.1	0.231	0.413	<0.1	<0.2	0.523	<0.2	<0.2	0.0288 J	<0.04	0.0154 J	<0.04	<0.04	0.0232 J	<0.04	0.151 J	0.352	<0.04	0.383	7.1	0.513	0.0911 J
MW-3S	7/24/2007	Well abandoned in August 2006 for City walk path construction in October 2006																											
MW-3D	5/18/2000	NA	NA	1.2	NA	1.4	<0.010	<0.010	0.34	0.21	<0.010	<5.0	0.32	0.015	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	0.18	<0.010	0.66	11.00	0.13	0.0075
MW-3D	8/14/2000	NA	NA	1.6	NA	2.4	<0.500	<0.500	0.52	0.47	<0.500	0.59	0.67	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	1.1	13.00	0.46	<0.500
MW-3D	11/13/2000	NA	NA	1	NA	1.3	<0.500	<0.500	0.31	0.31	<0.500	0.45	0.43	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.71	9.50	0.36	<0.500
MW-3D	2/1/2001	NA	NA	0.56	NA	0.6	<0.100	<0.100	0.28	0.26	<0.100	0.31	0.35	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.2	<0.100	0.79	9.10	0.18	<0.100
MW-3D	6/21/2001	NA	NA	0.88	NA	0.98	0.0052	<0.010	< 1.0	< 1.0	<0.010	<5.0	< 1.0	0.02	0.036	0.011	0.0053	<0.010	<0.010	<0.010	0.0088	<0.010	0.071	< 1.0	<0.010	0.67	11.00	< 1.0	0.056
MW-3D	12/11/2001	NA	NA	1	NA	1.2	<0.050	<0.050	0.36	0.26	<0.050	0.45	0.41	<0.050	0.018	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.0026	0.17	<0.050	0.61	9.40	0.17	0.018
MW-3D	8/11/2003	<0.240	1.8	1.18	1.12	0.689	<0.240	<0.240	1.96	7.06	<0.240	1.45	8.59	< 1.200	2.51	2.07	1.1	1.550	0.403	0.523	1.54	0.121	10.70	8.57	0.506	9.63	40.50	22	5.97
MW-3D	10/30/2003	<0.052	0.827	0.562	0.42	0.344	<0.052	<0.052	0.58	1.73	<0.052	0.698	2.05	0.139	0.467	0.394	0.203	0.229	0.0686	0.15	0.308	0.0198	1.86	1.8	0.0854	2.56	17.30	3.96	1.31
MW-3D	2/18/2004	<0.110	0.811	0.446	0.315	0.21	<0.110	<0.110	1.03	4.62	<0.110	0.416	6.31	0.44	1.7	1.49	0.752	0.748	0.268	0.66	1.2	0.0704	7.18	5.71	0.327	7.02	34.20	16	4.73
MW-3D	9/10//2004	<0.019	1.17	0.68	0.489	0.354	<0.19	<0.19	1.13	4.03	<0.19	0.61	4.19	0.348	1.33	1.17	0.618	0.607	0.22	0.468	0.829	0.0576	4.79	4.21	0.272	5.93	25.60	11	3.16
MW-3D	8/2/2006	< 0.08	1.053	0.862	0.927	0.437	< 0.08	< 0.08	0.296	0.248	< 0.08	0.776	0.35	< 0.08	< 0.08	0.0149 J	0.008 J	0.0082 J	<0.016	<0.016	0.0123 J	<0.016	0.082	0.206	<0.016	0.546	6.11	0.252	0.0518 J
MW-3D	7/24/2007	Well abandoned in August 2006 for City walk path construction in October 2006																											
MW-4S	8/12/2003	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	0.00053	0.001	0.0019	0.0009	0.00059	0.00069	0.00019	0.00087	<0.0010	0.001	<0.0010	<0.0010	<0.0010	0.00081
MW-4S	10/31/2003	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0010	<0.0010	<0.0010	<0.0010	0.00021	0.00045	0.00067	0.00043	0.00037	0.00031	<0.00020	0.0003	<0.0010	0.00047	<0.0010	0.00059	<0.0010	0.00034
MW-4S	2/19/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	0.00036 J	0.00011 J	0.00018 J	0.00027	0.00016 J	0.0002	0.0002	<0.00020	<0.0010	<0.0010	0.00018 J	<0.0010	<0.0010	<0.0010	<0.0010
MW-4S	8/2/2006	Well obstructed, unable to collect sample																											
MW-4D	8/12/2003	<0.050	0.472	0.0207	<0.050	<0.050	<0.050	<0.050	0.15	0.091	<0.050	<0.020	0.191	<0.020	0.0055	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0083	0.0939	<0.004	0.0534	2.86	0.0661	<0.020
MW-4D	10/31/2003	<0.020	0.483	0.0866	0.0835	0.0189	<0.020	<0.020	0.146	0.0951	<0.020	<0.020	0.189	<0.020	<0.020	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0058	0.0977	<0.004	0.0745	2.39	0.0657	<0.020
MW-4D	2/19/2004	<0.021	0.36	0.0544	0.018 J	0.009 J	<0.021	<0.021	0.174	0.0634	<0.021	<0.0041	0.148	0.0047	0.0094	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	0.0092	0.0856	<0.00082	0.0107	0.262	0.042	0.0055
MW-4D	9/9/2004	0.712	<0.053	0.103	0.0653	<0.021	<0.021	<0.021	0.21	0.112	<0.021	<0.011	0.186	0.0114	0.0077 J	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0058 J	0.101	<0.0021	<0.011	1.7	0.051	0.0031 J
MW-4D	8/2/2006	<0.020	0.483	0.148	<0.020	<0.020	<0.020	<0.020	0.145	0.0906	<0.020	<0.039	<0.184	<0.039	<0.039	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	<0.039	0.0899	< 0.0078	0.0525	1.52	0.0571	<0.039
MW-4D	7/24/2007	<0.049	0.633	0.130	0.0324 J	<0.049	<0.049	<0.049	0.195	0.102	<0.049	<0.049	0.175	<0.049	<0.049	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	<0.049	0.103	< 0.0097	0.0414 J	1.55	0.758	<0.049
MW-4D	11/17/2008	<0.0048	0.208	0.0179	0.0232	0.0039 J	<0.0048	<0.0048	0.0631	0.0275	<0.0048	<0.00095	0.0408	0.0029	0.0029	0.000054 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0055 B	0.0242	<0.00019	0.0089	0.017	0.0258	0.0032
MW-4D	12/16/2009	<0.0048	0.116	0.0068	<0.0048	<0.0048	<0.0048	<0.0048	0.0527	0.035	<0.0048	<0.0095	0.0661	<0.0095	<0.0095	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	<0.0095	0.0346	<0.00109	<0.0095	0.268	0.0233	<0.0095
MW-5S	8/12/2003	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	0.00014	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-5S	10/31/2003	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-5S	2/19/2004	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-5S	9/9/2004	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00020	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00036 J	<0.00097	0.00013 J	<0.00097	0.00027 J	0.00065 J	0.00025 J
MW-5S	8/2/2006	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-5S	7/24/2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-5S	11/17/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-5S	12/16/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-5S	6/22/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0012	<0.00098	<0.00908
MW-5D	8/12/2003	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-5D	10/31/2003	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00093	<0.0010	<0.0010
MW-5D	2/19/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-5D	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00042 J	0.00024 J	<0.00019	<0.00096	0.00028 J	0.00075 J	0.00028 J
MW-5D	8/2/2006	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-5D	7/24/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00033 J	<0.0010	<0.0010
MW-5D	11/17/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-5D	12/16/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.004	<0.00095	<0.00095
MW-5D	12/16/2010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.001	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	0.0016	0.0105	<0.0010	<0.0010

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-6S	2/19/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	**0.00017 J**	**0.00024**	**0.00033**	0.00014 J	**0.00023**	**0.00022**	<0.00020	<0.0010	<0.0010	0.00019 J	<0.0010	<0.0010	<0.0010	<0.0010
MW-6S	11/17/2008	Insufficent water supply to collect sample																												
MW-6S	12/16/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0083	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	**0.00022**	**0.00039**	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-6S	6/22/2011	Insufficent water supply to collect sample																												
MW-6D	8/14/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-6D	10/31/2003	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	*<0.0010*	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-6D	2/19/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-6D	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.00019**	<0.00019	0.000096 J	<0.00019	<0.00019	0.00014 J	<0.00019	0.00089 J	0.00054 J	0.00013 J	0.00025 J	0.00050 J	0.0017	0.00059 J
MW-6D	8/1/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.001	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-6D	7/24/2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-6D	11/17/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-6D	12/16/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	0.001	0.0062	<0.0010	<0.0010
MW-6D	6/24/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.0020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0037	<0.00098	<0.00098
MW-7S	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	8/14/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7S	8/11/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.0011	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00033	0.00058	<0.00020	<0.0010	0.0065	<0.0010	<0.0010
MW-7S	10/30/2003	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0003	<0.00020	<0.0010	0.0018	<0.0010	<0.0010
MW-7S	2/18/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-7S	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.00011 J**	0.00010 J	0.00012 J	<0.00019	0.000095 J	0.00010 J	<0.00019	<0.00095	<0.00095	0.00016 J	<0.00095	<0.00095	<0.00095	<0.00095
MW-7S	8/1/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.001	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-7S	7/24/2007	Well abandoned in August 2006 for City walk path construction in October 2006																												
MW-7D	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7D	8/14/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7D	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	0.0069	<0.010	<0.010
MW-7D	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7D	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7D	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-7D	8/11/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	0.0014	**0.00016**	0.00013	0.00019	<0.00020	<0.00020	**0.00022**	<0.00020	0.00066	<0.0010	<0.00020	<0.0010	<0.0010	0.0006	0.00039
MW-7D	10/30/2003	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	*<0.0010*	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-7D	2/18/2004	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	*<0.0010*	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-7D	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0014	<0.00095	<0.00095
MW-7D	8/1/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.001	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-7D	7/24/2007	Well abandoned in August 2006 for City walk path construction in October 2006																												
MW-8S	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.012	**0.067**	*<0.010*	*<0.050*	0.27	<0.010	0.014	**0.0066**	*<0.010*	*<0.010*	<0.010	*<0.010*	**0.0067**	*<0.010*	0.069	0.22	*<0.010*	<0.010	0.023	0.0095	0.053
MW-8S	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.017	**0.077**	*<0.010*	*<0.050*	0.23	<0.010	0.011	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	0.055	0.16	*<0.010*	<0.010	0.058	**0.023**	0.036
MW-8S	8/12/2003	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	0.0041	**0.046**	<0.0053	*<0.0010*	0.158	0.0028	0.0056	**0.0027**	**0.0032**	**0.0044**	0.0014	**0.0013**	**0.0033**	**0.0004**	0.0277	0.0885	**0.0017**	<0.0010	0.00033	0.00094	0.0111
MW-8S	10/31/2003	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.0017	**0.022**	<0.0054	*<0.0010*	0.0586	0.0019	0.0034	**0.0021**	**0.003**	**0.0032**	0.0015	**0.0016**	**0.0031**	**0.00034**	0.0172	0.0424	**0.0018**	<0.0010	<0.0010	0.0009	0.0073
MW-8S	2/19/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	0.0014 J	0.004 J	<0.0052	*<0.0021*	0.0168	0.0017 J	0.0028	**0.0029**	**0.0055**	**0.0053**	0.0031	**0.003**	**0.0054**	**0.00061**	0.0102	0.0171	**0.0036**	<0.0021	<0.0021	0.002 J	0.0055
MW-8S	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0068	**0.0745**	<0.0048	*< 0.0038*	0.155	0.0043	0.012	**0.0033**	**0.0043**	**0.0043**	0.0022	**0.0024**	**0.0043**	**0.00062 J**	0.0367	0.142	**0.0029**	< 0.0038	0.0012 J	0.0041	0.0192
MW-8S	8/1/2006	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	**0.0158**	<0.0053	*<0.0084*	0.163	<0.0084	0.0064 J	**0.0024**	**0.002**	**0.0017**	0.00085 J	**0.0015 J**	**0.0024**	**<0.00107**	0.04	0.132	**0.0012 J**	<0.0084	<0.0084	<0.0084	0.0227
MW-8S	7/25/2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0353**	<0.0048	<0.00096	0.124	0.002	0.0054	**0.0016**	**0.0025**	**0.0026**	0.0014	**0.0013**	**0.0025**	**0.00031**	0.0146	0.097	**0.0016**	<0.00096	0.00043 J	0.0051	0.0096
MW-8S	11/8/2008	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0125	<0.0048	<0.00096	0.0357	0.00059 J	0.0019	**0.00023**	**0.00041**	**0.00043**	0.00023	0.00011 J	**0.00036**	<0.00019	0.0068	0.00323	0.00027	<0.00096	<0.00096	0.0033	0.0032
MW-8S	12/15/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.009	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	0.006	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-8S	12/14/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0057	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0012	<0.00097	<0.00097
MW-8D	6/21/2001	NA	NA	<0.020	NA	<0.020	*<0.020*	<0.020	**0.13**	**0.093**	*<0.020*	*<0.100*	0.19	<0.020	<0.020	*<0.020*	*<0.020*	*<0.020*	<0.020	*<0.020*	*<0.020*	*<0.020*	0.043	0.11	*<0.020*	**0.054**	1.0	**0.12**	0.034
MW-8D	12/11/2001	NA	NA	0.022	NA	<0.010	<0.010	<0.010	**0.19**	**0.14**	*<0.010*	*<0.050*	0.27	0.0099	0.013	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	0.035	0.15	*<0.010*	0.03	**1.8**	**0.14**	0.021
MW-8D	8/12/2003	<0.020	0.234	0.0125	<0.020	<0.020	*<0.020*	<0.020	**0.159**	**0.13**	*<0.020*	*<0.020*	0.263	<0.020	0.0082	**0.0031**	**<0.0040**	**0.0029**	<0.0040	*<0.0040*	**0.0024**	*<0.0040*	0.0352	0.142	*<0.0040*	**0.104**	**2.25**	**0.106**	0.0175

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-8D	10/31/2003	<0.022	0.212	0.0117	<0.022	<0.022	<0.022	<0.022	**0.196**	**0.178**	<0.022	<0.056	0.361	<0.056	<0.056	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	0.029	0.205	<0.011	**0.141**	**2.38**	**0.167**	0.0152
MW-8D	2/19/2004	<0.021	0.32	0.125	0.0115 J	<0.021	<0.021	<0.021	**0.144**	**0.136**	<0.021	<0.010	0.268	0.0092 J	0.0123	**0.0014 J**	<0.0021	<0.0021	<0.0021	<0.0021	**0.0011 J**	<0.0021	0.0297	0.162	<0.0021	0.0211	0.972	**0.126**	0.017
MW-8D	9/9/2004	<0.0049	0.304	0.0127	0.0105	<0.0049	<0.0049	<0.0049	**0.132**	**0.152**	<0.0049	< 0.0097	0.25	0.0109	0.0126	**0.0039**	**0.002**	**0.0023**	<0.00109	**0.0014 J**	**0.0028**	<0.00109	0.043	0.157	**0.0019**	**0.055**	**1.38**	**0.116**	0.0255
MW-8D	8/1/2006	<0.026	0.214	<0.026	<0.026	<0.026	<0.026	<0.026	**0.166**	**0.158**	<0.026	<0.084	0.29	<0.084	<0.084	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.0295 J	0.153	<0.017	**0.143**	**2.79**	**0.112**	<0.084
MW-8D	7/24/2007	<0.048	0.181	<0.048	<0.048	<0.048	<0.048	<0.048	**0.175**	**0.156**	<0.048	<0.076	0.291	<0.076	<0.076	**0.0047 J**	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.0443 J	0.17	<0.015	**0.153**	**2.33**	**0.133**	0.0265 J
MW-8D	11/18/2008	<0.024	0.179	0.0053 J	<0.024	<0.024	<0.024	<0.024	**0.158**	**0.103**	<0.024	<0.049	0.236	<0.049	<0.049	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	0.0181 J	0.116	<0.0097	**0.114**	**1.49**	**0.0692**	<0.049
MW-8D	12/15/2009	<0.025	0.161	<0.025	<0.025	<0.025	<0.025	<0.025	**0.159**	**0.126**	<0.025	<0.050	0.161	<0.050	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	0.117	<0.010	**0.107**	**1.4**	**0.0816**	<0.050
MW-8D	6/24/2011	<0.019	0.177	<0.019	<0.019	<0.019	<0.019	<0.019	**0.173**	**0.151**	<0.019	<0.048	0.271	<0.048	<0.048	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.048	0.143	<0.0096	**0.179**	**3.19**	**0.105**	<0.048
MW-9	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-9	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-9	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-9	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-9	8/11/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	**0.0006**	**0.00081**	**0.0015**	0.00053	**0.0004**	**0.00069**	0.00013	0.00083	<0.0010	**0.00064**	<0.0010	<0.0010	<0.0010	0.00068
MW-9	10/29/2003	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	**0.00034**	**0.00043**	**0.00061**	0.0003	**0.0004**	**0.00043**	<0.00020	0.0005	<0.0010	0.00034	<0.0010	<0.0010	<0.0010	0.00048
MW-9	2/17/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	**0.00027**	**0.00031**	**0.0004**	0.00021	**0.00034**	**0.00034**	<0.00020	0.0004 J	<0.0010	0.00026	<0.0010	0.00065 J	<0.0010	0.00037 J
MW-9	7/31/2006	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0010	<0.0010	<0.0010	<0.0010	0.0001 J	0.00012 J	0.00015 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	0.00011 J	<0.0010	<0.0010	<0.0010	<0.0010
MW-9	7/24/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	**0.00016 J**	**0.00021**	**0.00033**	0.00012 J	0.00017 J	0.00019 J	<0.00020	<0.0010	<0.0010	0.00015 J	<0.0010	<0.0010	<0.0010	<0.0010
MW-9	11/19/2008	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	**0.0003**	**0.00045**	**0.00074**	0.00031	**0.00024**	**0.00025**	0.000074 J	0.00042 J	<0.00096	0.00038	<0.00096	<0.00096	<0.00096	0.00039 J
MW-9	12/9/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	**0.00021**	**0.00029**	**0.00059**	<0.00019	<0.00019	**0.00026**	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-9	12/13/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-10	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**<0.010**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-10	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-10	6/21/2001	NA	NA	<0.0010	NA	<0.0010	<0.016	<0.0010	<0.0010	<0.0010	<0.016	< 0.078	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
MW-10	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-10	8/11/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	**0.0011**	**0.0015**	**0.0025**	0.00095	**0.00086**	**0.0013**	0.00022	0.0016	<0.0010	**0.0011**	<0.0010	<0.0010	<0.0010	0.0013
MW-10	10/29/2003	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-10	2/17/2004	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-10	9/9/2004	<0.0048	0.0061	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.01	0.0107	<0.0048	0.00032 J	0.0211	0.003	0.00096	**0.00037**	**0.00062**	**0.00062**	0.00037	**0.00036**	**0.00043**	0.00014 J	0.002	0.0102	**0.00042**	0.0049	0.0351	0.0038	0.0013
MW-10	7/31/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	0.000066 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-10	7/24/2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	0.000064 J	<0.00020	0.00011 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	0.000068 J	<0.00098	<0.00098	<0.00098	<0.00098
MW-10	11/19/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-10	12/9/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-10	6/22/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00908
MW-11D	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-11D	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-11D	8/11/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.0032	<0.0010	<0.0010	**0.0001**	0.00016	**0.00027**	0.00016	<0.00020	0.00016	<0.00020	0.00028	0.00095	0.00017	<0.0010	<0.0010	<0.0010	<0.0010
MW-11D	10/30/2003	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	0.00014	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-11D	2/17/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	**0.00014 J**	**0.00021**	**0.00026**	0.0002	**0.0002**	**0.00023**	<0.00020	0.00043 J	<0.0010	0.00021	<0.0010	<0.0010	<0.0010	0.00034 J
MW-11D	9/9/2004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.00099	0.006	< 0.00099	< 0.00099	**0.00014 J**	**0.0002**	**0.00026**	0.00016 J	**0.00016 J**	0.00018 J	<0.00020	0.00031 J	0.0012	0.00026	< 0.00099	< 0.00099	< 0.00099	0.00028 J
MW-11D	7/31/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-11D	7/24/2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0028	<0.00098	<0.00098	0.000064 J	<0.00020	0.00012 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	0.00026 J	0.0001 J	<0.00098	<0.00098	<0.00098	<0.00098
MW-11D	11/19/2008	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-11D	12/9/2009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.0015	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0013	<0.0010	<0.0010	0.001	0.0013	<0.0010
MW-11D	6/23/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0175	<0.00096	0.002	**0.00023**	<0.00019	<0.00019	<0.00019	<0.00019	0.00019	<0.00019	0.0089	0.0116	<0.00019	<0.00096	0.0015	0.0091	0.0055
MW-12S	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-12S	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0095	<0.010	<0.010
MW-12S	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.022	<0.010	<0.010
MW-12S	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.00098
MW-12S	8/11/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0033	0.0076	<0.005	<0.0010	0.0107	0.0014	0.00059	**0.00029**	**0.00045**	**0.00068**	0.00029	0.00018	**0.00035**	<0.00020	0.0011	0.00026	0.00034	<0.0010	0.00095	0.00066	0.00062
MW-12S	10/30/2003	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0013	0.0028	<0.0051	<0.0010	0.0045	0.00082	0.00045	**0.00045**	**0.00087**	**0.001**	0.00052	**0.00054**	**0.00062**	0.00011	0.0011	<0.0010	**0.00064**	<0.0010	<0.0010	<0.0010	0.00082
MW-12S	2/17/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	0.00062 J	0.00091 J	**0.0015**	**0.0026**	**0.0029**	0.0016	**0.0019**	**0.0021**	**0.00037**	0.0028	<0.0010	**0.0018**	<0.0010	<0.0010	0.00071 J	0.0026
MW-12S	9/29/2004	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0033	0.0096	<0.0049	<0.00097	0.0148	0.002	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0005	0.0012	0.00014	<0.00097	0.00081	<0.00097	0.00029
MW-12S	8/1/2006	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	< 0.0063	<0.0010	0.00079 J	<0.0010	<0.0010	**0.0002 J**	**0.00035**	**0.00039**	0.00023 J	**0.00024 J**	**0.00028**	<0.00020	0.00051 J	<0.0010	0.00029	<0.0010	<0.0010	<0.0010	0.00036 J

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-12S	7/24/2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0011 J	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	0.00016 J	0.00024	0.0003	0.00013 J	0.00015 J	0.00022	<0.00019	0.00038 J	<0.00097	0.00016 J	<0.00097	0.00079 J	<0.00097	0.00037 J
MW-12S	11/20/2008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0012	<0.0010	<0.0010
MW-12S	12/11/2009	<.0048	<.0048	<.0048	<.0048	<.0048	<.0048	<.0048	<.0048	<.0048	<.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00019	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-12S	12/14/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-12D	6/21/2001	NA	NA	< 1.0	NA	< 1.0	<0.010	<0.010	< 1.0	< 1.0	<0.010	<5.0	0.61	0.032	0.068	0.055	0.022	0.02	0.0071	0.023	0.045	<0.010	< 1.0	< 1.0	0.0084	0.96	13.00	0.63	< 1.0
MW-12D	8/11/2003	<0.051	1.1	0.46	0.455	0.203	<0.051	<0.051	0.864	2.5	<0.051	0.463	2.35	0.289	0.669	0.658	0.375	0.509	0.139	0.178	0.486	< 0.082	3.26	2.46	0.176	3.37	21.60	6.2	1.78
MW-12D	10/30/2003	<0.052	4.18	3.12	4.49	1.76	<0.052	<0.052	0.642	0.84	<0.052	0.305	1.01	0.157	0.218	0.183	0.097	0.0999	0.0324	0.0813	0.146	<0.041	0.921	0.919	0.0388	1.65	16.40	1.93	0.576
MW-12D	2/18/2004	<0.110	0.813	0.473	0.482	0.294	<0.110	<0.110	0.57	0.844	<0.110	0.236	1.11	0.128	0.235	0.224	0.116	0.109	0.0438	0.104	0.172	0.0104 J	1.03	0.938	0.0513	2.09	15.90	2.04	0.691
MW-12D	9/10/2004	<0.97	1.01	0.586	0.624	<0.97	<0.97	<0.97	3.74	16	<0.97	0.426	13.4	1.89	4.41	4.84	2.71	2.66	0.981	1.91	3.39	0.315	18.9	14.7	1.27	17.9	64.90	30.40	12.70
MW-12D	8/2/2006	<0.11	3.331	2.01	3.14	1.19	<0.11	<0.11	0.429	0.347	<0.11	0.0672 J	0.444	0.064 J	<0.11	0.0254	0.0132 J	0.0121 J	<0.022	0.011 J	0.0182 J	<0.022	0.132	0.265	0.006 J	0.872	9.54	0.394	0.0756 J
MW-12D	7/24/2007	<0.048	0.990	<0.048.0	0.452	0.248	<0.048	<0.048	0.527	0.553	<0.048	0.274	0.606	0.0536	0.092	0.083	0.0446	0.0464	0.0164	0.0339	0.0618	0.0047	0.362	0.466	0.0217	1.35	13.2	0.849	0.277
MW-12D	11/20/2008	<0.020	1.170	0.790	0.597	0.555	<0.020	<0.020	0.208	0.236	<0.020	0.544	0.321	<0.100	<0.100	0.0146 J	0.0073 J	0.0096 J	<0.020	<0.020	0.010 J	<0.020	0.0753 J	0.0213	<0.020	0.648	8.7	0.251	0.0462 J
MW-12D	12/17/2009	<0.096	1.530	0.723	0.601	0.335	<0.096	<0.096	0.55	0.367	<0.096	0.471	0.482	<0.019	<0.019	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.019	0.279	<0.038	0.882	11.9	0.234	<0.019
MW-12D	12/21/2010	<0.097	0.979	0.491	0.433	0.228	<0.097	<0.097	0.464	0.617	<0.097	<0.97	<0.97	<0.97	<0.97	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.97	<0.97	<0.19	1.4	14.1	1.41	<0.97
MW-13	11/13/2000	NA	NA	0.052	NA	<0.010	<0.010	<0.010	0.24	0.24	<0.010	0.13	0.3	0.014	0.081	0.073	0.032	0.036	<0.010	0.028	0.058	0.0056	0.21	0.25	0.0099	0.6	6.4	0.34	0.18
MW-13	2/1/2001	NA	NA	0.067	NA	<0.010	<0.010	<0.010	0.28	0.32	<0.010	<0.050	0.58	0.013	0.1	0.07	0.034	0.033	0.015	0.034	0.065	0.0074	0.32	0.33	0.019	0.34	4.7	0.94	0.21
MW-13	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.078	0.18	<0.010	0.013	0.32	0.0071	0.043	0.024	0.011	0.011	<0.010	0.0098	0.022	<0.010	0.13	0.2	<0.010	0.072	0.1	0.33	0.1
MW-13	12/11/2001	NA	NA	0.17	NA	<0.050	<0.050	<0.050	0.36	0.34	<0.050	0.12	0.78	<0.050	0.035	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.12	0.28	<0.050	0.44	7.5	0.42	0.076
MW-13	8/12/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0015	0.0247	0.0011	0.0019	0.0013	0.0015	0.0024	0.0011	0.00072	0.0008	0.00024	0.0185	0.00098	0.0011	<0.0010	0.00095	0.0029	0.0039
MW-13	10/31/2003	<0.021	0.0195	0.0101	<0.021	<0.021	<0.021	<0.021	0.161	0.227	<0.021	0.0277	0.466	0.0157	0.0382	0.025	0.0196	0.0193	0.0078	0.0167	0.0222	<0.0042	0.182	0.257	0.0098	0.167	2.49	0.254	0.116
MW-13	2/18/2004	<0.021	0.0114 J	<0.021	<0.021	<0.021	<0.021	<0.021	0.107	0.216	<0.021	0.0106 J	0.562	0.01 J	0.052	0.0204	0.0118	0.0125	0.0054	0.0113	0.0175	<0.0042	0.248	0.325	0.0067	0.179	1.42	0.491	0.161
MW-13	9/9/2004	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	0.273	0.242	<0.048	<0.019	0.387	0.0129 J	0.0364	0.0227	0.0235	0.0241	0.0106	0.0173	0.02	0.0037 J	0.188	0.232	0.0133	0.234	2.91	0.287	0.137
MW-13	8/1/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0025 J	0.0036 J	<0.005	<0.0010	0.0281	0.0018	0.0028	0.0024	0.0046	0.0049	0.0024	0.0028	0.0028	0.00058	0.0272	0.004	0.0032	0.00067 J	0.0032	0.0118	0.0128
MW-13	7/26/2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0019	0.0036	0.0032	< 0.0038	0.0074	< 0.0038	0.0019 J	0.0012	0.0032	0.0036	0.003	0.0014	0.0018	0.00031 J	0.0143	0.0039	0.0033	< 0.0038	0.0028	0.0089	0.011
MW-13	11/18/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	0.000062 J	0.000062 J	<0.00020	<0.00020	<0.00020	0.00037 J	<0.00098	0.000060 J	<0.00098	<0.00098	<0.00098	<0.00098
MW-13	12/15/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.03	0.0332	<0.0050	<0.010	0.109	<0.010	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.010	0.0456	<0.0020	0.0174	0.401	0.0157	<0.010
MW-13	6/22/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0307	0.0268	<0.0049	0.0825	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	0.0147	0.037	<0.00098	0.0163	0.207	0.031	0.0079
MW-14S	8/11/2003	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.146	0.184	<0.020	0.0214	0.314	0.0039	0.0198	0.009	0.0052	0.0076	0.0023	0.0023	0.0074	0.00072	0.0544	0.0178	0.0028	0.246	0.962	0.189	0.0308
MW-14S	10/31/2003	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	0.05	0.0447	<0.0054	<0.0043	0.127	0.0023	0.0055	0.0019	0.001	0.0012	0.00044	0.00074	0.0016	< 0.00087	0.0163	0.0648	0.00048	<0.0043	0.0017	0.0224	0.0094
MW-14S	2/17/2004	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.169	0.184	<0.020	<0.020	0.36	<0.020	0.0131 J	0.004	0.0025 J	0.0028 J	<0.004	<0.004	0.0039 J	<0.004	0.0255	0.184	<0.004	0.354	4.01	0.137	0.015 J
MW-14S	9/9/2004	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.178	0.176	<0.019	< 0.0096	0.265	0.0059 J	0.014	0.0045	0.0029	0.0031	0.0014 J	0.002	0.0039	<0.00109	0.0294	0.152	0.0026	0.18	1.26	0.112	0.0177
MW-14S	8/1/2006	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	0.13	0.106	<0.0053	<0.0010	0.0263	<0.0010	0.00062 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0012	0.0119	<0.00020	0.0041	0.0199	0.0052	0.00067 J
MW-14S	7/24/2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0434	0.0421	<0.0049	<0.00098	0.0668	0.00064 J	0.0022	0.00065	0.00045	0.00063	0.00024	0.00032	0.00063	0.000065 J	0.0062	0.0279	0.00024	0.0027	0.0425	0.0236	0.0048
MW-14S	11/20/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-14S	12/11/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0014	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-14S	6/23/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0317	0.0327	0.0112	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-14D	8/11/2003	<0.050	0.325	0.119	0.105	0.0702	<0.050	<0.050	0.471	0.393	<0.050	0.319	0.519	0.0373	0.0426	0.0214	0.0115	0.0151	0.0041	0.006	0.017	<0.008	0.126	0.315	0.0054	1.11	12.90	0.435	0.0705
MW-14D	10/31/2003	<0.050	0.701	0.403	0.321	0.231	<0.050	<0.050	0.501	0.317	<0.050	0.513	0.517	<0.1	<0.1	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.0265	0.273	<0.020	1.01	12.10	0.226	<0.10
MW-14D	2/17/2004	<0.052	0.911	0.459	0.467	0.292	<0.052	<0.052	0.474	0.563	<0.052	0.707	0.84	0.0706 J	0.12	0.0902	0.0453	0.0463	0.0165 J	0.0378	0.0741	<0.021	0.485	0.631	0.0187 J	1.32	13.30	1.12	0.312
MW-14D	9/9/2004	<0.048	0.879	0.493	0.403	0.307	<0.048	<0.048	0.519	0.497	<0.048	1.05	0.686	0.0622 J	0.0671 J	0.0429	0.0221	0.023	<0.019	0.0154 J	0.0292	<0.019	0.227	0.456	0.0189 J	1.36	11.50	0.626	0.138
MW-14D	8/2/2006	<0.05	0.189	0.0896	0.0652	0.575	<0.05	<0.05	0.387	0.641	<0.05	0.292	1.00	0.07	0.166	0.146	0.0747	0.0715	0.0266	0.06	0.116	0.0069 J	0.684	0.72	0.036	0.838	2.87	1.42	0.445
MW-14D	7/24/2007	<0.05	0.509	<0.05	0.225	0.176	<0.05	<0.05	0.43	0.311	<0.05	0.712	0.404	0.0347	< 0.02	0.0055	0.0024 J	0.0029 J	<0.004	<0.004	0.0041	<0.004	0.0411	0.232	0.0011 J	0.766	9.41	0.228	0.0295
MW-14D	11/20/2008	0.0065 J	0.236	0.0857	0.0771	0.0684	<0.019	<0.019	0.392	0.317	<0.019	0.183	0.471	<0.096	<0.096	0.0254	0.0113 J	0.0156 J	<0.019	0.0052 J	0.0183	<0.019	0.144	0.319	<0.019	0.773	9.55	0.434	0.0892
MW-14D	12/17/2009	<0.096	0.138	<0.096	<0.096	<0.096	<0.096	<0.096	0.291	0.312	<0.096	<0.19	0.496	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	0.314	<0.19	<0.19	<0.19	<0.19	<0.19
MW-14D	12/21/2010	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.216	0.203	<0.019	<0.19	0.277	<0.19	<0.19	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.19	<0.19	<0.039	0.404	4.26	0.21	<0.19
MW-15S	8/11/2003	<0.052	0.751	0.451	0.42	0.0858	<0.052	<0.052	0.377	0.967	<0.052	<0.210	1.39	0.13	0.35	0.33	0.184	0.292	0.0597	0.082	0.278	<0.042	1.58	1.1	0.0766	1.55	12.50	2.67	0.925
MW-15S	10/30/2003	<0.020	0.297	0.191	0.0996	0.0216	<0.020	<0.020	0.12	0.23	<0.020	<0.100	0.415	<0.100	0.0335	0.0141	<0.020	<0.020	<0.020	<0.020	0.0102	<0.020	0.0964	0.231	<0.020	0.628	6.40	0.323	0.0615
MW-15S	2/17/2004	<0.054	2.08	1.12	1.22	0.382	<0.054	<0.054	0.222	0.391	<0.054	< 0.086	0.617	0.0555 J	0.0635 J	0.0549	0.0284	0.0294	0.0092 J	0.0258	0.0463	<0.017	0.266	0.339	0.0125 J	1.21	13.10	0.665	0.171
MW-15S	9/9/2004	<0.020	0.0507	0.0096	<0.020	<0.020	<0.020	<0.020	0.103	0.243	<0.020	<0.010	0.263	0.0275	0.0399	0.0324	0.0186	0.0192	0.0064	0.0139	0.024	0.0023	0.126	0.189	0.0091	0.342	1.21	0.299	0.0903
MW-15S	8/1/2006	<0.1	0.435	0.176	0.0685 J	<0.1	<0.1	<0.1	0.153	0.318	<0.1	< 0.08	0.526	0.0436 J	0.0452 J	0.0376	0.021	0.0204	<0.016	0.018	0.0318	<0.016	0.169	0.272	0.0096 J	0.374	6.29	0.465	0.107
MW-15S	7/24/2007	Well destroyed during walk path construction in October 2006																											

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Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-15D	8/14/2003	<0.052	0.69	0.234	0.139	0.0576	<0.052	<0.052	0.288	0.198	<0.052	<0.100	0.429	<0.100	<0.100	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.0269	0.192	<0.021	0.868	11.00	0.177	<0.100
MW-15D	10/30/2003	<0.057	0.703	0.298	0.263	0.0976	<0.057	<0.057	0.4	0.615	<0.057	0.0633	0.853	0.066	0.134	0.124	0.0621	0.0676	0.0198	0.0497	0.0962	0.0053	0.587	0.683	0.025	1.6	12.50	1.32	0.376
MW-15D	2/18/2004	<0.140	0.92	0.42	0.293	0.136 J	<0.140	<0.140	0.611	1.67	<0.141	<0.110	2.26	0.141	0.497	0.505	0.252	0.274	0.0869	0.204	0.396	0.0233	2.42	2.06	0.106	2.74	16.70	4.72	1.64
MW-15D	9/9/2004	<0.19	1.67	0.66	0.712	0.282	<0.19	<0.19	4.34	25.5	<0.19	<1.9	27.1	1.85	7.44	8.4	4.39	4.41	1.46	3.29	5.67	0.529	35	27.3	2	28.9	77.70	58.6	22.7
MW-15D	8/1/2006	<0.021	0.595	0.224	0.185	0.0717	<0.021	<0.021	0.247	0.327	<0.021	<0.042	0.54	0.0245 J	0.0659	0.0596	0.03	0.0282	0.0094	0.0267	0.0423	<0.0084	0.289	0.365	0.0128	0.334	1.42	0.649	0.193
MW-15D	7/24/2007	<0.025	0.614	0.328	0.407	0.127	<0.0250	<0.0250	0.316	0.369	<0.025	<0.02	0.521	0.0234	0.0462	0.0345	0.0168	0.018	0.0061	0.013	0.0246	0.0019 J	0.172	0.338	0.0082	0.474	1.89	0.513	0.133
MW-15D	11/20/2008	<0.020	0.661	0.257	0.16	0.116	<0.020	<0.020	0.278	0.213	<0.020	<0.100	0.322	<0.100	<0.100	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.100	0.192	<0.020	0.484	6.270	0.190	<0.100
MW-15D	12/17/2009	<0.095	0.298	0.102	<0.095	<0.095	<0.095	<0.095	0.363	0.308	<0.095	<0.19	0.492	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	0.27	<0.038	0.709	8.880	0.280	<0.19
MW-15D	12/21/2010	<0.020	0.506	0.239	0.132	0.102	<0.020	<0.020	0.29	0.212	<0.020	<0.20	0.398	<0.20	<0.20	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.20	<0.20	<0.039	0.642	6.460	0.208	<0.20
MW-16S	8/11/2003	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.591	1.19	<0.020	0.0624	1.56	0.0509	0.444	0.213	0.117	0.166	0.044	0.05	0.206	0.0136	1.06	1.16	0.0566	1.28	8.31	2.31	0.596
MW-16S	10/30/2003	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.255	0.448	<0.020	0.0465	0.675	<0.04	0.0643	0.0265	0.0129	0.0128	0.0042	0.0116	0.0259	<0.008	0.147	0.401	0.0052	0.453	3.99	0.475	0.093
MW-16S	2/18/2004	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.188	0.457	<0.021	0.0098 J	0.685	0.018 J	0.112	0.0557	0.0264	0.0276	0.0088	0.022	0.0552	0.0028 J	0.289	0.47	0.0106	0.233	2.95	0.705	0.194
MW-16S	9/9/2004	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	0.442	0.992	<0.097	<0.039	1.37	0.0478	0.578	0.276	0.138	0.134	0.0478	0.0967	0.272	0.0156	1.06	1.05	0.0622	0.291	2.39	2.16	0.682
MW-16S	8/1/2006	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.236	0.403	<0.025	0.0044 J	0.654	0.0173	0.112	0.0506	0.0275	0.0277	0.0086	0.0202	0.0514	0.0028	0.249	0.403	0.012	0.251	1.79	0.589	0.161
MW-16S	7/24/2007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.183	0.301	<0.05	< 0.02	0.515	0.0113 J	0.168	0.0785	0.0427	0.0483	0.0146	0.0281	0.0835	0.0046	0.369	0.396	0.0195	0.0541	0.451	0.507	0.264
MW-16S	11/20/2008	<0.005	<0.005	0.001 J	<0.005	<0.005	<0.005	<0.005	0.0926	0.0997	<0.005	<0.010	0.268	<0.010	0.0104	0.00089 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0238	0.139	<0.020	<0.010	0.0025 J	0.0428	0.011
MW-16S	12/11/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0849	0.151	<0.0048	<0.0095	0.325	<0.0095	0.0121	<0.00109	<0.00109	<0.00109	<.0019	<0.00109	<0.00109	<0.00109	0.0203	0.177	<0.00109	<0.0095	0.217	0.071	0.0126
MW-16S	12/14/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.02	0.0366	<0.0049	<0.0039	0.136	0.0049	0.0049	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.001	<0.00078	0.0153	0.055	<0.00078	<0.0039	0.0254	<0.0039	0.0055
MW-16D	8/11/2003	< 0.023	0.103	0.048	0.0405	0.0262	< 0.023	< 0.023	0.324	0.454	0.0241	0.0871	0.607	< 0.092	0.175	0.104	0.0596	0.0839	0.0229	0.0256	0.0969	<0.018	0.499	0.495	0.0271	0.711	6.51	1.05	0.286
MW-16D	10/30/2003	<0.022	0.188	0.0797	0.0581	0.0387	<0.022	<0.022	0.399	0.292	<0.022	0.126	0.463	<0.043	0.0304	0.0098	0.0051	0.0049	<0.0086	0.0044	0.0087	<0.0086	0.0538	0.248	<0.0086	0.965	10.70	0.229	0.0327
MW-16D	2/18/2004	<0.100	0.164	0.0743 J	0.0452 J	<0.100	<0.100	<0.100	1.78	7.42	<0.100	0.149 J	8.07	0.948	2.17	2.52	1.27	1.19	0.433	0.922	2.03	0.109	10.00	8.15	0.519	9.83	42.00	23.00	7.02
MW-16D	9/9/2004	<0.97	<0.97	<0.970	<0.970	<0.97	<0.97	<0.97	2.66	12.2	<0.97	0.13 J	10.8	1.34	3.15	3.63	1.93	1.76	0.691	1.26	2.55	0.245	13.60	11.00	0.898	14.7	50.60	28.20	8.78
MW-16D	8/2/2006	<0.021	0.0729	0.0356	0.0231	0.0123 j	<0.021	<0.021	0.19	0.176	<0.021	<0.011	0.31	0.0093 J	0.0132	0.0018 J	<0.0021	0.00089 J	<0.0021	<0.0021	0.0011 J	<0.0021	0.0151	0.167	<0.0021	0.0365	0.0197	0.116	0.0093 J
MW-16D	7/24/2007	<0.1	0.0801 J	<0.1	0.0279 J	<0.1	<0.1	<0.1	0.465	0.699	<0.1	<0.05	0.839	0.0537	0.116	0.125	0.0673	0.071	0.0237	0.0516	0.0935	0.0067 J	0.529	0.627	0.0313	0.97	6.55	1.17	0.389
MW-16D	11/19/2008	<0.096	0.0839 J	0.0377 J	0.0233 J	<0.096	<0.096	<0.096	0.368	0.254	<0.096	<0.19	0.353	<0.190	<0.190	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.190	0.178 J	<0.038	0.556	7.280	0.132 J	<0.190
MW-16D	12/17/2009	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	0.355	0.307	<0.096	<0.19	0.459	<0.190	<0.190	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.190	0.222	<0.038	0.653	7.570	<0.190	<0.190
MW-16D	12/21/2010	<0.020	0.0618	0.0239	<0.020	<0.020	<0.020	<0.020	0.316	0.233	<0.020	<0.20	0.387	<0.20	<0.20	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.20	<0.20	<0.040	0.66	6.790	<0.20	<0.20
MW-17S	8/12/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0013	0.0038	0.0039	<0.004	0.0076	<0.004	0.0029	0.0114	0.0111	0.0192	0.0057	0.0051	0.0092	0.0015	0.026	0.004	0.0069	0.0018	0.0061	0.0131	0.0173
MW-17S	10/31/2003	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	0.00058	0.0008	0.0011	0.0005	0.00063	0.00055	<0.00020	0.001	<0.0010	0.00057	<0.0010	0.00036	0.00058	0.00076
MW-17S	2/18/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	0.00078	0.0011	0.0014	0.0008	0.00091	0.00086	0.00018 J	0.0012	<0.0010	0.00082	<0.0010	0.00051 J	0.00049 J	0.0011
MW-17S	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0014 J	<0.0048	0.00058 J	0.0014	<0.00096	0.00058 J	0.00093	0.00082	0.00089	0.00045	0.00065	0.00069	0.00015 J	0.0029	0.0016	0.00057	0.00094 J	0.0018	0.0048	0.002
MW-17S	8/1/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00076 J	<0.0010	<0.0010	<0.0010	0.00042	0.00063	0.00077	0.00042	0.00053	0.00037	0.000091 J	0.00059 J	<0.0010	0.00053	<0.0010	<0.0010	<0.0010	0.00051 J
MW-17S	7/26/2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	0.00068	0.00093	0.0012	0.00061	0.00076	0.00062	0.00015	0.001	<0.00095	0.00077	<0.00095	0.00029	<0.00095	0.00095
MW-17S	11/18/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-17S	12/15/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	0.00022	0.00032	0.00049	0.00021	<0.00019	0.00021	<0.00019	<0.00095	<0.00095	0.00025	<0.00095	<0.00095	<0.00095	<0.00095
MW-17S	6/22/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-17D	8/12/2003	<0.020	0.285	0.198	0.0952	0.0978	<0.020	<0.020	0.147	0.0817	<0.020	<0.04	0.131	<0.04	<0.04	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.04	0.0731	<0.008	0.259	4.80	0.0612	<0.04
MW-17D	10/31/2003	<0.024	0.382	0.252	0.168	0.116	<0.024	<0.024	0.151	0.0694	<0.024	<0.049	0.144	<0.049	<0.049	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.049	0.0706	<0.0098	0.227	4.62	0.0559	<0.049
MW-17D	2/18/2004	<0.021	0.23	0.167	0.0889	0.0891	<0.021	<0.021	0.217	0.108	<0.021	<0.021	0.203	0.014 J	0.0089 J	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	0.0063 J	0.109	<0.0042	0.262	5.68	0.0877	<0.021
MW-17D	9/9/2004	<0.020	0.286	0.151	0.0971	0.0747	<0.020	<0.020	0.233	0.141	<0.020	<0.010	0.197	0.0158	0.0094 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0092 J	0.115	<0.002	0.313	4.63	0.101	0.0052 J
MW-17D	8/1/2006	<0.025	0.153	0.0847	0.0265	0.012 J	<0.025	<0.025	0.202	0.114	<0.025	<0.01	0.193	0.0112	0.0985	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0077 J	0.107	<0.002	0.155	2.23	0.0978	0.0042 J
MW-17D	7/26/2007	<0.025	0.129	0.0729	0.0186 J	<0.025	<0.025	<0.025	0.234	0.129	<0.025	<0.01	0.179	0.0122	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0114	0.101	<0.002	0.169	2.25	0.101	0.0072
MW-17D	11/18/2008	<0.0049	0.0154	<0.0049	0.0013 J	<0.0049	<0.0049	<0.0049	0.0052	<0.0049	<0.0049	<0.00097	0.004	<0.00097	0.00073 J	0.000069 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0012	0.0031	<0.00019	<0.00097	0.0030 J	0.0065	0.00083 J
MW-17D	12/15/2009	<0.0048	0.006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0051	<0.0048	<0.0048	<0.00096	0.0026	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.002	0.0021	<0.00019	<0.00096	<0.00096	0.005	0.0016
MW-17D	6/24/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0166	0.0177	0.0086	<0.00097	0.0187	<0.00097	0.0036	0.00026	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0086	0.0138	<0.00019	0.006	0.0265	0.0343	0.0046
MW-18S	8/12/2003	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0010	<0.0010	<0.0010	0.00068	0.0033	0.0049	0.0069	0.0031	0.0021	0.0037	0.00076	0.0052	<0.0010	0.0039	<0.0010	0.00032	0.002	0.0043
MW-18S	10/31/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	0.00018	0.00025	0.00032	0.00019	0.00019	0.00023	<0.00020	0.00028	<0.0010	0.00022	<0.0010	<0.0010	<0.0010	0.00026
MW-18S	2/18/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	0.00073 J	0.0035	0.0046	0.0049	0.0034	0.0035	0.004	0.00062	0.0058	<0.0010	0.0036	<0.0010	0.00028 J	0.0021	0.0051
MW-18S	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	0.00098	0.0012	0.0013	0.00079	0.00083	0.00095	0.00019	0.0019	0.0004	0.00097	<0.00095	0.00036	0.0017	0.0015
MW-18S	8/1/2006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0010	<0.0010	<0.0010	<0.0010	0.00026	0.00036	0.0004	0.00024	0.00028	0.0003	<0.00020	0.00039 J	<0.0010	0.00032	<0.0010	<0.0010	<0.0010	0.00034 J
MW-18S	7/24/2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	0.0009	0.0013	0.0014	0.00079	0.00081	0.001	0.00019	0.0013	<0.00095	0.001	<0.00095	<0.00095	0.00050 J	0.0014
MW-18S	11/18/2008	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	0.00013 J	0.00018 J	0.00024	0.00010 J	0.000076 J	0.00014 J	<0.00019	<0.00095	<0.00095	0.00012 J	<0.00095	<0.00095	<0.00095	<0.00095

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-18S	12/15/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-18S	6/22/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-18D	8/12/2003	< 0.0074	0.012	0.0034	< 0.0074	< 0.0074	< 0.0074	< 0.0074	0.0362	**0.0409**	< 0.0074	<0.0010	0.0875	0.0019	0.0023	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.001	0.0391	<0.00020	0.0283	0.327	0.0192	0.00061
MW-18D	10/31/2003	<0.0058	0.0109	0.0028	<0.0058	<0.0058	<0.0058	<0.0058	0.0233	0.0146	<0.0058	<0.0010	0.0537	0.0031	<0.0023	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0023	0.023	<0.00020	<0.0010	0.00037	0.0142	0.0014
MW-18D	2/18/2004	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0010	0.0011	<0.0010	<0.0010	**0.00011 J**	0.00016 J	0.00016 J	0.00011 J	0.00013 J	0.00012 J	<0.00020	0.00034 J	<0.0010	<0.00020	<0.0010	0.00042 J	<0.0010	0.00032 J
MW-18D	8/1/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	0.00065 J	<0.0010	<0.0010	**0.00013 J**	**0.00034**	**0.00035**	0.00021	0.00019 J	0.00017 J	<0.00020	0.00026 J	<0.0010	0.00026	<0.0010	<0.0010	<0.0010	<0.0010
MW-18D	7/24/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0016 J	0.0063	<0.005	<0.0010	0.0167	0.00065	0.00089	**0.00039**	**0.00085**	**0.00088**	0.00056	**0.00051**	**0.00058**	0.00013 J	0.0027	0.0126	**0.00062**	<0.0010	0.0022	0.0014	0.0018
MW-18D	11/18/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-18D	12/15/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0015	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0013	<0.00097	<0.00019	<0.00097	<0.00097	0.0029	<0.00097
MW-18D	6/24/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0051	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0023	0.0026	<0.00019	<0.00096	0.0021	0.0032	0.0013
MW-19S	10/31/2003	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	**0.00062**	**0.0013**	**0.0017**	0.00094	**0.001**	**0.00082**	0.00017	0.00069	<0.0010	**0.001**	<0.0010	<0.0010	<0.0010	0.00079
MW-19S	2/18/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	0.0011	0.001	**0.0039**	**0.006**	**0.0078**	0.0043	**0.0049**	**0.0048**	**0.0011**	0.0049	<0.0010	**0.0049**	<0.0010	<0.0010	0.00087 J	0.005
MW-19S	12/15/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	**0.00094**	**0.0017**	**0.0027**	0.0013	**0.00075**	**0.0011**	**0.00027**	0.0013	<0.00098	**0.0015**	<0.00098	<0.00098	<0.00098	0.0014
MW-19S	6/22/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	0.00019	**0.00025**	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-19D	8/12/2003	< 0.0091	0.0534	0.0275	0.0143	< 0.0091	< 0.0091	< 0.0091	0.0149	**0.0208**	< 0.0091	< 0.0073	0.0279	< 0.0073	0.0075	**0.0152**	**0.0165**	**0.0265**	0.0075	**0.0068**	**0.0152**	**0.0018**	0.043	0.0255	**0.0092**	0.0073	0.136	**0.0585**	0.0279
MW-19D	10/31/2003	<0.011	0.155	0.0482	0.0175	<0.011	<0.011	<0.011	0.0377	**0.0284**	<0.011	**0.0423**	0.0735	0.0088	<0.0045	**0.0018**	**0.0013**	**0.0016**	0.00062	**0.001**	**0.0014**	< 0.00091	0.0117	0.0298	**0.00071**	0.0254	0.137	0.018	0.0073
MW-19D	2/18/2004	<0.021	0.207	0.0739	0.0338	<0.021	<0.021	<0.021	0.015 J	**0.0217**	<0.021	**0.0532**	0.111	0.0163	0.0046	**0.00056 J**	< 0.00083	< 0.00083	< 0.00083	< 0.00083	< 0.00083	< 0.00083	0.0101	0.0289	< 0.00083	0.0288	0.276	0.0137	0.006
MW-19D	9/9/2004	<0.052	0.396	0.122	0.0936	<0.052	<0.052	<0.052	**0.393**	**1.89**	<0.052	**0.119**	**2.35**	**0.268**	0.606	**0.714**	**0.378**	**0.354**	0.134	**0.304**	**0.474**	**0.0426**	**2.98**	**2.22**	**0.178**	**2.52**	**8.46**	**5.06**	**1.98**
MW-19D	8/2/2006	<0.047	0.379	0.126	0.102	0.0216 J	<0.047	<0.047	**0.127**	**0.199**	<0.047	**0.119**	0.32	0.0377 J	<0.059	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	0.0191 J	0.164	<0.012	**0.287**	**2.82**	**0.137**	<0.059
MW-19D	7/24/2007	<0.048	0.486	<0.048	0.106	0.025 J	<0.048	<0.048	**0.157**	**0.216**	<0.048	**0.118**	0.30	0.0398	<0.019	**0.0024 J**	< 0.0038	**0.0018 J**	<0.0038	< 0.0038	**0.002 J**	< 0.0038	0.0221	0.166	<0.0038	**0.167**	**3.64**	**0.143**	0.0168 J
MW-19D	11/18/2008	0.0142 J	0.156	0.0655	0.0827	0.133	<0.020	<0.020	0.0114 J	**0.0438**	<0.020	<0.015	0.0979	0.0133 J	<0.015	**0.0009 J**	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0063 J	0.0381	<0.003	**0.032**	0.366	**0.0321**	0.004 J
MW-19D	12/17/2009	<0.020	0.392	0.125	0.0757	0.0764	<0.020	<0.020	**0.164**	**0.337**	<0.020	<0.010	0.603	<0.010	<0.010	**0.0716**	**0.0366**	**0.0528**	<0.020	<0.020	**0.0525**	<0.020	0.285	0.422	<0.020	**0.81**	**4.37**	**0.772**	**0.264**
MW-19D	12/16/2010	<0.050	0.238	0.0632	<0.050	<0.050	<0.050	<0.050	**0.125**	**0.202**	<0.050	<0.020	0.534	<0.020	<0.020	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.020	0.0304	<0.0040	**0.0949**	**0.638**	**0.0352**	<0.020
MW-20S	11/13/2003	<0.0051	0.0115	0.0031	<0.0051	<0.0051	<0.0051	<0.0051	0.0285	**0.0236**	<0.0051	<0.004	0.0739	0.0024	0.0048	**0.0095**	**0.0064**	**0.0071**	0.0021	**0.0055**	**0.0073**	**0.0006**	0.0451	0.0283	**0.0026**	0.0018	0.12	**0.0249**	0.0282
MW-20S	2/19/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0012 J	<0.0051	<0.010	<0.010	0.0056 J	0.008 J	**0.0348**	**0.0317**	**0.0347**	0.0127	**0.0231**	**0.0345**	**0.0032**	0.0791	0.003 J	**0.0153**	<0.010	0.177	0.0112	0.0482
MW-20S	11/18/2008	<0.0049	<0.0021 J	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0094	0.0076	<0.0049	<0.019	0.0227	<0.019	<0.019	**0.0536**	**0.0566**	**0.0735**	0.0224	**0.0232**	**0.0479**	**0.0058**	0.09	0.0111 J	**0.029**	<0.019	0.0063 J	0.0105 J	0.0603
MW-20S	12/16/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0067	0.0022	0.0034	**0.0174**	**0.0186**	**0.024**	0.0078	**0.0083**	**0.0169**	**0.0023**	0.0203	0.004	**0.0099**	<0.00095	0.0021	0.0042	0.0208
MW-20S	12/14/2010	<0.0048	0.0059	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0062	<0.0048	<0.0048	**0.009**	**0.012**	**0.0163**	0.0059	**0.0055**	**0.0091**	**0.0013**	0.0149	<0.0048	**0.0071**	<0.0048	0.14	<0.0048	0.0096
MW-20D	11/13/2003	<0.020	0.245	0.149	0.0629	0.079	<0.020	<0.020	**0.131**	**0.0973**	<0.020	**0.0545**	0.221	<0.04	0.0109	**0.0077**	**0.0042**	**0.0048**	<0.008	<0.008	**0.0051**	<0.008	0.0557	0.107	<0.008	**0.303**	**4.37**	**0.106**	0.0328
MW-20D	2/18/2004	<0.100	0.282	0.112	0.0593 J	.0441 J	<0.100	<0.100	**1.17**	**4.81**	<0.100	**0.107 J**	**5.92**	**0.598**	1.77	**1.94**	**0.982**	**0.965**	0.351	**0.728**	**1.52**	**0.0935**	**7.87**	**5.52**	**0.423**	**7.26**	**31.20**	**16.70**	**5.53**
MW-20D	9/10/2004	<0.100	0.212	0.114	<0.10	<0.10	<0.10	<0.10	**0.342**	**0.624**	<0.100	<0.082	0.861	**0.0853**	0.142	**0.13**	**0.0681**	**0.0646**	0.022	**0.056**	**0.0883**	**0.0104**	**0.555**	0.64	**0.034**	**1.49**	**9.63**	**1.10**	0.355
MW-20D	8/2/2006	< 0.08	0.217	0.0864	0.0394 J	< 0.08	< 0.08	< 0.08	**0.339**	**0.543**	< 0.08	<0.10	0.762	<0.10	0.102	**0.089**	**0.0485**	**0.0462**	0.0152 J	**0.0407**	**0.0654**	**< 0.02**	**0.406**	0.494	**0.0219**	**0.978**	**6.59**	**0.916**	0.271
MW-20D	7/26/2007	< 0.095	0.11	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	**0.428**	**0.853**	< 0.095	**0.0116 J**	1.21	0.0589	0.221	**0.219**	**0.139**	**0.154**	0.0473	**0.0929**	**0.183**	**0.0131**	**1.05**	0.956	**0.064**	**1.73**	**10.9**	**2.13**	0.752
MW-20D	11/18/2008	<0.0049	0.0072	0.0016 J	0.0016 J	<0.0049	<0.0049	<0.0049	0.0069	0.0062	<0.0049	<0.0039	0.0091	<0.0039	<0.0039	**0.00039 J**	**0.0003 J**	**0.0004 J**	<0.00078	<0.00078	<0.00078	<0.00078	0.0019 J	0.005	<0.00078	0.0109	0.1	0.0064	0.0015 J
MW-20D	12/17/2009	<0.00109	0.162	0.0414	0.0203	<0.00109	<0.00109	<0.00109	**0.231**	**0.307**	<0.00109	<0.077	0.476	<0.077	<0.077	**0.0302**	<0.015	**0.0207**	<0.015	<0.015	**0.0199**	<0.015	0.133	0.29	<0.015	**0.515**	**5.65**	**0.384**	**0.104**
MW-20D	12/21/2010	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	**0.19**	**0.246**	<0.049	<0.098	0.399	<0.098	<0.098	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.098	0.211	<0.020	**0.452**	**3.34**	**0.241**	<0.098
MW-21S	11/13/2003	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	0.003	0.0033	<0.0010	0.0091	0.00054	0.00071	**0.00089**	**0.0011**	**0.0012**	0.00044	**0.00092**	**0.0008**	<0.00020	0.0029	0.0035	**0.00052**	<0.0010	0.00043	0.00062	0.0015
MW-21S	2/18/2004	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.0014 J	<0.0054	<0.0010	0.0101	<0.0010	<0.0010	<0.00020	0.00016 J	0.00016 J	<0.00020	0.00012 J	0.00011 J	<0.00020	0.00058 J	0.0031	<0.00020	<0.0010	<0.0010	<0.0010	0.00030 J
MW-21S	9/10/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.006	<0.0010	0.008	<0.0010	<0.0010	<0.0010	**0.0014**	**0.0014**	0.00069	**0.0009**	**0.00099**	0.00022	0.0041	0.00059	**0.00086**	0.0004	0.0028	0.00088	0.0024
MW-21S	8/2/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	0.000055 J	<0.00020	0.00007 J	<0.00020	<0.00020	<0.00020	<0.00020	0.00051 J	<0.0010	0.000067 J	<0.0010	<0.0010	<0.0010	<0.0010
MW-21S	7/26/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.00099	0.0044	< 0.00099	< 0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0033	< 0.00099	<0.00020	< 0.00099	0.0003	< 0.00099	0.0016
MW-21S	11/18/2008	<0.076	0.0209 J	<0.076	<0.076	<0.076	<0.076	<0.076	**0.225**	**0.213**	<0.076	<0.120	0.36	<0.120	<0.120	**0.0092**	<0.024	**0.0063**	<0.024	<0.024	<0.024	<0.024	0.0485 J	0.185	<0.024	**0.448**	**3.580**	**0.211**	<0.120
MW-21S	12/16/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.013	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0023	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-21S	12/14/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-21D	11/13/2003	<0.022	0.0116	<0.022	<0.022	<0.022	<0.022	<0.022	**0.271**	**0.251**	<0.022	<0.043	0.445	<0.043	0.0147	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	0.0206	0.227	<0.0086	**0.74**	**7.35**	**0.193**	0.0121
MW-21D	2/18/2004	<0.021	0.0263	0.0105 J	<0.021	<0.021	<0.021	<0.021	**0.312**	**0.333**	<0.021	<0.042	0.551	<0.042	0.0241 J	**0.0055 J**	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	0.0517	0.292	<0.0084	**0.893**	**8.46**	**0.301**	0.0301 J
MW-21D	8/2/2006	<0.04	0.0212 J	<0.04	<0.04	<0.04	<0.04	<0.04	**0.194**	**0.294**	<0.04	<0.05	0.469	<0.05	0.0461 J	**0.047**	**0.0253**	**0.0243**	0.0082 J	**0.022**	**0.0363**	<0.01	0.224	0.301	**0.0115**	**0.395**	**2.8**	**0.465**	0.146
MW-21D	7/26/2007	<0.049	0.0232 J	<0.049	<0.049	<0.049	<0.049	<0.049	**0.251**	**0.359**	<0.049	<0.097	0.463	<0.097	<0.097	**0.0205**	**0.0099 J**	**0.0101 J**	<0.019	<0.019	**0.0158 J**	<0.019	0.111	0.281	**0.0052 J**	**0.539**	**5.82**	**0.361**	0.0764 J
MW-21D	11/18/2008	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	**0.273**	**0.313**	<0.095	<0.190	0.452	<0.190	<0.190	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.190	0.226	<0.038	**0.556**	**5.33**	**0.249**	<0.190
MW-21D	12/17/2009	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**0.186**	**0.263**	<0.020	<0.080	0.441	<0.080	<0.080	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.080	0.225	<0.016	**0.275**	**3.46**	**0.235**	<0.080

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-21D	12/21/2010	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.177	0.192	<0.019	<0.096	0.416	<0.096	<0.096	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.096	0.22	<0.019	0.397	3.84	0.185	<0.096
MW-22D	11/13/2003	<0.020	0.089	0.0487	0.0908	0.0146	<0.020	<0.020	0.0906	0.159	0.0101	0.0771	0.241	0.026	0.0357	0.0326	0.0161	0.0191	0.0049	0.0129	0.0253	<0.004	0.171	0.201	0.0062	0.268	1.85	0.399	0.112
MW-22D	2/18/2004	<0.011	0.0478	0.029	0.055	0.0091 J	<0.011	<0.011	0.0355	0.0367	<0.011	0.0284	0.0658	0.0079 J	0.0061 J	0.0022	<0.0021	<0.0021	<0.0021	<0.0021	0.0017 J	<0.0021	0.0181	0.0422	<0.0021	0.0938	1.02	0.061	0.011
MW-22D	9/10/2004	<.049	0.0478	0.0259	0.0476	<0.049	<0.049	<0.049	0.0792	0.147	<0.049	0.0323	0.174	0.0217	0.0357	0.0368	0.0199	0.0205	0.0066	0.0142	0.0257	0.0023	0.161	0.158	0.0088	0.254	1.57	0.298	0.105
MW-22D	8/2/2006	<0.049	0.918	0.433	0.805	0.116	<0.049	<0.049	0.310	0.275	<0.049	0.324	0.374	0.0414 j	0.0344 J	0.0152	0.0068 J	0.0069 J	<0.0098	0.0059 J	0.0105	<0.0098	0.0902	0.206	0.003 J	0.567	5.34	0.304	0.0563
MW-22D	7/26/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0278	0.0622	0.0024 J	< 0.02	0.0767	< 0.02	0.0135 J	0.0112	0.0065	0.0074	0.0027 J	0.0055	0.0091	<0.004	0.052	0.0645	0.0038 J	0.0686	0.549	0.129	0.0389
MW-22D	11/18/2008	<0.019	0.152 J	0.0062 J	0.0092 J	<0.019	<0.019	<0.019	0.0288	0.0656	<0.019	<0.024	0.0891	<0.024	0.0179 J	0.0213	0.0111	0.0156	0.0034 J	0.005	0.0159	<0.0048	0.0934	0.0737	0.0042 J	0.0774	0.787	0.184	0.0687
MW-22D	12/17/2009	<0.019	0.0284	<0.019	<0.019	<0.019	<0.019	<0.019	0.0489	0.264	<0.019	<0.024	0.335	0.0283	0.0626	0.0622	0.0312	0.0414	0.0112	0.0152	0.0402	<0.0048	0.242	0.292	0.0139	0.136	1.13	0.609	0.249
MW-22D	12/21/2010	<0.048	0.0149	0.0071	0.0084	<0.048	<0.048	<0.048	0.028	0.0608	<0.048	<0.19	1.14	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	0.802	<0.038	0.653	5.49	1.16	<0.19
MW-23D	11/13/2003	<0.021	1.03	0.331	0.407	0.105	<0.021	<0.021	0.3	0.186	0.0366	0.568	0.396	<0.100	<0.100	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.0274	0.191	<0.021	0.645	9.27	0.154	<0.100
MW-23D	2/18/2004	<0.050	1.13	0.422	0.527	0.134	<0.050	<0.050	0.321	0.23	0.0956	0.491	0.416	0.0512	0.034 J	0.0162	0.0077 J	0.0079 J	<0.008	0.007 J	0.0119	<0.008	0.0981	0.237	<0.008	0.71	7.78	0.31	0.062
MW-23D	9/10/2004	<0.048	1.17	0.436	0.563	0.15	<0.048	<0.048	0.31	0.231	0.183	0.495	0.375	0.0449	0.0335	0.0208	0.0111	0.0125	0.0076	0.0074	0.0143	<0.0076	0.106	0.224	0.0084	0.663	5.53	0.382	0.0637
MW-23D	8/2/2006	0.022	0.762	0.279	0.316	0.129	<0.021	<0.021	0.169	0.113	0.0184 J	0.105	0.231	<0.053	<0.053	0.0034 J	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	0.0225 J	0.109	<0.011	0.132	1.28	0.0939	0.0147 J
MW-23D	7/26/2007	0.0194 J	0.622	0.19	0.175	0.0703	<0.025	<0.025	0.238	0.132	0.0279	0.0659	0.224	0.0207 J	<0.04	0.0037 J	< 0.0079	< 0.0079	< 0.0079	< 0.0079	< 0.0079	< 0.0079	0.0251 J	0.114	< 0.0079	0.178	1.52	0.0973	0.0176 J
MW-23D	11/18/2008	<0.020	0.0973	0.027	0.0136 J	0.007 J	<0.020	<0.020	<0.020	0.0211	<0.020	0.0748	0.0544	0.0031 J	<0.0038	0.00031 J	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	0.0032 J	0.026	<0.00076	<0.0038	0.0015 J	0.0175	0.0021 J
MW-23D	12/16/2009	0.0061	0.0666	0.013	0.0149	<0.0048	<0.0048	<0.0048	0.0782	0.073	<0.0048	0.0533	0.111	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	0.0533	<0.0038	0.139	1.26	0.0429	<0.0038
MW-23D	12/17/2010	<0.0096	0.0256	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	0.016	<0.0096	<0.0096	0.0096	0.0382	<0.0038	0.0038	0.0118	0.0077	0.0104	0.0028	0.004	0.0097	<0.00077	0.0319	0.0077	0.0037	<0.0038	0.0082	0.022	0.0305
MW-24A	11/17/2008	Not Sampled do the presence of Free-product																												
MW-24A	3/3/2009	<0.057	1.1	0.418	0.678	0.104	<0.057	<0.057	0.395	0.458	<0.057	0.167	0.705	0.0896 J	0.0877 J	0.0761	0.0393	0.0521	0.0101 J	0.02 J	0.0558	< 0.023	0.357	0.494	0.0150 J	1.31	10.6	0.863	0.241
MW-24A	12/17/2009	<0.12	1.3	0.478	0.757	<0.12	<0.12	<0.12	0.408	0.43	<0.12	<0.19	0.654	<0.19	<0.19	0.0703	<0.038	0.0461	<0.038	<0.038	0.0486	<0.038	0.293	0.459	<0.038	0.977	10.0	0.8	0.236
MW-24A	12/21/2010	<0.098	1.2	0.439	0.654	<0.098	<0.098	<0.098	0.442	0.565	<0.098	<0.49	0.772	<0.49	<0.49	0.141	<0.098	<0.098	<0.098	<0.098	0.105	<0.098	0.622	0.611	<0.098	1.22	11.5	1.4	<0.49
MW-24A	3/11/2011	<0.095	1.4	0.534	0.725	<0.095	<0.095	<0.095	0.398	0.439	<0.095	0.172	0.584	0.0651	0.105	0.0807	0.0408	0.056	0.0129	0.0208	0.0617	<0.0095	0.364	0.413	0.0173	1.02	11.5	0.858	0.23
MW-24A	6/24/2011	<0.097	1.03	0.283	0.391	<0.097	<0.097	<0.097	0.444	0.518	<0.097	<0.97	<0.97	<0.97	<0.97	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.97	<0.97	<0.19	1.31	15.5	1.32	<0.97
MW-25A	11/18/2008	<0.0049	0.0086	0.0066	0.0028 J	0.022 J	<0.0049	<0.0049	0.0468	0.051	<0.0049	0.0034 J	0.142	<0.0098	<0.0098	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0113	0.0682	<0.002	0.0203	0.265	0.0582	0.0069 J
MW-25A	12/15/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0134	0.0296	<0.0049	<0.0049	0.151	<0.0049	<0.0049	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	0.0075	0.0521	<0.00098	<0.0049	0.016	0.0225	0.0053
MW-25A	12/17/2010	<0.0048	0.102	0.0633	<0.0048	<0.0048	<0.0048	<0.0048	0.0104	0.0275	<0.0048	<0.00096	0.0911	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	0.0289	<0.00019	<0.00096	0.345	0.0175	<0.00096
MW-25A	3/7/2011	<0.024	0.22	0.122	0.0424	<0.024	<0.024	<0.024	0.049	0.0784	<0.024	<0.019	0.203	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0712	<0.0038	0.0472	1.56	0.0516	<0.019
MW-25A	6/23/2011	<0.049	0.242	0.118	<0.049	<0.049	<0.049	<0.049	0.0575	0.0705	<0.049	<0.039	0.18	<0.039	<0.039	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.039	0.0662	<0.0078	0.0395	1.14	0.0496	<0.039
MW-26A	11/18/2008	<0.019	0.0058 J	<0.019	<0.019	<0.019	<0.019	<0.019	0.0081 J	0.0277	<0.019	0.0518	0.048	<0.015	<0.015	0.0037	0.0015 J	0.0022 J	<0.003	<0.003	0.0023 J	<0.003	0.0203	0.0361	<0.003	0.0445	0.321	0.0586	0.0185
MW-26A	12/16/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0237	0.0092	<0.00095	<0.00095	0.00029	0.00029	0.00042	<0.00019	<0.00019	0.00024	<0.00019	0.0014	0.0046	<0.00019	0.003	0.019	0.0022	<0.00095
MW-26A	12/16/2010	<0.0050	0.0089	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0455	0.0084	<0.0020	<0.0020	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	0.0025	0.0025	<0.00040	<0.0020	0.002	<0.0020	<0.0020
MW-26A	3/7/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0449	0.0035	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0013	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-26A	6/24/2011	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.062	0.0039	<0.0038	<0.0038	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.0038	<0.0038	<0.00077	<0.0038	<0.0038	<0.00038	<0.00038
MW-27A	11/17/2008	the presence of Free-product																												
MW-27A	3/3/2009	<0.056	0.437	0.136	0.198	0.0233 J	<0.056	<0.056	0.389	0.839	<0.056	0.0745 J	1.04	0.107 J	0.221	0.213	0.114	0.159	0.0316	0.052	0.161	0.0099 J	0.943	0.864	0.0458	1.59	10.1	1.91	0.646
MW-27A	12/17/2009	<0.096	0.319	<0.096	<0.096	<0.096	<0.096	<0.096	0.723	2.32	<0.096	<0.038	4.11	<0.038	0.057	1.11	0.545	0.746	0.182	0.26	0.737	<0.077	4.03	3.85	0.237	4.48	23.2	9.13	4.02
MW-27A	4/15/2010	<0.038	0.239	0.0686	0.0612	<0.038	<0.038	<0.038	0.151	0.546	<0.038	<0.38	0.756	<0.38	<0.38	0.103	<0.076	<0.076	<0.076	<0.076	0.0783	<0.076	0.523	0.576	<0.076	1.21	12.3	1.22	<0.38
MW-28A	2/12/2009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0031	<0.005	0.0036	<0.0010	0.0051	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0012	<0.00020	0.0026	0.0196	0.00082	<0.0010
MW-28A	8/5/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.00099	<0.00096	<0.00096	0.000055 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	0.00096	0.0057	<0.00096	<0.00096
MW-28A	12/16/2009	No Sample Collected																												
MW-28A	6/16/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-28A	9/21/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0046	<0.00095	<0.00095
MW-28A	3/8/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0035	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0034	<0.00095	<0.00095
MW-28A	6/22/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-28B	2/12/2009	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.0409	0.0066	<0.020	<0.0039	0.059	<0.0039	<0.0039	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.0039	0.0156	<0.00078	0.0811	0.4300	0.0059	<0.0039
MW-28B	8/5/2009	<0.0048	0.009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0753	0.0151	<0.0048	<0.019	0.102	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0315	<0.0038	0.137	0.9360	0.0122 J	<0.019
MW-28B	12/16/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0561	0.0095	<0.0049	<0.0039	0.102	<0.0039	<0.0039	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.0039	0.0303	<0.00078	0.113	0.1710	0.0124	<0.0039
MW-28B	6/16/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0326	<0.0048	<0.0048	<0.00109	0.0512	<0.00109	<0.00109	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00109	0.0144	<0.00038	0.0254	0.0099	0.0076	<0.00109

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-28B	9/21/2010	<0.0048	0.0135	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0699**	**0.0193**	<0.0048	<0.0076	0.105	<0.0076	<0.0076	<0.0076	<0.0076	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0076	0.0340	<0.0010	**0.151**	**1.34**	0.0142	<0.0076
MW-28B	12/15/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	**0.0715**	**0.0162**	<0.0049	<0.019	0.108	<0.019	<0.019	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.019	0.0332	<0.0039	**0.139**	0.49	<0.019	<0.019
MW-28B	3/8/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0434**	<0.0048	<0.0048	<0.0038	0.0803	<0.0038	<0.0038	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.0038	0.0213	<0.00076	**0.0591**	0.01	0.0094	<0.0038
MW-28B	6/22/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0313	<0.0050	<0.0050	<0.0020	0.0516	<0.0020	<0.0020	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.0020	0.0144	<0.00040	0.0147	0.01	0.0069	<0.0020
MW-28C	2/12/2009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-28C	8/5/2009	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-28C	12/16/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	0.0027	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	0.0017	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-28C	6/16/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-28C	9/21/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0015	<0.00097	<0.00097
MW-28C	12/15/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-28C	3/8/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-28C	6/22/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0022	<0.00097	<0.00097
MW-29A	2/12/2009	<0.0049	0.0046	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0182	**0.0306**	**0.0085**	<0.00098	0.06	0.0022	0.0085	**0.0018**	**0.00088**	**0.0015**	0.00042	**0.00048**	**0.002**	0.00013	0.0174	0.0393	**0.00048**	0.0011	0.0016	**0.0547**	0.0107
MW-29A	8/5/2009	<0.0049	0.0043 J	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0096	0.0063	<0.0049	<0.00098	0.0199	0.00054 J	0.0022	**0.00028**	0.000068 J	0.00010 J	<0.00020	<0.00020	**0.00024**	<0.00020	0.0049	0.0112	<0.00020	<0.00098	<0.00098	0.0081	0.003
MW-29A	12/15/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0085	0.0089	<0.0050	<0.0020	0.0193	<0.0020	0.0031	**0.001**	<0.0040	**0.00051**	<0.0040	<0.0040	**0.00093**	<0.0040	0.0078	0.013	<0.0040	0.008	0.0514	0.0131	0.0069
MW-29A	6/17/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.005	<0.0050	<0.0050	<0.0010	0.0078	<0.0010	0.0012	**0.0002**	<0.00020	<0.00020	<0.00020	<0.00020	**0.00023**	<0.00020	0.003	0.0053	<0.00020	<0.0010	0.0029	0.0032	0.0025
MW-29A	9/21/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0055	<0.0049	<0.0049	<0.00097	0.0074	<0.00097	0.0013	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0026	0.0052	<0.00019	0.0041	0.027	0.0048	0.0017
MW-29A	3/11/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0052	<0.0048	<0.0048	<0.00095	0.0072	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0011	0.0045	<0.00019	0.0035	0.0273	0.0035	<0.00095
MW-29A	6/24/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-29B	3/3/2009	<0.11	**1.63**	0.153	0.0817 J	0.0815 J	<0.11	<0.11	**0.415**	**0.51**	<0.11	**0.201 J**	0.823	<0.22	0.123 J	**0.075**	**0.0383 J**	**0.0541**	<0.044	**0.0187 J**	**0.0557**	<0.044	**0.386**	0.581	**0.0125 J**	**1.71**	**14**	**1.01**	0.248
MW-29B	8/5/2009	<0.099	**0.494**	0.0603 J	0.0462 J	0.0355 J	<0.099	<0.099	**0.411**	**0.432**	<0.099	**0.505**	0.653	<0.40	<0.40	**0.0646 J**	**0.0313 J**	**0.0430 J**	<0.079	<0.079	**0.0480 J**	<0.079	**0.312 J**	0.453	<0.079	**1.02**	**11.6**	**0.763**	0.206
MW-29B	12/17/2009	<0.048	**0.339**	0.0625	<0.048	<0.048	<0.048	<0.048	**0.343**	**0.332**	<0.048	**0.623**	0.503	<0.019	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	0.312	<0.038	**0.806**	**8.6**	**0.444**	<0.019
MW-29B	6/17/2010	<0.098	**0.196**	<0.098	<0.098	<0.098	<0.098	<0.098	**0.321**	**0.413**	<0.098	**0.376**	0.662	<0.20	<0.20	**0.0535**	<0.039	<0.039	<0.039	<0.039	**0.0411**	<0.039	**0.271**	0.441	<0.039	**1.11**	**11.2**	**0.728**	0.2
MW-29B	9/21/2010	<0.050	**0.129**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.322**	**0.429**	<0.050	**0.198**	0.602	<0.10	0.112	**0.0934**	**0.0461**	**0.0663**	<0.020	**0.0200**	**0.0675**	<0.020	**0.439**	0.464	**0.0204**	**0.909**	**9.47**	**0.965**	0.281
MW-29B	12/21/2010	<0.040	**0.183**	<0.040	<0.040	<0.040	<0.040	<0.040	**0.263**	**0.31**	<0.040	**0.21**	0.337	<0.20	<0.20	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.20	0.224	<0.040	**0.572**	**5.21**	**0.382**	<0.20
MW-29B	3/11/2011	<0.096	**0.125**	<0.096	<0.096	<0.096	<0.096	<0.096	**0.286**	**0.316**	<0.096	**0.143**	0.311	<0.038	0.0458	**0.0142**	<0.0077	0.009	<0.0077	<0.0077	0.0102	<0.0077	0.0779	0.194	<0.0077	**0.522**	**7.58**	**0.273**	<0.038
MW-29B	6/24/2011	<0.20	**0.325**	<0.20	<0.20	<0.20	<0.20	<0.20	**0.315**	**0.419**	<0.98	<0.98	<0.98	<0.98	<0.98	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.98	<0.98	<0.20	<0.98	**12.50**	<0.98	<0.98
MW-30A	11/4/2009	0.0565 J	**0.824**	<0.10	0.376	0.0242 J	<0.10	<0.10	**0.222**	**0.127**	<0.10	<0.1	0.267	<0.10	<0.10	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.10	0.0987 J	<0.020	**0.492**	**9.28**	**0.0465 J**	<0.10
MW-30A	12/16/2009	<0.10	0.628	0.119	0.279	<0.10	<0.10	<0.10	**0.167**	<0.10	<0.10	<0.10	0.204	<0.10	<0.10	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.10	<0.10	<0.020	**0.334**	**5.60**	<0.10	<0.10
MW-30A	6/16/2010	<0.020	0.407	0.145	0.163	<0.020	<0.020	<0.020	**0.0726**	**0.0298**	<0.020	<0.039	0.0751	<0.039	<0.039	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.039	<0.039	<0.039	**0.0756**	1.12	<0.039	<0.039
MW-30A	9/23/2010	<0.049	**0.742**	0.191	0.188	<0.049	<0.049	<0.049	**0.211**	**0.0975**	<0.049	<0.49	<0.49	<0.49	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.49	<0.49	<0.098	<0.49	**8.14**	<0.49	<0.49
MW-30A	12/16/2010	<0.19	0.715	<0.19	<0.19	<0.19	<0.19	<0.19	**0.238**	<0.19	<0.19	<0.38	0.395	<0.38	<0.38	<0.077	<0.077	<0.077	<0.077	<0.077	<0.077	<0.077	<0.38	<0.38	<0.077	**0.61**	**8.61**	<0.38	<0.38
MW-30A	3/8/2011	<0.095	0.522	0.118	<0.095	<0.095	<0.095	<0.095	**0.175**	<0.095	<0.095	<0.095	0.217	<0.095	<0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.095	<0.095	<0.019	**0.369**	**3.56**	<0.095	<0.095
MW-30A	6/24/2011	<0.048	0.527	0.122	0.0733	<0.048	<0.048	<0.048	**0.164**	**0.0898**	<0.048	<0.096	0.194	<0.096	<0.096	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.096	<0.096	<0.019	**0.291**	**7.5**	<0.096	<0.096
MW-30B	11/4/2009	<0.0053	<0.0053	<0.0053	<0.0053	0.0034 J	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	0.0013	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.00055 J	<0.00020	0.0014	0.0171	0.00038 J	<0.0010
MW-30B	12/16/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040	<0.0040	<0.0040	<0.0040	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.0040	<0.0040	<0.00080	<0.0040	<0.0040	<0.0040	<0.0040
MW-30B	6/16/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.00099	<0.00098	<0.00098	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.00020	<0.00098	<0.00098	<0.020	0.0012	0.0128	<0.00098	<0.00098
MW-30B	9/23/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	0.0012	0.0157	<0.0010	<0.0010
MW-30B	12/16/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	0.0011	0.0107	<0.00097	<0.00097
MW-30B	3/8/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-30B	6/24/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0049	<0.00096	<0.00096
MW-31A	11/4/2009	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00084 J	<0.0010	<0.0010
MW-31A	12/15/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-31A	6/18/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-31A	9/21/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31A	12/17/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0026	<0.00096	<0.00096
MW-31A	3/8/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-31A	6/24/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-31B	11/4/2009	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00073 J	<0.0010	<0.0010
MW-31B	12/15/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-31B	6/18/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-31B	9/21/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-31B	3/8/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-31B	6/24/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-31C	11/4/2009	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	*<0.00020*	*<0.00020*	*<0.00020*	*<0.00020*	<0.0010	<0.0010	<0.00020	<0.0010	0.00038 J	<0.0010	<0.0010
MW-31C	12/15/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	*<0.00109*	<0.00109	<0.00109	<0.00109	*<0.00038*	*<0.00038*	*<0.00038*	*<0.00038*	*<0.00038*	*<0.00038*	*<0.00038*	<0.00109	<0.00109	<0.00038	<0.00109	<0.00109	<0.00109	<0.00109
MW-31C	6/18/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040	<0.0040	<0.0040	<0.0040	*<0.00080*	*<0.00080*	*<0.00080*	*<0.00080*	*<0.00080*	*<0.00080*	*<0.00080*	<0.0040	<0.0040	<0.00080	<0.0040	<0.0040	<0.0040	<0.0040
MW-31C	9/21/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0038	<0.0038	<0.0038	<0.0038	*<0.00076*	*<0.00076*	*<0.00076*	*<0.00076*	*<0.00076*	*<0.00076*	*<0.00076*	<0.0038	<0.0038	*<0.00076*	<0.0038	<0.0038	<0.0038	<0.0038
MW-31C	12/17/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31C	3/8/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-31C	6/24/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-32A	11/4/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00051 J	<0.0010	<0.0010
MW-32A	12/16/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-32A	6/16/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	*<0.0010*	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-32A	9/21/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0106	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	0.0011	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-32A	12/15/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.002	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-32A	3/7/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-32A	6/22/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33A	11/23/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33A	12/17/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33A	3/14/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33A	6/15/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33A	9/20/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33A	12/13/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33A	12/13/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33A	3/7/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33A	6/21/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33B	11/23/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0078**	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33B	12/17/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33B	3/14/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33B	6/15/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33B	9/20/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33B	12/13/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33B	12/13/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33B	3/7/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
MW-33B	6/21/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33C	11/23/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33C	12/17/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33C	3/14/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-33C	6/15/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-33C	9/20/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-33C	12/13/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-33C	12/13/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-33C	3/7/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-33C	6/21/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097
MW-34A	11/23/2009	<0.020	<0.020	<0.020	<0.020	<0.020	*<0.020*	0.0404	<0.020	*<0.020*	*<0.020*	*<0.010*	0.035	<0.010	<0.010	*<0.0020*	*<0.0020*	*<0.0020*	<0.0020	*<0.0020*	*<0.0020*	*<0.0020*	<0.010	0.0151	<0.0020	**0.0691**	**1.29**	<0.010	<0.010
MW-34A	12/16/2009	<0.0050	0.0369	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0523**	**0.0285**	<0.0050	*<0.040*	0.0591	<0.040	<0.040	*<0.0080*	*<0.0080*	*<0.0080*	<0.0080	*<0.0080*	*<0.0080*	*<0.0080*	<0.040	<0.040	*<0.0080*	**0.113**	**1.92**	*<0.040*	<0.040
MW-34A	6/16/2010	<0.0050	0.061	0.0058	<0.0050	<0.0050	<0.0050	<0.0050	**0.0441**	**0.0299**	<0.0050	*<0.050*	0.0544	<0.050	<0.050	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.050	<0.050	*<0.010*	**0.106**	**1.53**	*<0.050*	<0.050
MW-34A	9/23/2010	<0.0098	0.13	0.0176	<0.0098	<0.0098	<0.0098	<0.0098	**0.0548**	**0.0328**	*<0.0098*	*<0.20*	<0.20	<0.20	<0.20	*<0.039*	*<0.039*	*<0.039*	<0.039	*<0.039*	*<0.039*	*<0.039*	<0.20	<0.20	*<0.039*	<0.20	**1.89**	*<0.20*	<0.20
MW-34A	12/16/2010	<0.020	0.116	<0.020	<0.020	<0.020	*<0.020*	0.0404	**0.0562**	**0.0323**	*<0.020*	*<0.039*	0.0616	*<0.039*	<0.039	*<0.0078*	*<0.0078*	*<0.0078*	<0.0078	*<0.0078*	*<0.0078*	*<0.0078*	<0.039	<0.039	*<0.0078*	**0.101**	**1.3**	*<0.039*	<0.039
MW-34A	3/7/2011	<0.038	0.0802	<0.038	<0.038	<0.038	*<0.038*	<0.038	**0.0553**	*<0.038*	*<0.038*	*<0.0038*	0.0626	<0.0038	<0.0038	*<0.00076*	*<0.00076*	*<0.00076*	<0.00076	*<0.00076*	*<0.00076*	*<0.00076*	<0.0038	0.0271	*<0.00076*	**0.117**	<0.0038	0.0192	<0.0038

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-34A	6/23/2011	<0.0048	0.986	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0558**	**0.0356**	<0.0048	*<0.019*	0.0615	<0.019	<0.019	*<0.0038*	*<0.0038*	*<0.0038*	<0.0038	*<0.0038*	*<0.0038*	*<0.0038*	<0.019	0.0266	*<0.0038*	**0.0826**	**2.03**	0.0196	<0.019
MW-35A	2/24/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35A	6/18/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
MW-35A	9/22/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	*<0.0010*	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.006	<0.0010	<0.0010
MW-35A	12/22/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35A	3/10/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-35A	6/23/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.0020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-35B	2/25/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35B	6/18/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-35B	9/22/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0024	<0.00098	<0.00098
MW-35B	12/22/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35B	3/10/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-35B	6/23/2011	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0096	<0.00097	<0.00097
MW-35C	2/25/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-35C	6/18/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-35C	9/22/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0023	<0.00098	<0.00098
MW-35C	12/22/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-35C	3/10/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.0023	<0.00099	<0.00099
MW-35C	6/23/2011	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0096	<0.00097	<0.00097
MW-36A	2/25/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0026	<0.00095	<0.00095
MW-36A	6/18/2010	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0013	<0.0010	<0.0010
MW-36A	9/22/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0047	<0.00097	<0.00097
MW-36A	12/20/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0026	<0.00098	<0.00098
MW-36A	3/10/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0013**	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-36A	6/23/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.0228**	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-36B	2/25/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-36B	6/18/2010	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	*<0.0010*	0.0017	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0013	*<0.0010*	<0.0010	<0.0010	0.0011	<0.0010
MW-36B	9/22/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	**0.0461**	**0.12**	<0.0049	*<0.019*	0.167	<0.019	0.036	**0.0352**	**0.0182**	**0.0263**	0.0064	**0.0083**	**0.0263**	*<0.039*	0.167	0.148	**0.0077**	**0.212**	**1.35**	**0.352**	0.105
MW-36B	12/20/2010	<0.020	<0.020	<0.020	<0.020	<0.020	*<0.020*	<0.020	**0.224**	**0.573**	*<0.020*	*<0.20*	0.941	*<0.20*	0.219	**0.234**	**0.116**	**0.166**	0.0437	**0.0544**	**0.179**	*<0.039*	**1.02**	0.81	**0.0489**	**1.21**	**6.5**	**2.09**	0.723
MW-36B	3/10/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.085**	**0.141**	<0.0048	**0.0264**	0.179	0.0116	0.0245	**0.0168**	**0.0083**	**0.0114**	0.0031	**0.0041**	**0.0123**	*<0.0010*	**0.0815**	0.12	**0.0036**	**0.209**	**1.3**	**0.22**	0.515
MW-36B	6/24/2011	<0.098	<0.098	<0.098	<0.098	<0.098	*<0.098*	<0.098	**0.332**	**0.831**	*<0.098*	*<0.098*	1.45	*<0.98*	<0.98	**0.337**	*<0.20*	*<0.20*	<0.20	*<0.20*	**0.272**	*<0.20*	**1.6**	**1.26**	*<0.20*	**1.72**	**11.5**	**3.22**	**1.25**
MW-36C	2/25/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0018	<0.00095	<0.00095	**0.00021**	<0.00019	0.00019	<0.00019	<0.00019	0.00019	<0.00019	<0.00095	0.0018	<0.00019	0.0037	**0.0083**	0.0031	<0.00095
MW-36C	6/18/2010	<0.039	0.0864	<0.039	<0.039	<0.039	*<0.039*	<0.039	<0.039	**0.26**	*<0.039*	*<0.25*	0.39	*<0.25*	<0.25	*<0.049*	*<0.049*	*<0.049*	<0.049	*<0.049*	*<0.049*	*<0.049*	<0.25	0.26	*<0.049*	**0.531**	**5.7**	**0.433**	<0.25
MW-36C	9/22/2010	<0.038	0.105	<0.038	<0.038	<0.038	*<0.038*	<0.038	**0.118**	**0.249**	*<0.038*	*<0.019*	0.339	<0.019	<0.019	*<0.038*	*<0.038*	*<0.038*	<0.038	*<0.038*	*<0.038*	*<0.038*	<0.019	0.236	*<0.038*	**0.564**	**5.9**	**0.439**	<0.019
MW-36C	12/20/2010	<0.019	0.114	<0.019	<0.019	<0.019	*<0.019*	<0.019	**0.195**	**0.194**	*<0.019*	*<0.19*	0.332	<0.19	<0.19	*<0.039*	*<0.039*	*<0.039*	<0.039	*<0.039*	*<0.039*	*<0.039*	<0.19	0.211	*<0.039*	**0.576**	**5.72**	**0.319**	<0.19
MW-36C	3/10/2011	<0.019	0.0956	<0.019	<0.019	<0.019	*<0.019*	<0.019	**0.159**	**0.176**	*<0.019*	*<0.039*	0.191	<0.039	0.137	*<0.0078*	*<0.0078*	*<0.0078*	<0.0078	*<0.0078*	*<0.0078*	*<0.0078*	<0.039	0.111	*<0.0078*	**0.348**	**5.56**	**0.116**	<0.039
MW-36C	6/24/2011	<0.019	0.055	<0.019	<0.019	<0.019	*<0.019*	<0.019	**0.0808**	**0.204**	*<0.019*	*<0.097*	0.341	*<0.097*	<0.097	*<0.019*	*<0.019*	*<0.019*	<0.019	*<0.019*	*<0.019*	*<0.019*	<0.097	0.21	*<0.019*	**0.426**	**2.71**	**0.218**	<0.097
MW-37A	2/25/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.00666	<0.00096	<0.00096
MW-37A	6/16/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-37A	9/23/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0026	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0012	<0.00097	<0.00097
MW-37A	12/17/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0037	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0053	<0.00096	<0.00096
MW-37A	3/8/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-37A	6/23/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0014	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096
MW-37B	2/25/2010	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.0196	<0.0095	*<0.0095*	*<0.019*	0.0254	<0.019	<0.019	*<0.0038*	*<0.0038*	*<0.0038*	<0.0038	*<0.0038*	*<0.0038*	*<0.0038*	<0.019	<0.019	*<0.0038*	0.0334	0.453	<0.019	<0.019
MW-37B	6/16/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0176	<0.0050	<0.0050	*<0.0040*	0.0228	<0.0040	<0.0040	*<0.00079*	*<0.00079*	*<0.00079*	<0.00079	*<0.00079*	*<0.00079*	*<0.00079*	<0.0040	<0.0040	*<0.00079*	0.021	0.179	<0.0040	<0.0040
MW-37B	9/23/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0359	<0.0049	<0.0049	<0.00097	0.0365	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	0.0075	<0.00019	**0.0487**	0.169	0.0014	<0.00097
MW-37B	12/17/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0256	<0.0048	<0.0048	*<0.0077*	0.0385	<0.0077	<0.0077	*<0.0010*	*<0.0010*	*<0.0010*	<0.0010	*<0.0010*	*<0.0010*	*<0.0010*	<0.0077	<0.0077	*<0.0010*	**0.05**	0.225	<0.0077	<0.0077
MW-37B	3/9/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0248	<0.0048	<0.0048	*<0.0038*	0.0293	<0.0038	<0.0038	*<0.00077*	*<0.00077*	*<0.00077*	<0.00077	*<0.00077*	*<0.00077*	*<0.00077*	<0.0038	0.0038	*<0.00077*	0.0291	0.0947	<0.0038	<0.0038
MW-37B	6/23/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0138	<0.0048	<0.0048	*<0.00095*	0.0192	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	0.0021	<0.00019	0.0168	0.0476	<0.00095	<0.00095

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-37C	9/12/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0050	<0.0050	0.0054	0.0059	0.005	<0.0010	0.0077	<0.0010	0.0025	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.0062	<0.00020	0.0045	0.0291	0.0051	<0.0010
MW-38A	4/14/2010	<0.019	0.0579	<0.019	<0.019	<0.019	<0.019	<0.019	0.196	0.119	<0.019	<0.095	0.257	<0.095	<0.095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.095	<0.095	<0.019	0.305	6.51	<0.095	<0.095
MW-38A	6/17/2010	<0.025	0.0552	<0.025	<0.025	<0.025	<0.025	<0.025	0.110	0.0719	0.025	<0.020	0.131	<0.020	<0.020	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.020	0.0587	<0.0040	0.12	3.24	0.0412	<0.020
MW-38A	9/22/2010	<0.049	0.206	0.0588	0.0616	<0.049	<0.049	<0.049	0.212	0.0850	<0.049	<0.20	0.221	<0.20	<0.20	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.20	<0.20	<0.039	0.317	7.31	<0.20	<0.20
MW-38A	12/17/2010	<0.0048	0.214	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.174	0.0879	<0.0048	<0.19	0.215	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	<0.19	<0.038	0.29	6.08	<0.19	<0.19
MW-38A	3/8/2011	<0.12	0.153	<0.12	<0.12	<0.12	<0.12	<0.12	0.239	0.121	<0.12	<0.097	0.256	<0.097	<0.097	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.097	<0.097	<0.019	0.275	5.62	<0.097	<0.097
MW-38A	6/23/2011	<0.048	0.0935	<0.048	<0.048	<0.048	<0.048	<0.048	0.14	0.0704	<0.048	<0.019	0.186	<0.019	<0.019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.019	0.0587	<0.0038	0.141	5.38	0.0314	<0.019
MW-38B	4/14/2010	<0.0048	0.0201	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0743	0.0223	<0.0048	<0.0095	<0.0095	<0.0095	<0.0095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.0095	<0.0095	<0.00109	<0.0095	2.49	<0.0095	<0.0095
MW-38B	6/17/2010	<0.0099	0.0272	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.0582	0.0154	<0.0099	<0.020	0.0486	<0.020	<0.020	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.020	<0.020	<0.0040	0.03	0.604	<0.020	<0.020
MW-38B	9/22/2010	<0.049	0.197	0.0524	0.0554	<0.049	<0.049	<0.049	0.246	0.119	<0.19	0.297	<0.19	<0.19	<0.19	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.19	<0.19	<0.039	0.395	8.92	<0.19	<0.19
MW-38B	12/17/2010	<0.0048	0.235	0.0544	0.0527	<0.0048	<0.0048	<0.0048	0.201	0.0982	<0.0048	<0.19	0.284	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	<0.19	<0.038	0.391	7.58	<0.19	<0.19
MW-38B	3/8/2011	<0.12	0.134	<0.12	<0.12	<0.12	<0.12	<0.12	0.174	<0.12	<0.12	<0.097	0.188	<0.097	<0.097	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.097	<0.097	<0.00109	0.211	6.54	<0.097	<0.097
MW-38B	6/23/2011	<0.048	0.085	<0.048	<0.048	<0.048	<0.048	<0.048	0.13	0.062	<0.048	<0.48	<0.48	<0.48	<0.48	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.48	<0.48	<0.096	<0.48	6	<0.48	<0.48
MW-38C	4/14/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0095	<0.0095	<0.0095	<0.0095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.0095	<0.0095	<0.00109	<0.0095	<0.0095	<0.0095	<0.0095
MW-38C	6/17/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-38C	9/22/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.00098	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	0.00098	0.0081	0.0013	<0.00096
MW-38C	12/15/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-38C	3/8/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-38C	6/23/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-38D	4/14/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0095	<0.0095	<0.0095	<0.0095	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.0095	<0.0095	<0.00109	<0.0095	<0.0095	<0.0095	<0.0095
MW-38D	6/17/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-38D	9/22/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0071	<0.00097	<0.00097
MW-38D	12/15/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-38D	3/8/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-38D	6/23/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-39A	4/14/2010	<0.095	0.498	<0.095	<0.095	<0.095	<0.095	<0.095	1.28	5.35	<0.095	<0.48	6.6	1.13	2.23	2.37	1.42	1.7	0.682	0.68	1.81	0.178	9.31	6.97	0.788	8.36	38.2	17.4	6.54
MW-39A	6/16/2010	<0.0050	0.656	0.0806	0.0842	<0.0050	<0.0050	<0.0050	0.36	0.428	<0.0050	<0.20	0.324	0.2	0.2	0.0452	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.201	0.246	<0.040	0.617	6.56	0.485	0.2
MW-39A	9/23/2010	<0.079	0.692	0.0933	0.119	<0.079	<0.079	<0.079	0.621	1.2	<0.079	<0.40	1.77	<0.40	0.533	0.577	0.306	0.473	0.0852	0.146	0.426	<0.079	2.35	1.74	0.102	2.5	15.8	4.59	1.62
MW-39A	12/21/2010	<0.038	0.38	0.0475	0.0644	<0.038	<0.038	<0.038	0.336	0.256	<0.038	<0.19	0.342	<0.19	<0.19	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.19	0.228	<0.038	0.702	7.3	0.338	<0.19
MW-39A	3/11/2011	<0.095	0.33	<0.095	<0.095	<0.095	<0.095	<0.095	0.391	0.4	<0.095	<0.048	0.427	0.0716	0.085	0.0567	0.0283	0.0386	<0.0095	0.137	0.0429	<0.0095	0.252	0.315	0.0113	0.79	9.2	0.618	0.161
MW-39A	6/24/2011	<0.049	0.0919	<0.049	<0.049	<0.049	<0.049	<0.049	0.353	0.334	<0.049	<0.98	0.98	<0.98	<0.98	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.98	<0.98	<0.20	<0.98	11.2	<0.98	<0.98
MW-39B	4/14/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0077	0.0125	<0.0048	<0.0095	0.0153	0.0028	0.0035	0.0029	0.0016	0.002	0.00085	0.00075	0.0021	0.00022	0.0127	0.0138	0.00099	0.0195	0.0153	0.0284	0.0088
MW-39B	6/17/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-39B	9/23/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.0022	<0.00099	<0.00099
MW-39B	12/15/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-39B	3/8/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-39B	6/23/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.0097
MW-40A	4/14/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-40A	6/16/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-40A	9/23/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0043	<0.00097	<0.00097
MW-40A	3/7/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-40A	6/22/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0043	<0.00097	<0.0097
MW-40B	4/20/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0011	0.002	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-40B	6/16/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0105	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0013	0.0042	<0.00020	<0.0010	0.0159	0.0034	<0.0010
MW-40B	9/23/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0042	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00099	0.0017	<0.00020	<0.00098	0.0027	0.0015	<0.00098
MW-40B	12/14/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0041	<0.00096	<0.00096	0.00032	0.00023	0.00043	<0.00019	<0.00019	0.00032	<0.00019	0.0015	0.0016	0.00019	<0.00096	0.0012	<0.00096	0.001
MW-40B	3/7/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-40B	6/23/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0081	<0.00096	<0.00096	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	0.0035	<0.00019	<0.00096	0.0054	<0.00096	<0.00096

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-40C	4/14/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0071	0.00134	<0.0049	<0.00098	0.0268	<0.00098	0.0049	**0.00039**	<0.00020	**0.00022**	<0.00020	<0.00020	**0.00034**	<0.00020	0.01	0.0137	<0.00020	<0.00098	<0.00098	**0.0214**	0.0058
MW-40C	6/16/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	*<0.0020*	0.0333	<0.0020	0.0073	**0.00048**	*<0.00040*	*<0.00040*	<0.00040	*<0.00040*	*<0.00040*	*<0.00040*	0.016	0.014	<0.0004	0.0151	0.0559	**0.0335**	0.0088
MW-40C	9/23/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.007	**0.0178**	<0.0049	<0.00098	0.0325	<0.00098	0.0055	**0.00039**	<0.00020	<0.00020	<0.00020	<0.00020	**0.00033**	<0.00020	0.016	0.0211	<0.00020	0.0023	0.0155	**0.0319**	0.0088
MW-40C	12/17/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.007	<0.0048	<0.00096	0.0173	<0.00096	0.0028	**0.00025**	<0.00019	<0.00019	<0.00019	<0.00019	**0.00024**	<0.00019	0.00091	0.0109	<0.00019	<0.00096	0.0033	0.0134	0.006
MW-40C	3/7/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0104	<0.00098	0.0021	**0.0024**	0.0017	**0.003**	0.0011	**0.0011**	**0.0024**	**0.00033**	0.0108	0.0064	**0.0013**	<0.00098	<0.00098	0.0073	0.0063
MW-40C	6/23/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0056	<0.0049	<0.00097	0.0187	<0.00097	0.0021	**0.00026**	<0.00019	<0.00019	<0.00019	<0.00019	**0.00021**	<0.00019	0.0094	0.0123	<0.00019	<0.00097	0.0014	0.0098	0.0057
MW-41A	12/15/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-41A	3/8/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-41A	6/23/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0038	<0.00097	<0.00097
MW-42A	12/15/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0043	<0.00097	<0.00097
MW-42A	3/8/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-42A	6/23/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-42B	12/15/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0043	<0.00097	<0.00097
MW-42B	3/8/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0013	<0.00095	<0.00095
MW-42B	6/23/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-43A	12/15/2010	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.0067	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	0.0039	0.0189	<0.00098	<0.00098
MW-43A	3/8/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.0022	<0.00099	<0.00099
MW-43A	6/22/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0029	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	0.0073	<0.00097	<0.00097
MW-44A	12/22/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-44A	3/10/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.0027	<0.0010	<0.0010
MW-44A	6/23/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.0020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-45A	12/22/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-45A	3/10/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0017	<0.00095	<0.00095
MW-45A	6/21/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-45B	12/22/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-45B	3/10/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.001	<0.00095	<0.00095
MW-45B	6/21/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-45C	12/22/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	0.0012	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-45C	3/10/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0017	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0.0099	<0.00095	<0.00095
MW-45C	6/22/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	*<0.0080*	0.0315	<0.0080	<0.0080	*<0.0010*	*<0.0010*	*<0.0010*	*<0.0010*	*<0.0010*	*<0.0010*	*<0.0010*	<0.0080	0.0155	*<0.0010*	<0.0080	0.205	0.0082	<0.0080
MW-46A	12/22/2010	<0.048	0.164	<0.048	<0.048	<0.048	*<0.048*	<0.048	**0.0766**	*<0.048*	*<0.048*	**0.129**	0.0871	<0.019	<0.019	*<0.0038*	*<0.0038*	*<0.0038*	*<0.0038*	*<0.0038*	*<0.0038*	*<0.0038*	<0.019	0.04	*<0.0038*	**0.107**	0.643	**0.0233**	<0.019
MW-46A	3/10/2011	<0.0049	0.0264	0.006	<0.0049	<0.0049	*<0.0049*	<0.0049	**0.0106**	0.0079	<0.0049	**0.115**	0.0135	<0.0039	<0.0039	*<0.00078*	*<0.00078*	*<0.00078*	<0.00078	*<0.00078*	*<0.00078*	*<0.00078*	<0.0039	0.0055	*<0.00078*	0.01	0.0631	<0.0039	<0.0039
MW-46A	6/22/2011	<0.019	0.199	0.0418	0.0201	<0.019	**0.0439**	<0.019	**0.0542**	**0.0332**	*<0.019*	*<0.048*	0.0817	<0.048	<0.048	*<0.0095*	*<0.0095*	*<0.0095*	<0.0095	*<0.0095*	*<0.0095*	*<0.0095*	<0.048	<0.048	*<0.0095*	**0.111**	**1.63**	<0.048	<0.048
MW-47A	12/22/2010	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0026	<0.00096	<0.00096
MW-47A	3/10/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	<0.00099	<0.00099	<0.00099
MW-47A	6/22/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	*<0.0010*	<0.0010	<0.0010	<0.0010	<0.0010
MW-48A	1/11/2011	<0.095	0.134	<0.095	<0.095	<0.095	*<0.095*	<0.095	**0.351**	**1.09**	*<0.095*	*<0.38*	1.34	*<0.38*	<0.38	**0.365**	**0.18**	**0.254**	<0.076	**0.102**	**0.277**	*<0.076*	**1.64**	**1.26**	*<0.076*	**1.69**	**8.48**	**3.15**	**1.01**
MW-48A	6/21/2011	<0.020	0.408	0.0367	0.0381	<0.020	*<0.020*	<0.020	**0.318**	**0.452**	*<0.020*	*<0.20*	0.672	*<0.20*	<0.20	**0.101**	**0.05**	**0.0561**	<0.039	**<0.039**	**0.0814**	*<0.039*	**0.471**	0.522	*<0.039*	**0.866**	**4.52**	**1.04**	0.314
MW-48B	1/11/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0068	<0.0048	*<0.0038*	0.0112	<0.0038	<0.0038	*<0.00076*	*<0.00076*	*<0.00076*	<0.00076	*<0.00076*	*<0.00076*	*<0.00076*	<0.0038	0.0087	*<0.00076*	0.0142	0.0509	0.0135	<0.0038
MW-48B	6/21/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00097*	*<0.00097*	*<0.00097*	<0.00097	*<0.00097*	*<0.00097*	*<0.00097*	<0.00097	<0.00097	*<0.00097*	<0.00097	0.0023	0.001	<0.00097
MW-49A	8/16/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-49B	8/16/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-49C	8/16/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-50A	8/17/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-50B	8/17/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	<0.00098	<0.00098	<0.00098
MW-51A	8/17/2011	<0.048	0.336	<0.048	<0.048	<0.048	*<0.048*	<0.048	0.115	0.0962	*<0.048*	**0.5**	0.147	<0.024	<0.024	*<0.0048*	*<0.0048*	*<0.0048*	<0.0048	*<0.0048*	*<0.0048*	*<0.0048*	<0.024	0.0894	*<0.0048*	**0.212**	**2.03**	**0.118**	<0.024
MW-51B	8/17/2011	<0.0048	0.006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0199	0.0343	<0.0048	<0.00095	0.0724	0.0054	0.0019	<0.00019	*<0.0038*	*<0.0038*	<0.0038	*<0.0038*	<0.00019	*<0.0038*	0.0031	0.0344	*<0.0038*	**0.0937**	**0.571**	**0.0302**	0.0017
MW-52A	8/17/2011	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	0.0011	<0.00097	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097
MW-53A	9/12/2011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00099	<0.00099	<0.00099	<0.00099	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00099	<0.00099	<0.00020	<0.00099	0.0021	<0.00099	<0.00099
MW-53B	9/12/2011	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-OW1	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.01	**0.041**	*<0.010*	*<0.050*	0.067	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	0.0053	0.039	*<0.010*	<0.010	<0.010	0.019	<0.010
MW-OW1	8/14/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW1	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.0052	*<0.010*	*<0.050*	0.013	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW1	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW1	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	0.0055	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	0.0057	<0.010	<0.010
MW-OW1	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW1	8/11/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0143	**0.041**	<0.005	*<0.002*	0.0643	<0.002	0.0019	**0.00033**	**0.00029**	**0.00044**	< 0.00040	*< 0.00040*	**0.0003**	*< 0.00040*	0.0054	0.0333	0.00021	0.0039	0.0049	**0.0249**	0.0029
MW-OW1	10/30/2003	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	0.0058	**0.019**	<0.0053	*<0.0010*	0.0387	0.00067	0.00067	**0.00027**	**0.00023**	**0.00028**	<0.00020	0.00016	**0.00022**	<0.00020	0.0035	0.0158	0.00013	0.00039	0.0042	0.0013	0.0018
MW-OW1	2/17/2004	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.0134	**0.038**	<0.0054	*<0.0022*	0.0744	.0011 J	0.0012 J	*< 0.00043*	*< 0.00043*	*< 0.00043*	< 0.00043	*< 0.00043*	*< 0.00043*	*< 0.00043*	0.0043	0.0312	*< 0.00043*	0.0039	0.0401	0.0086	0.0025
MW-OW1	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0176	**0.0272**	<0.0048	<0.00095	0.0557	0.00076 J	0.0012	**0.00032**	**0.00027**	**0.00034**	0.00014	0.00016 J	**0.00025 J**	<0.00019	0.0046	0.0257	0.00027	<0.00095	<0.00095	0.0075	0.003
MW-OW1	8/1/2006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0015 J	<0.0048	<0.00095	0.0067	<0.00095	<0.00095	0.000077 J	<0.00019	0.000069 J	<0.00019	<0.00019	<0.00019	<0.00019	0.0014	0.00054 J	<0.00019	<0.00095	<0.00095	<0.00095	0.001
MW-OW1	7/24/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.022	**0.0448**	<0.005	<0.0010	0.0717	0.00052 J	0.002	**0.00028**	**0.00021**	**0.00026**	0.00011 J	0.00015 J	**0.00021**	<0.00020	0.0065	0.0353	0.00014 J	0.0129	0.0435	0.0195	0.0051
MW-OW1	11/19/2008	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0156	**0.0441**	<0.0048	<0.00109	0.0936	<0.00109	0.0013 J	*<0.00038*	*<0.00038*	*<0.00038*	<0.00038	*<0.00038*	*<0.00038*	*<0.00038*	0.0033	0.038	<0.00038	0.0166	0.0831	0.0173	0.0014 J
MW-OW1	12/11/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-OW2	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW2	8/14/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW2	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.00075	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW2	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW2	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW2	12/28/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW2	8/11/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	0.00018	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0.00068	<0.0010	<0.0010
MW-OW2	10/30/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-OW2	2/17/2004	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	*<0.0010*	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-OW2	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	0.0016	<0.00096	<0.00096
MW-OW2	8/1/2006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	*<0.00019*	<0.00019	0.000061 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-OW2	7/24/2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	**0.00021**	0.00017 J	**0.00028**	0.00014 J	0.00019 J	**0.00023**	<0.00020	0.00054 J	<0.00098	0.00017 J	<0.00098	0.00036 J	<0.00098	0.00058 J
MW-OW2	11/19/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	<0.00098	<0.00098	<0.00098	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0015	<0.00098	<0.00098
MW-OW2	12/10/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010
MW-OW3	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW3	8/14/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW3	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW3	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	0.005	<0.010	*<0.010*	<0.010	<0.010	<0.010	0.0056
MW-OW3	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW3	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-OW3	8/11/2003	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	0.00064	**0.0012**	**0.0016**	**0.0024**	0.0009	**0.00069**	**0.0013**	0.00027	0.0019	<0.0010	**0.0012**	<0.0010	<0.0010	<0.0010	0.0019
MW-OW3	10/30/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0010	<0.0010	0.0006	0.00034	**0.002**	**0.0025**	**0.0027**	0.0013	**0.0023**	**0.0022**	**0.00037**	0.0031	<0.0010	**0.0016**	<0.0010	<0.0010	0.00026	0.0033
MW-OW3	2/18/2004	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	*<0.0010*	<0.0010	0.0013	0.00067 J	**0.0035**	**0.0048**	**0.0051**	0.0027	**0.0041**	**0.0039**	**0.00071**	0.0052	<0.0010	**0.0032**	<0.0010	<0.0010	0.00034 J	0.0066
MW-OW3	9/9/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	*<0.00020*	*<0.00020*	<0.00020	<0.00020	*<0.00020*	*<0.00020*	<0.00020	0.00044	<0.0010	<0.00020	<0.0010	0.0011	<0.0010	0.00033

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

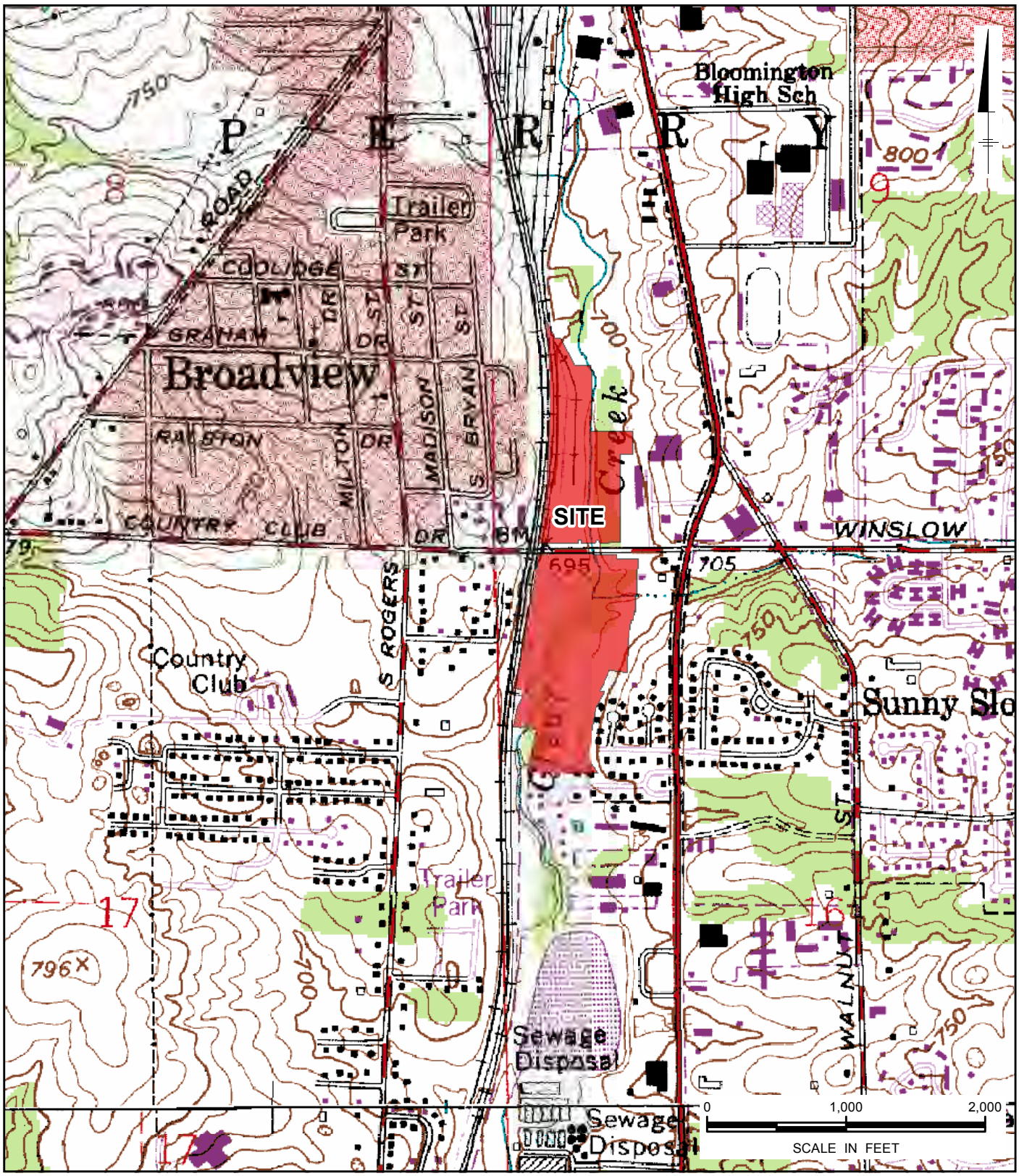
Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																													
MW-OW3	8/1/2006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0010	<0.0010	0.0006 J	<0.0010	**0.0014**	**0.0019**	**0.0021**	0.00098	**0.0015**	**0.0014**	0.00028	0.0017	<0.0010	**0.0013**	<0.0010	<0.0010	<0.0010	0.0024
MW-OW3	7/24/2007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.0099	< 0.0099	0.00073 J	< 0.0099	**0.0030**	**0.0041**	**0.0042**	0.0025	**0.0031**	**0.0032**	**0.00073**	0.0037	< 0.00099	**0.0033**	< 0.00099	< 0.00099	< 0.00099	0.0056
MW-OW3	11/19/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	0.000057 J	0.000065 J	0.000090 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00097	<0.00097	0.000055 J	<0.00097	0.001	<0.00097	<0.00097
MW-OW3	12/10/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<.00095	<.00095	<.00095	<.00095	**0.00021**	**0.00025**	**0.00041**	<0.00019	<0.00019	**0.00021**	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-P1	5/18/2000	NA	NA	< 30	NA	< 30	< 30	< 30	**95**	**580**	< 30	< 150	**650**	**60**	**190**	**210**	**100**	**110**	40	**96**	**160**	< 30	**780**	**650**	**42**	**780**	**2,400**	**1,600**	**620**
MW-P1	8/14/2000	NA	NA	< 1.0	NA	< 1.0	< 1.0	< 1.0	**1**	**3.7**	< 1.0	<5.0	**4.5**	**0.4**	1.2	**1.1**	**0.68**	**0.52**	0.41	**0.64**	**0.99**	< 1.0	**5.80**	**4.20**	**0.13**	**4.9**	**18**	**11**	**4.30**
MW-P1	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	**0.092**	**0.15**	<0.010	<0.050	0.2	0.017	0.02	**0.016**	**0.0081**	**0.0088**	<0.010	**0.0069**	**0.011**	<0.010	0.075	0.13	<0.010	**0.14**	**1.4**	**0.19**	0.052
MW-P1	2/1/2001	NA	NA	<0.100	NA	<0.100	<0.100	<0.100	**1**	**5.2**	<0.100	<0.500	**6.1**	**0.62**	1.6	**1.9**	**0.97**	**0.99**	0.36	**0.84**	**1.4**	**0.2**	**7.10**	**5.90**	**0.41**	**6.3**	**16.00**	**14.00**	**5.70**
MW-P1	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.039	**0.06**	<0.010	<0.050	0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	0.05	<0.010	0.012	0.025	**0.044**	0.01
MW-P1	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	**0.055**	**0.065**	<0.010	<0.050	0.1	0.0067	0.0089	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.03	0.067	<0.010	**0.043**	0.14	**0.11**	0.023
MW-P1	8/12/2003	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**0.107**	**0.141**	<0.020	<0.004	0.193	0.0111	0.0281	**0.0167**	**0.016**	**0.0213**	0.0073	**0.0065**	**0.0143**	**0.0019**	0.0743	0.133	**0.0093**	**0.0317**	0.26	**0.171**	0.0495
MW-P1	10/30/2003	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	**0.0527**	**0.0907**	<0.0055	<0.0044	0.121	0.006	0.0111	**0.0076**	**0.0057**	**0.0061**	0.0026	**0.0036**	**0.0061**	**0.00052**	0.0392	0.0793	**0.0032**	**0.0406**	0.194	**0.0963**	0.0231
MW-P1	2/18/2004	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**0.101**	**0.445**	<0.020	<0.04	0.637	0.0474	0.174	**0.178**	**0.0985**	**0.104**	0.0359	**0.0783**	**0.135**	**0.0088**	**0.795**	0.634	**0.0413**	**0.455**	1.05	**1.44**	0.543
MW-P1	9/10/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.191**		<0.1	<0.083	1.04	0.072	0.304	**0.317**	**0.175**	**0.181**	0.0564	**0.12**	**0.204**	**0.0217**	**1.28**	1.07	**0.0805**	**0.677**	1.02	**2.16**	0.864
MW-P1	8/1/2006	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	**0.116**	**0.222**	< 0.0095	< 0.0095	0.333	0.0119	0.0796	**0.061**	**0.0311**	**0.0283**	0.0104	**0.0264**	**0.0416**	**0.0031**	**0.258**	0.276	**0.0153**	**0.119**	0.16	**0.533**	0.181
MW-P1	7/24/2007	Well abandoned August 2006 in preparation for Creek Liner Installation in August 2007																											
MW-P2	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P2	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P2	8/14/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.02	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.02**	<0.010	0.13	<0.010	<0.010	<0.010	<0.010	**0.026**	0.088
MW-P2	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0058	<0.010	<0.010
MW-P2	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0058	<0.010	<0.010
MW-P2	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P2	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P2	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P2	8/11/2003	<0.005	0.0488	0.0561	0.0711	0.0489	<0.005	<0.005	0.0142	**0.031**	<0.005	**0.0108**	0.0358	<0.010	0.0125	**0.0118**	**0.0069**	**0.0092**	0.0027	**0.0033**	**0.0085**	<0.0020	0.0568	0.0393	**0.0031**	**0.0453**	0.289	**0.109**	0.0318
MW-P2	10/30/2003	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	0.00067	<0.0010	<0.0010	**0.00032**	**0.00049**	**0.00043**	0.0003	**0.0003**	**0.00039**	<0.00020	0.00036	<0.0010	0.00029	<0.0010	0.0061	<0.0010	0.00078
MW-P2	2/17/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	**0.00016 J**	**0.00024**	**0.00021**	0.00017 J	0.00017 J	**0.00020 J**	<0.00020	<0.0010	<0.0010	0.00018 J	<0.0010	0.00054 J	<0.0010	0.00036 J
MW-P2	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.00021**	**0.00029**	**0.00023**	0.00019	**0.0002**	**0.00023**	<0.00019	0.00036 J	<0.00095	0.00029	<0.00095	<0.00095	<0.00095	0.00068 J
MW-P2	8/1/2006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	< 0.0095	< 0.0095	< 0.0095	0.000056 J	<0.00019	0.000077 J	<0.00109	<0.00109	<0.00109	<0.00019	< 0.0095	< 0.0095	0.000064 J	< 0.0095	< 0.0095	< 0.0095	< 0.0095
MW-P2	7/24/2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	**0.00024**	**0.00041**	**0.00037**	0.00033	**0.00029**	**0.00031**	0.000071 J	0.00035 J	<0.00097	0.00034	<0.00097	<0.00097	<0.00097	<0.00097
MW-P2	11/20/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00098	0.00083 J	<0.00098	<0.00098	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00098	<0.00098	<0.00020	<0.00098	0.0017	<0.00098	<0.00098
MW-P2	12/10/2009	<.0048	<.0048	<.0048	<.0048	<.0048	<.0048	<.0048	<.0048	<.0048	<.0048	<0.00096	0.0013	<0.00096	<0.00096	**0.0005**	**0.00083**	**0.0015**	0.00059	**0.00047**	**0.00063**	<0.00019	<0.00096	<0.00096	**0.00065**	<0.00096	<0.00096	<0.00096	<0.00096
MW-P3	8/14/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.058	<0.010	<0.010	<0.010	<0.010	<0.010	0.044
MW-P3	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P3	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P3	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P3	8/11/2003	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	<0.0010	<0.0010	<0.0010	**0.00024**	**0.00042**	**0.00051**	0.00031	0.00017	**0.00029**	<0.00020	0.00043	<0.0010	0.00033	<0.0010	<0.0010	<0.0010	0.0004
MW-P3	10/30/2003	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0010	<0.0010	<0.0010	<0.0010	<0.0021	0.00014	0.00013	<0.00020	0.00011	0.00012	<0.00020	<0.0010	<0.0010	0.0001	<0.0010	<0.0010	<0.0010	<0.0010
MW-P3	2/17/2004	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0010	<0.0010	<0.0010	<0.0010	**0.00021**	**0.00031**	**0.00029**	0.00021	**0.00023**	**0.00026**	<0.00020	0.00035 J	<0.0010	0.00023	<0.0010	<0.0010	<0.0010	0.00039 J
MW-P3	9/9/2004	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	**0.00026**	**0.00035**	**0.00034**	0.00024	**0.00023**	**0.00027**	<0.00019	0.00055 J	<0.00097	0.00034	<0.00097	<0.00097	<0.00097	0.00053 J
MW-P3	8/1/2006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	<0.00095	<0.00095	<0.00095	**0.00015 J**	**0.00023**	**0.00022**	0.00015 J	0.00017 J	0.00017 J	<0.00019	0.00025 J	<0.00095	0.00018 J	<0.00095	<0.00095	<0.00095	0.00025 J
MW-P3	7/24/2007	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0011 J	<0.0049	<0.0049	<0.00098	0.0015	<0.00098	<0.00098	**0.00025**	**0.00043**	**0.00043**	0.00032	**0.00034**	**0.00033**	0.000066 J	0.00044 J	0.00052 J	0.00033	<0.00098	<0.00098	<0.00098	0.00061J
MW-P3	11/19/2008	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	0.000049 J	0.000065 J	0.000087 J	0.000049 J	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	0.000054 J	<0.00096	<0.00096	<0.00096	<0.00096
MW-P3	12/10/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	<0.00097	<0.00097	<0.00097	**0.00049**	**0.00075**	**0.001**	0.00036	**0.00032**	**0.00054**	<0.00019	<0.00097	<0.00097	0.00039	<0.00097	<0.00097	<0.00097	0.001
MW-P4	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.0066	<0.010	<0.050	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.01	0.0054	<0.010	<0.010	<0.010	<0.010	0.0078
MW-P4	8/4/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.0065	<0.010	<0.050	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0081	0.0059	<0.010	<0.010	<0.010	<0.010	0.0051
MW-P4	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	0.0054	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P4	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P4	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0051	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P4	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0056	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-P4	8/11/2003	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0407	**0.0554**	<0.0051	<0.0010	0.118	0.0026	0.0069	**0.0035**	**0.0019**	**0.0026**	0.00074	**0.00074**	**0.0025**	0.00023	0.0322	0.0757	**0.00091**	0.0013	0.0834	**0.0269**	0.0151
MW-P4	10/30/2003	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0.0019	<0.0054	<0.0010	0.0046	0.00067	0.001	**0.0028**	**0.0029**	**0.0029**	0.0013	**0.0022**	**0.0028**	**0.00036**	0.0082	0.0024	**0.0016**	<0.0010	<0.0010	<0.0010	0.0049
MW-P4	2/18/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	0.0015 J	<0.0051	<0.0010	0.0092	0.00072 J	0.00093 J	**0.0014**	**0.0016**	**0.0018**	0.00083	**0.0011**	**0.0015**	0.00019 J	0.0064	0.006	**0.00093**	<0.0010	0.0011	0.00051 J	0.0034

ARCADIS

Table 12. Summary of Historic Groundwater PAH Analytical Results
Former Indiana Creosoting Co
Bloomington, IN

Chemical Name		2,4-Dichlorophenol *	2,4-Dimethylphenol *	2-Methylphenol	3&4-Methylphenol (m,p-Cresol)	Phenol	2,4,6-Trichlorophenol	Benzyl Butyl Phthalate	Carbazole *	Dibenzofuran *	Bis(2-Ethylhexyl) Phthalate	Pentachlorophenol	Acenaphthene	Acenaphthylene *	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Benzo(g,h,i) Perylene ***	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)Pyrene	2-Methylnaphthalene *	Naphthalene	Phenanthrene *	Pyrene
Unit of Measure		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1996 VRP Tier II Residential		0.11 *	0.73 *	1.52	1.52	3.648	0.01	0.1	0.043 *	0.015 *	0.006	0.001	1.824	0.071 *	9.12	0.0001	0.0002	0.0002	***	0.0002	0.0002	0.0003	0.2432	1.216	0.0004	0.031 *	1.216	0.021 *	0.912
1996 VRP Tier II Non-Residential		0.31 *	2.0 *	5.11	5.11	12.26	0.26	20.44	0.14 *	0.2 *	0.2043	0.05	6.132	0.73 *	30.66	0.01	0.01	0.01	***	0.0392	0.3918	0.01	0.8176	4.088	0.01	0.41 *	4.088	0.31 *	3.066
Location ID	Sample Date																												
MW-P4	9/9/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0136	0.0132	<0.0048	<0.00095	0.0205	0.001	0.0016	**0.0025**	**0.0022**	**0.0025**	0.0011	**0.0014**	**0.0021**	**0.00032**	0.0098	0.0129	**0.0013**	<0.00095	0.0318	0.0029	0.0058
MW-P4	8/1/2006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0038 J	0.0023 J	<0.005	<0.0010	0.0239	0.00068 J	0.00064 J	**0.00056**	**0.0006**	**0.0006**	0.00026	**0.00044**	**0.00059**	0.000061 J	0.0054	0.0113	0.00033	<0.0010	<0.0010	<0.0010	0.0021
MW-P4	7/24/2007	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	0.0046	0.00054 J	0.00078 J	**0.0032**	**0.0038**	**0.0042**	0.0019	**0.0026**	**0.0035**	**0.00058**	0.0077	0.0026	**0.0023**	<0.00096	0.00072 J	0.00092 J	0.0064
MW-P4	11/19/2008	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0024	<0.00097	<0.00097	**0.00078**	**0.001**	**0.0013**	0.00056	**0.00045**	**0.00056**	0.00015 J	0.0029	<0.00097	**0.00068**	<0.00097	<0.00097	<0.00097	0.0016
MW-P4	12/9/2009	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.00097	0.0045	<0.00097	<0.00097	**0.0015**	**0.0019**	**0.0029**	0.00079	**0.001**	**0.0015**	0.00019	0.004	<0.00097	**0.00095**	<0.00097	<0.00097	<0.00097	0.0034
MW-P5	5/18/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	8/4/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	0.007	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	<0.010	*<0.010*	*<0.050*	<0.010	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	<0.010	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P5	10/30/2003	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	*<0.0010*	0.0083	<0.0010	<0.0010	*<0.00020*	*<0.00020*	*<0.00020*	<0.00020	*<0.00020*	*<0.00020*	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	<0.0010	<0.0010	0.00037
MW-P5	2/17/2004	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0010	0.0073	<0.0010	<0.0010	*<0.00020*	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0010	0.00071 J	<0.00020	<0.0010	0.0029	<0.0010	<0.0010
MW-P5	11/19/2008	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00096	<0.00096	<0.00096	<0.00096	0.000058 J	<0.00019	0.000080 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096
MW-P5	12/9/2009	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0124	<0.00095	<0.00095	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	<0.00095	<0.00095	<0.00095
MW-P6	5/18/2000	NA	NA	0.0059	NA	<0.010	<0.010	<0.010	0.021	**0.046**	*<0.010*	*<0.050*	0.066	<0.010	0.0075	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	0.018	0.049	*<0.010*	**0.055**	0.51	**0.061**	0.013
MW-P6	8/14/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	0.022	**0.023**	*<0.010*	*<0.050*	0.046	0.014	<0.010	**0.011**	*<0.010*	*<0.010*	<0.010	*<0.010*	**0.01**	*<0.010*	0.048	0.035	*<0.010*	<0.010	<0.010	<0.010	0.044
MW-P6	11/13/2000	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.0051	*<0.010*	*<0.050*	0.0097	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	0.005	*<0.010*	<0.010	0.0068	<0.010	<0.010
MW-P6	2/1/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.0068	*<0.010*	*<0.050*	0.012	<0.010		*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	0.0069	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P6	6/21/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.01	*<0.010*	*<0.050*	0.019	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	0.0064	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P6	12/11/2001	NA	NA	<0.010	NA	<0.010	<0.010	<0.010	<0.010	0.01	*<0.010*	*<0.050*	0.018	<0.010	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	*<0.010*	*<0.010*	*<0.010*	<0.010	0.0096	*<0.010*	<0.010	<0.010	<0.010	<0.010
MW-P6	8/11/2003	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	<0.0057	0.0041	0.0089	<0.0057	*<0.0010*	0.0133	0.00061	0.0017	**0.00064**	**0.00067**	**0.00088**	0.00048	**0.00029**	**0.00066**	0.00012	0.0048	0.0088	**0.00058**	<0.0010	0.0015	0.00091	0.0026
MW-P6	10/30/2003	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	0.0112	**0.0208**	<0.0052	<0.0010	0.027	0.0015	0.0037	**0.002**	**0.002**	**0.002**	0.001	**0.0013**	**0.0021**	0.00027	0.0117	0.0221	**0.0013**	<0.0010	0.00035	0.0011	0.0072
MW-P6	2/17/2004	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	0.0029 J	0.006	<0.0052	<0.0010	0.0111	0.00082 J	0.0015	**0.0013**	**0.0016**	**0.0017**	0.00096	**0.001**	**0.0016**	0.00021	0.0041	0.0068	**0.001**	<0.0010	0.00030 J	0.00092 J	0.0025
MW-P6	9/10/2004	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0091	<0.00095	0.00075	**0.0004**	**0.00034**	**0.00037**	0.00019	**0.00021**	**0.00038**	<0.00019	0.003	0.0058	0.00031	<0.00095	0.00052	0.0011	0.0016
MW-P6	8/1/2006	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.00095	0.0103	0.00049 J	0.0005 J	**0.00039**	**0.00046**	**0.00043**	0.00029	**0.00032**	**0.00044**	0.000058 J	0.0046	0.0084	0.00039	<0.00095	0.00031 J	<0.00095	0.0024
MW-P6	7/24/2007	aration for Creek Liner Installation in August 2007																											
RW-4	4/15/2010	<0.095	**1.38**	0.374	0.482	<0.095	<0.095	<0.095	**0.479**	**0.63**	<0.095	*<0.38*	0.886	*<0.38*	<0.38	**0.157**	**0.083**	**0.114**	<0.076	*<0.076*	**0.122**	*<0.076*	**0.881**	0.731	*<0.076*	**1.37**	**13.2**	**1.59**	0.566
RW-5	4/15/2010	<0.019	0.392	0.042	0.0359	<0.019	<0.019	<0.019	**0.312**	**0.294**	<0.019	*<0.19*	0.36	*<0.19*	<0.19	*<0.038*	*<0.038*	*<0.038*	<0.038	*<0.038*	*<0.038*	*<0.038*	<0.19	0.256	*<0.038*	**0.692**	**7.16**	**0.397**	<0.19
RW-6	4/15/2010	<0.019	0.606	0.229	0.267	0.021	<0.019	<0.019	**0.327**	**0.25**	<0.019	*<0.38*	0.381	*<0.38*	<0.38	*<0.38*	*<0.076*	*<0.076*	<0.076	*<0.076*	*<0.076*	*<0.076*	<0.38	<0.38	*<0.076*	**0.719**	**9.33**	*<0.38*	<0.38

0.68	BOLD - Concentration exceeds 1996 IDEM VRP Tier II Default Residential Closure Levels
770	BOLD/SHADE - Concentration exceeds 1996 IDEM VRP Tier II Default Non-residential (Industrial) Closure Levels
<	Analyte not detected above the laboratory's Run Detection Limit, displayed as ND (Non-detect) in laboratory analytical data packages.
<0.050	*Italics* - Analyte not detected above the labortory's Run Detection Limit, however Detection Limit is above VRP Closure Levels
NA	Not Analyzed
*	Cleanup goals with an asterisk are taken form the January 31, 2006 IDEM RISC Technical Guide Appendix 1, since the Constituents did not have cleanup goals in the 1996 VRP Guidance Manual
***	Benzo(g,h,i)perylene does not have a cleanup goal in the 1996 VRP Guidance Manual or in the current IDEM RISC Technical Guide Appendix 1, dated January 26, 2006.



INDIANA

PROJECTION:
NAD_1983_StatePlane_Indiana_West
REFERENCE:
U.S.G.S. 7.5 Minute
Series Topographic Quadrangles:
Bloomington, Indiana 1992,
Clear Creek, Indiana 1992.
CONTOUR INTERVAL: 10 feet

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Site Location Map

ARCADIS

FIGURE
1

CITY: (KNOXVILLE) DIV/GROUP: (ENV) DB: (B.ALTOM) LD: (B.ALTOM) PIC:(J.REID) PM: (S.SHARP) TM: (R.WOODRUFF)
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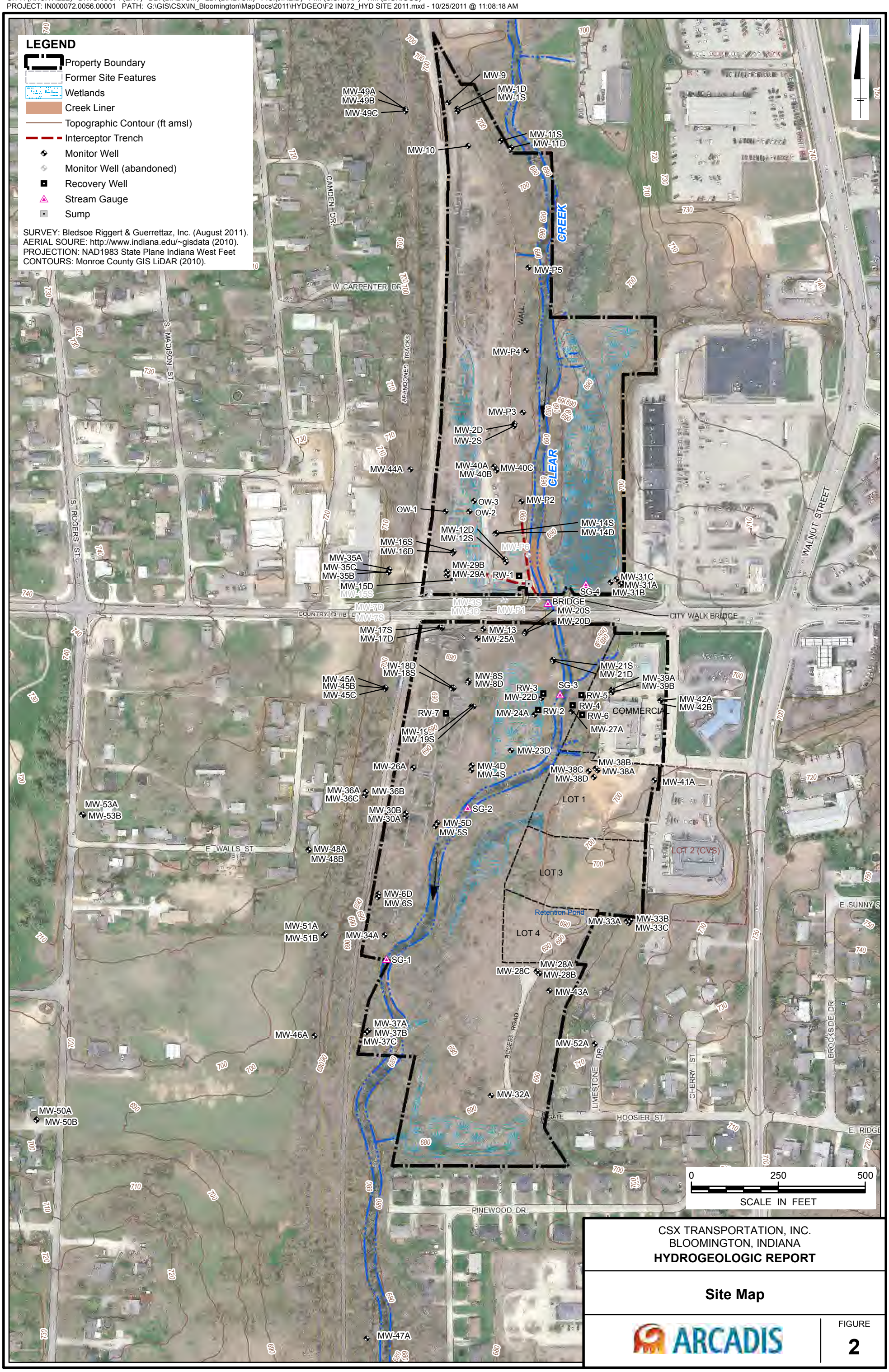
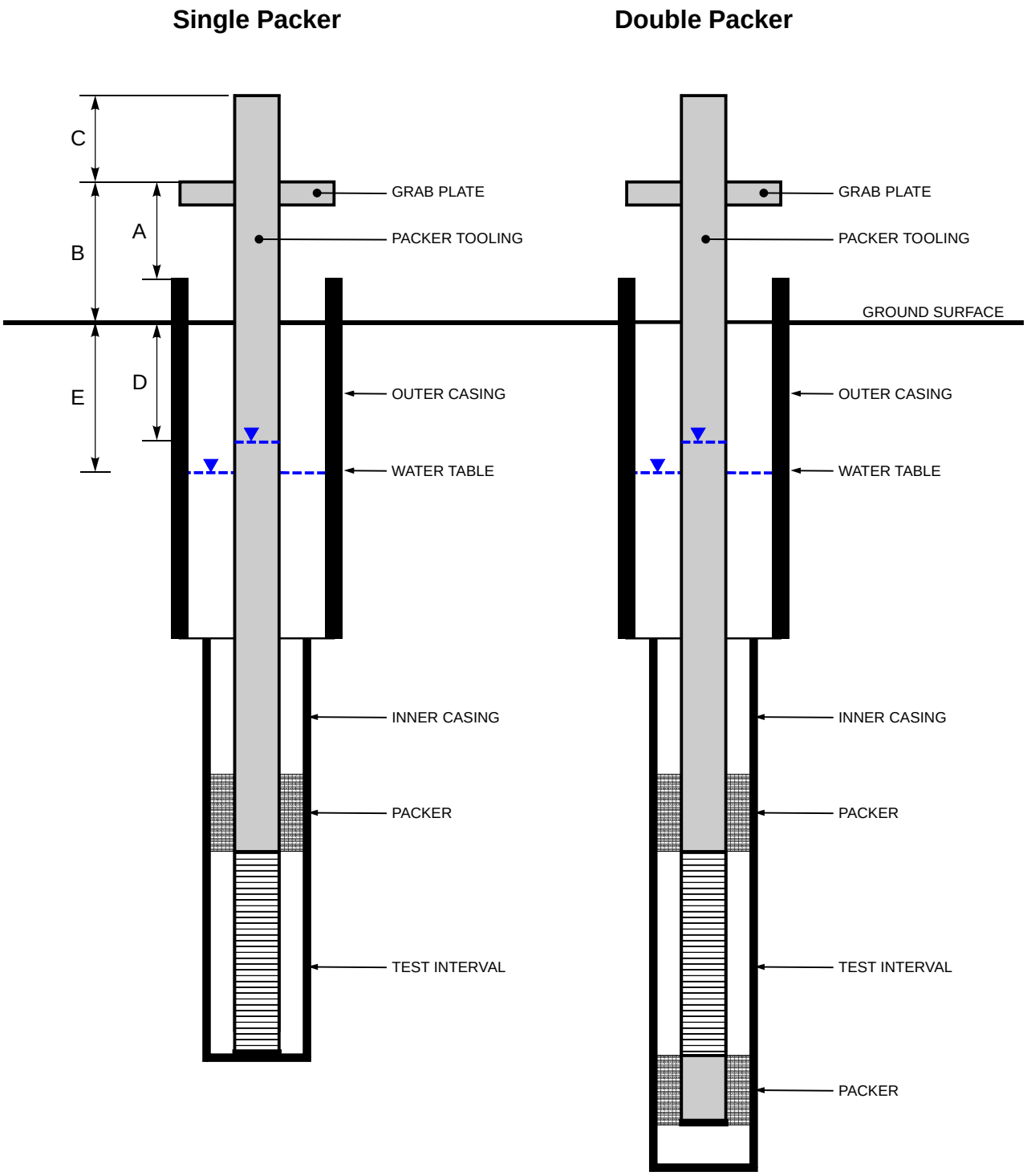


CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Site Map

ARCADIS

FIGURE
2



A *Distance*
(Top of Grab Plate to Top of Outer Casing)

B *Distance*
(Top of Grab Plate to Ground Surface)

C *Distance*
(TOC to Top of Grab Plate)

D *Depth to Water*
(Inside Packer Tooling)

E *Depth to Water*
(Outside Packer from Top of Packer Tooling)

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Packer Schematic Diagrams

ARCADIS

FIGURE
3

CITY: (KNOXVILLE) DIV/GROUP: (ENV) DB: (B.ALTOM) LD: (B.ALTOM) PIC:(J.REID) PM: (S.SHARP) TM: (R.WOODRUFF)
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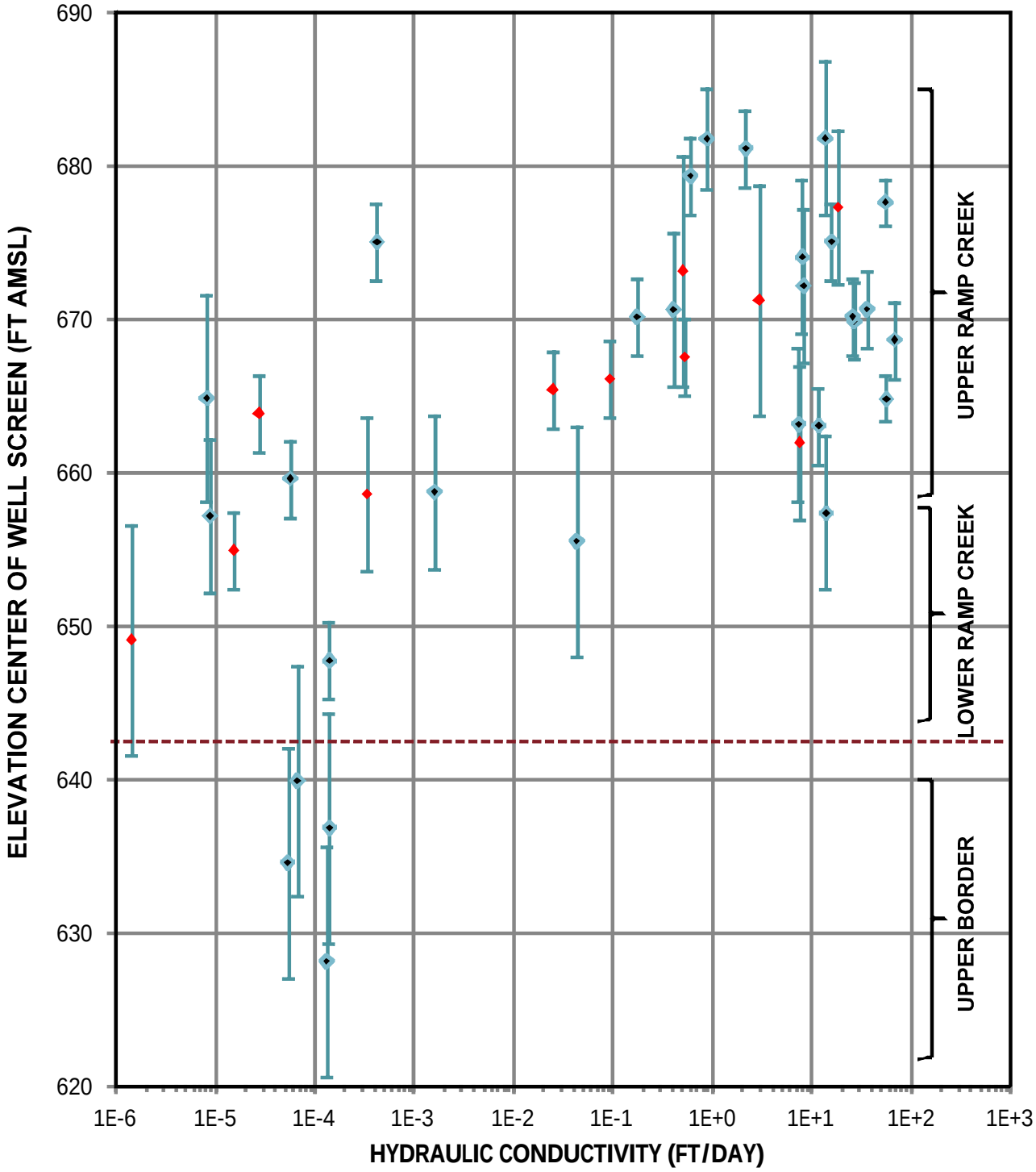


NOTE:
1) FT AMSL = feet above Mean Sea Level
2) Vertical bars indicate elevation range of screened interval.
3) Red symbols (u) indicate locations were measurable DNAPL has entered well.

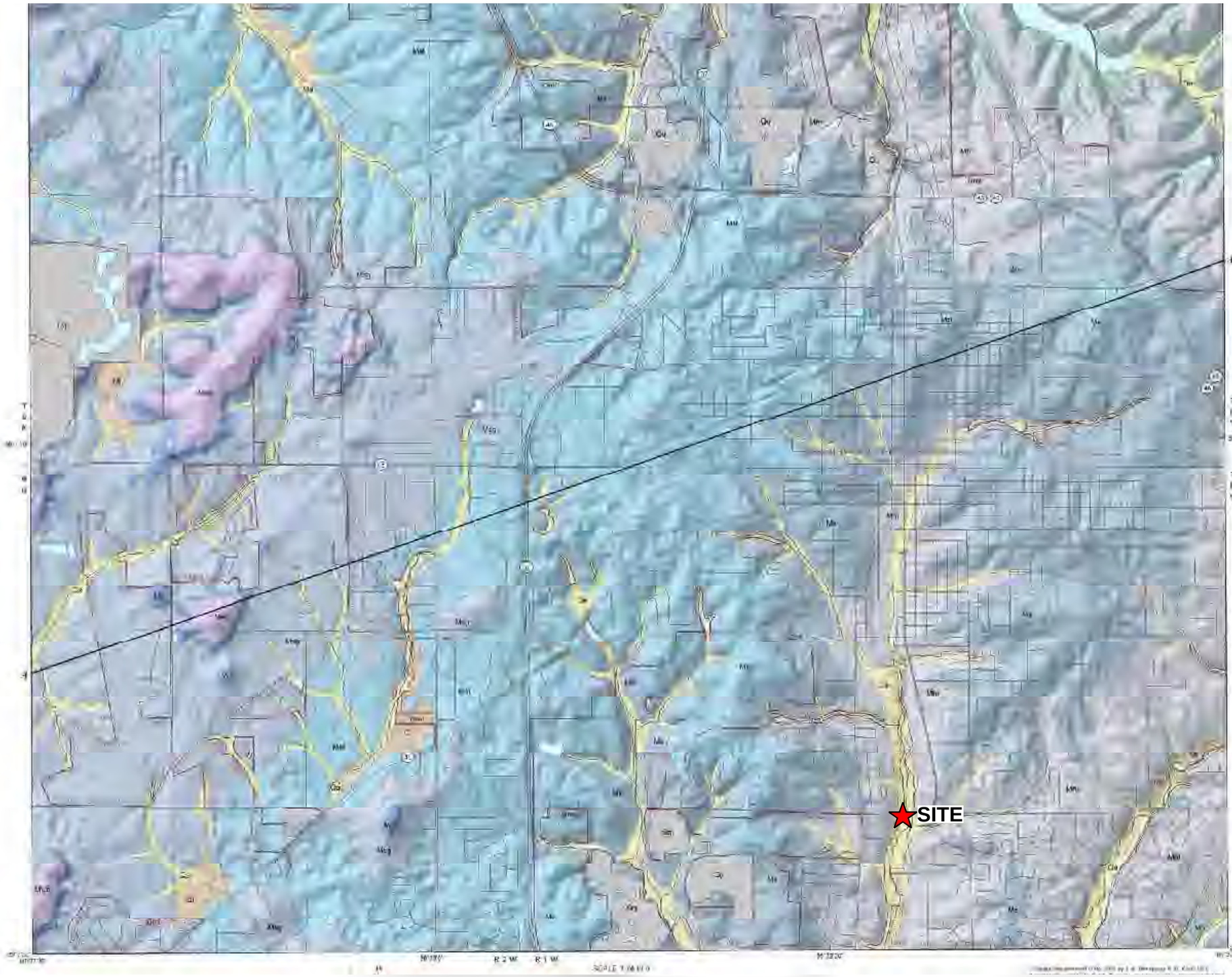
CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Range of Single-Well Hydraulic Test Results

ARCADIS

FIGURE
4

CITY: (KNOXVILLE) DIV/GROUP: (ENV) DB: (B.ALTOM) LD: (B.ALTOM) PIC:(J.REID) PM: (S.SHARP) TM: M.GRILES)
PROJECT: IN000072.0059.00001 PATH: G:\GIS\CSXT_Bloomington\MapDocs\2011\HYDGEO\F4 IN072_HYDGEO hydraulics.cdr SAVED: 25OCT2011



REFERENCE:
USGS 7.5-minute Geologic Quadrangle:
Bloomington, Indiana.

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Bloomington Area Geology Map

FIGURE
5

CITY: (KNOXVILLE) DIV/GROUP: (ENV) DB: (B.ALTOM) LD: (B.ALTOM) PIC:(J.REID) PM: (S.SHARP) TM: M.GRILES)
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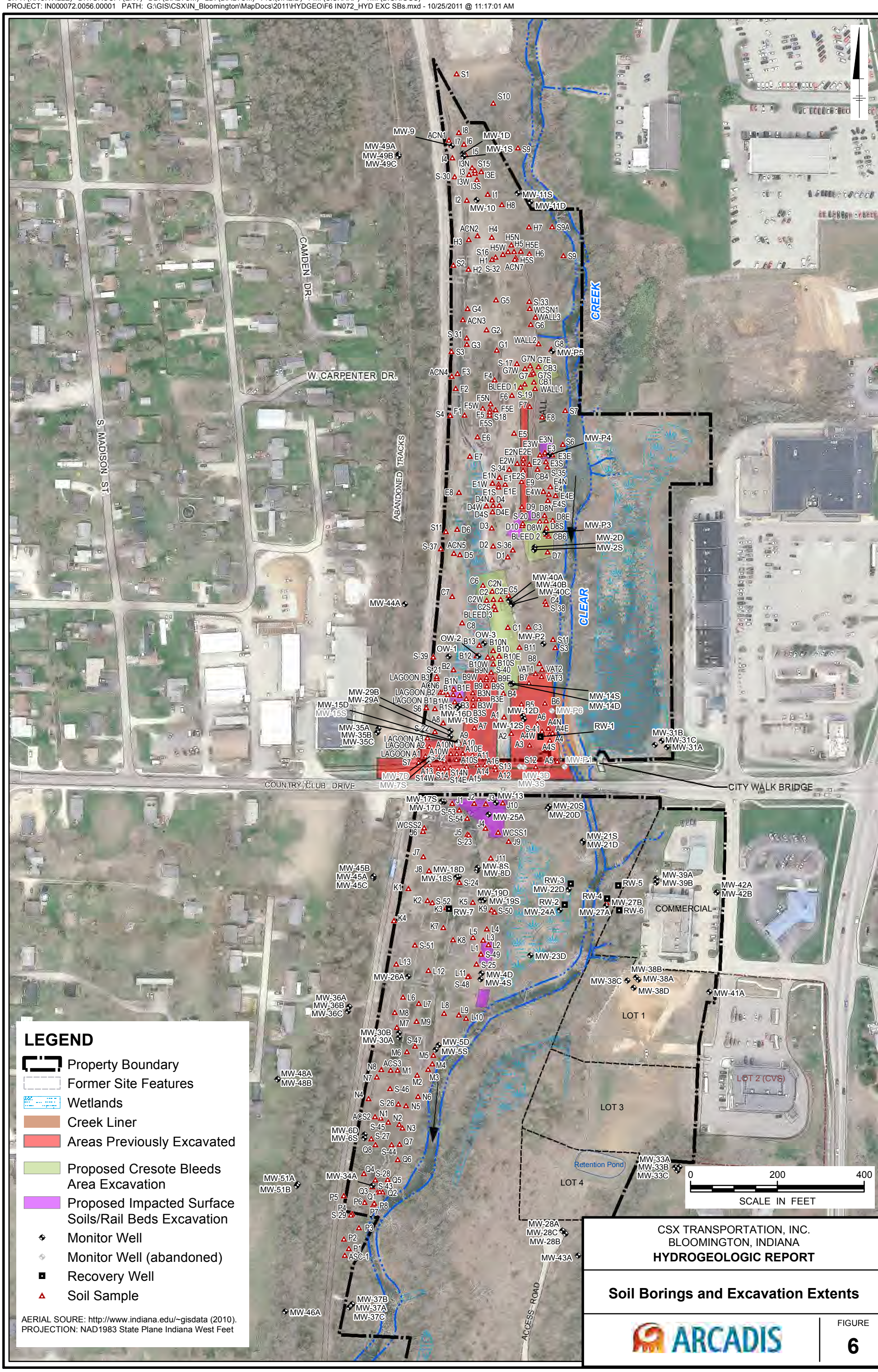

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Soil Borings and Excavation Extents

ARCADIS

FIGURE
6

CITY: (KNOXVILLE) DIV/GROUP: (ENV) DB: (B.ALTOM) LD: (B.ALTOM) PIC:(J.REID) PM: (S.SHARP) TM: (B.GRIGGS)
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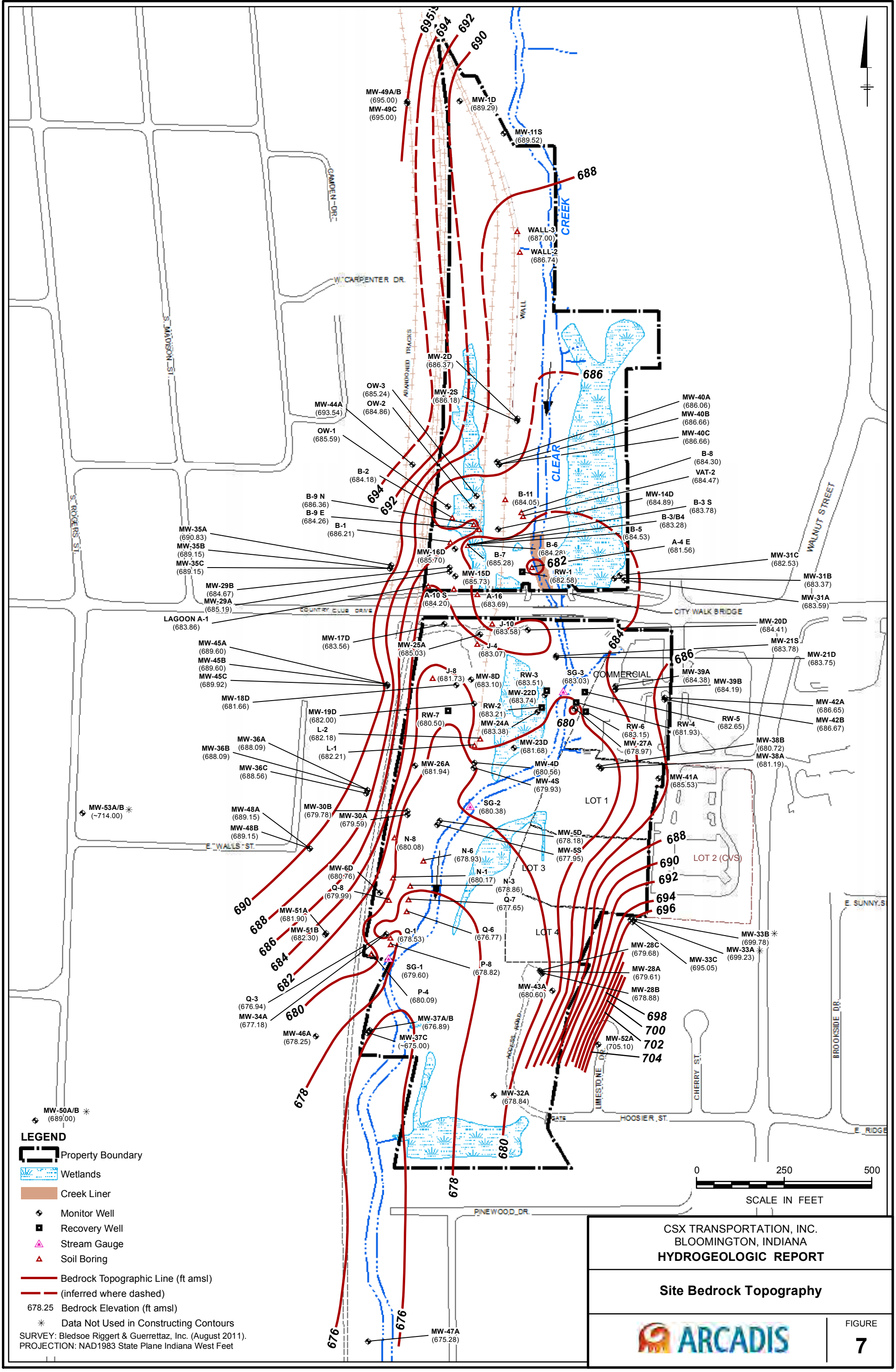

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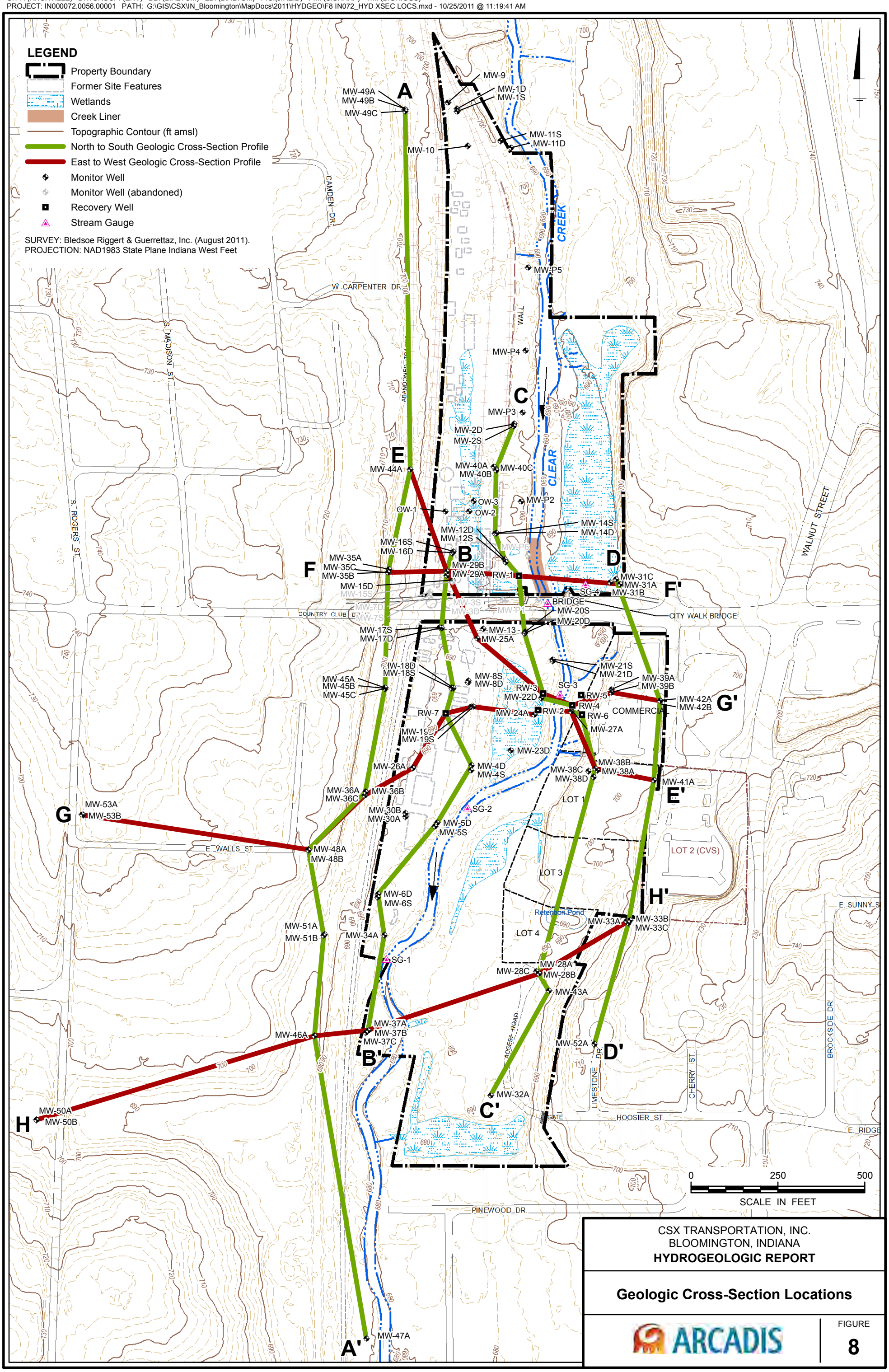
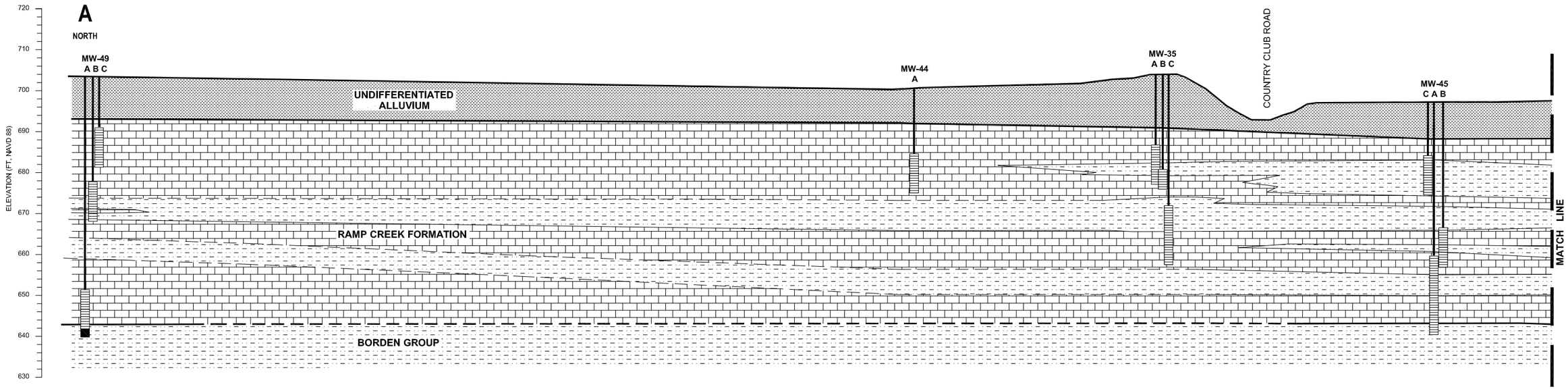


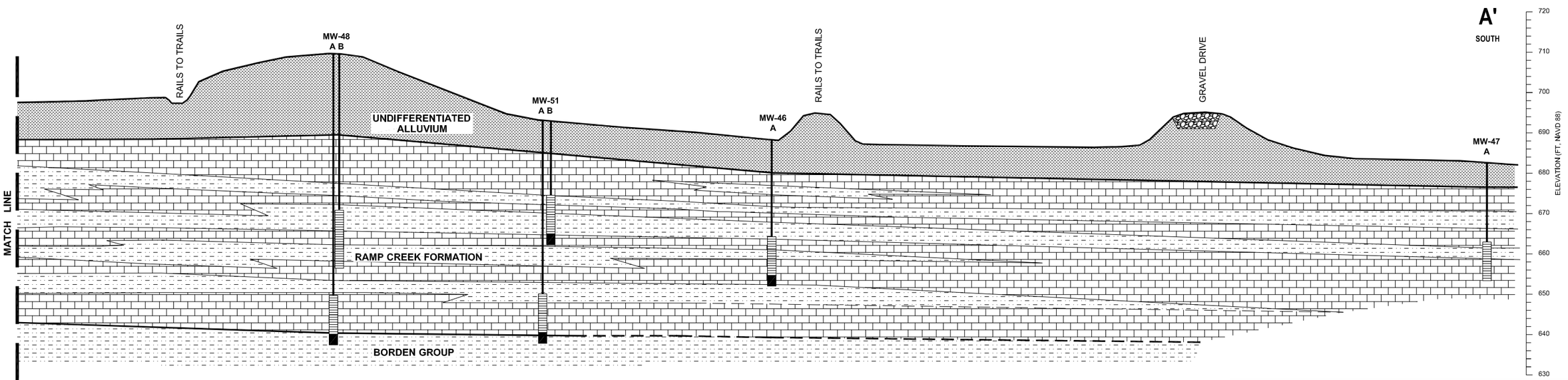
CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Geologic Cross-Section Locations

ARCADIS

FIGURE
8





NOTES:

1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. BEDROCK FORMATION CONTACTS DASHED WHERE INFERRED.
3. THE INTERBEDDED LIMESTONE AND SILTSTONE UNITS ATTRIBUTED TO THE RAMP CREEK FORMATION MAY INCLUDE UNDIFFERENTIATED REMNANTS OF THE BASAL PORTION OF THE OVERLYING HARRODSBURG FM, PARTICULARLY WHERE THE UNIT THICKNESS EXCEEDS 35 TO 40 FT.

LEGEND

- GRAVEL
- UNDIFFERENTIATED ALLUVIUM
- LIMESTONE
- SILTSTONE
- MONITOR WELL
- SCREENED INTERVAL
- SUMP

0 — 125'
HORIZONTAL SCALE IN FEET
VERTICAL EXAGGERATION: 5X

CSX TRANSPORTATION, INC
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Geologic Cross-Section A-A'

ARCADIS

FIGURE
9

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:(B.ALTOM) PIC:(S.GLENN) PM:(S.SHARP) TM:(M.GRILES/R.WOODRUFF)
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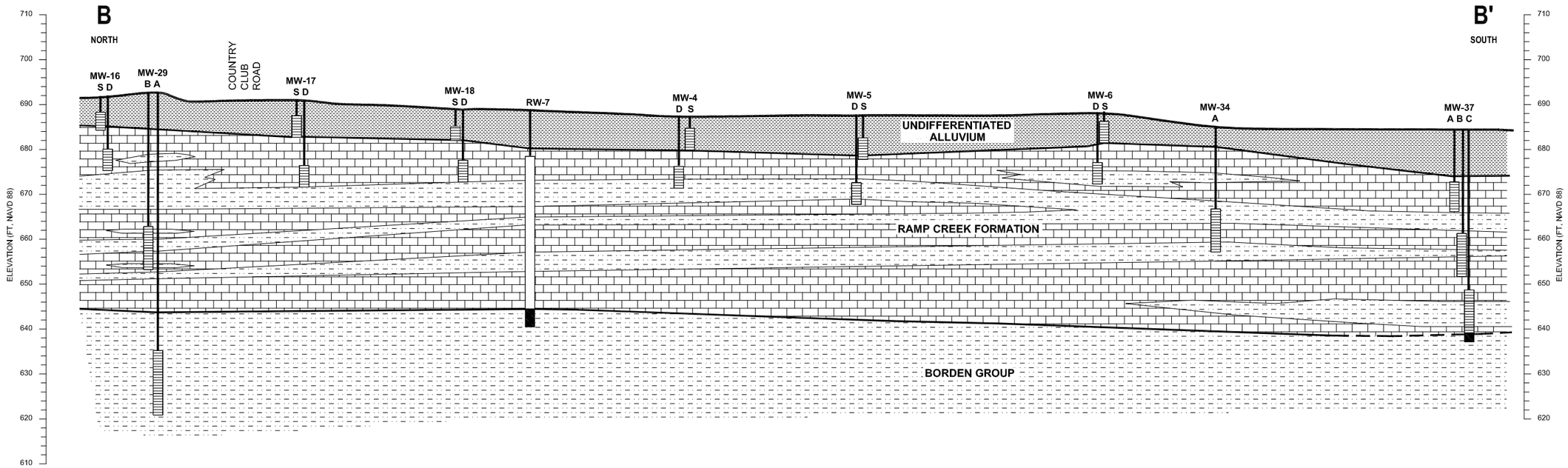

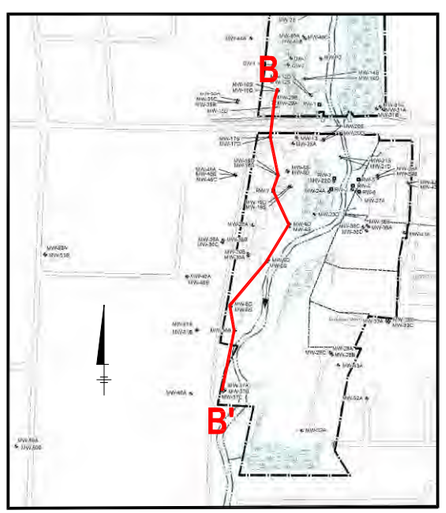

LOCATION MAP

PROJECTION: NAD83 STATE PLANE INDIANA WEST.

LEGEND

- UNDIFFERENTIATED ALLUVIUM
- LIMESTONE
- SILTSTONE
- MONITOR WELL
- SCREENED INTERVAL
- OPEN BORE HOLE
- SUMP

NOTES:

1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. BEDROCK FORMATION CONTACTS DASHED WHERE INFERRED.
3. THE INTERBEDDED LIMESTONE AND SILTSTONE UNITS ATTRIBUTED TO THE RAMP CREEK FORMATION MAY INCLUDE UNDIFFERENTIATED REMNANTS OF THE BASAL PORTION OF THE OVERLYING HARRODSBURG FM, PARTICULARLY WHERE THE UNIT THICKNESS EXCEEDS 35 TO 40 FT.

0 125'

HORIZONTAL SCALE IN FEET

VERTICAL EXAGGERATION: 5X

CSX TRANSPORTATION, INC
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Geologic Cross-Section B-B'

ARCADIS

FIGURE
10

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:(B.ALTOM) PIC:(S.GLENN) PM:(S.SHARP) TM:(M.GRILES/R.WOODRUFF)
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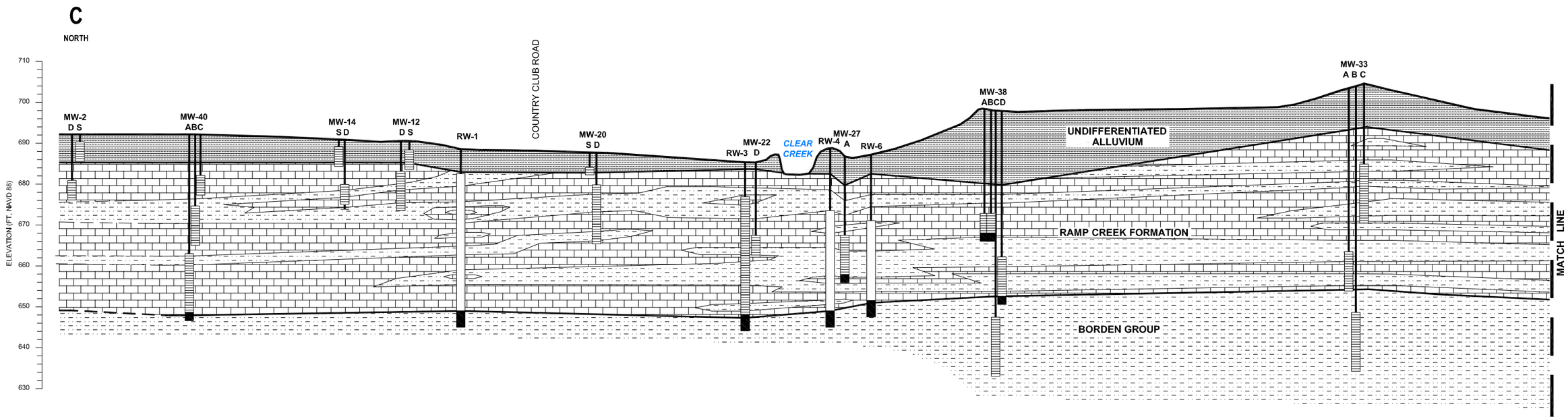
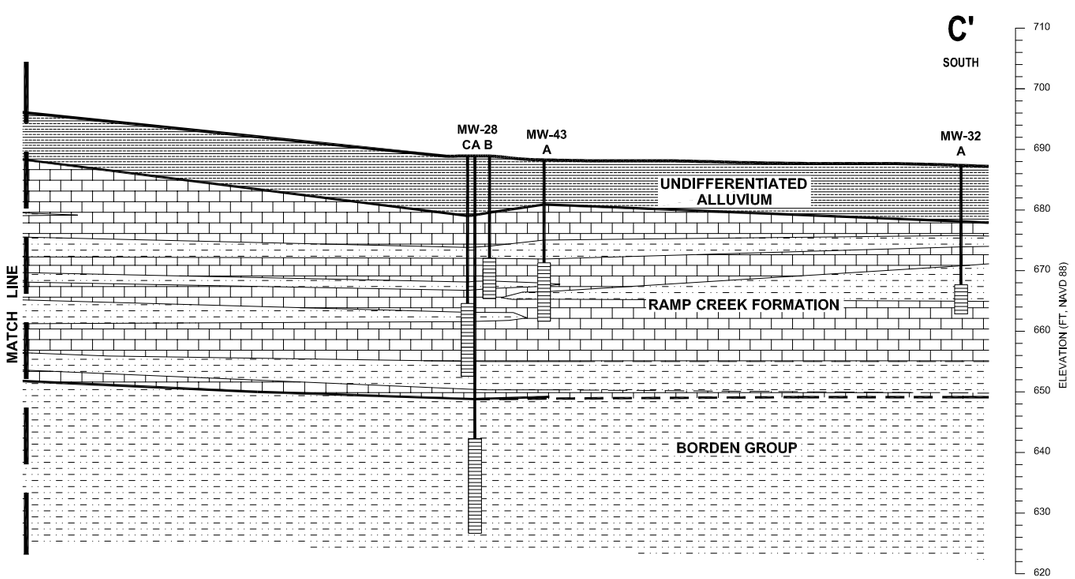
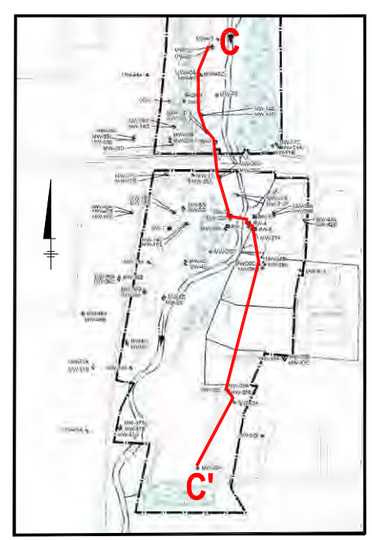






LOCATION MAP

PROJECTION: NAD83 STATE PLANE INDIANA WEST.

LEGEND

- UNDIFFERENTIATED ALLUVIUM
- LIMESTONE
- SILTSTONE
- MONITOR WELL
- SCREENED INTERVAL
- OPEN BORE HOLE
- SUMP

NOTES:

1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. BEDROCK FORMATION CONTACTS DASHED WHERE INFERRED.
3. THE INTERBEDDED LIMESTONE AND SILTSTONE UNITS ATTRIBUTED TO THE RAMP CREEK FORMATION MAY INCLUDE UNDIFFERENTIATED REMNANTS OF THE BASAL PORTION OF THE OVERLYING HARRODSBURG FM, PARTICULARLY WHERE THE UNIT THICKNESS EXCEEDS 35 TO 40 FT.

0 125'

HORIZONTAL SCALE IN FEET

VERTICAL EXAGGERATION: 5X

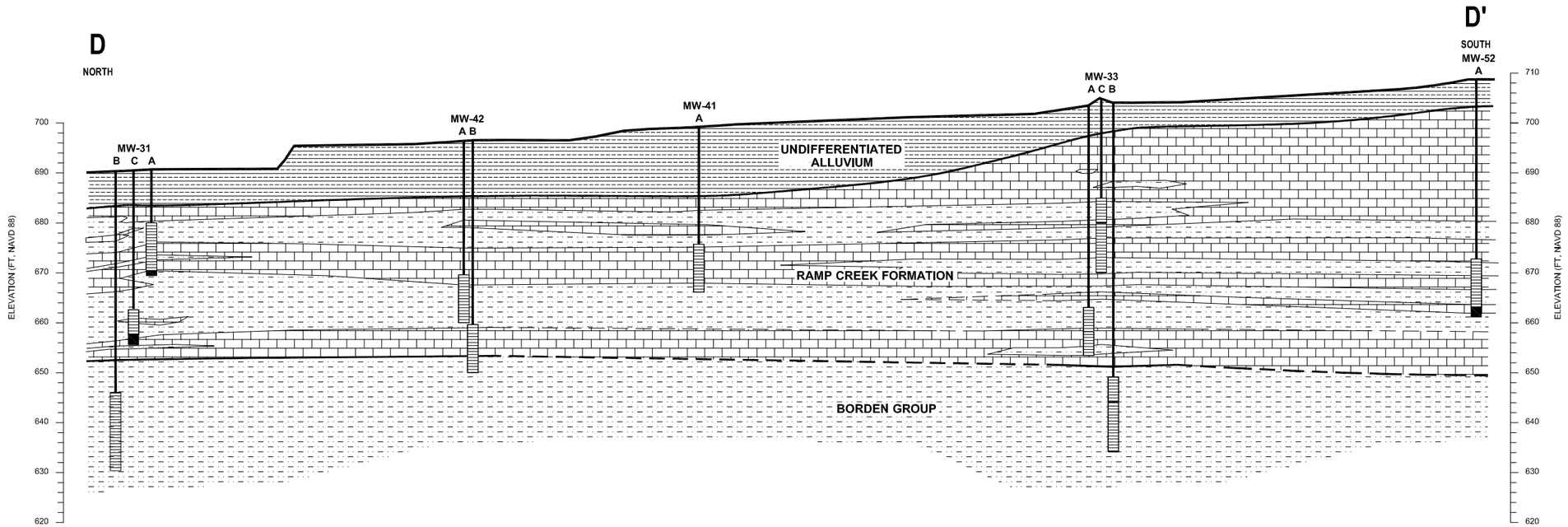
CSX TRANSPORTATION, INC
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

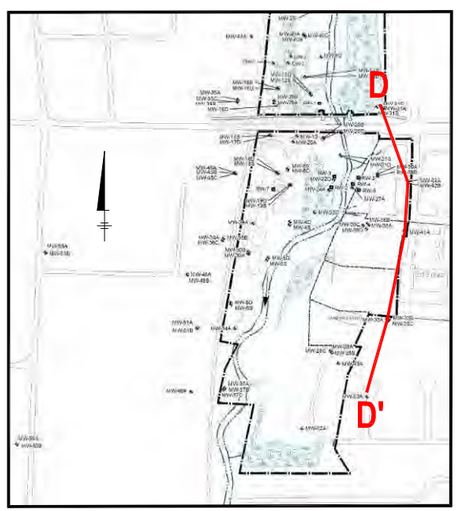
Geologic Cross-Section C-C'

ARCADIS

FIGURE
11

CITY:(KNOXVILLE) DIV/GROUP:(ENV) LD:(B.ALTOM) PIC:(S.GLENN) PM:(S.SHARP) TM:(M.GRILES)
G:\GIS\CSX\IN_Bloomington\MapDocs\2011\HYDGEO\F9-16 IN072_HYD_XSECs2011.dwg LAYOUT: C 125 SAVED: 10/18/2011 1:30 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: TN1_STANDARD.CTB PLOTTED: 10/18/2011 1:30 PM BY: ALTOM, BRENDA





LOCATION MAP

PROJECTION: NAD83 STATE PLANE INDIANA WEST.

LEGEND

- UNDIFFERENTIATED ALLUVIUM
- LIMESTONE
- SILTSTONE
- MONITOR WELL
- SCREENED INTERVAL
- OPEN BORE HOLE
- SUMP

NOTES:

1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. BEDROCK FORMATION CONTACTS DASHED WHERE INFERRED.
3. THE INTERBEDDED LIMESTONE AND SILTSTONE UNITS ATTRIBUTED TO THE RAMP CREEK FORMATION MAY INCLUDE UNDIFFERENTIATED REMNANTS OF THE BASAL PORTION OF THE OVERLYING HARRODSBURG FM, PARTICULARLY WHERE THE UNIT THICKNESS EXCEEDS 35 TO 40 FT.

0 125'

HORIZONTAL SCALE IN FEET

VERTICAL EXAGGERATION: 5X

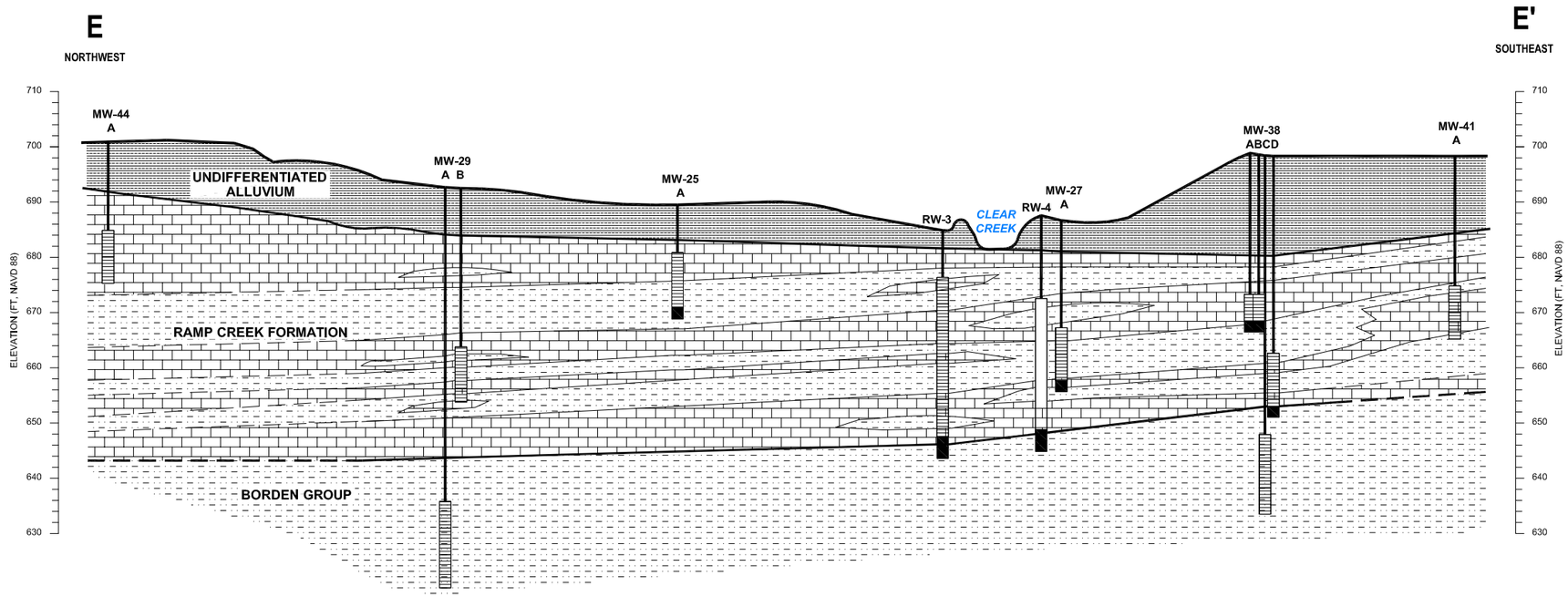
CSX TRANSPORTATION, INC
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

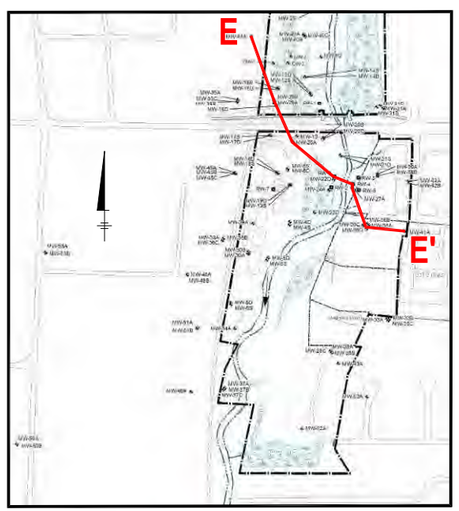
Geologic Cross-Section D-D'

ARCADIS

FIGURE
12

CITY:(KNOXVILLE) DIV/GROUP:(ENV) LD:(BLALTOM) PIC:(S.GLENN) PM:(S.SHARP) TM:(M.GRILES)
G:\GIS\CSX\IN_Bloomington\MapDocs\2011\HYDGEO\F9-16 IN072_HYD_XSECs2011.dwg LAYOUT: D 125 SAVED: 10/25/2011 10:40 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: TN1_STANDARD.CTB PLOTTED: 10/25/2011 10:45 AM BY: ALTOM, BRENDA





LOCATION MAP

PROJECTION: NAD83 STATE PLANE INDIANA WEST.

LEGEND

- UNDIFFERENTIATED ALLUVIUM
- LIMESTONE
- SILTSTONE
- MONITOR WELL
- SCREENED INTERVAL
- OPEN BORE HOLE
- SUMP

NOTES:

1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. BEDROCK FORMATION CONTACTS DASHED WHERE INFERRED.
3. THE INTERBEDDED LIMESTONE AND SILTSTONE UNITS ATTRIBUTED TO THE RAMP CREEK FORMATION MAY INCLUDE UNDIFFERENTIATED REMNANTS OF THE BASAL PORTION OF THE OVERLYING HARRODSBURG FM, PARTICULARLY WHERE THE UNIT THICKNESS EXCEEDS 35 TO 40 FT.

0 125'

HORIZONTAL SCALE IN FEET

VERTICAL EXAGGERATION: 5X

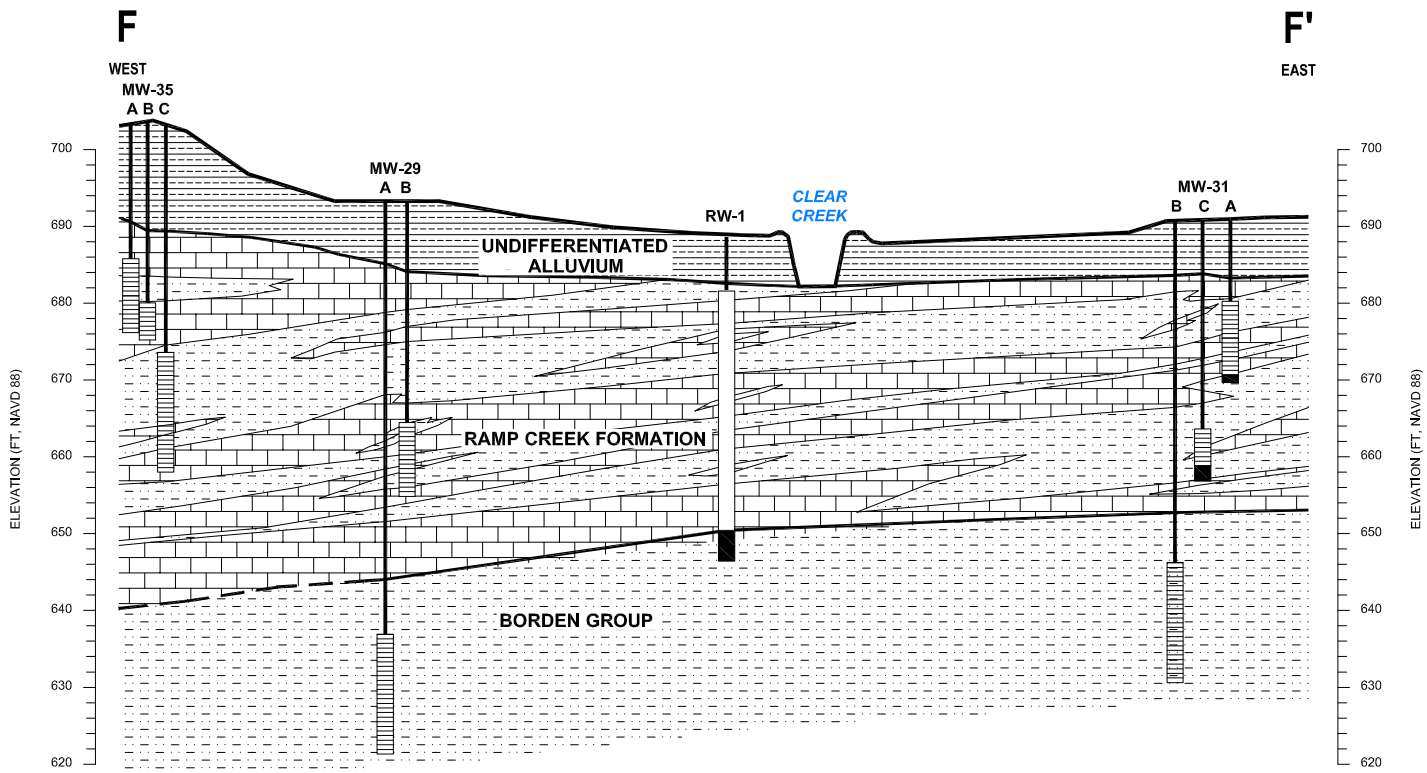
CSX TRANSPORTATION, INC
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Geologic Cross-Section E-E'

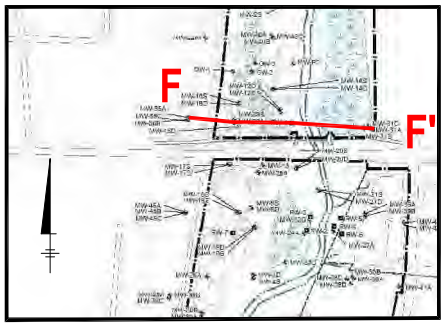
ARCADIS

FIGURE
13

CITY:(KNOXVILLE) DIV/GROUP:(ENV) LD:(B.ALTOM) PIC:(S.GLENN) PM:(S.SHARP) TM:(M.GRILES)
G:\GIS\CSXIN_Bloomington\MapDocs\2011\HYDGEOF\9-16 IN072_HYD_XSECs2011.dwg LAYOUT: E 125 SAVED: 10/25/2011 10:10 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: TN1_STANDARD.CTB PLOTTED: 10/25/2011 10:10 AM BY: ALTOM, BRENDA



0 125'
HORIZONTAL SCALE IN FEET
VERTICAL EXAGGERATION: 5X



LOCATION MAP
PROJECTION: NAD83 STATE PLANE INDIANA WEST.

LEGEND

- UNDIFFERENTIATED ALLUVIUM
- LIMESTONE
- SILTSTONE
- MONITOR WELL
- SCREENED INTERVAL
- OPEN BORE HOLE
- SUMP

NOTES:

1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
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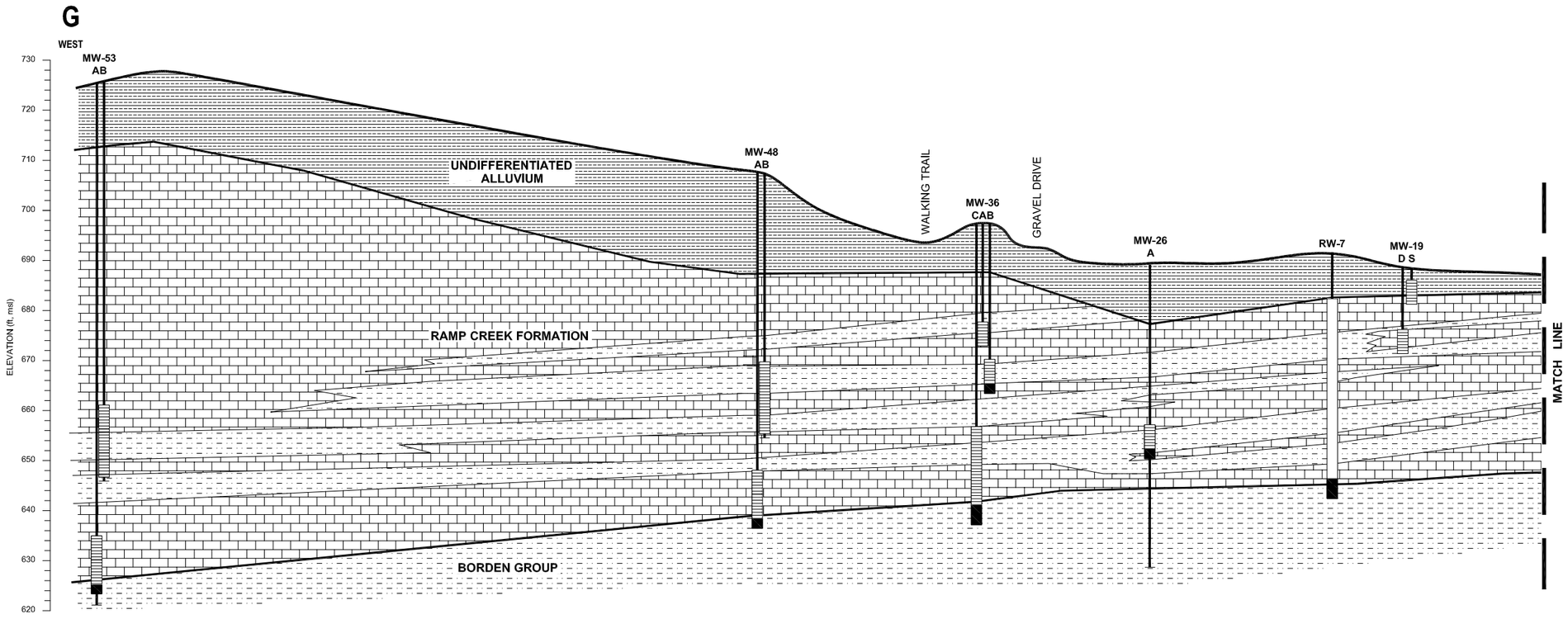
3. THE INTERBEDDED LIMESTONE AND SILTSTONE UNITS ATTRIBUTED TO THE RAMP CREEK FORMATION MAY INCLUDE UNDIFFERENTIATED REMNANTS OF THE BASAL PORTION OF THE OVERLYING HARRODSBURG FM, PARTICULARLY WHERE THE UNIT THICKNESS EXCEEDS 35 TO 40 FT.

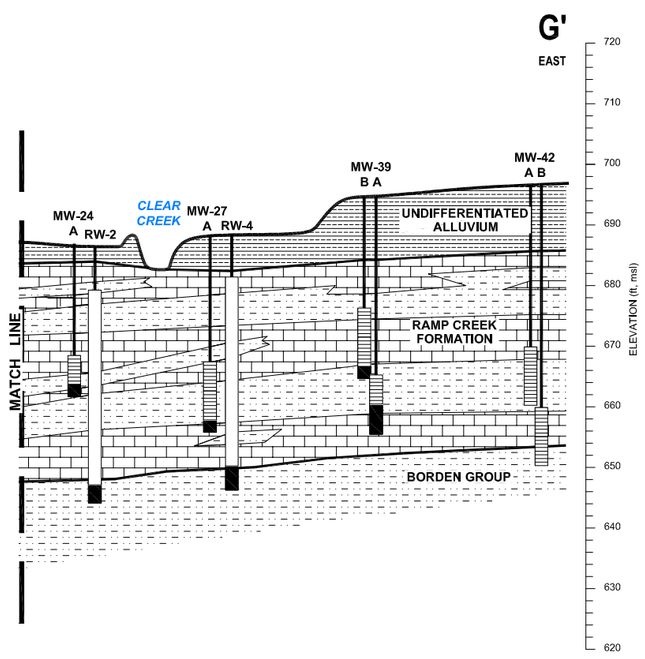
CSX TRANSPORTATION, INC
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Geologic Cross-Section F-F'

ARCADIS

FIGURE
14





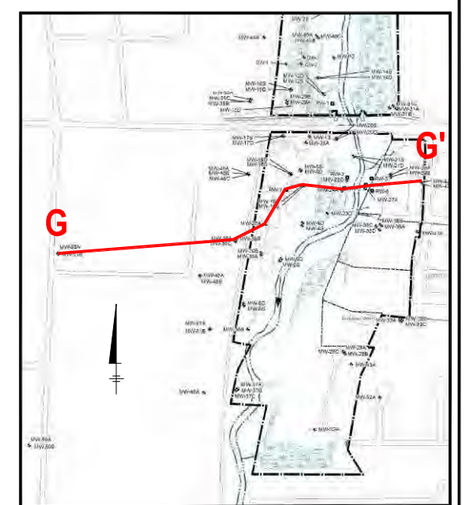
NOTES:

1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. THE INTERBEDDED LIMESTONE AND SILTSTONE UNITS ATTRIBUTED TO THE RAMP CREEK FORMATION MAY INCLUDE UNDIFFERENTIATED REMNANTS OF THE BASAL PORTION OF THE OVERLYING HARRODSBURG FM, PARTICULARLY WHERE THE UNIT THICKNESS EXCEEDS 35 TO 40 FT.

LEGEND

- GRAVEL
- UNDIFFERENTIATED ALLUVIUM
- LIMESTONE
- SILTSTONE
- MONITOR WELL
- SCREENED INTERVAL
- OPEN BORE HOLE
- SUMP

0 — 125'
HORIZONTAL SCALE IN FEET
VERTICAL EXAGGERATION: 5X



LOCATION MAP
PROJECTION: NAD83 STATE PLANE INDIANA WEST.

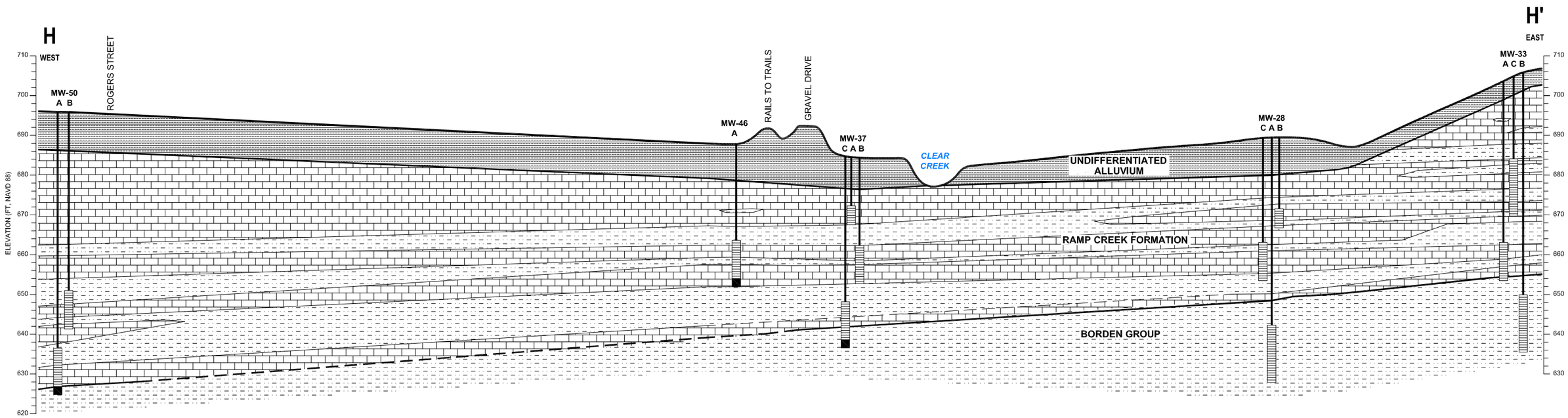
CSX TRANSPORTATION, INC
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

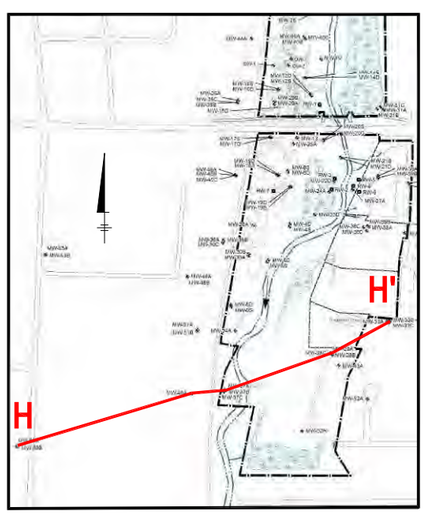
Geologic Cross-Section G-G'

ARCADIS

FIGURE
15

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:(B.ALTOM) PIC:(S.GLENN) PM:(S.SHARP) TM:(M.GRILES/R.WOODRUFF)
G:\GIS\CSXIN_Bloomington\MapDocs\2011\HYDGEO\F9-16 IN072_HYD_XSECs2011.dwg LAYOUT: G 125 SAVED: 10/18/2011 10:16 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: TN1_STANDARD.CTB PLOTTED: 10/18/2011 10:16 AM BY: ALTOM, BRENDA





LOCATION MAP

PROJECTION: NAD83 STATE PLANE INDIANA WEST.

LEGEND

- UNDIFFERENTIATED ALLUVIUM
- LIMESTONE
- SILTSTONE
- MONITOR WELL
- SCREENED INTERVAL
- SUMP

NOTES:

1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. BEDROCK FORMATION CONTACTS DASHED WHERE INFERRED.
3. THE INTERBEDDED LIMESTONE AND SILTSTONE UNITS ATTRIBUTED TO THE RAMP CREEK FORMATION MAY INCLUDE UNDIFFERENTIATED REMNANTS OF THE BASAL PORTION OF THE OVERLYING HARRODSBURG FM, PARTICULARLY WHERE THE UNIT THICKNESS EXCEEDS 35 TO 40 FT.

0 125'

HORIZONTAL SCALE IN FEET

VERTICAL EXAGGERATION: 5X

CSX TRANSPORTATION, INC
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Geologic Cross-Section H-H'

ARCADIS

FIGURE
16

CITY:(KNOXVILLE) DIV/GROUP:(ENV) LD:(B.ALTOM) PIC:(S.GLENN) PM:(S.SHARP) TM:(M.GRILES)
G:\GIS\CSX\IN_Bloomington\MapDocs\2011\HYDGEO\F9-16 IN072_HYD_XSECs2011.dwg LAYOUT: H 125 SAVED: 10/25/2011 9:44 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: TN1_STANDARD.CTB PLOTTED: 10/25/2011 9:44 AM BY: ALTOM, BRENDA

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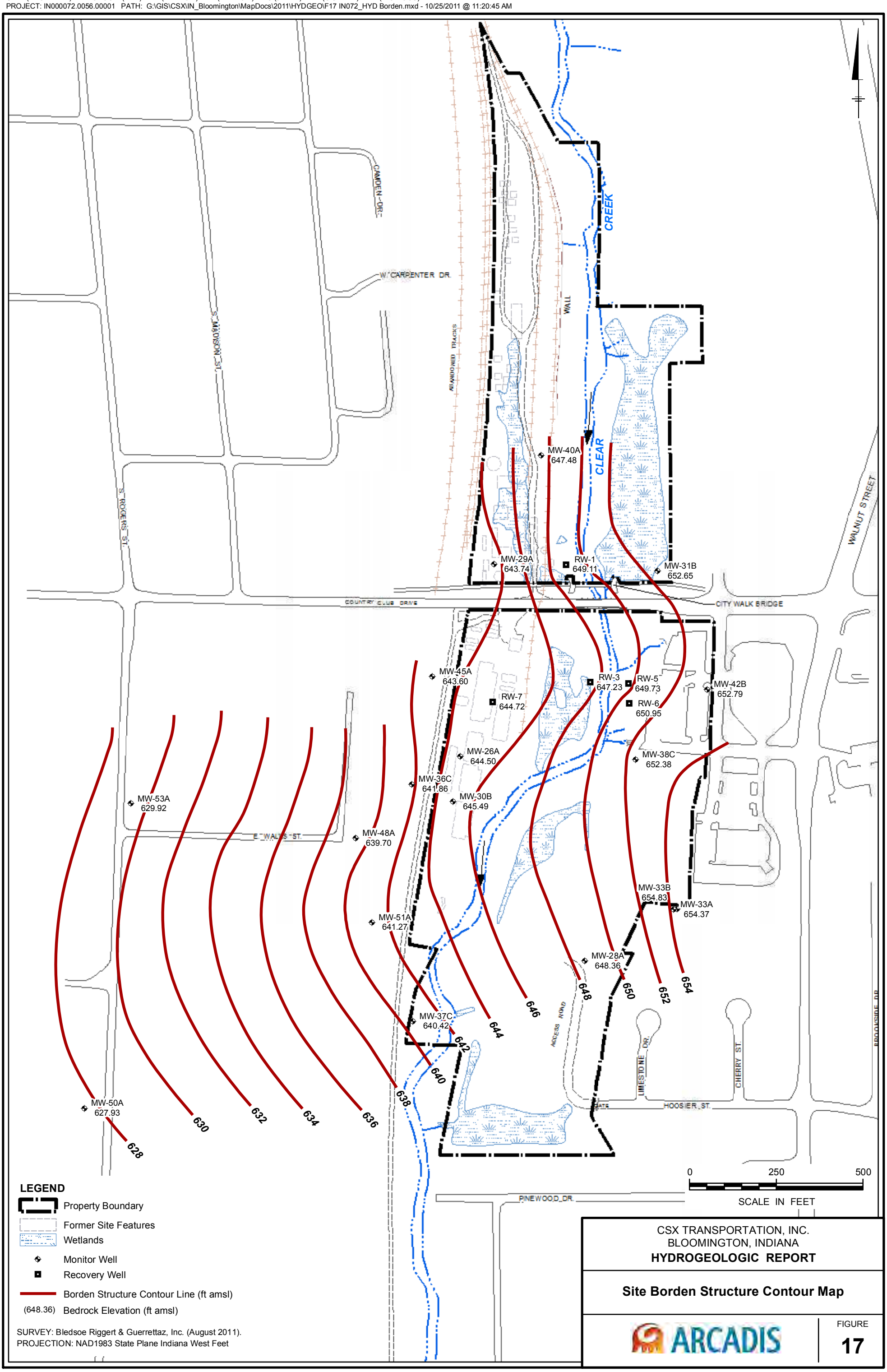

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Site Borden Structure Contour Map

ARCADIS

FIGURE
17

CITY: (KNOXVILLE) DIV/GROUP: (ENV) DB: (B.ALTOM) LD: (B.ALTOM) PIC:(J.REID) PM: (S.SHARP) TM: (B.GRIGGS)
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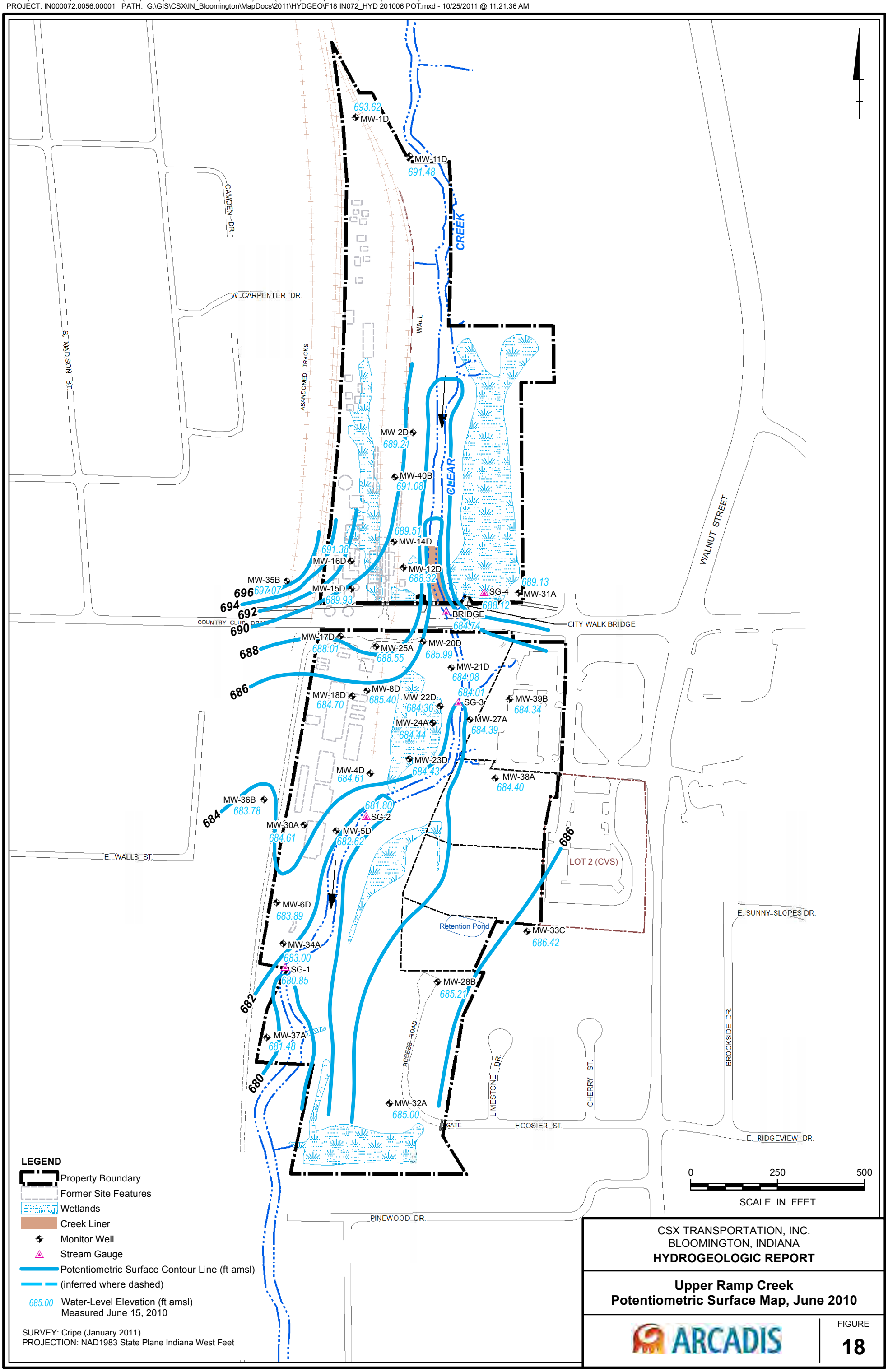

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Upper Ramp Creek
Potentiometric Surface Map, June 2010

ARCADIS

FIGURE
18

CITY: (KNOXVILLE) DIV/GROUP: (ENV) DB: (B.ALTOM) LD: (B.ALTOM) PIC:(J.REID) PM: (S.SHARP) TM: (B.GRIGGS)
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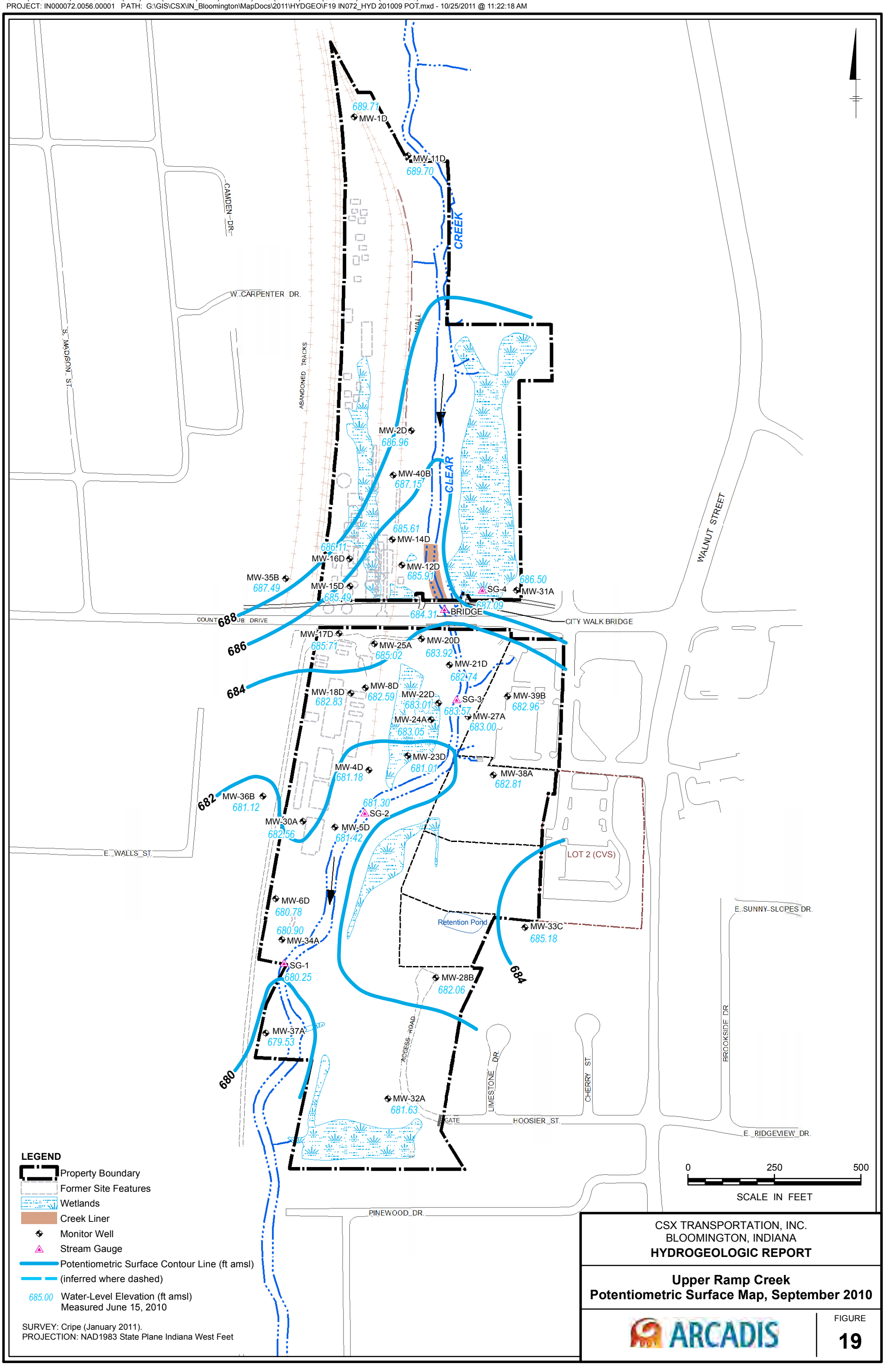

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Upper Ramp Creek
Potentiometric Surface Map, September 2010

ARCADIS

FIGURE
19

CITY: (KNOXVILLE) DIV/GROUP: (ENV) DB: (B.ALTOM) LD: (B.ALTOM) PIC:(J.REID) PM: (S.SHARP) TM: (B.GRIGGS)
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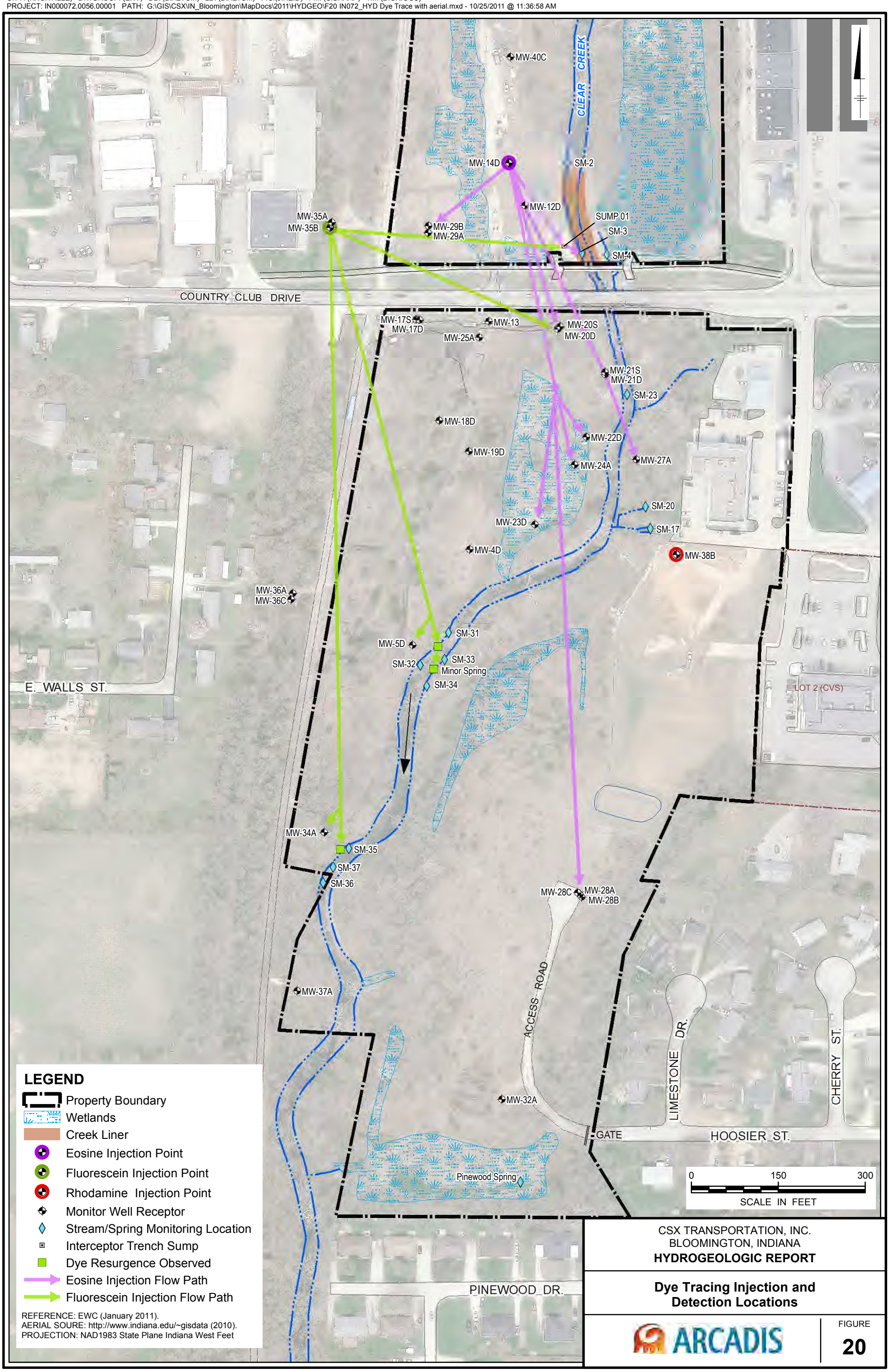
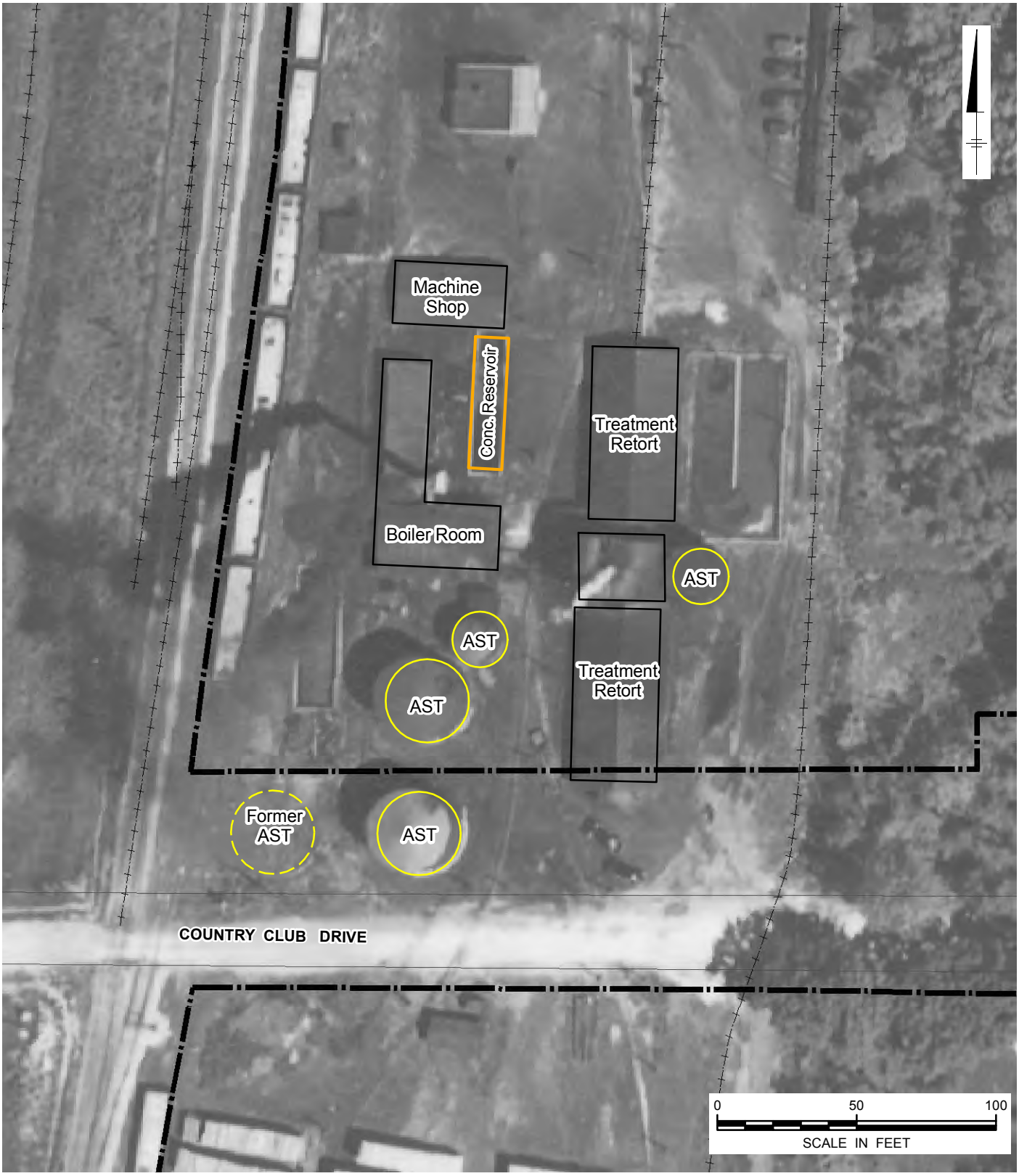


CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Dye Tracing Injection and Detection Locations

ARCADIS

FIGURE
20



AERIAL SOURE: http://www.indiana.edu/~gisdata
City of Bloomington (1949).
PROJECTION: NAD1983 State Plane Indiana West Feet

LEGEND

Property Boundary

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Annotated 1949 Aerial Photograph

ARCADIS

FIGURE
21

CITY: (KNOXVILLE) DIV/GROUP: (ENV/GIS) DB: (B.ALTOM) LD: (B.ALTOM) PIC:(J.REID) PM: (S.SHARP) TM: (M.GRILES)
PROJECT: IN000072.0059.00001 PATH: G:\GIS\CSX\IN_Bloomington\MapDocs\2011\HYDGEO\F21 IN072_HYD SITE 1949 Features.mxd - 10/25/2011 @ 11:36:10 AM

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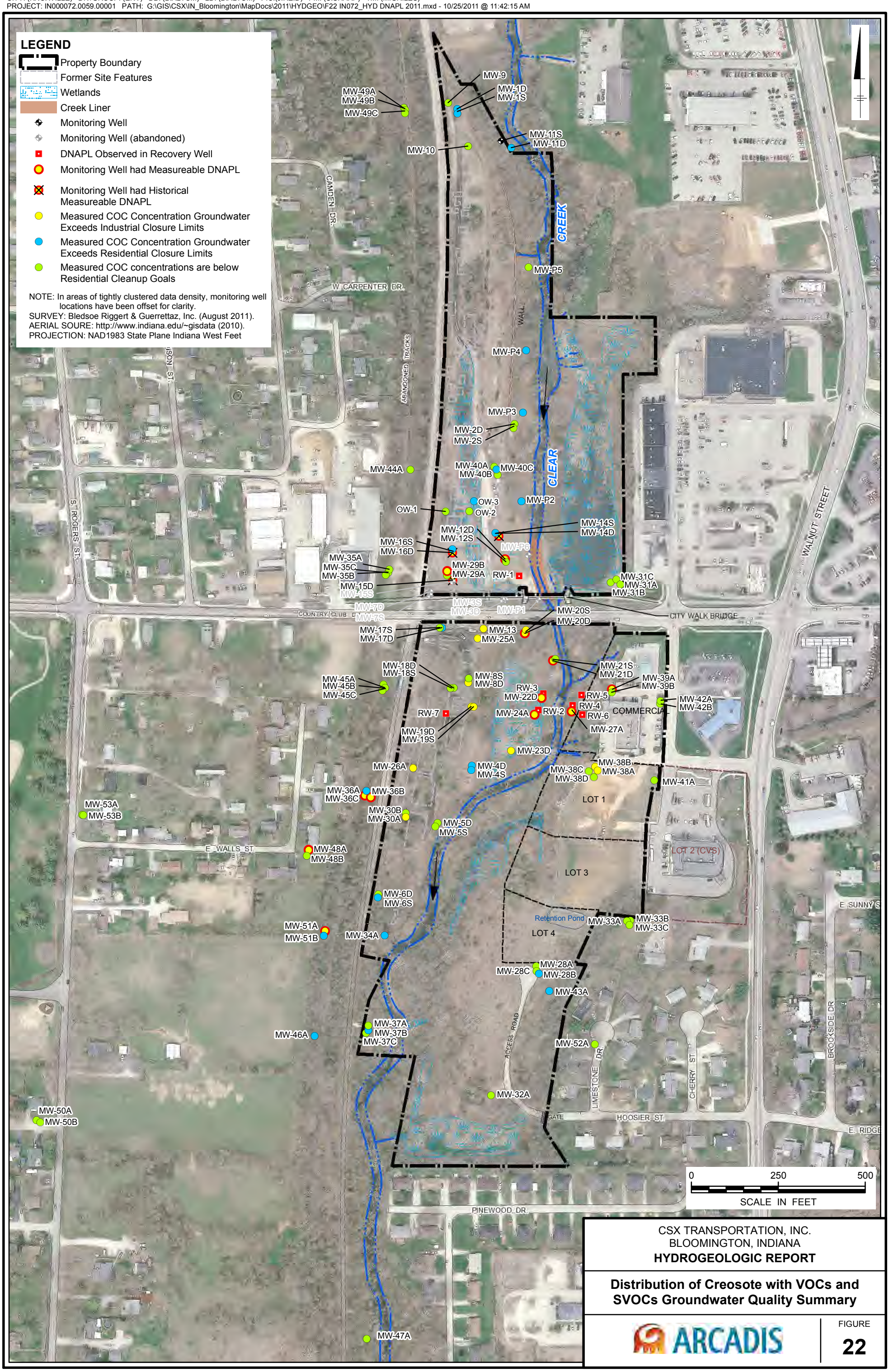

CSX TRANSPORTATION, INC.
BLOOMINGTON, INDIANA
HYDROGEOLOGIC REPORT

Distribution of Creosote with VOCs and SVOCs Groundwater Quality Summary

ARCADIS

FIGURE
22

SOIL BORING / SAMPLING LOG

Boring/Well: MW-24A | Project/No.: CSXT Bloomington/IN000072 | Page 1 of 3

Site Location: Bloomington, IN | Drilling Started: 7/22/2008 | Drilling Completed: 7/24/2008

Drilling Contractor: Boart Longyear | Driller: J. Greer / D. Duscatr | Helper: M. Patrick

Drilling Fluid Used: Water | Drilling Method: Sonic (mini)

Length and Diameter of Coring Device: 5.0 ft core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 684.88 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.0 Feet | Hole Diameter: 6" | Coring Device: 5' coring barrel

Prepared By: T. Schoen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.0 | Water Loss: 205 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-1.5'	Grab	1420	--	SVOC, metals, BTEX

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	4.0	100	--	--		0.0-1.0'	**Clay**, brown-medium, trace silt, little fine to medium sand, trace subangular gravel up to 0.5", low plasticity, high organics, rootlets, moist, musty odor
						1.0-1.25'	Clay, brown-medium, trace silt, little fine to medium sand, little subangular gravel up to 1.0", high plasticity, moist, musty odor
						1.25-1.5'	**Limestone**, weathered, fine to coarse sand, angular to subangular, clay coated, fine to coarse gravel, subround to angular
						1.5-3.0'	Bedrock hit, blind drill, competent rock, set double case 0-3.0', 10" steel pipe in 14" hole
						3.0-4.0'	Blind drill

ROCK CORING / SAMPLING LOG

Boring/Well: MW-24A | Project/No.: CSXT Bloomington/IN000072 | Page 2 of 3

Site Location: Bloomington, IN | Drilling Started: 7/21/2008 | Drilling Completed: 7/21/2008

Drilling Contractor: Boart Longyear | Driller: J. Greer / D. Duscatr | Helper: M. Patrick

Drilling Fluid Used: Water | Drilling Method: Sonic (mini)

Length and Diameter of Coring Device: 5.0 ft core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 684.88 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.0 Feet | Hole Diameter: 6" | Coring Device: 5' coring barrel

Prepared By: T. Schoen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.0 | Water Loss: 205 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-1.5'	Grab	1420	--	SVOC, metals, BTEX

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water loss	Sample/Core Description
4.6	9.0	69.0	--	20/5	~25 gal	**4.6-9.0' Limestone**, light to medium grey, argillaceous, contorted, laminations, geodes up to 2-3" in diameter
9.0	13.8	72.0	--	20/5	180 gal	4.85-5.6' subvertical joint, oxidation on facies, trace pyrite, apparent transitional fracture
14.0	19.0	100	67.0	--		5.65' bedding plane, little oxidation, clay on facies
19.0	22.0	--	94.0	--		6.3' bedding plane, highly oxidized 1.0" above and below, apparent transitional fracture
22.0	25.0	100	100.0	--		6.5, 6.7 and 7.0', tight bedding plane, little pitting on facies
						6.85, fossilifierous packstone, mostly crinoids
						7.3' bedding plane, little contact, tight
						7.7' bedding plane, tight, partly decomposed
						7.8-7.9' fossilifierous packstone, mostly crinoids
						8.2-9.0' highly contorted laminations
						9.0-12.0' Limestone, very light grey to medium grey, argillaceous, laminations, varved banding
						9.75' bedding plane fracture with minor argillaceous infilling, semi-smooth surface
						9.75-9.9' geode, 2.5" wide, subangular globules, narrow opening
						10.0-10.1' packstone, crinoids, trace oolites, oxidized brown, mostly clay, fine sand, "suspect sand washed out"
						10.1-10.3' bedding plane fracture, argillaceous, rust brown on parting face, "suspect sand washout"
						10.5' bedding plane fracture, grey argillaceous infiling
						10.9' bedding plane fracture grey argillaceous infilling
						11.6' bedding plan fracture, weakened by contact with outer surface of geode (rounded)
						11.6-11.85' flowstone speleothem feature, diameter of core (2.5") quartz crystal, 1-2.0" deep, trace pyrite
						12.0-13.8' Siltstone, fractures

ROCK CORING / SAMPLING LOG

Boring/Well: MW-24A | Project/No.: CSXT Bloomington/IN000072 | Page 3 of 3

Site Location: Bloomington, IN | Drilling Started: 7/21/2008 | Drilling Completed: 7/21/2008

Drilling Contractor: Boart Longyear | Driller: J. Greer / D. Duscatr | Helper: M. Patrick

Drilling Fluid Used: Water | Drilling Method: Sonic (mini)

Length and Diameter of Coring Device: 5.0 ft core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 684.88 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.0 Feet | Hole Diameter: 6" | Coring Device: 5' coring barrel

Prepared By: T. Schoen / M. Griles | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.0 | Water Loss: 205 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-1.5'	Grab	1420	--	SVOC, metals, BTEX

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water loss	Sample/Core Description
						12.0' geode, 0.5" diameter
						12.0-12.2' geode
						12.5-12.7' flowstone feature
						12.7' bedding plane fracture with argillaceous infilling
						12.75-12.8' geode
						14.0-14.9' Siltstone, argillaceous, finely laminated
						14.9-15.9' Limestone, wackestone 14.9-15.15'
						15.15' pyrite vein
						15.3-15.65' wackestone primarily crinoids
						15.75' pyrite infilling, styolite structure
						15.9-16.3' Limestone, 5G4/1, dark greenish grey, trace crinoids, micritic
						16.3-16.8' Packstone, predominately crinoids
						16.9-17.15' Mudstone
						17.15-17.4' Weathered Siltstone, weathered, calcitic, finely laminated, strong odor, product along cleavage
						19.0-20.75' Limestone, wackestone, argillaceous, crinoids, braciopods
						20.75-22.2' Calcitic Mudstone, argillaceous, contorted, bedding planes
						22.2-22.5' Limestone, packstone, heavy crinoids
						22.5-25.0' Siltstone, 5GY/41 dark greenish grey, 23.2' 1/2" geode
						25.0' End of boring

SOIL BORING / SAMPLING LOG

Boring/Well: MW-25A Project/No.: CSXT Bloomington/IN000072 Page 1 of 5

Site Location: Bloomington, IN Drilling Started: 7/24/2008 Drilling Completed: 7/29/2008

Drilling Contractor: Boart Longyear Driller: Kevin O'Brien Helper: Jason Greer

Drilling Fluid Used: Water Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.53 feet [X] Surveyed [ ] Estimated Water:

Total Depth Drilled: 25.0 Feet (25.05) Hole Diameter: 6" Coring Device: 5.0' coring barrel (5' core barrel)

Prepared By: T. Schoen / R. Woodruff Hammer Weight: N/A Hammer Drop: N/A ins.

Boring Termination Depth: 25.05 Water Loss: 0 gallons GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	8.0	100	--	--		0.0-2.0'	cinders, coal, ash
						2.0-4.5'	**Clay**, free product from 4.2-4.5'
						4.5-6.0	**Limestone**, weathered
						6.0-8.0	Blank drilled to set 10" casing two foot into bedrock

ROCK CORING / SAMPLE LOG

Boring/Well: MW-25A | Project/No.: CSXT Bloomington/IN000072 | Page 2 of 5

Site Location: Bloomington, IN | Drilling Started: 7/24/2008 | Drilling Completed: 7/29/2008

Drilling Contractor: Boart Longyear | Driller: Jason Greer | Helper: Kevin O'Brien

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.53 Feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.05 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: T. Schoen / R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.05 | Water Loss: 0 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
8.0	12.9	98	40.0	9.3	0	**8.0-12.9' Limestone, packstone,** N8, very light grey to, N5, medium-light grey, argillaceous, brachiopods, crinoids, bryozoans, turbid and contorted
13.0	15.0	100	--	9	0	8.40-8.55' clay infilling along fracture face at 8.40', oxidized/rust staining
15.0	20.0	100	95.0	28.0	0	8.65' bedding plane fracture with argillaceous coating, abundant bryozoans, oxidized/rust staining penetration 0.03' into rock on both faces (.01'), semi-smooth
20.0	25.0	100	100.0	28.0	0	8.75' argillaceous, crinoids, brachiopods, semi-smooth (.01')
						8.95' styolite (.01-.02'), heavy pitting, rough face (.05), creosote staining
						9.15' crinoids, bryozoan, brachiopods, semi-smooth, minor argillaceous coating, creosote staining
						9.40' bedding plane fracture with argillaceous coating, crinoids, semi-smooth quartz crystals, creosote staining
						9.45' bedding plane fracture with argillaceous coating, crinoids, semi-smooth quartz crystals, creosote staining
						9.60' bedding plane fracture with argillaceous infilling, crinoids, semi-smooth quartz crystals, creosote staining
						9.90' bedding plane fracture with argillaceous coating, some quartz crystals, brachiopod mold intact, crinoids
						10.05' bedding plane fracture with argillaceous infilling, creosote staining, slight odor
						10.50' styolite (.01-.02), argillaceous, very rough, heavy pitting, creosote stains
						11.35' bedding plane fracture rough, pitted, argillaceous, styolite, creosote staining
						11.55-11.75' styolite, break at 11.70'
						12.0' styolite
						12.35' styolite

ROCK CORING / SAMPLE LOG

Boring/Well: MW-25A | Project/No.: CSXT Bloomington/IN000072 | Page 3 of 5

Site Location: Bloomington, IN | Drilling Started: 7/24/2008 | Drilling Completed: 7/29/2008

Drilling Contractor: Boart Longyear | Driller: Kevin O'Brien | Helper: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.53 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.05 Feet | Hole Diameter: 6" | Coring Device: 5' core barrel

Prepared By: T. Schoen / R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.05 | Water Loss: 0 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
						13.0-13.4' Limestone, Wackstone, N8, very light grey to, N6, medium-light grey, thin horizontal beds, crinoids, bryozoans, brachiopods, trace pyrite
						13.1-13.2' styolite
						13.4-15.0' Siltstone, 5G6/1, greenish-grey to 5G4/1, dark greenish-grey, thinly laminated, varved beds, tighter beds from 14.35-15.0'
						13.45' argillaceous, slight odor, crinoids, trace sub-angular sand grains, (fine, <5%), slight creosote staining
						13.6-13.8' geode, quartz crystals ~ 1cm deep
						14.0-14.1' geode, across width of core
						14.1-14.2' geode
						14.2' argillaceous, heavy creosote staining, quartz crystals on face, part of a geode, semi-smooth to smooth face, strong odor, parting (.01'-.05')
						14.2-14.35' geode
						14.3' slight weathering of silt, semi-smooth, moderate odor, trace creosote staining
						14.6-14.65' geode, quartz crystals <1/4 deep
						14.7-14.75' geode

ROCK CORING / SAMPLE LOG

Boring/Well: MW-25A | Project/No.: CSXT Bloomington/IN000072 | Page 4 of 5

Site Location: Bloomington, IN | Drilling Started: 7/24/2008 | Drilling Completed: 7/29/2008

Drilling Contractor: Boart Longyear | Driller: Kevin O'Brien | Helper: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.53 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.05 Feet | Hole Diameter: 6" | Coring Device: 5' core barrel

Prepared By: T. Schoen / R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.05 | Water Loss: 0 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
						15.0-17.5' Siltstone, thinly laminated, contorted bedding, geodes, minor pyrite mineralizations
						15.08-15.29' large geode cavity with quartz crystals
						15.35-15.37' geode
						15.40-15.43' geode
						15.47-15.50' minor packstone interfingering, trace pyrite veining, predominately crinoids
						15.62' bedding plane fracture with slight argillaceous infilling -0.05'
						15.69-15.70' small geode
						15.75' bedding plane fracture, horizontal, minor argillaceous infilling (.02')
						16.30' quartz geode
						16.45-16.64' quartz geode with amorphous banding around
						17.5-17.85' Limestone, wackstone, abundant crinoid fossils
						17.50' bedding plane fracture, contact fracture, horizontal, minor argillaceous infilling (.01')
						18.20-18.25' Siltstone/Shale, 5G6/1, slight odor, minor creosote flecks, weathered shale
						18.21' bedding plane fracture, slight pitting with trace creosote flecks and odor (.01')
						18.25-20.0' Siltstone, 5G4/1, thinly banded, amorphous banding around geodes, possible varied sequencing
						18.25' bedding plane fracture, smooth face, slight odor
						18.37-18.50' quartz geode
						19.04-19.10' quartz geode
						19.16-19.26' quartz geode
						19.35' bedding plane fracture, slight arigilaceous infilling (0.2)

ROCK CORING / SAMPLE LOG

Boring/Well: MW-25A | Project/No.: CSXT Bloomington/IN000072 | Page 5 of 5

Site Location: Bloomington, IN | Drilling Started: 7/24/2008 | Drilling Completed: 7/29/2008

Drilling Contractor: Boart Longyear | Driller: Kevin O'Brien | Helper: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.53 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.05 Feet | Hole Diameter: 6" | Coring Device: 5' core barrel

Prepared By: T. Schoen / R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.05 | Water Loss: 0 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
						20.0-22.35' Siltstone, 5G 4/1 to 5G 6/1, dark greyish green, thinly laminated, amorphous banding around large geode features
						20.63-20.97' large geode with quartz crystals and amorphous banding around geode
						20.68' fracture zone around weathered siltstone adjacent to large geode, argillaceous infilling (.04')
						21.16-21.21' quartz geode
						21.22' bedding plane fracture, slight argillaceous infilling (.01) smooth face, adjacent to geode suspected weathering
						21.40-21.43' small quartz geode
						22.35-25.05' Limestone, 5G5/1 to 5G8/1 fossiliferous, predominately crinoids, trace brachiopods, color change, becoming increasingly light with depth
						22.78' large crinoid fossil
						22.95-23.17' increasing fossil deposits, packstone
						23.18' styolite, argillaceous infilling, pit markings, suspected high hydrologic conductivity (.02')
						23.41' styolite, with pyrite infilling and argillaceous infilling
						23.50-23.68' wackestone sequence increasing
						23.72' tight styolite with argillaceous infilling (.01)
						23.72-25.05' crystalline texture, reduction in fossilization
						24.25' styolite, tight, argillaceous infilling

SOIL BORING / SAMPLING LOG

Boring/Well: MW-26A Project/No.: CSXT Bloomington/IN000072 Page 1 of 7

Site Location: Bloomington, IN Drilling Started: 7/29/2008 Drilling Completed: 8/5/2008

Drilling Contractor: Boart Longyear Driller: Helper:

Drilling Fluid Used: Water Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.44 feet [X] Surveyed [ ] Estimated Water:

Total Depth Drilled: 61.08 Feet Hole Diameter: 6" Coring Device: 5ft core barrel

Prepared By: M. Griles/R. Woodruff Hammer Weight: N/A Hammer Drop: N/A ins.

Boring Termination Depth: 61.08 Water Loss: 115 gallons GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	0.5		0-2, 10.3		TS	0.0-0.5'	**Topsoil**, some cinders and gravel, organics
0.5	7.5		2-4, 15.8		ML	0.5-7.5'	**Silty clay**, 5YR 3/4, ML, trace organics, firm, slightly blocky, slightly moist, trace sands
			4-6, 20.1		MH	7.5-9.5'	**Silt (clayey silt)**, 5Y 6/4, MH, lamintations noted, trace pebbles, geode
7.5	9.5		6-8, 20.3		LS	9.5-10.5'	Weathered Limestone, weathered argillaceous, oxidation noted within weathered limestone compacted, grey mud, cemented, weathered bedrock from in-situ parent material
			8-10, 2.9			10-10.5'	
9.5	10.5				LS	10.5-11.0'	**Limestone, N7, light grey, massive, minor fossiliferous, slightly argillaceous**
					CL	11.0-11.5'	**Clay**, 10YR4/6, yellowish-brown, silty sandy clay, high plasticity, oxidation, orange mottling
10.0	10.5				LS	11.5-11.68'	**Weathered Limestone**, N7, light grey, weathered, compacted grey mud, silty, rust oxidation, mottling
10.5	11.0						
11.0	11.5						
11.5	11.7						

ROCK CORING / SAMPLING LOG

Boring/Well: MW-26A | Project/No.: CSXT Bloomington/IN000072 | Page 2 of 7

Site Location: Bloomington, IN | Drilling Started: 7/29/2008 | Drilling Completed: 8/5/2008

Drilling Contractor: Boart Longyear | Driller: | Helper:

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.44 feet | [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.08 Feet | Hole Diameter: 6" | Coring Device: 5ft core barrel

Prepared By: M. Griles/R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 61.08 | Water Loss: 115 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
11.68	16.60	100	78.0	33.5	0	**11.68-16.60' Limestone,** N6-5G 6/1, medium to light grey to greyish green, argillaceous, amorphous banding, thinly bedded, predominately crinoid fossils with trace brachiopods, minor silicification
16.60	21.60	100	100.0	37.5	0	12.16' fractures along sub-horizontal, styolite plane, argillaceous infilling and pitting (.03')
21.6	31.6	100	97.0	66.5	60 gal	12.20' minor styolite fracture, pitting
31.6	41.5	100	97.0	93	25 gal	12.25' bedding plane fracture, slight pitting, minor argillaceous infilling
41.5	51.4	100	100.0	50.8	30 gal	12.45-12.65' Wackestone sequence, predominately crinoids
51.4	61.1	90	--	46.8		12.48' bedding plane fracture along Wackstone/Siltstone contact, oxidation staining on face, sub-horizontal, suspected high hydraulic conductivity (.04')
						12.48-12.55' zone of increasing oxidation, oxidation staining present
						13.08' bedding plane fracture, minor pitting, minor argillaceous infilling
						13.35' bedding plane fracture along styolite feature, some pitting and argillaceous infilling (.01')
						13.59-13.65' amorphous banding, pyrite infilling
						14.28' fracture along styolite feature, minor argillaceous infilling
						14.60' styolite (tight), argillaceous infilling
						14.95' increased amorphous banding
						15.22' bedding plane fracture, minor argillaceous infilling
						15.38' styolite (tight), argillaceous infilling
						16.11' bedding plane fracture, minor argillaceous infilling
						16.6-17.05' Limestone, N6 to 5G6/1, medium to light grey to greyish green, argillaceous, amorphous banding, thinly bedded, predominately crinoid fossils with trace brachiopods, minor silicification
						16.95-17.05' packstone, basal, predominately crinoids, pyrite mineralization

ROCK CORING / SAMPLING LOG

Boring/Well: MW-26A | Project/No.: CSXT Bloomington/IN000072 | Page 3 of 7

Site Location: Bloomington, IN | Drilling Started: 7/29/2008 | Drilling Completed: 8/5/2008

Drilling Contractor: Boart Longyear | Driller: | Helper:

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.44 feet | [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.08 Feet | Hole Diameter: 6" | Coring Device: 5ft core barrel

Prepared By: M. Griles/R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 61.08 | Water Loss: 115 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
						17.05-21.60' Siltstone, 5G6/1, greenish-grey to dark greenish-grey, increasingly dark with depth, finely laminated, geodes, amorphous banding around geodes
						17.05' bedding plane fracture, argillaceous infilling along lithological contact, pyrite mineralization on face, minor pitting
						18.01' bedding plane fracture very minor pitting, bedding plane fracture, weakened due to geode
						18.75' bedding plane fracture, smooth face, weakened due to geode
						18.75-18.79' geode
						18.96-19.00' geode
						19.35-19.39' geode
						19.51-19.54' geode
						19.93-20.00' geode
						20.22-20.45' large crystaline geode
						20.50-20.60' geode with amorphous banding
						20.65-20.67' geode
						21.60-22.45', Siltstone, 5G 4/1-5Y 4/1, dark greenish grey, amorphous bedding plane along geode feature, thinly laminated
						21.60' tight vertical to sub-vertical bedding plane, adjacent to geode
						21.60-21.78' quartz geode
						22.05-22.15' geode with amorphous banding around
						22.17' bedding plane along weakened zone, next to geode (.01')
						22.45-23.25' Limestone, packstone, abundant crinoids
						22.45-22.52' Packstone sequence
						22.49' bedding plane along contact of packstone and argillaceous limestone, minor argillaceous infilling (.01')
						23.10-23.27' increasing fossilization of limestone

ROCK CORING / SAMPLING LOG

Boring/Well: MW-26A | Project/No.: CSXT Bloomington/IN000072 | Page 4 of 7

Site Location: Bloomington, IN | Drilling Started: 7/29/2008 | Drilling Completed: 8/5/2008

Drilling Contractor: Boart Longyear | Driller: | Helper:

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.44 feet | [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.08 Feet | Hole Diameter: 6" | Coring Device: 5ft core barrel

Prepared By: M. Griles/R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 61.08 | Water Loss: 115 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
						23.27' styolite with argillaceous and pyrite infilling.
						23.25-24.70' limestone, 5G6/1 to 5B7/1, greenish-grey to light blueish grey, argillaceous, minor fossilification
						23.27' styolite with argillaceous and pyrite infilling
						24.70-25.30' Siltstone, 5G6/1, minor crinoids, moderately calcareous
						25.25' micro joint along bedding plane
						25.30-25.47' Weathered Siltstone, calcareous, shaley, argillaceous
						25.31' bedding plane joint at lithologic change, siltstone to weathered siltstone-shale
						25.36' micro joint within weathered siltstone
						25.40' bedding plane, cohesive argillaceous infilling (0.02)
						25.46' bedding plane along lithologic contact between weakened siltstone, shale and competent limestone, smooth face on shale, slightly pitted face on limestone, secondary mineralization of pyrite on both facies
						25.47-26.18' Limestone, argillaceous, thinly bedded, slightly fossiliferous, brachiopods
						25.50-25.60' quartz geode with amorphous banding around
						26.17' tight bedding plane along contact of limestone and siltstone
						26.18-27.35' Siltstone, 5G2/1 to 5G4/1, dark green-grey to greenish-black, thinly bedded, infrequent interfingering of wackestone
						26.66-26.68' minor quartz geode
						27.16-27.32' quartz geode, speleoturem features
						27.35-27.45' Limestone, N5, minor fossilication
						27.45-27.48' Siltstone, 5G 4/1, calcareous
						27.48-27.61' Limestone, N5 ,argillaceous
						27.61-28.20' Siltstone, calcareous, thinly bedded with basal wackstone, predominate crinoids
						28.20-31.60' Limestone, N6 to 5G4/1, medium light grey to greenish grey, argillaceous, zone of increasing fossilization
						29.53-29.66' packstone
						29.88-29.99' quartz geode
						31.00-32.00' intrugal of increasing brachipod fossilizations, minimum silicification

ROCK CORING / SAMPLING LOG

Boring/Well: MW-26A | Project/No.: CSXT Bloomington/IN000072 | Page 5 of 7

Site Location: Bloomington, IN | Drilling Started: 7/29/2008 | Drilling Completed: 8/5/2008

Drilling Contractor: Boart Longyear | Driller: | Helper:

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.44 feet | [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.08 Feet | Hole Diameter: 6" | Coring Device: 5ft core barrel

Prepared By: M. Griles/R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 61.08 | Water Loss: 115 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
						31.60-33.70' Limestone, N7-5G 6/1, fossiliforus wackstone, predominately brachiopods
						31.60-32.00' increasing brachiopod fossilication zone
						32.07-32.13' geode
						32.21' pyrite vein
						32.91-33.14' grainstone, crinoids
						33.33-33.54' multiple geodes zone, disseminated pyrite mineralization
						33.59' argillaceous infilling (0.02), suspeced possible hydraulic conductivity, moderately pitted, secondary pyrite mineralization
						33.70-38.12' Siltstone, 5G4/1 to 5G6/1, laminated, minor packstone bedding interfingering, contorted, bedding planes at times slightly calcareous, geodes present, basal wackstone (.03')
						33.88-33.90' minor geodes
						34.10' tight bedding plane joint
						34.28-34.50' minor geode
						34.45-34.47' tight styolite
						34.75' bedding plane along weakened contact between siltstone and quartz geode sequence (.03')
						34.77-34.87' zone of multiple, minor geodes
						35.07-35.15' geode
						37.18-37.20' minor geode
						38.12-39.58' Limestone, argillaceous, trace brachiopods, some styolitic structures, minor crinoids
						38.12' bedding plane along lithologic contact between siltstone and limestone, pitted on limestone face, minor argillaceous infiling
						38.33' fracture zone, narrow, horizontal, fractures with slightly pitted faces and a corresponding vertical joint running from 38.33-38.5', adjacent horizontal styolite feature, possible hydraulical conductivity (.01')
						38.50' styolite with argillaceous infilling, sub-horizontal, sub-vertical
						39.24' bedding plane, minor argillaceous infilling, slightly pitted (.01')
						39.40-39.42' large crinoid
						39.58-41.50 Siltstone, 5G6/1 to 5G4/1, contoured beds, thinly laminated, minor packstone interfinering, geodes

ROCK CORING / SAMPLING LOG

Boring/Well: MW-26A | Project/No.: CSXT Bloomington/IN000072 | Page 6 of 7

Site Location: Bloomington, IN | Drilling Started: 7/29/2008 | Drilling Completed: 8/5/2008

Drilling Contractor: Boart Longyear | Driller: | Helper:

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.44 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.08 Feet | Hole Diameter: 6" | Coring Device: 5ft core barrel

Prepared By: M. Griles/R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 61.08 | Water Loss: 115 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
						39.74-39.77' minor geode
						40.40-40.42' minor geode
						41.05-41.28' moderate interfingering of packstone
						41.32-41.34' minor geode
						41.50-42.53' Siltstone, 5GY6/1 to 5GY4/1, greenish-grey to dark greenish-grey, thinly laminated, mild amorphous bedding, some quartz, geode, calcareous
						41.72-41.77' minor geode
						42.53-43.51' Limestone, 5B5/1 to N7, medium blueish-grey to light grey, argillaceous, contoured bedding, alternating limestone-wackstone sequence, predominately crinoids
						42.40-42.43' minor geode
						42.67-42.95' increasing fossil sequence (packstone)
						43.17' bedding plane along wackestone and limestone contact (.01'), weakened due to increasing fossilization
						43.51-44.54' Siltstone, calcareous, mildy fossiliforous, slightly contoured bedding plane, laminated, trace minor wackestone, interfingering, trace crinoid
						44.54-44.75' Limestone, argillaceous wackestone, crinoidal fragments
						44.55-44.70' packstone sequence, crinoid fragments
						44.75-44.83' Siltstone, 5G4/1, amorphous bedding, minor geodes
						44.75' bedding plane along weakened contact at adjacent geode, minor argillaceous infilling, smooth face (.01')
						44.77-44.80' minor quartz geode
						44.83-44.94' Limestone, argillaceous, trace fossil fragments, sharp contact
						44.94-51.38' Siltstone (Borden), N3 to N4, dark grey to medium grey, shale, laminated, varying cross bedding sequence, massive, moderately uniform
						45.00-45.05' minor geode with pyrite mineralization
						45.83-45.91' crossbedding sequence
						45.85' tight bedding plane along weakened crossbedding structure, minor argillaceous infilling
						47.95-48.20' crossbedding sequence

ROCK CORING / SAMPLING LOG

Boring/Well: MW-26A | Project/No.: CSXT Bloomington/IN000072 | Page 7 of 7

Site Location: Bloomington, IN | Drilling Started: 7/29/2008 | Drilling Completed: 8/5/2008

Drilling Contractor: Boart Longyear | Driller: | Helper:

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.44 feet | [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.08 Feet | Hole Diameter: 6" | Coring Device: 5ft core barrel

Prepared By: M. Griles/R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 61.08 | Water Loss: 115 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
						51.38-61.08' Siltstone shale, N3 to N4, dark grey to medium-dark grey, laminated, varying crossbedding
						54.00' crossbedding
						55.47-55.50' increasing pyrite mineralization
						56.68' cubic pyrite
						56.70' tight bedding plane with palm frond clast/mold, increasing pyrite mineralization
						57.28' bedding plane, minor argillaceous infilling, tight
						57.72' amorphous bedding planes
						57.95' bedding plane, minor argillaceous infilling
						60.71' crossbedding
						**Run 6 was taken from 51.38-61.50' unable to recover 0.42'
						of run. Original difficulty removing the core using wireline
						tecnique causing subsequent breaks throughout the run.

SOIL BORING / SAMPLING LOG

Boring/Wel MW-27A Project/No. CSXT Bloomington / IN000072.0042 Page 1 of 6

Site Location Bloomington, Indiana

Drilling Date/Time Started 8/5/08 / 15:22 Drilling Date/Time Completed 8/7/08 @ 17:00

Drilling Contractor Boart Longyear Driller/License#

Drilling Fluid Used water Drilling Method Mini Sonic

Length and Diameter of Coring Device 5 ft. core barrel Sampling Interval 5.0 feet

Land-Surface Elev. 685.97 feet [X] Surveyed [ ] Estimated Datum NAVD 88

Total Depth Drilled 32.8 Feet Hole Diameter 6" Coring Device 5.0' corring barrel

Prepared By Randy Woodruff, Toni Schoen Hammer Weight N/A Hammer Drop N/A ins.

Boring Termination Depth 32.8 Water Loss 720 gallons GPS Coordinates

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	grab		--	BTEX/PAH/Metals
4-6	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	2.0	50	0.7			0.0-0.5	**Topsoil**, organics, trace gravels
2.0	4.0	50	1.1		MH	0.5-3.5	**Clay, 5Y4/4,** some silt and sands, low plasticity, slightly moist, slightly sticky, some orgainics noted
4.0	5.0	50	0.8		ML	3.5-5.0	**Silty clay**, 5Y3/2, low plasticity, crumbles easily, slightly moist
5.0	7.0	50	0.9		SC	5.0-7.0	**Sandy clay,** 10YR5/4, wet, gravels, sticky, moist; fine gravels
					LS	7.0-8.0	Limestone, weathered, argillaceous, compacted grey mud, cemented, weathered bedrock
					LS	8.0-9.0	Limestone, N8, very light grey, slightly argillaceous, minor fossilification

ROCK CORING / SAMPLING LOG

Boring/Well: MW-27A | Project/No.: CSXT Bloomington / IN000072.0042 | Page 2 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/5/2008 | Drilling Date/Time Completed: 8/7/08 @ 17:00

Drilling Contractor: Boart Longyear | Driller/License#:

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5 ft. core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 685.97 feet | [X] Surveyed [ ] Estimated | Datum: NAVD 88

Total Depth Drilled: 32.8 Feet | Hole Diameter: 6" | Coring Device: 5.0' corring barrel

Prepared By: Randy Woodruff, Toni Schoen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 32.8 | Water Loss: 720 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	grab		--	BTEX/PAH/Metals
4-6	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes / Run	Water Loss		Sample/Core Description
9.0	13.0	75	42	45.75		120 gal	**9.0-11.10' Limestone**, N7, light grey to N5, medium grey, Wackstone, varied bedding
12.5	17.99	100	85	64.5		180 gal	9.0-9.50' Limestone, mechanically broken, highly weathered, clayey surfaces, fossiliferous, crinoids, oxidation staining
17.99	22.92	98	89	31.75		~100 gal	9.50' Bedding plane (.01), Packstone to Wackstone contact, vertical fracture within (.001'), argillaceous, trace pyrite, crinoids
22.92	28.07	100	100.0	23.0		150 gal	9.8' bedding plane, argillaceous, oxidation staining to .03' in core, suspected clay infilling washed away
28.07	32.80	94	--	33.5		170 gal	9.8-10.8' missing rock formations; driller noted drop at 10.5'
							10.8-11.1' geode, broken mechanically (width of core), argillaceous, fine sands, oxidation staining
							11.1-13.0' Siltstone, N3, dark grey, laminated, notable geodes
							11.1' bedding plane, siltstone-geode contact, laminated
							11.6' siltstone, (.01-.02) argillaceous
							11.6-11.7' geode
							11.9' Siltstone, rock intact, hairlike fracture noted
							11.98' Siltstone, geode near by, argillaceous, massive
							11.98-12.10' geode
							12.0-13.0' Driller notes spike in water pressure
							12.35-13.0' broken siltstone, mechanically broken by hammer when struck in rock core, argillaceous, slightly soft, weathered
							13.0-14.55' Siltstone, N4, medium-dark grey, finely laminated
							13.25' trace clay, semi-smooth
							14.30' Trace clay, semi-smooth
							14.55-17.99' Limestone, N7 to N4, light grey to medium dark grey
							14.55-14.60' geode
							14.55-15.5' Mudstone, no fossils
							14.60' contact, trace clay, varied, geode on face (.25")
							15.5-16.0' Wackstone sequence, laminations
							15.75' styolites, heavy pitting, crinoids, very rough
							16.0-16.3' Packstone sequence, crinoids
							16.3-17.2' Mudstone, laminations

ROCK CORING / SAMPLING LOG

Boring/Wel MW-27A Project/No. CSXT Bloomington / IN000072.0042 Page 3 of 6

Site Location Bloomington, Indiana Drilling Date/Time Started 8/5/2008 Drilling Date/Time Completed 8/7/08 @ 17:00

Drilling Contractor Boart Longyear Driller/License#

Drilling Fluid Used water Drilling Method Mini Sonic

Length and Diameter of Coring Device 5 ft. core barrel Sampling Interval 5.0 feet

Land-Surface Elev. 685.97 feet [X] Surveyed [ ] Estimated Datum NAVD 88

Total Depth Drilled 32.8 Feet Hole Diameter 6" Coring Device 5.0' corring barrel

Prepared By Randy Woodruff, Toni Schoen Hammer Weight N/A Hammer Drop N/A ins.

Boring Termination Depth 32.8 Water Loss 720 gallons GPS Coordinates

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	grab		--	BTEX/PAH/Metals
4-6	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Feet / Minute	Water Loss		Sample/Core Description
							16.45' massive, trace clay, semi-smooth
							16.5-16.7' geode
							16.7' styolite
							16.8' styolite, splits into 2 styolites
							16.8-16.95' geode
							16.95' hairlike styolite
							17.2-17.7' Wackstone
							17.7-17.99' Mudstone, laminations
							17.99-18.40' Limestone, N7 light grey to N8, medium grey
							17.99-18.29' Mudstone sequence
							18.29-18.38' Packstone sequence
							18.40-18.85' 5GY6/1 Limestone, 5GY6/1, greenish grey
							18.40' argillaceous, semi-smooth, (.02), bedding plane
							18.38-18.87' Mudstone sequence
							18.85-18.95' Siltstone, 5GY4/1, dark greenish grey, thinly laminated
							18.87-18.95' Siltstone
							18.95-19.05' Limestone, Packstone, N6, medium-light grey, grainstone/packstone
							19.05-19.45' Siltstone, 5GY4/1, dark greenish grey, laminated
							19.43-19.54' Wackstone
							19.45-19.55' Limestone, N5', medium grey
							19.50' possible styolite
							19.54-19.57' Siltstone
							19.55-19.60' Limestone, N4, medium-dark grey
							19.57-19.60' Wackstone
							19.60-20.24' Siltstone
							19.60' trace Clay, semi-smooth bedding plane
							19.60-20.38' Siltstone, 5GY4/1, dark greenish grey, laminated, weathered from 20.24-20.38'
							19.65' trace Clay, semi-smooth

ROCK CORING / SAMPLING LOG

Boring/Well MW-27A Project/No. CSXT Bloomington / IN000072.0042 Page 4 of 6

Site Location Bloomington, Indiana Drilling Date/Time Started 8/5/2008 Drilling Date/Time Completed 8/7/08 @ 17:00

Drilling Contractor Boart Longyear Driller/License#

Drilling Fluid Used water Drilling Method Mini Sonic

Length and Diameter of Coring Device 5 ft. core barrel Sampling Interval 5.0 feet

Land-Surface Elev. 685.97 feet [X] Surveyed [ ] Estimated Datum NAVD 88

Total Depth Drilled 32.8 Feet Hole Diameter 6" Coring Device 5.0' corring barrel

Prepared By Randy Woodruff, Toni Schoen Hammer Weight N/A Hammer Drop N/A ins.

Boring Termination Depth 32.8 Water Loss 720 gallons GPS Coordinates

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	grab		--	BTEX/PAH/Metals
4-6	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Feet / Minute	Water Loss		Sample/Core Description
							19.77' hairline fracture
							19.85-20.0' geode
							20.24' weathered, silt grains, slight odor
							20.38-21.25' Limestone, N6, medium-light grey to N4, medium-dark grey, clay infill from 21.15-21.24'
							20.38-20.42' Siltstone
							20.41-21.17' Wackstone
							20.65' Creosote, sheen, slight odor, rough, crinoids, trace clay and sand
							21.17-21.25' Limestone, weathered, clay infill
							21.25-21.30' Siltstone, 5GY4/1, dark greenish grey
							21.22' Weathered, trace clay and sand, sub-rounded to sub-angular gravel, slight odor, brachiopod, slight sheen
							21.30-22.92' Limestone, N7, light grey to N4, medium dark grey, fossiliferous, crinoids
							21.45-21.68' Mudstone
							21.68-22.92' Wackstone
							22.92' slight odor
							22.92-23.05' Packstone, N7 to N5, light grey to medium grey, crinoids
							22.98' bedding plane, rough, heavy pitting, weathered, N3 dark grey (darker than the outside of core)
							23.05-25.89' Siltstone, 5G6/1, greenish grey to 5G4/1, dark greenish-grey, thinly laminated, geodes
							23.76-23.80' small geode
							25.24-25.43' quartz geode
							24.95-28.07' vertical fractures filled with limestone in a siltstone bed, hairline to (.01'), limestone vein, vein from 24.95-25.33', fractured to 25.83'
							25.33-28.07' vertical fracture, creosote, sheen, slight odor, Limestone filled vein, hairline (.01'), potential high hydraulic conductivity
							25.89-25.96' Grainstone, N7, light grey to N5, medium grey, crinoids
							25.89' bedding plane, crinoids, siltstone/grainstone contact, odor, trace creosote on face

ROCK CORING / SAMPLING LOG

Boring/Well MW-27A Project/No. CSXT Bloomington / IN000072.0042 Page 5 of 6

Site Location: Bloomington, Indiana

Drilling Date/Time Started: 8/5/2008 Drilling Date/Time Completed: 8/7/08 @ 17:00

Drilling Contractor: Boart Longyear Driller/License#:

Drilling Fluid Used: water Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5 ft. core barrel Sampling Interval: 5.0 feet

Land-Surface Elev. 685.97 feet [X] Surveyed [ ] Estimated Datum: NAVD 88

Total Depth Drilled 32.8 Feet Hole Diameter 6" Coring Device: 5.0' corring barrel

Prepared By: Randy Woodruff, Toni Schoen Hammer Weight: N/A Hammer Drop: N/A ins.

Boring Termination Depth: 32.8 Water Loss: 720 gallons GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	grab		--	BTEX/PAH/Metals
4-6	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Feet / Minute	Water Loss		Sample/Core Description
							25.96-28.07' Siltstone, thinly laminated, geodes, 5G6/1 to 5G4/1, greenish-grey to dark greenish-grey
							26.00-26.10' geode
							26.38-26.50' varied sequence
							26.46-26.91' secondary limestone vertical fracture, still intact, hairline to 2mm, limestone vein
							26.90-28.07' varied sequence
							27.15' horizontal fracture connecting with vertical fracture, no creosote staining, slight odor, semi-smooth
							27.46-27.50' small geode
							28.07-30.15' Siltstone, 5G6/1 to 5G4/1, greenish grey to dark greenish grey, odor, thin laminations, varied, geodes
							28.07-28.50' vertical fracture from above run, creosote staining, slight odor
							28.07-29.00' product staining,
							28.11' fine sands, semi-smooth, odor
							28.76-28.80' geode, quartz
							28.92-28.97' geode
							29.39' slight odor, ground by rock core
							30.15-30.95' Limestone, predominately Mudstone, trace crinoids
							30.40-30.50' small geode sequence
							30.79-30.95' Packstone, N5, medium grey to N4 medium-dark grey, crinoids
							30.86' trace crinoids, semi-smooth, slightly rough
							30.93' argillaceous infill, crinoids, semi-smooth, greenish clay infill
							30.95-31.44' Packstone, N7, light grey to N5 medium grey, fossiliferous, crinoids, brachiopods
							31.23' trace pyrite infill, .5" brachiopod, semi-smooth
							31.33' brachipod cast, rough, dark green staining
							31.43' styolite
							31.44-31.70' Mudstone, 5GY6/1, greenish grey

ROCK CORING / SAMPLING LOG

Boring/Well MW-27A Project/No. CSXT Bloomington / IN000072.0042 Page 6 of 6

Site Location Bloomington, Indiana Drilling Date/Time Started 8/5/2008 Drilling Date/Time Completed 8/7/08 @ 17:00

Drilling Contractor Boart Longyear Driller/License#

Drilling Fluid Used water Drilling Method Mini Sonic

Length and Diameter of Coring Device 5 ft. core barrel Sampling Interval 5.0 feet

Land-Surface Elev. 685.97 feet [X] Surveyed [ ] Estimated Datum NAVD 88

Total Depth Drilled 32.8 Feet Hole Diameter 6" Coring Device 5.0' corring barrel

Prepared By Randy Woodruff, Toni Schoen Hammer Weight N/A Hammer Drop N/A ins.

Boring Termination Depth 32.8 Water Loss 720 gallons GPS Coordinates

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	grab		--	BTEX/PAH/Metals
4-6	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Feet / Minute	Water Loss		Sample/Core Description
							31.70-31.72' Mudstone, 5B5/1, medium blueish grey to 5G4/1 dark greenish grey
							31.72-32.19' contoured Wackstone, 5B5/1, medium blueish grey
							32.19-32.32' interfingered Mudstone/Wackstone
							32.32-32.40' Packstone, N7 light grey to 5G6/1, greenish grey, crinoids, brachiopods
							32.40' trace creosote (pin sized flecks), semi-smooth, slight odor
							32.40-32.46' Mudstone, N6 medium light grey, crinoids, brachiopods
							32.45' possible styolite
							32.46-32.50' Packstone, N8, very light grey to N7, light grey, crinoids
							32.50-32.80' Mudstone, 5G6/1, greenish grey

SOIL BORING / SAMPLING LOG

Boring/Well: MW-27B | Project/No.: CSXT Bloomington, Indiana | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/8/2008 | Drilling Date/Time Completed: 8/11/2008

Drilling Contractor: Boart Longyear | Driller/License#:

Drilling Fluid Used: water | Drilling Method: Mini-Sonic

Length and Diameter of Coring Device: 5 ft. core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.1 feet | [X] Surveyed | [ ] Estimated | Datum:

Total Depth Drilled: 28.0 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: Toni Schoen/Randy Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 28.0 | Water Loss: 715 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX/PAH/Metals
2 - 4'	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth From - To		Sample/Core Description
0.0	2.0	50	1.0		top soil	0.0-0.5'	**Topsoil,** organics, few gravels
2.0	4.0	50	2.3		MH	0.5-4.5'	**Sandy clay**, 10YR4/2, dark yellowish brown, fine, low plasticity, crumbles easily, slightly moist, some organics
4.0	6.0	50/100	3.8		ML	4.5-6.0'	**Silty sandy clay**, 10YR4/2, dark yellowish brown, soft, plastic, slightly moist, some organics, slightly wet
6.0	8.0	100	5.2		ML	6.0-6.75'	**Silty clay**, 10YR6/6, dark yellowish orange, dry, firm, crumbles easily, non-plastic
					LS	6.75-7.0'	**Weathered Limestone**, N5, medium grey, weathered, argillaceous, compacted mud, cemented, weathered bedrock from in-situ parent material
					LS	7.0-8.0'	**Limestone,** N8, very light grey, slightly argillaceous, laminations, crystals, fossiliferous, crinoids, bryozoans, brachiopods

SOIL CORING / SAMPLING LOG

Boring/Well: MW-27B | Project/No.: CSXT Bloomington, Indiana | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/8/2008 | Drilling Date/Time Completed: 8/11/2008

Drilling Contractor: Boart Longyear | Driller/License#:

Drilling Fluid Used: water | Drilling Method: Mini-Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.1 feet | [X] Surveyed [ ] Estimated | Datum:

Total Depth Drilled: 28.0 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: Toni Schoen/Randy Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 28.0 | Water Loss: 715 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX/PAH/Metals
2 - 4'	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minute / Run	Water Loss		Sample/Core Description
8.0	12.0	56	9.0	22.3		0 gal	**8.0-9.47' Limestone,** broken fragments, geodes, silty sandy infill
12.0	18.0	82	82.0	NA		300 gal	8.0-8.55' fracture, crinoids, limestone fragments, oxidation on fragments, sub-angular
18.0	23.0	--	--	41.3		220 gal	8.5' geode (width of core)
23.0	28.0	4.9'	100.0	39.5		195 gal	8.55-8.65' bedding plane fracture, geode, heavy oxidation, clay on bottom face
							8.65-9.47 Silty Sandy infill gap
							Limestone, N8, very light grey, slightly argillaceous, laminations, crystals, fossiliferous, crinoids, bryozoans, brachiopods
							9.47-9.60' Limestone, N6, medium light grey, crushed fossils
							9.5' bedding plane fracture smooth, oxidation on surface, crinoids
							9.60-10.42' Siltstone, N4, medium-dark grey, laminated
							9.82' Bedding plane, semi-smooth
							9.95' bedding plane fracture semi-smooth, trace clay
							10.42-10.61' gap
							10.61-10.81' Siltstone, N4, medium-dark grey, crinoids, laminated
							10.74' bedding plane fracture semi-smooth, trace clays
							10.81-11.45 gap
							11.45-12.0' Siltstone and Limestone fragments, N5, medium grey, broken
							12.0-12.5' Limestone, 10YR5/4, moderate yellowish brown, oxidized limestone, argillaceous, broken siltstone and limestone fragments
							12.5-12.75' gap/void
							12.75-12.8' Limestone, N5, medium grey, crinoids
							12.8-15.0' Siltstone, N7, light grey to N4, medium-dark grey laminating
							12.8' bedding plane fracture with argillaceous infilling, crinoids, semi-smooth face
							Limestone, N8, very light grey, slightly argillaceous, laminations, crystals, fossiliferous, crinoids, bryozoans, brachiopods
							13.11' bedding plane fracture, semi-smooth face, trace clays
							13.18-13.23' geode (<.01' deep), quartz
							13.52' bedding plane fracture, semi-smooth face, trace clays
							14.08' bedding plane fracture, semi-smooth face, argillaceous

SOIL CORING / SAMPLING LOG

Boring/Well: MW-27B | Project/No.: CSXT Bloomington, Indiana | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/8/2008 | Drilling Date/Time Completed: 8/11/2008

Drilling Contractor: Boart Longyear | Driller/License#:

Drilling Fluid Used: water | Drilling Method:

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.1 feet [X] Surveyed [ ] Estimated | Datum:

Total Depth Drilled: 28.0 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: Toni Schoen/Randy Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 28.0 | Water Loss: 715 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX/PAH/Metals
2 - 4'	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Feet/ Minute	Water Loss		Sample/Core Description
							14.12' bedding plane fracture, semi-smooth face, trace clays
							14.43-14.44' small geode
							14.57-14.60' geode
							14.63-14.66' geode
							14.74' semi-smooth, argillaceous bedding plane
							14.82' semi-smooth, trace clays, bedding plane
							15.0-18.0' Limestone, N8, very light grey to N4, medium-dark grey, fossiliferous, crinoids, brachiopods
							15.0-15.13' wackestone sequence, crinoids
							15.03-15.05' geode
							15.13-15.23' mudstone sequence
							15.23-15.63' wackestone sequence, crinoids
							15.63-16.55' packstone sequence, crinoids, brachiopods
							15.85' fracture, heavy pitting, styolite, trace coarse sand to fine gravel
							15.95' styolite
							16.55-16.84' mudstone sequence
							16.84' styolite
							16.84-17.15' packstone sequence, crinoids
							16.85' bedding plane fracture, heavy pitting, styolite, 5G6/1 greenish-grey face
							17.13' styolite
							17.15-17.33' mudstone sequence
							17.33-17.48' wackstone sequence, crinoids
							17.48-17.76' packstone sequence, crinoids
							Limestone, N8, very light grey, slightly argillaceous, laminations, crystals, fossiliferous, crinoids, bryozoans, brachiopods
							18.0-18.50 Limestone, N2, medium grey, Wackestone, crinoid abundance increases to basal contact
							18.5-18.9 Siltstone, 5G8/1, greenish grey, little calcareousness

SOIL BORING / SAMPLING LOG

Boring/Well: MW-28A | Project/No.: IN Creosote / IN000072.0044 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/5/2009 @ 13:10 | Drilling Date/Time Completed: 1/7/2009 @ 10:00

Drilling Contractor: Boart Longyear | Driller:

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 688.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 62.1 Feet | Hole Diameter: 4.0 | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks, M. Griles, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 62.1 | Water Loss: 1225 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	17:00	--	BTEX, SVOCs, Metals: As, Pb
4-6'	Grab	17:10	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	2.0		--	--		0.0-1.8'	**Topsoil** and organics, some gravels and asphalt fragments
2.0	4.0		--	--		1.8-2.0'	Asphalt fragments
4.0	6.0		--	--	OL	2.0-2.3'	**Silty Clay**, (fill), brown-grey, organics, trash, firm, slightly moist
6.0	8.0		--	--	CL-ML	2.3-5.25'	**Silty Clay**, light brown-light grey, trace sands, trace gravels, firm, slightly moist, brown and grey rust colored mottling, large gravels at 4.0', organics noted at 4.5', trash noted at 4.75'
8.0	10.0		--	--	OH	5.25-6.50'	**Silty Clay**, light brown-grey, trace gravels, soft, plastic, some organics
10.0	12.0		--	--		6.50-7.25'	**Weathered Limestone**, powdered (fractured by sonic drill)
					CL	7.25-9.50'	**Silty Sandy Clay**, light brown, wet from 7.25-7.50', firm from 7.50', limestone fragments within (weathered bedrock)
						9.50-11.15'	**Weathered Limestone**

ROCK CORING / SAMPLING LOG

Boring/Well: MW-28A | Project/No.: IN Creosote / IN000072.0044 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/5/2009 @ 13:10 | Drilling Date/Time Completed: 1/7/2009 @ 10:00

Drilling Contractor: Boart Longyear | Driller:

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 688.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 62.1 Feet | Hole Diameter: | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks, M. Griles, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 62.1 | Water Loss: 1225 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	17:00	--	BTEX, SVOCs, Metals: As, Pb
4-6'	Grab	17:10	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss (gallons)	Sample/Core Description
11.5	17.09	100	72.4	11.0	55	**11.15-14.60' Limestone**, 5GY 6/1 - N5, greenish grey - medium grey, argillaceous, thinly bedded, banded, fossiliforous, strong, fresh matrix, competent, slightly fractured
17.1	21.96	97.4	92.2	16.0	170	11.16-12.44' Limestone lighter in color
21.96	23.0	100	74.4	8.0	50	12.44' Styolite dissolution feature (0.04')
23.0	27.00	100	94.4	10.0	145	12.69-12.94' Sub-vertical fracture about 70° from horizontal joint, very narrow, slightly pitted, partly healed, surface oxidation and staining on both faces, wet with minor seepage, rough sides
27.0	32.08	100	99.6	14.0	145	12.94-14.00' Rock core sample was partly destroyed by 6.0" core barrel (overdrilled), based on observations rock was greener and finer grained in this interval
32.08	37.00	98.4	99.1	12.0	155	14.13-14.25' Packstone sequence
37.00	42.12	100	100.0	14.0	140	14.46-14.54' Packstone sequence
42.12	46.97	97	100.0	7.0	105	14.50-14.60'Geode, amorphous banding around geode
46.97	52.19	100	100.0	7.0	70	**14.60-16.52' Siltstone**, 5G 6/1, greenish-grey - dark greenish-grey, increasing darkness with depth, finely laminated, moderate, fresh, fine grained, component, unfractured
52.19	62.08	100	100.0	15.0	190	16.45-16.50' Series of geode sequence (0.05'), amorphous banding around geode
						16.52-19.90' Limestone, N7
						16.52-17.61' Packstone sequence
						17.53' Bedding plane fracture, joint, tight, extremely narrow, party healed, argillaceous infill, stepped faces, rough, damp
						18.13-18.47' Fracture zone along weakened styolite dissolution feature, partly healed, minor argillaceous infill, pyrite infill, wet with seepage, suspect hydraulic conductive zone
						18.22-18.47' Wackstone sequence, crinoid fossils
						18.47-18.55' Interval of loss, clayey sands on contact faces; suspect major hydraulic conductive zone, wet with seepage
						18.55-19.90' Rock becomes increasingly green in color, reduction in fossil content
						19.90-20.07' Weathered Siltstone, calcareous, shaley, argillaceous
						19.95' Bedding plane joint, extremely narrow, not healed, clean, semi-rough, damp
						19.98' Bedding plane joint, very narrow, argillaceous, partly healed, minor decomposition, semi-smooth, wet with minor seepage
						20.07-20.33' Limestone, argillaceous, thinly bedded, fossiliferous (crinoids and brachiopods)
						20.31-20.33' Bedding plane joint, narrow, partly healed, secondary mineralization, argillaceous infill, deposition, wet with minor seepage
						20.33-21.47' Siltstone, N4, medium - dark grey, thinly bedded, infrequent interbedding with Wackstone
						20.72-20.75' minor geode
						20.83' Bedding plane fracture, minor argillaceous infill, tight, not healed, semi-smooth, damp

ROCK CORING / SAMPLING LOG

Boring/Well: MW-28A | Project/No.: IN Creosote / IN000072.0044 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/5/2009 @ 13:10 | Drilling Date/Time Completed: 1/7/2009 @ 10:00

Drilling Contractor: Boart Longyear | Driller:

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 688.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 62.1 Feet | Hole Diameter: | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks, M. Griles, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 62.1 | Water Loss: 1225 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	17:00	--	BTEX, SVOCs, Metals: As, Pb
4-6'	Grab	17:10	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
						21.47-25.65' Limestone, N6 - 5G, medium-light grey - greyish-green, argillaceous, crinoid fossils, trace brachiopods, pyrite veins, styolite sequence, becoming lighter in color with depth
						21.47' Lithologic bedding plane joint, pitted, minor argillaceous infill, rough face, wet with minor seepage
						22.03' Pyrite infill along undeveloped sytolite feature
						22.55-22.56' Bedding plane joint along and adjacent to styolite feature, partly healed, argillaceous infill, semi-smooth, wet with minor seepage
						22.67' Styolite, pyrite infill and veining
						22.77-22.83' Bedding plane joint, narrow, partly healed, cohesive, argillaceous sedidment infill, semi-rough surfaces, wet with minor seepage
						22.86-22.87' Bedding plane joint, pitted, partly healed, minor argillaceous infill on faces, slightly rough, wet with minor seepage along minor styolite feature with pyrite infill
						23.0' Joint along styolite with minor argillaceous infill
						25.06-25.07' Moderate styolite feature, suspect slight hydraulic conductive zone, well developed
						25.65-27.02' Siltstone, 5Y6/1, olive grey - light olive grey, laminated, amorphous, innerbedding of Wackstone sequence
						26.10-26.17' Wackstone sequence
						26.30-26.33' Wackstone sequence
						26.40-26.47' Wackstone sequence
						27.02-27.41' Limestone, N5 - 5B7/1, medium grey - light bluish-grey, fossiliferous, Wackstone, crinoid fossils, strong, amorphous laminations, fresh, incompetent, unfractured
						27.41-32.83' Siltstone, 5Y6/1 - 5GY6/1, light olive-grey - greenish-grey, moderately strong, fine grained, slightly fossiliferous, thinly laminated, fresh, competent, slightly fractured, minor geodes with amorphous banding around
						27.80-27.84' minor Wackstone sequence, crinoids
						28.25-28.27' minor Grainstone sequence
						28.82-28.90' minor geode
						29.20' joint along weak bedding plane adjacent to quartz geode
						29.81-29.84' minor geode sequence
						31.38-31.42' minor geode sequence
						32.83-34.08' Limestone, N4-5G6/1, medium-dark grey - greenish-grey, thinly laminated, amorphous, laminations near contact, pyrite mineralization, fossiliferous, crinoids
						32.90' Bedding plane joint, slightly pitted, adjacent to lithologic contact, weakened bedding
						33.28-33.32' Styolite dissolution feature, minor argillaceous infill, joint
						33.90' moderate styolite, minorpyrite and argillaceous infill
						34.00-34.08' Styolite sequence, pyrite mineralization

ROCK CORING / SAMPLING LOG

Boring/Well: MW-28A | Project/No.: IN Creosote / IN000072.0044 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/5/2009 @ 13:10 | Drilling Date/Time Completed: 1/7/2009 @ 10:00

Drilling Contractor: Boart Longyear | Driller:

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 688.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 62.1 Feet | Hole Diameter: | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks, M. Griles, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 62.1 | Water Loss: 1225 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	17:00	--	BTEX, SVOCs, Metals: As, Pb
4-6'	Grab	17:10	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
						34.08-38.53' Siltstone, 5GY6/1-5Y6/1, greenish-grey - light olive-grey, amorphous banding, thinly laminated, moderate, fine grained, fresh, competent, unfractured
						37.75' minor pyrite veining
						38.53-40.75' **Limestone**, 5Y8/1-N5, fossiliferous, crinoid fragments, trace brachiopods, minor silicification, geodes
						38.53-38.64' large geode
						38.68-38.87' numbers geodes sequence
						38.72-38.77' Packstone sequence
						39.16-39.68' color change to tan
						39.68-40.05' Grainstone sequence, large brachiopod and smaller crinoid fragments
						40.27-40.38' Wackstone sequence, large crinoid and brachiopod
						40.48-40.49' joint along styolite dissolution feature, pitted faces, argillaceous infill at contact
						40.75-52.15' Siltstone (Borden), N3-N4, shaley, thinly laminated, massive, crossbedding sequence, moderately uniform, amorphous banding
						42.8-43.20' Crossbedding sequence
						52.15-62.08' Siltstone, N3-N4, shaley, thinly laminated, massive, crossbedding sequence, moderately uniform, amorphous banding
						53.80-53.90' Crossbedding sequence
						54.96-55.08' Crossbedding sequence
						55.95-56.30' Crossbedding sequence
						56.75-57.11' Crossbedding sequence
						58.74-58.79' Crossbedding sequence

SOIL BORING / SAMPLING LOG

Boring/Well: MW-28B | Project/No.: IN Creosote / IN000072.0045 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/12/2009 @ 1:30 | Drilling Date/Time Completed: 1/13/2009 @ 11:09

Drilling Contractor: Boart Longyear | Driller:

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 688.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 22.71 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 22.71 | Water Loss: 935 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	14:35	--	BTEX, SVOCs, Metals: As, Pb
6-8'	Grab	14:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	2.0	100	--	--		0.0-0.8'	**Topsoil**, organics, sand and gravel
2.0	4.0	100	--	--		0.8-3.3'	**Silty Clay** (fill), brown, red-grey mottling, organics, trace gravels, firm, cohesive, sticky, slightly moist
4.0	6.0	100	--	--		3.3-3.7'	railroad tie
6.0	8.0	100	--	--		3.7-7.2'	**Silty Clay**, light grey - light brown, trace sand, moist, cohesive, pliable, sticky, organics, trace gravel, interbedded with weathered limestone fragments
8.0	10.0	100	--	--		7.2-8.0'	**Weathered Limestone**, powdered
10.0	11.5	100	--			8.0-10.0'	**Silty Clay**, light grey - light brown, wet at 8.0', sticky, cohesive, pliable, trace gravel
						10.0-10.5'	**Weathered Limestone, powdered**
						10.5-10.79'	**Limestone**, light grey, heavily fractured by sonic drill

ROCK CORING / SAMPLING LOG

Boring/Well: MW-28B | Project/No.: IN Creosote / IN000072.0045 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/12/2009 @ 1:30 | Drilling Date/Time Completed: 1/13/2009 @ 11:09

Drilling Contractor: Boart Longyear | Driller:

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 688.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 22.71 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 22.71 | Water Loss: 935 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
10.79	12.83	100	88.7	9.0	80 gallons	**10.79-14.52' Limestone**, 5GY6/1, N5, greenish-grey - medium grey, thinly bedded, fossiliferous, strong, component, slightly fractured, banded, Wackstone/Packstone
12.83	18.00	100	88.9	28.0	510 gallons	11.29-11.30' Fracture, pitted, horizontal, moderately narrow, partly healed, some clay and sand infilling; possible hydraulic conductive zone, rough
18.00	19.66	100	51.0	9.0	125 gallons	11.31-11.40' Styolite feature
19.66	22.7	100	87.6	10.0	220 gallons	12.22-12.26' Styolite feature
						12.61-12.73' Styolite feature
						*beginning of run 2 (12.83-13.05) heavily fractured with clays on fractures
						13.35-13.41' Styolite fracture, pitted, partly healed, clay and sand infilling, rough
						13.46' heavily oxidized fracture, parting sub-vertical fracture within, partly healed, some clay and sand infilling, possible hydraulic conductive zone
						13.81-13.84' small geode
						14.10-14.14' small geode
						14.13' fracture along large geode
						14.14-14.33' large geode, open, large crystals
						14.36-14.51' geode sequence, open, crystals
						14.10-14.51' Packstone sequence
						14.52-15.07' Limestone, medium - dark grey, fossiliferous, horizontally bedded, brachiopods and crinoids, thinly banded, strong, component, Packstone
						15.07-16.57' Siltstone, medium - dark grey
						15.14-15.16' Fracture along geode (on other side of core), some clay infill, partly healed
						15.32-15.44' Fracture, slightly oxidation on faces, clay infilling, possible zone of hydraulic conductivity
						15.60-15.66' geode
						16.16-16.19' Fracture, some clay infill
						16.54-16.59' small geode

ROCK CORING / SAMPLING LOG

Boring/Well: MW-28B | Project/No.: IN Creosote / IN000072.0045 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/12/2009 @ 1:30 | Drilling Date/Time Completed: 1/13/2009 @ 11:09

Drilling Contractor: Boart Longyear | Driller:

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 688.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 22.71 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 22.71 | Water Loss: 935 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
						16.57-20.11' Limestone, medium grey - light medium greenish-grey, fossiliferous, crinoids and brachiopods, laminated
						16.57-16.78' Packstone sequence
						17.08-17.14' geode
						18.03-18.28' Packstone sequence
						18.28-18.34' Fracture, oxidation on faces, clay infill, possible hydraulic conductive zone
						18.58-18.66' Fracture, oxidation on faces, broken into smaller pieces
						18.81-18.82' Fracture, slight clay infill, vertical fracture coming off
						19.05' Bedding plane joint, semi-smooth partly healed, narrow
						20.11-20.34' Weathered Siltstone, light green - light grey calcareous, shaley, argillaceous
						20.34' Bedding plane joint, semi-smooth
						20.34-20.50' Siltstone, medium-dark grey, thinly bedded, fossiliferous
						20.50-21.51' Mudstone sequence
						20.51' Bedding plane joint, slightly pitted, partly healed, slight sand and clay infill
						20.62-20.65' geode
						21.51-22.71' Limestone, light-medium grey - light greenish-grey, massive, strong, laminated, bedded, fossiliferous, crinoids, brachiopods, Wackstone
						22.51-22.52' Fracture, narrow, pitted, partly healed, slight clay infill

SOIL BORING / SAMPLING LOG

Boring/Well: MW-28C | Project/No.: IN Creosote / IN000072.0045 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/14/2009 @ 16:09 | Drilling Date/Time Completed: 1/19/09 @ 17:48

Drilling Contractor: Boart Longyear | Driller:

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.5 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.73 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.73 | Water: 840 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	16:35	--	BTEX, SVOCs, Metals: As, Pb
9-10'	Grab	16:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	2.0	100	--	--		0.0-1.0'	gravel
2.0	4.0	100	--	--		1.0-4.2'	**Silty clay** (fill), brownish-red, cohesive, sticky, slightly moist, trace sands, trace gravels, organics, asphalt pieces
4.0	6.0	100	--	--		4.2-5.0'	**Fill**, grey, coarse grained sands, coarse gravel, rock fragments, loose, moist
6.0	8.0	100	--	--		5.0-7.75'	**Silty clay**, brown - dark brown, trace gravels, light brown - tan (silty clay) nodules with in the brown - dark brown silty clay; soft to stiff, slightly plastic, possibly fill
8.0	10.0	100	--	--		7.75-9.0'	**Limestone**, medium grey, heavily fractured due to sonic drilling, broken pieces
10.0	11.5	100	--	--		9.0-9.80'	**Silty Clay**, light-medium grey with light brown, possibly weathered bedrock and limestone gravels, firm, non-plastic, dry
						9.80-10.5'	**Limestone,** medium grey, heavily fractured due to sonic drilling, broken pieces
						10.5-11.5'	**Silty Clay**, brown - dark brown, lots of organics, wet to moist, sticky plastic, soft
						11.5-13.0'	**Limestone**, medium grey, heavily fractured due to sonic drilling, broken pieces

ROCK CORING / SAMPLING LOG

Boring/Well: MW-28C | Project/No.: IN Creosote / IN000072.0045 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/14/2009 @ 16:09 | Drilling Date/Time Completed: 1/19/09 @ 17:48

Drilling Contractor: Boart Longyear | Driller:

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 689.5 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.73 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.73 | Water: 840 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	16:35	--	BTEX, SVOCs, Metals: As, Pb
9-10'	Grab	16:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
13.00	14.32	100	25.0		100 gallons	**13.00-13.85' Wackestone,** medium to light grey, thinly bedded, fossiliferous, crinoids, fresh matrix, heavily fractured (broken pieces), broken pieces have clay infill
14.32	21.85	96.8	78.9		740 gallons	13.0-13.59' Heavily fractured, clay infill, sand infill, possible zone of hydraulic conductivity
21.85	25.56	100				13.85' Bedding plane fracture with Wackestone and Siltstone
25.56	35.73	100				**13.85-16.58' Siltstone**, medium grey, thinly bedded, laminated, fresh matrix, slightly fractured, competent, geodes
						13.94-13.98' Geode
						14.06-14.22' Geode
						14.38-14.42' Geode
						14.58-14.62' Geode
						14.81-14.85' Geode
						15.10' Fracture, slightly smooth, slight clay infill
						15.55-15.60' Geode
						16.38-16.43' Geode
						16.43-16.64' Large geode
						16.58-20.50' Limestone, light to medium grey, slightly fractured, thinly bedded, interbedded Packstone
						16.58-16.79' Packstone sequence
						16.79' Fracture, some clay infill
						16.79-18.04' Mudstone/Wackestone sequence
						18.04' Fracture, pitted, rough, sand and clay infill, slight oxidation of faces
						18.04-18.11' Packstone sequence
						18.11' Styolite feature
						18.11-18.21' Wackestone sequence
						18.21' Styolite feature
						18.21-18.36' Packstone sequence, crinoids
						18.36' Fracture, oxidized faces, clay and sand infill; color change to light greenish-grey
						18.36-20.21' Wackestone/Packstone sequence
						20.21' Fracture, semi-smooth, slight clay infill
						20.21-20.36' Packstone sequence
						20.36-20.50' Possible location of bit drop

ROCK CORING / SAMPLING LOG

Boring/Well: MW-28C | Project/No.: IN Creosote / IN000072.0045 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/14/2009 @ 16:09 | Drilling Date/Time Completed: 1/19/09 @ 17:48

Drilling Contractor: Boart Longyear | Driller:

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 689.5 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.73 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.73 | Water: 840 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	16:35	--	BTEX, SVOCs, Metals: As, Pb
9-10'	Grab	16:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD	Minutes / Run	Water Loss	Sample/Core Description
						20.50-20.70' Weathered Siltstone, dark grey to dark greyish-green, soft, fine grained, silty, slightly moist
						20.70-21.85' Siltstone, medium to dark grey, laminated, thinly bedded, some calcite lenses
						20.68-20.70' fracture, heavy clay infill, bedding plane
						21.49-21.51' Calcite lens, fossiliferous
						21.69-21.85' Calcite lens sequence, fossiliferous
						23.98-24.16' Siltstone, medium dark grey to medium greenish grey, thinly bedded, crinoids
						24.16' Fracture, pitted, bedding plane, some clay infill
						24.16-24.73' Wackestone, light medium grey to greenish grey, laminated, crinoids, brachiopods
						24.73-25.18' Siltstone, dark greenish grey to dark greyish green, thinly bedded, slight cross bedding at 0.25'
						25.18-25.68' Packstone/Grainstone, medium to dark grey, fossiliferous
						25.68-32.00' Limey-Siltstone, dark medium grey, thinly bedded, some cross bedding, laminated, fossiliferous, crinoids, color darkens with depth
						32.00-33.18' Mudstone/Wackestone, medium grey, thinly bedded
						33.18-33.29' Weathered Siltstone, dark grey, soft, sticky, moist, silty, possible hydraulic conductive zone
						33.29-35.73' Siltstone, medium dark grey, thinly bedded, fine grained, laminated
						33.47' Fracture, clay infill, possible hydraulic conductive zone, semi-smooth
						34.16' Fracture, some clay infill, partly healed

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-29A | Project/No.: IN Creosote / IN000072.0045.00001 | Page 1 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/22/2009 @ 8:13 | Drilling Date/Time Completed: 2/2/2009 @ 14:16

Drilling Contractor: Boart Longyear | Driller: Dave Chamblee

Drilling Fluid Used: water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.00 feet

Land-Surface Elev.: 692.7 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 71.81 Feet | Hole Diameter: 6" | Coring Device:

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 71.81 | Water Loss: 127 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:15	MS/MSD	BTEX, SVOC, Metals
6-8'	Grab	9:25	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interva	From - To	Sample/Core Description
0.0	2.0					0.0-0.4'	Topsoil, **Silty Clay**, brown, trace sands, trace gravels, sticky, cohesive, organics, slight staining and odor at 0.2',
2.0	4.0			--		0.4-2.5'	**Fill**, sand and gravel, black, medium to coarse grained, rock (up to fist size), stained, odor, railroad ties
4.0	6.0			--		2.5-7.5'	**Silty Clay**, brown to brownish-grey, mottled, moist, medium-soft, cohesive, sticky, trace organics from 2.5-3.0', black staining through 3.0', sheen throughout, odor, trace gravels at 7.0', medium to coarse grained
6.0	8.0			--		7.5-8.0'	**Weathered Limestone**, light grey, partly crushed from sonic

ROCK CORING / SAMPLING LOG

Boring/Well: MW-29A | Project/No.: IN Creosote / IN000072.0045.00001 | Page 2 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/22/2009 @ 8:13 | Drilling Date/Time Completed: 2/2/2009 @ 14:16

Drilling Contractor: Boart Longyear | Driller: Dave Chamblee

Drilling Fluid Used: water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 692.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 71.81 Feet | Hole Diameter: 6" | Coring Device:

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 71.81 | Water Loss: 127 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:15	MS/MSD	BTEX, SVOC, Metals
6-8'	Grab	9:25	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
8.00	16.43	100	59.00		50	**8.00-8.62' Wackstone**, light grey, strong, fossiliferous, medium bedded, slightly disintegrated, moderately fractured
16.43	20.75	100	99.00		10	8.0-8.21' Broken fragments, clay infilling , creosote odor/staining
20.75	26.67	100	92.00		50	8.36' Fracture, slight oxidation on both faces, partly healed, creosote staining/odor, rough, wet, crinoids
20.67	28.00	69.2	0.00		0	**8.62-8.85' Packstone**, light grey, fossiliferous, crinoids
28.00	31.14	100	88.00		0	8.62' Fracture, rough, crinoids, some clay and sand infilling, partly healed
31.14	36.41	100	94.00		0	**8.00-14.22' Wackstone**, light grey, strong, fossiliferous, medium bedded, slightly disintegrated, moderately fractured
36.41	41.64	100	98.00		0	8.85' Fracture, heavily crystallized, slight oxidation
41.64	46.70	100	96.00		0	8.95' Fracture, smooth, some sand and clay
46.70	51.67	99	100.0		17	9.09' Styolite feature
51.67	56.75	100	100.00		0	9.19-9.30' Fracture, sand and clay infilling, some creosote staining, possible hydraulic conductive zone
56.75	61.81	100	100.00		0	9.50' Small styolite, creosote staining
61.81	71.81	100	100.0		0	9.50-9.62' Vertical fracture off styolite containing creosote staining
						9.68' Fracture, sand and clay infilling, rough, slightly pitted, creosote staining
						9.83' Fracture, sand and slight clay infilling, rough
						10.50' Styolite feature
						10.54' Styolite fracture, heavy clay infilling, possible hydraulic conductive zone
						10.93' Fracture, sand, crinoids, brachiopods, slightly rough
						11.13' Styolite fracture, pyrite infilling
						11.31-11.38' Styolite, healed fracture
						11.46' Fracture, sand, some clay, oxidation
						11.88' Fracture, oxidation
						12.30' Fracture, slight sand infill, slight oxidation
						12.56' Fracture, slight sand infill, oxidation
						12.61' Fracture, slight sand infill, oxidation
						12.77' Fracture, rough, pitted, oxidation, partly healed, possible hydraulic conductive zone
						13.34' Fracture, creosote staining, oxidation, clay and sand infill, possible hydraulic conductive zone
						13.90-14.22' large Geode

ROCK CORING / SAMPLING LOG

Boring/Well: MW-29A | Project/No.: IN Creosote / IN000072.0045.00001 | Page 3 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/22/2009 @ 8:13 | Drilling Date/Time Completed: 2/2/2009 @ 14:16

Drilling Contractor: Boart Longyear | Driller: Dave Chamblee

Drilling Fluid Used: water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 692.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 71.81 Feet | Hole Diameter: 6" | Coring Device:

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 71.81 | Water Loss: 127 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:15	MS/MSD	BTEX, SVOC, Metals
6-8'	Grab	9:25	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						14.22-15.25' Siltstone, medium grey, thinly laminated
						14.27' Fracture, sand and clay infilling
						14.60-14.67' Weathered siltstone, soft
						14.67' Fracture, sand and clay infilling
						14.96-15.01' Weathered Siltstone, soft
						15.25-16.58' Packstone, light grey, crinoids, styolites, fossiliferous
						15.97' Styolite
						16.03' Styolite
						16.58-26.03' Siltstone, medium grey, amorphous banding, thinly banded, thickly bedded, calcite lenses
						16.98' small Geode sequence
						17.50-17.61' Geode
						18.37-18.47' Geode sequence
						18.63-18.75' Geode
						18.75' Fracture along geode
						20.39-20.50' Weathered Siltstone, soft
						20.68-20.75' Weathered Siltstone, soft
						20.84' Fracture, clay infilling, smooth
						21.02' Fracture, clay infill, partly healed
						21.23' Fracture, some clay infilling, smooth
						21.99-22.08' Geode
						22.17-22.31' Geode sequence
						22.33-22.34' small Geode
						22.43-22.45' small Geode
						23.88-24.03' Geode sequence
						24.03' Fracture along geode
						24.07-24.13' Crinoid sequence
						24.18-24.28' Geode sequence
						25.76' Fracture along geode

ROCK CORING / SAMPLING LOG

Boring/Well: MW-29A | Project/No.: IN Creosote / IN000072.0045.00001 | Page 4 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/22/2009 @ 8:13 | Drilling Date/Time Completed: 2/2/2009 @ 14:16

Drilling Contractor: Boart Longyear | Driller: Dave Chamblee

Drilling Fluid Used: water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 692.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 71.81 Feet | Hole Diameter: 6" | Coring Device:

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 71.81 | Water Loss: 127 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:15	MS/MSD	BTEX, SVOC, Metals
6-8'	Grab	9:25	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						25.80-25.83' Geode
						26.23-26.27' Geode
						26.30-26.67' Packstone, medium grey, fossiliferous, crinoids, brachiopods, strong
						26.39-26.48' Geode
						26.67-27.09' Missing core, cleared during reaming process
						27.09-27.35' Siltstone (fragment)
						27.35-30.41' Packstone, medium grey, fossiliferous, crinoids, moderately fractured
						27.35-28.0' Fractured limestone fragments
						27.35-27.58' Geode
						28.0-28.06' Broken fragments
						30.35' Styolite feature
						30.41-30.82' Siltstone, medium grey, laminated, thinly bedded
						30.82' Bedding plane fracture, fossiliferous, slightly pitted
						30.82-32.76' Packstone, medium grey, fossiliferous, fractured
						31.09' Fracture, fossiliferous
						31.44' Fracture, pitted, fossiliferous
						31.93' Fracture, healed, filled with siltstone
						32.76-35.46' Siltstone, medium grey, medium bedded, thin amorphous banding
						32.76-32.87' Geode
						35.28-35.31' Geode
						35.46-37.19' Grainstone/Packstone, medium grey, fossiliferous, crinoids, brachiopods
						36.52' Fracture along crinoid
						37.19-37.72' Siltstone, medium grey, medium bedded, thin amorphous banding
						37.72-39.94' Grainstone/Packstone, medium grey, fossiliferous, crinoids, brachiopods, geodes, innerbedded Siltstone, amorphous banding
						38.47-38.72' Siltstone unit
						38.68-38.75' Geode
						39.35-39.57' Geode

ROCK CORING / SAMPLING LOG

Boring/Well: MW-29A | Project/No.: IN Creosote / IN000072.0045.00001 | Page 5 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/22/2009 @ 8:13 | Drilling Date/Time Completed: 2/2/2009 @ 14:16

Drilling Contractor: Boart Longyear | Driller: Dave Chamblee

Drilling Fluid Used: water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 692.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 71.81 Feet | Hole Diameter: 6" | Coring Device:

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 71.81 | Water Loss: 127 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:15	MS/MSD	BTEX, SVOC, Metals
6-8'	Grab	9:25	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						39.94-41.64' Siltstone, medium grey, thinly banded, amorphous banding, medium bedding
						41.69' Fracture atop of geode, smooth, clay infilling, possilbe weathered Siltstone
						41.64-46.70' Wackstone, light to medium grey, compentent, thinly banded, fossiliferous, crinoids, brachiopods
						41.64-41.78' Geode
						41.78' Fracture at bottom of geode, slight clay infilling, semi-smooth
						41.93' Fracture, slightly pitted, partly healed, slight clay infilling
						42.34' Styolite feature, healed fracture, mechanical break
						43.23' Styolite feature, mechanical break
						44.35' Styolite feature, mechanical break
						44.46-44.48' Healed fracture, filled with siltstone
						45.13' Styolite feature, mechanical break
						45.47-46.70' Packstone sequence
						45.61' Styolite feature
						46.44-46.55' Large geode
						46.70-47.00' Siltstone, dark to medium-dark grey, thinly laminated, medium horizontal bedding
						46.77-46.79' Geode
						47.00-48.75' Wackstone, light to medium grey, strong, compotent, fossiliferous, crinoids
						47.20-47.27' Geode
						47.32-47.85' Packstone/Grainstone sequence, crinoids
						48.61-48.95' Packstone sequence, crinoids, brachiopods, some pyrite mineralization
						48.95' Bedding plane fracture, contact with siltstone unit, slight clay infill

ROCK CORING / SAMPLING LOG

Boring/Well: MW-29A | Project/No.: IN Creosote / IN000072.0045.00001 | Page 6 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/22/2009 @ 8:13 | Drilling Date/Time Completed: 2/2/2009 @ 14:16

Drilling Contractor: Boart Longyear | Driller: Dave Chamblee

Drilling Fluid Used: water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5' x 4 1/2" core barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 692.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 71.81 Feet | Hole Diameter: 6" | Coring Device:

Prepared By: M. Hicks, R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 71.81 | Water Loss: 127 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:15	MS/MSD	BTEX, SVOC, Metals
6-8'	Grab	9:25	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						48.95-71.81' Siltstone (Borden), dark grey to dark greenish grey, strong, compotent, horizontal and amorphous banding, thinly banded, some pyrite mineralization
						52.66-52.71' Crossbedding sequence
						55.82-55.86' Heavy pyrite mineralization
						53.83-53.90' Crossbedding sequence
						56.30-56.41' Heavy pyrite mineralization
						57.94-58.53' Crossbedding sequence
						59.48-59.56' Crossbedding sequence
						60.81-60.98' Crossbedding sequence
						61.98-62.05' Crossbedding sequence
						62.32-68.05' Increase in turbation sequence
						66.05-68.49' Horizontal bedding sequence
						67.09-67.10' Pyrite mineralization
						67.70-67.73' Pyrite mineralization
						67.96-68.03' Heavy pyrite mineralization
						68.49-69.35' Increase in turbation
						70.58-70.65' Pyrite mineralization
						70.71-70.73' Pyrite mineralization
						70.90-70.92' Pyrite mineralization
						71.16-71.17' Pyrite mineralization

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-29B | Project/No.: IN Creosote / IN000072.0045.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/3/2009 @ 14:45 | Drilling Date/Time Completed: 2/4/09 @ 14:25

Drilling Contractor: Boart Longyear | Driller: Dave Chamblee

Drilling Fluid Used: water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5' core barrel | Sampling Interval: 5.25 feet

Land-Surface Elev.: 692.7 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 38.57 Feet | Hole Diameter: 6" | Coring Device: Sonic Barrel/HQ Core

Prepared By: T. Porter/R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 38.57 | Water Loss: 213 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	15:15	--	BTEX, SVOCs, Metals: As, Pb
2-4	Grab	15:25	FD-1(020309)	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interva	From - To	Sample/Core Description
0.0	2.0	100	--	--		0.0-1.0'	Topsoil (0.0-0.1'), **Clayey Silt/Silty Clay**, light brown-orange-red, trace sands, few common gravels, medium to coarse, lightly moist, cohesive, sticky, little organic matter
2.0	4.0	100	--	--			0.8' color change to Brown, increase in organics, cinders
4.0	6.0	100	--	--		1.0-2.2'	**Fill**, sands and gravel, dark brown to black, cinders, loose
6.0	8.0	100	--	--		2.2-7.0'	**Silty Clay/Clayey Silt**, brown and dark grey, cohesive, trace sands, trace gravels, organic matter (coating and layers), odor, staining, slightly moist
8.0	10.0	100	--	--			2.75' Odor and staining
							3.0' Sheen and greyish staining
							3.75-6.25' Very moist
							4.0-4.5' Wet, loose, sheen
							6.8-7.0' Powdered and crushed Limstone
						7.0-8.0'	**Silty Clay**, dark grey to dark brown, very moist to wet, soft, sticky, odor
							8.0' Sheen
							7.5-7.8' Powdered and crushed Limestone
						8.0-10.0'	**Limestone**, powdered and crushed

ROCK CORING / SAMPLING LOG

Boring/Well: MW-29B | Project/No.: IN Creosote / IN000072.0045.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/3/2009 @ 14:45 | Drilling Date/Time Completed: 2/4/09 @ 14:25

Drilling Contractor: Boart Longyear | Driller: Dave Chamblee

Drilling Fluid Used: water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5' X 4 1/2" core barrel | Sampling Interval: 5.25 feet

Land-Surface Elev.: 692.7 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 38.57 Feet | Hole Diameter: 6" | Coring Device: Sonic Barrel/HQ Core

Prepared By: T. Porter/R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 38.57 | Water Loss: 213 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	15:15	--	BTEX, SVOCs, Metals: As, Pb
2-4	Grab	15:25	FD-1(020309)	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
10.0	16.67	100	77.00	36 min	74 gallons	**10.0-13.50' Wackstone**, light to medium grey, fossiliferous, crinoids, brachiopods, strong, competent, thin-medium bedding, moderately fractured
16.67	21.0	87	96.00	17 min	17 gallons	10.00-10.06' Broken fragments
21.0	26.76	100	100.00	22 min	0 gallons	10.06' Fracture, slightly smooth, slight clay and sand infill
26.76	31.89	96	95.00	9 min	0 gallons	10.26' Fracture, slightly smooth, partly healed
31.89	36.91	100	100.00	11 min	64 gallons	10.39' Fracture, oxidation staining, creosote flakes, slight sand and clay infill, slight odor
36.91	38.51	100	100.00	5 min	58 gallons	10.52' Fracture, oxidation staining, creosote flakes, slight sand and clay infill, slight odor
						10.75-10.82' Styolite feature
						10.87' Fracture along styolite feature, slightly smooth, slightly pitted, partly healed, sand and clay infill, minor creosote flakes
						11.60' Fracture along styolite feature, oxidation staining, sand and clay infill
						11.92' Fracture, slightly smooth, partly healed, some sands
						12.00' Fracture, black staining on bottom face, creosote staining, oxidation staining, odor, sand and clay infill
						12.59-12.64' Fracture with broken pieces along styolite feature, heavy sand and clay infill
						12.72' Fracture, oxidation staining, some sand and clay infill, partly healed
						12.64-12.88' Slight vertical fracture, oxidation staining
						12.86' Fracture, oxidation staining, slightly smooth, slight sand and clay infill, partly healed
						13.17' Fracture, sand and clay infill, creosote flakes
						13.50-14.61' Mudstone/Siltstone, light-medium grey to medium greenish-grey, medium bedding, horizontal banding, moderately fractured
						14.00-14.11' Soft weathered bed, clay infill
						14.00' Fracture along weathered bed
						14.30-14.59' Large geode sequence
						14.61-16.42' Wackstone, fossiliferous, crinoids, brachiopods, strong, competent, thin-medium bedding, moderately fractured
						14.83-14.98' Large geode
						15.72' Styolite feature
						16.30-16.42' Packstone

ROCK CORING / SAMPLING LOG

Boring/Well: MW-29B | Project/No.: IN Creosote / IN000072.0045.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/3/2009 @ 14:45 | Drilling Date/Time Completed: 2/4/09 @ 14:25

Drilling Contractor: Boart Longyear | Driller: Dave Chamblee

Drilling Fluid Used: water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5' X 4 1/2" core barrel | Sampling Interval: 5.25 feet

Land-Surface Elev.: 692.7 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 38.57 Feet | Hole Diameter: 6" | Coring Device: Sonic Barrel/HQ Core

Prepared By: T. Porter/R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 38.57 | Water Loss: 213 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	15:15	--	BTEX, SVOCs, Metals: As, Pb
2-4	Grab	15:25	FD-1(020309)	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						16.42-26.25' Siltstone, medium-dark grey to medium greenish-grey, thinly bedded, strong, slight pyrite mineralization, horizontal bedding, moderately fractured, calcareous zones
						16.67' change to medium-dark grey
						17.15-17.27' Large geode, crystalline
						17.29-17.67' Large geode, crystalline
						17.71-17.74' Fossil zone, crinoids
						17.81-17.82' geode
						18.00-18.34' Calcareous/fossiliferous lenes
						18.35-18.47' Large geode
						18.53-18.61' Geode sequence
						18.42-18.61' Amorphous banding around geodes, darker bands
						18.72-18.74' Pyrite minieralization lens
						18.86-18.89' Calcareous/fossiliferous zone, crinoids
						20.38' Fracture along fossiliferous zone, slight clay infill
						20.44-20.55' Fractrue with broken calcareous/fossiliferous pieces, crinoids, some clay infill
						21.60-21.65' Geode, crystalline
						21.95-22.22' Large geode sequence, entire core, vugs, crystailline
						22.43-22.53' Large geode, entire core, vugs, crystalline
						22.72-22.80' Large geode
						23.28-23.30' Small geode
						23.39-23.96' Geode sequence (small geodes)
						23.46-23.70' Large geode, entire core, vugs, crystalline
						23.70-24.04' Hairline (45 degree) healed fracture zone, small geodes along fracture
						25.41-25.42' Small geode
						25.76-25.83' Geode
						26.18-26.25' Calcareous/fossiliferous zone, crinoids, brachiopods

ROCK CORING / SAMPLING LOG

Boring/Well: MW-29B | Project/No.: IN Creosote / IN000072.0045.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/3/2009 @ 14:45 | Drilling Date/Time Completed: 2/4/09 @ 14:25

Drilling Contractor: Boart Longyear | Driller: Dave Chamblee

Drilling Fluid Used: water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5' X 4 1/2" core barrel | Sampling Interval: 5.25 feet

Land-Surface Elev.: 692.7 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 38.57 Feet | Hole Diameter: 6" | Coring Device: Sonic Barrel/HQ Core

Prepared By: T. Porter/R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 38.57 | Water Loss: 213 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	15:15	--	BTEX, SVOCs, Metals: As, Pb
2-4	Grab	15:25	FD-1(020309)	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						26.25-28.79' Wackestone, medium grey to medium-dark grey, medium bedding, strong, competent, fossiliferous, crinoids
						26.42' Healed fracture, filled with dark grey Mudstone
						26.67-26.98' Rock lost in reaming process
						27.10' Fracture, slightly smooth, pyrite mineralization, slight clay infill
						28.65-28.74' Packstone sequence
						28.79-29.81' Siltstone, medium-dark grey, calcaerous lenses, thinly bedded, strong, compentent
						29.33-29.41' Large calcareous lens
						29.81-32.67' Wackstone/Packstone, medium grey, fossiliferous, crinoids, brachiopods, medium bedding, strong, competent
						30.18' Fracture, clay infill, some sands, fracture lined with siltstone, possible zone of hydraulic conductivity
						30.22' Connected with above fracture, clay an dsand infill, siltstone on top of face, possible zone of hydraulic conductivity
						30.46' healed fracture
						30.70-30.74' Fracture, heavy clay infill, soft, weathered zone, clay is plastic in nature, wet with seepage, possible zone of hydraulic conductivity
						30.71-30.89' Broken pieces caused by removal from core barrel
						30.89' Begins transition to siltstone
						32.47-32.58' Large geode, crystalline
						32.67-35.13' Siltstone, light-medium grey to light-medium greenish-grey, strong, competent, thinly bedded, horizontal banding
						33.25-33.28' Geode
						33.86-33.98' 2 Geodes, crystalline
						34.23-34.27' Dark grey, calcareous zone, fossiliferous, geode
						34.27-35.13' Amorphous banding, linnear bedding
						35.13-36.58' Packstone, medium bedding, fossiliferous, crinoids, brachiopods, strong, competent
						36.09-36.58' Wackestone
						36.58-37.52' Siltstone, medium-dark grey, thinly bedded, slightly calcareous, slight horizontal banding
						36.86-36.87' Geode
						37.11-37.52' Begin transition to limestone, darker bands/beds, crinoids
						37.52-37.87' Grainstone, sll crinoids, fossiliferous, strong, compentent
						37.87-38.57' Siltstone, medium-dark grey, thinly bedded, horizontal banding, begin transition to limestone, increasing in calcareous zones, crinoids

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-30A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/12/2009 @ 5:01 | Drilling Date/Time Completed: 10/12/2009 @ 5:35

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 688.6 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 30.20 Feet | Hole Diameter: 4.0 | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 30.20 | Water Loss: 329 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	17:30	--	BTEX, SVOCs, Metals
4,-6	Grab	17:40	Dup-1	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interva	From - To	Sample/Core Description
0.0	2.0	80	2.00	--	TS	0.0-.33'	Topsoil, organics, gravel
2.0	4.0	80	1.80	--	ML	.33-5.0'	**Silty Clay**, brown with grey mottling, some sands, stiff to slightly medium, plastic, slightly moist; no more mottling at 2.0'
4.0	6.0	80/75	2.30	--	ML	5.0-9.0'	**Clayey Silt**, light brown to tan, Weathered Limestone from 5.5-6.0', soft to stiff, plastic to slightly plastic, lightly moist; moist from 7.0-8.0'; *bedrock contact at 9.0'
6.0	8.0	75	1.70	--	LS	9.0-11.16'	**LS: Solid Wackestone/Packstone**, medium grey, medium bedding, strong, fossiliferous, crinoids, brachiopods
8.0	10.0	75	2.30	--			
10.0	11.0	100	--	--			

ROCK CORING / SAMPLING LOG

Boring/Well: MW-30A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/12/2009 @ 5:01 | Drilling Date/Time Completed: 10/12/2009 @ 5:35

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 688.6 feet | [X] Surveyed | [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 30.20 Feet | Hole Diameter: 4.0 | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 30.20 | Water Loss: 329 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	17:30	--	BTEX, SVOCs, Metals
4,-6	Grab	17:40	Dup-1	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
11.16	16.10	92.2	86.5	10.0	115	**11.16-13.00' Mudstone-Wackstone**, light to medium grey, slightly fossiliferous, crinoids, strong, competent, medium bedding
16.10	21.00	100	100.0	7.0	60	11.16-11.37' Brown fragments from sonic drill
21.00	26.34	100	90.4	13.0	90	12.58-12.61' Fracture, smooth, slight clay infilling
26.34	30.20	100	92.7	7.0	64	29.76-30.20' Wackestone-Packstone, medium grey, medium bedding, strong, fossiliferous, crinoids, brachiopods
						13.00-13.23' Packstone, light grey, strong, competent, fossiliferous, crinoids, brachiopods
						13.14-13.15' Fracture, rough, pitted, pyrite infill
						13.23-14.68' Mudstone, strong, slightly fractured, thinly bedded, medium to dark grey, horizontal
						13.38-13.47' Void, clay infill on faces, zone of water loss, smooth faces, possible weathered limestone interval
						13.85-13.92' Geode
						14.06' Fracture, slightly pitted
						14.11-14.16' Geode
						14.20' Fracture, slightly pitted
						14.51-14.68' Geode sequence
						14.68-14.83' Packstone-Grainstone, strong, competent, fossiliferous, crinoids, brachiopods
						14.83-15.58' Packstone, dark grey with light blue, strong, competent, fossiliferous, crinoids, brachiopods
						15.58-15.88' Mudstone, medium to dark grey, strong, competent, thinly bedded, horizontal planes
						15.88-21.47' Siltstone, grey, very competent, very strong, thin horizontal bedding
						17.26-17.28' Geode
						17.51-17.54' Geode
						17.52' Color change to dark grey
						18.12-18.15' Geode
						18.16-18.19' Slight clay zone within rock
						18.22-18.26' Geode
						18.41-18.59' Large geode
						18.82' Fracture along geode
						18.82-19.01' Large geode
						21.47-21.74' Grainstone, medium grey, strong, slightly fractured, fossiliferous, crinoids, brachiopods
						21.71-21.73' Fracture, slight clay infill, partly healed

ROCK CORING / SAMPLING LOG

Boring/Well: MW-30A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/12/2009 @ 5:01 | Drilling Date/Time Completed: 10/12/2009 @ 5:35

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 688.6 feet | [X] Surveyed | [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 30.20 Feet | Hole Diameter: 4.0 | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 30.20 | Water Loss: 329 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	17:30	--	BTEX, SVOCs, Metals
4,-6	Grab	17:40	Dup-1	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						21.74-22.36' Wackestone-Packstone, grey, strong, competent, fossiliferous, crinoids, brachiopods
						22.36-22.55' Grainstone, medium grey, strong, competent, fossiliferous, crinoids, brachiopods
						22.55' Fracture, bedding plane, pitted, partly healed, along styolite feature as well
						29.76-30.20' Wackestone-Packstone, medium grey, medium bedding, strong, fossiliferous, crinoids, brach
						23.32' Fracture, bedding plane, slight sand and clay infill
						23.32-23.45' Mudstone, dark grey, competent, horizontal bedding
						23.45-23.63' Siltstone, dark grey, thinly bedded, horizontal
						23.56-23.58' Fracture, clay infill, moist, sticky
						23.63-25.60' Wackstone, grey with light bluish-green, strong, competent, fossiliferous, crinoid, brachiopods
						24.50' Styolite
						24.54-24.56' Fracture along styolite, rough, pitted, partly healed, sand and clay infill
						25.31' Styolite
						25.60' Fracture, bedding plane with weathered limestone
						25.60-25.91' Clay, soft, sticky, moist, zone of water loss
						25.91-26.34' Mudstone-Siltstone, dark grey, horizontal bedding
						*When pulling tooling from Run 3, A creosote odor was noted. Creosote odor and some flakes on WLI when dropped down to get total depth of borehole
						26.34-26.82' Interbedded Siltstone-Wackestone, dark grey, strong, horizontal bedding, thin to medium bedding, crinoids
						26.67-26.75' Geode
						26.82' Fracture, bedding plane, slightly smooth, partly healed, pyrite infill
						26.82-26.90' Packstone-Grainstone, medium grey, fossiliferous, crinoids, brachiopods, strong
						26.90-26.95' Interbedded Siltstone-Wackestone, dark grey, thin horizontal bedding, strong
						26.95-27.03' Packstone, grey, strong, fossiliferous, crinoids, brachiopods
						27.03' Fracture, bedding plane with siltstone, slight creosote odor, clay infill, pitted, slightly weathered
						27.03-27.09' Siltstone, dark grey, thin horizontal bedding, strong
						27.09' Fracture, bedding plane, clay infill, slight creosote odor
						27.09-27.18' Interbedded Siltstone-Mudstone, healed fractures, light grey to dark grey
						27.18-28.95' Wackestone, medium grey, strong, competent, thin to medium bedding, horizontal
						27.84-27.90' Geode

ROCK CORING / SAMPLING LOG

Boring/Well: MW-30A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/12/2009 @ 5:01 | Drilling Date/Time Completed: 10/12/2009 @ 5:35

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 688.6 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 30.20 Feet | Hole Diameter: 4.0 | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 30.20 | Water Loss: 329 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	17:30	--	BTEX, SVOCs, Metals
4,-6	Grab	17:40	Dup-1	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						28.10-28.13' Large crinoid sequence
						28.28-28.32' Large crinoid sequence
						28.95-29.76' Packstone, light to medium grey, strong, massive, fossiliferous, crinoids, brachiopods
						29.76-30.20' Wackestone-Packstone, medium grey, medium bedding, strong, fossiliferous, crinoids, brachiopods
						30.00-30.08' Styolite at 30° angle

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-30B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/14/2009 @ 10:37 | Drilling Date/Time Completed: 10/14/2009 @ 10:53

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 688.8 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 50.69 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 50.69 | Water Loss: 186 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	11:00	--	BTEX, SVOCs, Metals
4,-6	Grab	11:10	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	100	0.00	--	TS	0.0-0.5'	**Topsoil,** organics, gravels, slag
2.0	4.0	80	0.00	--	ML/ CL	0.5-7.0'	**Silty Clay**, light brown to brown, stiff to firm, slightly moist, decreasing moisture with depth, lightly plastic, trace sands, cohesive; weathered Limestone fragments at 6.5'
4.0	6.0	80/80	0.00	--	ML	7.0-9.0'	**Clayey Silt**, light brown to tan, friable, dry, non-plastic
6.0	8.0	80	0.00	--	LS	9.0-10.8'	**Limestone (Mudstone)**, broken fragments from sonic drill
8.0	10.0	80	0.00	--			

ROCK CORING / SAMPLING LOG

Boring/Well: MW-30B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/14/2009 @ 10:37 | Drilling Date/Time Completed: 10/14/2009 @ 10:53

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 688.8 feet | [X] Surveyed | [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 50.69 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 50.69 | Water Loss: 186 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	11:00	--	BTEX, SVOCs, Metals
4,-6	Grab	11:10	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
10.80	11.28	100	55.0	3.0	0	**10.80-12.00' Wackstone**, medium grey to light greyish green, strong, competent, medium bedding, fossiliferous, crinoids, bryozoans
11.28	16.34	100	92.8	10.0	45	11.11' Fracture, oxidation, bryozoans, rough, slight sand and clay infill
16.34	21.46	100	100.0	9.0	42	11.28-11.36' Fractures in rock, broken pieces, oxidation, clay and sand infill
21.46	26.32	97.2	95.9	12.0	37	**12.00-12.71' Packstone,** light to medium grey, strong, massive, crinoids
26.32	27.19	100	69.00	4.0	5	12.71' Fracture along styolite, rough, slightly pitted, bedding plane
27.19	30.15	100	100.00	5.0	35	**12.71-13.65' Mudstone,** medium grey, strong, massive
30.15	34.61	100	100.00	--	0	12.98' Styolite
34.80	36.26	100	97.20	5.0	22	13.03' Styolite
36.26	41.03	95.4	100.0	12.0	(+) 6	13.13' Styolite
41.03	45.91	97.6	96.10	9.0	0	**13.65-13.97' Packstone,** light grey, dolomite, massive, fossiliferous, glauconite (green)
45.91	50.69	100	89.70	10.0	0	13.72' Fracture, semi-smooth, sand and clay infilling, possible zone of water loss
						13.80' Fracture, semi-smooth
						13.97' Fracture, semi-smooth, slight sand and clay infill
						13.97-14.61' Mudstone, medium grey, strong, massive
						14.61-15.37' Siltstone, medium to dark grey, strong, massive
						15.17' Healed fracture
						15.21' Quartz vein along healed fracture
						15.34' Fracture, semi-smooth, sand and clay infill, possible zone of water
						15.37-15.55' Grainstone, light to dark grey, strong, massive
						15.55-16.34' Wackstone, interbedded Mudstone, small to medium bedded, medium grey, strong
						16.34-16.48' Grainstone, light to dark grey, strong, massive
						16.48-21.80' Siltstone, medium grey, horizontal uniform beds, massive, strong, geodes
						17.65-17.87' Geode cluster
						18.30-18.33' Geode
						18.48-18.79' Geode "open" cluster
						18.87-18.92' Geode
						19.19-19.26' Geode

ROCK CORING / SAMPLING LOG

Boring/Well: MW-30B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/14/2009 @ 10:37 | Drilling Date/Time Completed: 10/14/2009 @ 10:53

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 688.8 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 50.69 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 50.69 | Water Loss: 186 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	11:00	--	BTEX, SVOCs, Metals
4,-6	Grab	11:10	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						19.66-19.69' Geode
						19.84-19.87' Geode
						20.32-20.39' Geode
						20.46-20.51' Geode
						21.46-21.59' Geode
						21.59' Healed fracture
						21.80' bedding plane fracture with large brachiopod fossil
						21.80-22.18' Wackstone, medium grey, massive, strong
						22.18' Fracture, sand and clay infill
						22.18-22.75' Packstone/Grainstone, light to medium grey, fossiliferous, crinoids
						22.75-23.23' Wackstone, medium grey, massive, strong, some crinoid fossils
						23.23' Fracture, rough, some clay infill
						23.23-23.62' Mudstone, medium grey, strong, massive
						23.62' Fracture, semi-smooth, slight sand and clay infill
						23.62-23.71' Siltstone (possible marker bed), thin horizontal bedding
						23.71' Fracture semi-smooth, sand and clay infill, weather parent material, possible zone of water loss
						23.71-26.91' Wackstone, light grey, massive, strong
						23.71-23.76' Healed fracture zone
						23.95'Healed fracture
						24.08' Healed fracture
						24.61' Styolite
						24.66' Styolite
						24.81' Fracture along styolite, rough
						24.97' Styolite
						25.29' Styolite
						25.42' Styolite
						25.47' Fracture along styolite

ROCK CORING / SAMPLING LOG

Boring/Well: MW-30B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 4 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/14/2009 @ 10:37 | Drilling Date/Time Completed: 10/14/2009 @ 10:53

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 688.8 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 50.69 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 50.69 | Water Loss: 186 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	11:00	--	BTEX, SVOCs, Metals
4,-6	Grab	11:10	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						26.91-27.04' Silty Clay, medium grey, soft, possible zone of water loss, small void due to drilling
						27.04-27.12' Mudstone, medium grey, medium bedded
						27.12' Fracture, sand and clay infill, smooth, possible zone of water loss
						27.12-27.19' Siltstone, medium grey, moderate strength
						27.19-28.37' Wackstone/Packstone, light to medium grey, massive, some crinoid fossils
						27.40-27.51' Geode
						28.37-30.04' Mudstone/Wackstone, medium grey, massive, fossiliferous, crinoids
						30.04-32.35' Siltstone, medium grey, moderate strength, calcite cement
						31.20-31.22' Geode
						31.31-31.33' Geode cluster
						31.40-31.43 Geode
						31.54-31.56' Geode
						31.56-31.59' Geode
						31.60-31.62' Geode
						31.67-31.72' Geode "open"
						31.83-31.89' Geode
						32.35-33.08' Wackstone, light to medium grey, massive
						32.50-32.76' Geode cluster
						32.92-33.08' Geode
						33.08' Fracture, along styolite and bedding plane, geode
						33.08-34.61' Mudstone/Wackstone, light to medium grey, some crinoid fossils
						34.61-34.80' lost in reaming process
						34.80-36.43' Siltstone, medium grey, strong, massive
						36.43-36.70' Wackstone/Packstone, medium to dark grey, massive, strong
						36.70-37.36' Mudstone, light grey, massive, strong
						37.36' Fracture along styolite, clay infill
						37.36-41.66' Siltstone, light to medium grey, interbedded Mudstone, medium bedded, very strong

ROCK CORING / SAMPLING LOG

Boring/Well: MW-30B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 5 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/14/2009 @ 10:37 | Drilling Date/Time Completed: 10/14/2009 @ 10:53

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 688.8 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 50.69 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 50.69 | Water Loss: 186 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	11:00	--	BTEX, SVOCs, Metals
4,-6	Grab	11:10	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						41.66-43.29' Packstone, light to medium grey, interbedded Siltstone, small to medium bedding
						41.69' Crinoid sequence
						41.80' Crinoid sequence
						42.10' Crinoid sequence
						42.41' Crinoid sequence
						42.62' Crinoid sequence
						43.16-43.29' dolomitic, fossiliferous, strong, massive
						43.29' Bedding plane and styolite
						43.29-50.69' Siltstone (Borden), medium grey, small bedding, strong to weak, cross bedding
						44.02' Healed fracture
						47.05-47.32' Cross bedding
						48.25-48.54' Cross bedding
						49.96-50.9' Weak to moderate strength, friable

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-31A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/19/2009 @ 2:35 | Drilling Date/Time Completed: 10/19/2009 @ 2:47

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 690.6 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 22.65 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 22.65 | Water Loss: 140 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	14:45	--	BTEX, SVOCs, Metals
4,-6	Grab	14:55	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	100	28.00	--	TS	0.0-2.0'	**Topsoil,** brown, organics, soft, slightly moist
2.0	4.0	100	18.00	--	ML	3.0-7.0'	**Clayey Silt,** brown, light grey and light brown mottling, firm, dry, friable, some Limestone fragments
4.0	6.0	100/100	32.00	--			4.5' Moist
6.0	8.0	100	153.00	--			5.0' Wet
							5.5' Increasing clay and Limestone fragments
					LS	7.0-9.48'	**Limestone** bedrock, weathered and competent

ROCK CORING / SAMPLING LOG

Boring/Well: MW-31A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/19/2009 @ 2:35 | Drilling Date/Time Completed: 10/19/2009 @ 2:47

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 690.6 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 22.65 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 22.65 | Water Loss: 140 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	14:45	--	BTEX, SVOCs, Metals
4,-6	Grab	14:55	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
9.00	11.60	100	61.3	5.0	15	**9.48-14.31' Siltstone,** strong, massive, horizontal bedding
11.60	16.50	98	95.9	14.0	60	9.48-11.05' light grey
16.50	18.13	100	100.0	6.0	32	10.91' Fracture along geode
18.13	18.78	100	100.0	16.0	0	10.91-11.08' Geode
18.78	21.68	100	100.00	13.0	31	11.05-13.40' medium grey
21.68	22.65	100	83.10	3.0	2	11.64-11.66' Geode
						12.60' Fracture with silt and clay infill
						13.05-13.16' Geode
						13.40-14.31' light grey
						14.31' Fracture, silt and clay infill
						14.31-14.45' Packstone, light to medium grey, medium size beds, fossiliferous, crinoids
						14.45' Fracture along bedding plane
						14.45-17.81' Wackstone, light grey, strong, massive, some crinoid fossils
						14.86' Styolite
						15.52' Styolite
						15.57' Styolite
						15.85' Styolite
						17.81-18.31' Siltstone, medium grey, soft to moderate strength, calcite cement
						18.16' Fracture
						18.22' Fracture
						18.27' Fracture
						18.31' Fracture along bedding plane
						18.31-18.64' Clay, medium grey, soft, possible zone of water loss
						18.64' Fracture
						18.64-18.78' Siltstone, medium grey, moderate strength, calcite cement
						18.78-20.29' Wackstone, light grey, massive, strong
						19.54' Fracture along styolite
						20.29-21.12' Mudstone, light to medium grey, massive, strong

ROCK CORING / SAMPLING LOG

Boring/Well: MW-31A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/19/2009 @ 2:35 | Drilling Date/Time Completed: 10/19/2009 @ 2:47

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 690.6 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 22.65 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 22.65 | Water Loss: 140 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	14:45	--	BTEX, SVOCs, Metals
4,-6	Grab	14:55	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						20.51-20.58' Geode
						21.12-21.92' Wackstone/Packstone, light to medium grey, massive, strong
						21.46-21.68' Geode
						21.92-22.65' Siltstone, medium grey, massive, strong

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-31B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/20/2009 @ 3:47 | Drilling Date/Time Completed: 10/20/2009 @ 4:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 689.4 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 59.98 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff/M. Hicks/I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 59.98 | Water Loss: 126 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	16:10	--	BTEX, SVOCs, Metals
4,-6	Grab	16:15	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	100	56.10	--	TS	0.0-0.84'	**Topsoil**, organics, dark brown, firm to stiff, some gravels
2.0	4.0	100	85.40	--	ML	0.84-2.8'	**Clayey Silt**, brown, dark brown and reddish brown mottling, oxidation, staining, gravels, friable, slightly plastic, firm, dry
4.0	6.0	100	156.00	--	CL	2.8-6.0'	**Silty Clay**, brown, light grey and light brown mottling, oxidation, staining, slightly moist, gravels, plastic, slightly sticky
6.0	8.0	100	178.00	--			3.8' Limestone fragments
							5.5' Saturated
					LS	6.0-8.0'	**Limestone**, weathered to competent bedrock

ROCK CORING / SAMPLING LOG

Boring/Well: MW-31B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/20/2009 @ 3:47 | Drilling Date/Time Completed: 10/20/2009 @ 4:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: NA | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 689.4 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 59.98 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff/M. Hicks/I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 59.98 | Water Loss: 126 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	16:10	--	BTEX, SVOCs, Metals
4,-6	Grab	16:15	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
8.00	11.00	100	79.0	9.0	7	**8.00-11.16' Siltstone**, medium grey, moderate strength, massive
11.00	16.25	100	69.0	12.0	8	8.00-8.25' Heavily fractured due to drilling
16.25	17.40	100	100.0	6.0	18	8.60-8.93' Heavily fractured due to drilling
17.40	19.22	100	100.0	6.0	16	9.07-9.10' Geode
19.22	21.99	100	100.0	6.0	35	9.17-9.23' Geode
21.99	26.87	100	100.0	12.0	10	9.51-9.64' Geode "open"
26.87	31.80	100	98.0	12.0	2	9.51' Fracture along geode
31.80	35.87	100	100.0	9.0	0	9.65-9.70' Geode
35.87	36.05	100	0.0	5.0	19	10.89-10.92' Geode
36.05	40.80	100	93.0	12.0		11.07-11.16' clay infill, slight sand, possible zone of water loss
40.80	45.87	100	100.0	14.0		**11.16-11.57' Packstone**, light to medium grey, fossiliferous, strong, massive
45.87	50.88	100	100.0	14.0	1	11.57' Fractured
50.88	55.95	100	100.0	9.0	5	**11.57-11.79' Clay,** medium grey, weak, possible zone of water loss
55.95	59.98	100	100.0	7.0	5	**11.79-13.72' Siltstone**, medium grey, weak to moderate strength, massive
						12.66' Heavily fractured due to drilling
						13.45-13.72' Heavily fractured due to drilling
						13.72' Fracture along bedding plane
						13.72-17.18' Packstone, light to medium grey, fossiliferous, crinoids, strong, massive
						13.83' Styolite
						13.85' Styolite
						14.47' Styolite
						14.80' Styolite
						15.02' Styolite
						15.07' Fracture along styolite
						15.07-15.20' Heavily broken due to drilling
						15.68-16.00' Heavily broken due to drilling
						17.13' Styolite
						17.18-17.40' Clay, weak strength, possible zone of water loss

ROCK CORING / SAMPLING LOG

Boring/Well: MW-31B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/20/2009 @ 3:47 | Drilling Date/Time Completed: 10/20/2009 @ 4:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 689.4 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 59.98 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff/M. Hicks/I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 59.98 | Water Loss: 126 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	16:10	--	BTEX, SVOCs, Metals
4,-6	Grab	16:15	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						17.47-18.05' Siltstone, medium grey, strong, massive
						18.05' Fracture along bedding plane
						18.05-18.83' Wackestone, light grey, strong, massive
						18.09' Styolite
						18.79' Styolite
						18.83-19.05' Clay, medium to light grey, weak strength, possible zone of water loss
						19.05-19.22' Wackestone light grey, strong, massive
						19.22-19.42' Packstone, light grey, strong, massive, fossiliferous
						19.42-21.13' Mudstone, light grey, strong, massive
						20.18' Fracture
						21.13-21.51' **Packstone,** light to medium grey, fossiliferous, massive
						21.51-21.99' Mudstone, light grey, massive, strong
						21.99-22.55' ***No Core due to over reaming when setting casing***
						22.55-23.90' Packstone, light grey, fossiliferous, strong
						23.31' Fracture, some clay infilling
						23.90-24.82' Siltstone, medium grey, competent
						24.45-24.68' Geode
						24.82-25.57' Packstone/Wackstone, interbedded, fossiliferous
						25.57-25.68' Grainstone, fossiliferous, crinoids, brachiopods
						25.68-33.36' Packstone/Wackstone, interbedded, light grey with light to medium green, fossiliferous, styolites, competent
						29.13' Fracture
						25.45' Styolite
						30.26' Fracture along styolite
						30.31' Styolite
						31.40' Fracture along styolite
						33.5' Fracture
						33.36-36.72' Siltstone, medium grey, strong, massive, some small interbedded Packstone
						35.35-35.62' Packstone, medium grey, fossiliferous, crinoids, brachiopods

ROCK CORING / SAMPLING LOG

Boring/Well: MW-31B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10/20/2009 @ 3:47 | Drilling Date/Time Completed: 10/20/2009 @ 4:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.00 feet

Land-Surface Elev.: 689.4 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 59.98 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff/M. Hicks/I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 59.98 | Water Loss: 126 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	16:10	--	BTEX, SVOCs, Metals
4,-6	Grab	16:15	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						36.0-36.72' Packstone, medium grey, strong, crinoid sequence
						36.63' Fracture
						36.72' Bedding plane fracture
						36.72-59.98' Siltstone (Borden), medium grey, cross bedded, massive, strong
						37.10-37.25' Clay infill, soft, medium grey, cohesive, sticky
						46.44' Fracture, slight clay infill

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-31C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10.26.09 @ 9:00 | Drilling Date/Time Completed: 10.26.09 @ 9:08

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 690.0 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 35.40 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.4 | Water Loss: 192 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	9:25	--	BTEX, SVOCs, Metals
2,-4	Grab	9:30	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	100	39.80	--	TS	0.0 - 0.5'	**Topsoil,** organics
2.0	4.0	100	30.40	--		0.5 - 1.4'	**Clayey Silt**, dark brown, dry, friable, non-plastic
4.0	6.0	100	60.50	--		1.4 - 5.5'	**Silty Clay**, brown, light brown and reddish brown mottling, sticky, plastic, moist, trace Limestone fragments; wet/saturated at 4.0', increasing Limestone fragments with depth
6.0	8.0	100	58.60	--		5.5 - 7.5'	**Weathered Limestone**, fragments mixed with saturated Silty Clay
						7.5 - 9.5'	**Limestone bedrock**, competent

ROCK CORING / SAMPLING LOG

Boring/Well: MW-31C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10.26.09 @ 10:10 | Drilling Date/Time Completed: 10.26.09 @ 15:48

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 690.0 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 35.40 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.40 | Water Loss: 192 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	9:25	--	BTEX, SVOCs, Metals
2,-4	Grab	9:30	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
9.42	11.76	100	85.0	4.0	10	**9.42 - 9.52' Clay**, brown, very soft, some Limestone fragments
11.76	17.13	100	100.0	8.0	52	**9.52 - 9.67' Wackestone**, light to medium grey, strong, massive
17.13	17.88	100	100.0	4.0	20	**9.67 - 10.34' Siltstone**, medium grey, strong, massive
17.88	21.99	100	100.0	8.0	45	10.34' Fracture along bedding plane
21.99	26.75	100	100.0	9.0	0	**10.34 - 10.61' Clay**, brown, very soft, small pebbles of oxidized Siltstone
26.75	31.75	100	100.0	11.0	40	**10.61 - 11.76' Siltstone**, medium grey, strong, massive
31.75	35.40	100	100.0	7.0	25	11.11 - 11.21' Fracture with clay infill, broken pieces of Siltstone
						11.76 - 12.00' Silty Clay, medium grey, very weak, massive, broken fragments of Siltstone, possible zone of water loss
						12.00 - 12.30' Siltstone, medium grey, strong, massive
						12.30 - 12.50' Silty Clay, medium grey, very weak, massive, possible zone of water loss
						12.37' Fracture
						12.50 - 14.13' Siltstone, medium grey, strong, massive
						14.13 - 14.24' Grainstone, medium to light grey, fossiliferous: crinoids, brachiopods
						14.24 - 14.26' Fracture with clay infill, possible zone of water loss
						14.26 - 15.7' Packstone, light to medium grey, strong, massive, fossiliferous
						14.71' Styolite
						14.87' Styolite
						15.39' Styolite
						15.71 - 15.73' Fracture along bedding plane with clay infill
						15.73 - 16.11' Grainstone, medium to light grey, strong, fossiliferous: crinoids
						16.11 - 17.13' Packstone/Wackestone, light grey, massive, strong
						16.96' Styolite
						17.63 - 17.75' Silty Clay, medium grey, soft, possible zone of water loss
						17.75 - 17.80' Packstone/Grainstone, medium to light grey, moderate to strong in strength
						17.80 - 18.53' Siltstone, medium grey, greenish, moderate, massive
						18.13' Strong
						18.53 - 18.62' Grainstone, interbedded Siltstone
						18.54 - 18.57' Geode
						18.62' Styolite
						18.62 - 19.42' Wackestone, light grey, massive, strong

ROCK CORING / SAMPLING LOG

Boring/Well: MW-31C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10.26.09 @ 10:10 | Drilling Date/Time Completed: 10.26.09 @ 15:48

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 690.0 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 35.40 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.40 | Water Loss: 192 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	9:25	--	BTEX, SVOCs, Metals
2,-4	Grab	9:30	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						19.42 - 19.59' Clay, light grey, very soft, fragments of moderate strength Wackestone
						19.59' Fracture along bedding plane
						19.59 - 20.01' Wackestone/Packstone, light grey, strong, massive
						20.01 - 21.81' Mudstone/Wackestone, medium grey, massive, strong
						21.81 - 22.95' Siltstone, medium grey, strong, massive
						22.95 - 23.25' Packstone, light to medium grey, strong, massive
						23.25 - 23.82' Wackestone, light grey, strong massive
						23.82 - 24.09' Packstone, light to medium grey, strong, massive
						24.09 - 29.25' Siltstone, medium grey, strong, thin beds of Packstone throughout
						25.22 - 25.32' Geode, open and filled in with brown clay of moderate strength
						27.19 - 27.25' Geode cluster
						29.25 - 29.66' Packstone, medium grey, strong, interbedded Siltstone
						29.66 - 30.03' Clay, medium grey, soft, possible zone of water loss, fragments of light grey Mudstone
						30.03 - 31.96' Wackestone, light grey, greenish, strong, massive
						30.61' Styolite
						31.96' Styolite
						31.96 - 33.76' Mudstone/Wackestone, light grey, strong, massive
						33.76 - 35.27' Siltstone, medium grey, strong, thin beds of Packstone throughout
						35.27 - 35.40' Packstone, light to medium grey, strong, massive, fossiliferous: crinoids, brachiopods

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-32A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10.27.09 @ 13:44 | Drilling Date/Time Completed: 10.27.09 @ 16:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 687.3 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 23.85 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 23.85 | Water Loss: 57 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	14:00	--	BTEX, SVOCs, Metals
2,-4	Grab	14:10	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	50	1.0	--	TS	0.0 - 1.0'	**Topsoil**, organics
2.0	4.0	50	2.5	--		1.0 - 6.0'	**Clay**, reddish brown, pebbles and small Limestone fragments, soft, hit large piece of Limestone at 4.0', cinders from 5.0 - 6.0'
4.0	6.0	50	2.6	--		6.0 - 7.0'	**Weathered Limestone**, light brown to light grey, soft to moderate strength
6.0	8.0	50	2.3	--		7.0 - 8.0'	**Clay**, reddish brown, pebbles, Limestone fragments
8.0	10.0	50	1.8	--		8.0 - 8.5'	**Silty Clay**, medium to dark brown, soft
						8.5 - 9.0'	**Weathered Limestone, light brown to light grey, soft to moderate strength**
						9.0 - 10.0'	**Limestone**, light grey, moderate strength

ROCK CORING / SAMPLING LOG

Boring/Well: MW-32A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10.27.09 @ 13:44 | Drilling Date/Time Completed: 10.27.09 @ 16:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 687.3 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 23.85 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 23.85 | Water Loss: 57 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	14:00	--	BTEX, SVOCs, Metals
2,-4	Grab	14:10	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
9.69	11.60	100	85.0	5.0	10	**9.69 - 10.92' Mudstone/Wackestone**, light grey, strong, massive
11.60	16.71	100	100.0	13.0	5	9.69 - 10.12' Damaged and broken due to drilling/pushing of temporary casing
16.71	21.77	100	95.0	11.0	7	10.83' Fracture
21.77	23.85	90	82.0	6.0	35	10.92' Fracture along bedding plane
						10.92 - 13.10' Siltstone, medium grey, moderate strength, massive
						11.07 - 11.12' Clay, light brown, soft
						11.60 - 12.01' Geode cluster with pinkish quartz crystals
						12.01 - 12.17' Fracture along geode cluster
						12.17 -12.53' Geode cluster with pinkish quartz crystals
						12.53 - 12.61' Geode
						12.66 - 12.74' Geode
						13.08 - 13.16' Geode
						13.10 - 13.55' Mudstone, light to medium grey, strong, massive
						13.55' Fracture along bedding plane
						13.55 - 15.80' Packstone, light to medium grey, strong, massive, fossiliferous: crinoids
						13.92' Styolite
						13.93' Fracture along styolite
						14.10' Styolite
						14.41' Fracture along styolite
						14.82' Styolite
						15.23' Fracture along styolite
						15.80 - 16.05' Mudstone, light greenish grey, moderate strength
						16.05 - 22.23' Siltstone, medium to dark grey, strong, massive
						19.42' Fracture
						19.47 - 19.53' Silty Clay, medium grey, very soft
						19.53 - 19.75' Open geode
						19.75' Fracture along geode

ARCADIS

ROCK CORING / SAMPLING LOG

Boring/Well: MW-32A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10.27.09 @ 13:44 | Drilling Date/Time Completed: 10.27.09 @ 16:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 687.3 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 23.85 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 23.85 | Water Loss: 57 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2	Grab	14:00	--	BTEX, SVOCs, Metals
2,-4	Grab	14:10	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						22.23 - 23.50' Packstone, light to medium grey, strong, massive, fossiliferous
						22.36 - 22.46' Geode cluster
						22.46 - 22.72' Drop in pipe
						22.95 - 23.15' Geode cluster
						23.50 - 23.85' Mudstone, light greenish grey, strong massive

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-33A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.02.09 @ 13:01 | Drilling Date/Time Completed: 11.03.09 @ 16:37

Drilling Contractor: Boart Longyear | Driller: Jason Greer / Kevin Smith

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 703.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 51.59 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 51.59 | Water Loss: 241 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	13:02	--	BTEX, SVOCs, Metals
4 - 5'	Grab	13:12	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	80	0.0	--		0.0 - 0.1'	**Topsoil**, organics
2.0	4.0	80	0.0	--		0.1 - 4.0'	**Clay**, reddish brown, mottling, silty, plastic, trace gravel, moist
4.0	5.4	80	0.0	--		4.0 - 5.4'	**Limestone**, weathered, moderate strength, broken due to drilling process

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.02.09 @ 13:01 | Drilling Date/Time Completed: 11.03.09 @ 16:37

Drilling Contractor: Boart Longyear | Driller: Jason Greer / Kevin Smith

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 703.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 51.59 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 51.59 | Water Loss: 241 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	13:02	--	BTEX, SVOCs, Metals
4 - 5'	Grab	13:12	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
5.40	6.80	100	71.4	6.0	NM	**5.40 - 7.16' Wackestone**, light grey, moderate strength; from 5.40 - 6.80' broken due to drilling process
6.80	11.80	100	94.0	8.0	42	5.95' Healed vertical fracture
11.80	16.80	100	93.6	17.0	74	7.16' Fracture along bedding plane
16.80	21.60	96	72.0	25.0	40	**7.16 - 7.42' Siltstone**, greenish grey, strong, competent
21.60	26.88	100	93.7	13.0	15	**7.42 - 12.18' Packstone**, light grey, strong, competent, massive
26.88	31.58	94	72.3	12.0	0	8.76' Styolite
31.58	36.74	100	94.0	11.0	25	8.81' Fracture along styolite
36.74	41.67	98.6	92.6	9.0	3	8.90' Styolite
41.67	46.59	98.4	95.9	11.0	12	9.20' Styolite
46.59	51.59	100	98.2	11.0	30	9.82' Styolite
						9.90' Fracture along styolite
						10.00' Styolite
						11.49 - 11.63' Clay, infill, possible zone of water loss
						12.15' Styolite
						12.18 - 12.56' Siltstone, greenish, strong, competent
						12.56 - 17.27' Packstone, light grey
						13.06' Fracture
						13.34' Fracture
						13.39 - 13.42' healed fracture, Siltstone infill
						13.72' Fracture
						14.15' Fracture
						14.15 - 14.80' Horizontal fracture
						14.80' Fracture along styolite
						15.15' Fracture along styolite
						15.54 - 15.77' Geode
						16.80 - 17.27' Broken due to drilling process
						17.27 - 17.35' Silty Clay, light to medium grey, soft, pebbles of limestone

ARCADIS

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.02.09 @ 13:01 | Drilling Date/Time Completed: 11.03.09 @ 16:37

Drilling Contractor: Boart Longyear | Driller: Jason Greer / Kevin Smith

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 703.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 51.59 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 51.59 | Water Loss: 241 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	13:02	--	BTEX, SVOCs, Metals
4 - 5'	Grab	13:12	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						17.35 - 18.80' Siltstone, medium grey, strong, competent
						17.35 - 17.45' Geode cluster
						17.60 - 17.64' Geode
						17.64' Fracture along geode
						17.66 - 17.68' Geode
						17.82 - 18.05' Geode cluster
						18.74 - 18.80' Geode
						18.80 - 19.47' Packstone/Grainstone, light to medium grey, fossiliferous: crinoids
						19.08' Fracture with clay infill
						19.10 - 19.47' Dolomitized
						19.47 - 22.77' Siltstone, medium grey, strong, competent, massive
						19.47 - 19.65' Broken due to drilling process
						20.47 - 20.53' Geode
						21.38' Fracture
						21.47' Fracture
						21.42 - 21.45' Geode
						22.03' Fracture
						22.77' Fracture along bedding plane
						22.77 - 24.40' Packstone/Wackestone, light grey, strong, competent, massive
						23.50' Fracture with clay infill
						24.40 - 25.75' Siltstone, interbedded Packstone approx. 0.05 - 0.2' in width, strong, competent
						25.17 - 25.40' Geode Cluster
						25.53 - 25.64' Geode
						25.70' Fracture
						25.75' Fracture along bedding plane
						25.75 - 27.05' Wackestone, light grey, strong, competent, massive, some fossils: crinoids

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 4 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.02.09 @ 13:01 | Drilling Date/Time Completed: 11.03.09 @ 16:37

Drilling Contractor: Boart Longyear | Driller: Jason Greer / Kevin Smith

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 703.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 51.59 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 51.59 | Water Loss: 241 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	13:02	--	BTEX, SVOCs, Metals
4 - 5'	Grab	13:12	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						27.05 - 27.76' Packstone, medium grey, strong, competent, massive, fossiliferous: crinoids
						27.10' Fracture along styolite
						27.50' Styolite
						27.62' Fracture
						27.67' Fracture along bedding plane
						27.67 - 27.76' Clay, medium grey, silty, soft
						27.76 - 29.05' Siltstone, medium grey, strong, competent, massive
						28.15 - 28.21' Geode
						28.32 - 28.36' Geode
						28.36 - 28.41' Packstone
						28.74 - 29.05' Geode cluster
						29.05 - 29.60' Packstone, medium grey, competent, massive
						29.10 - 29.32' Geode cluster
						29.38 - 29.46' Geode cluster
						29.60' Fracture along bedding plane
						29.60 - 30.65' Siltstone, medium grey, competent, strong, massive
						29.62 - 29.72' Geode
						29.42 - 29.51' Geode
						29.56' Fracture along geode
						29.56 - 29.64' Geode
						30.65 - 30.76' Packstone, medium grey, strong, competent, fossiliferous: crinoids
						30.76' Fracture along bedding plane
						30.76 - 31.42' Wackestone/Packstone, light grey, strong, competent, massive
						31.00' Fracture
						31.09' Fracture along geode
						31.09 - 31.40' Geode
						31.42' Fracture along bedding plane

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 5 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.02.09 @ 13:01 | Drilling Date/Time Completed: 11.03.09 @ 16:37

Drilling Contractor: Boart Longyear | Driller: Jason Greer / Kevin Smith

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 703.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 51.59 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 51.59 | Water Loss: 241 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	13:02	--	BTEX, SVOCs, Metals
4 - 5'	Grab	13:12	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						31.42 - 31.58' Siltstone, medium grey, moderate strength
						31.58 - 32.65' Packstone/Wackestone, light grey, strong, competent
						31.95' Fracture, slight clay infill
						32.65 - 33.54' Grainstone/Packstone, light to medium grey, strong, competent, massive
						32.66' Styolite
						33.54 - 34.45' Siltstone, medium grey, strong, competent, massive
						33.66 - 33.81' Geode, open
						33.95' Fracture
						34.45 - 35.70' Grainstone, medium grey, strong, competent, massive
						34.93' Fracture
						35.70 - 41.00' Siltstone, medium grey, strong, competent, massive, interbedded Packstone approx. 0.05' in width
						36.30 - 36.33' Geode
						39.25 - 39.39' Geode cluster
						41.00 - 42.40' Packstone, light grey, strong, competent, massive
						41.25' Fracture
						41.32' Fracture
						41.42' Styolite
						41.85' Styolite
						42.40 - 45.10' Wackestone, medium grey, strong, competent, interbedded Packstone approx. 0.05' in width
						42.70' Fracture
						44.23' Fracture
						44.50 - 44.72' Geode cluster
						44.72 - 44.82' Crinoid sequence in Packstone
						45.10 - 47.52' Siltstone, medium grey, strong, competent, massive
						46.15' Fracture
						47.52 - 47.92' Packstone/Grainstone, light to medium grey, strong, competent
						47.52' Fracture along geode
						47.52 - 47.73' Geode cluster

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 6 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.02.09 @ 13:01 | Drilling Date/Time Completed: 11.03.09 @ 16:37

Drilling Contractor: Boart Longyear | Driller: Jason Greer / Kevin Smith

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 703.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 51.59 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 51.59 | Water Loss: 241 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	13:02	--	BTEX, SVOCs, Metals
4 - 5'	Grab	13:12	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						47.92 - 48.86' Siltstone, light to medium grey, strong, competent, interbedded Packstone
						48.75 - 48.86' Fracture along bedding plane; Clay, silty, medium grey, soft; possible zone of water loss
						48.86 - 51.59' Siltstone (Borden), medium grey, strong, very competent, cross bedding

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-33B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.05.09 @ 9:15 | Drilling Date/Time Completed: 11.06.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 704.8 feet | [X] Surveyed | [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 70.0 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: M. Hicks / R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 70.0 | Water Loss: 951 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	9:25	--	BTEX, SVOCs, Metals
2 - 4'	Grab	9:30	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	75	0.0	--	TS	0.0 - 0.5'	**Topsoil**, organics
2.0	4.0	75	0.0	--	ML	0.5 - 2.5'	**Clay**, red, soft, plastic, slightly moist
4.0	6.0	75	0.0	--	ML	2.5 - 5.0'	**Silty Clay**, reddish brown, broken Limestone fragments
					LS	5.0 - 6.0'	**Limestone**, bedrock, broken due to drilling processes

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.05.09 @ 9:15 | Drilling Date/Time Completed: 11.06.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 704.8 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 70.0 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: M. Hicks / R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 70.0 | Water Loss: 951 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	9:25	--	BTEX, SVOCs, Metals
2 - 4'	Grab	9:30	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
6.61	11.61	64.8	34.6	12.0	75	**6.61 - 13.39' Packstone**, light grey, cream, strong, massive
11.61	16.94	100	92.4	14.0	80	6.61 - 6.81' Broken due to drilling process
16.94	22.32	100	86.8	10.0	66	7.03' Fracture
22.32	27.24	98.4	79.4	9.0	30	7.54' Fracture with slight reddish clay infill
27.24	29.33	69.6	75.6	9.0	50	7.62' Fracture
29.33	31.71	100	92.8	13.0	130	7.81' Fracture
31.71	36.85	100	87.1	14.0	115	8.30' Fracture along styolite
36.85	41.80	87.1	100.0	9.0	50	8.64 - 10.43' Void, bit drop
41.80	46.59	95.8	93.1	15.0	120	10.59 - 10.66' Clay, reddish brown, soft
46.59	51.65	100	97.5	15.0	30	10.66 - 11.87' Half core, weathered edge with clay infill
51.65	56.54	97.8	96.4	13.0	40	11.54' Fracture
56.54	61.54	100	100.0	11.0	55	11.71' Fracture
61.54	66.59	100	100.0	10.0	50	12.00' Fracture
66.59	70.00	100	100.0	7.0	60	12.10' Fracture
						12.10 - 12.25' Cavity, weathered edge, slight clay infill
						12.81' Fracture
						13.39 - 14.29' Siltstone, greenish grey, strong, competent, massive
						13.63 - 14.09' Interbedded Packstone, light grey with greenish grey
						13.87' Fracture
						14.29 - 15.85' Packstone, light grey, strong, competent, massive
						14.73 - 14.89' Broken fragments, fractures
						15.21' Fracture
						15.71 - 15.75' Fracture with clay infill, medium grey
						15.85 - 16.20' Siltstone/Packstone, interbedded, greenish grey with light grey, strong, competent
						16.02' Fracture along styolite
						16.10' Styolite

ARCADIS

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.05.09 @ 9:15 | Drilling Date/Time Completed: 11.06.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 704.8 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 70.0 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: M. Hicks / R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 70.0 | Water Loss: 951 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	9:25	--	BTEX, SVOCs, Metals
2 - 4'	Grab	9:30	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						16.20 - 17.37' Packstone, light grey, strong, competent, massive
						17.20' Styolite
						17.37 - 17.55' Grainstone, medium grey, strong, competent, massive, fossiliferous: crinoids
						17.55 - 20.5' Siltstone, medium grey, strong, competent, massive
						17.64 - 17.80' Clay, medium grey, soft, plastic
						18.40 - 18.45' Geode
						18.54 - 18.56' Geode
						18.59' Fracture
						18.64 - 19.00' Geode cluster
						19.00' Fracture along geode
						19.12 - 19.17' Geode
						19.19' Fracture along geode
						19.57' Fracture
						19.60 - 19.64' Geode
						20.50 - 20.74' Grainstone, medium grey, strong, fossiliferous: crinoids
						20.53' Fracture
						20.58' Fracture
						20.65' Fracture
						20.74' Fracture along bedding plane
						20.74 - 21.15' Packstone, light grey, strong, competent, massive
						21.15 - 22.80' Mudstone, light grey, strong, competent, massive
						22.55' Fracture, slight clay infill, possible zone of water loss
						22.68' Fracture, slight clay infill, possible zone of water loss
						22.80' Fracture along geode
						22.80 - 24.47' Siltstone, medium grey, strong, massive, competent
						22.80 - 24.91' Geode
						22.91' Fracture along geode, slight clay infill, possible zone of water loss
						22.91 - 21.10' Geode

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 4 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.05.09 @ 9:15 | Drilling Date/Time Completed: 11.06.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 704.8 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 70.0 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: M. Hicks / R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 70.0 | Water Loss: 951 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	9:25	--	BTEX, SVOCs, Metals
2 - 4'	Grab	9:30	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						24.22 - 24.27' Geode cluster
						24.47 - 28.93' Packstone, light to medium grey, strong, competent
						24.72' Styolite
						26.38 - 26.66' Geode cluster
						26.90 - 27.15' Geode cluster
						27.00' Fracture, clay infill
						27.31' Styolite
						28.34' Fracture
						28.43' Fracture along styolite
						28.93' Fracture along bedding plane
						28.93 - 31.90' Siltstone, medium grey, moderate strength; interbedded Packstone, light grey
						29.33 - 29.54' Broken due to drilling process
						29.54' Fracture
						29.72 - 29.83' Geode
						30.25' Fracture along geode
						30.25 - 30.34' Geode
						30.27 - 30.45' Packstone
						30.38 - 30.42' Geode cluster
						30.45 - 30.95' Packstone
						30.63 - 30.82' Geode
						30.95' Fracture at Packstone / Siltstone bedding plane
						31.61 - 31.71' Geode
						31.80 - 31.90' Geode
						31.90' Fracture along geode
						31.90 - 32.10' Geode

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 5 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.05.09 @ 9:15 | Drilling Date/Time Completed: 11.06.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 704.8 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 70.0 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: M. Hicks / R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 70.0 | Water Loss: 951 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	9:25	--	BTEX, SVOCs, Metals
2 - 4'	Grab	9:30	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						31.90 - 33.85' Packstone, light grey, strong, competent, massive
						32.17' Fracture along Styolite
						32.27' Styolite
						32.55' Fracture along styolite
						32.55 - 32.75' Broken styolite
						32.95 - 33.10' Geode, open
						33.57 - 33.64' Geode, open
						33.64' Fracture along geode
						33.85 - 34.86' Grainstone, medium grey, fossiliferous: crinoids, brachiopods
						34.86 - 35.72' Siltstone, medium grey, strong
						35.58 - 35.67' Geode
						35.72 - 37.30' Packstone, light grey, fossiliferous, geodes
						37.30 - 42.85' Siltstone, medium grey, competent, geodes ; interbedded Packstone, fossiliferous
						38.32 - 38.36' Packstone
						39.27 - 39.44' Geode
						42.85 - 42.93' Bedding plane fracture, broken fragments
						42.85 - 46.31' Packstone, light grey fossiliferous: crinoids, brachiopods, fractures, massive; interbedded Siltstone, medium grey
						43.08' Fracture along styolite, clay infill, pyrite ineralization
						45.18' Fracture
						46.31 - 48.88' Siltstone, medium grey, massive, competent, geodes, some cross bedding; interbedded Packstone
						47.33 - 47.38' Geode
						47.48 - 47.55' Geode
						48.84 - 48.88' Geode
						48.88 - 49.95' Grainstone, light grey, fossiliferous: crinoids, brachiopods, geodes
						49.02 - 49.09' Geode
						49.02 - 49.42' Siltstone

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 6 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.05.09 @ 9:15 | Drilling Date/Time Completed: 11.06.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 704.8 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 70.0 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: M. Hicks / R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 70.0 | Water Loss: 951 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	9:25	--	BTEX, SVOCs, Metals
2 - 4'	Grab	9:30	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						49.95 - 70.00' Siltstone (Borden), medium grey to dark grey, slightly green tint, massive, competent, cross bedding
						50.71' Fracture
						52.65' Fracture
						52.95' Fracture
						53.13' Fracture
						56.54 - 61.54' Heavily fractured due to core retriever failure
						60.86' Fracture, slight clay infill

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW-33C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.09.09 @ 8:58 | Drilling Date/Time Completed: 11.09.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 705.1 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 35.13 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.13 | Water Loss: 15 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	9:05	--	BTEX, SVOCs, Metals
8 10	Grab	9:20	--	

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	70	0.0	--		0.0 - 0.1'	**Topsoil**, organics
2.0	4.0	70	0.0	--		0.1 - 2.0'	**Silty Clay**, red, soft, plastic slightly moist, pebbles and Limestone fragments
4.0	6.0	70	0.0	--		10.0 - 11.61'	**Limestone**, cream to light grey, slightly weathered, moderate strength
6.0	8.0	70	0.0	--			
8.0	10.0	70	0.0	--			

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.09.09 @ 8:58 | Drilling Date/Time Completed: 11.09.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 705.1 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 35.13 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.13 | Water Loss: 15 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	9:05	--	BTEX, SVOCs, Metals
8 10	Grab	9:20	--	

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
11.61	16.21	94.2	73.0	10.0	0	**11.61 - 13.45' Packstone**, cream and slightly grey; color change to light grey at 12.5', strong, massive, fossiliferous: crinoids
16.32	21.55	100	68.8	8.0	0	11.93' Fracture, iron oxidation inside fracture
21.55	26.70	100	85.6	8.0	0	12.18' Fracture, iron oxidation, reddish
26.70	31.65	99	47.0	10.0	15	12.27' Fracture, iron oxidation, reddish
31.65	35.13	100	47.9	9.0	0	12.5' Fracture, medium grey clay infill
						12.65' Fracture, medium grey clay infill
						13.05' Styolite
						13.30' Healed fracture
						13.45 - 13.85' Clay, medium grey, silty, soft
						13.85 - 14.00' Siltstone, medium grey, strong, competent
						14.00 - 16.40' Grainstone, light grey, strong, competent, massive; interbedded Siltstone, medium grey
						14.07' Fracture with clay infill
						14.13' Styolite
						14.28' Fracture
						14.77' Fracture with clay infill
						15.09' Styolite
						15.55 - 16.40' interbedded Siltstone
						16.40 - 17.33' Packstone, light grey, strong, competent, massive
						17.00' Fracture with clay infill
						17.33 - 17.52' Grainstone, light to medium grey, strong, competent, fossiliferous: crinoids, brachiopods
						17.52 - 20.42' Siltstone, medium grey, greenish, strong, competent
						17.55 - 17.69' Clay, medium grey, silty, soft
						17.69' Fracture, clay infill
						17.87' Fracture, clay infill
						18.62 - 18.90' Geode cluster
						18.78' Fracture along geode
						18.95' Fracture with slight clay infill
						19.10 - 19.20' Geode

ARCADIS

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.09.09 @ 8:58 | Drilling Date/Time Completed: 11.09.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 705.1 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 35.13 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.13 | Water Loss: 15 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	9:05	--	BTEX, SVOCs, Metals
8 10	Grab	9:20	--	

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						19.52 - 19.62' Geode
						20.42 - 20.57' Grainstone, light to medium grey, fossiliferous, strong
						20.52' Fracture
						20.57 - 20.72' Silstone, medium grey, strong, competent
						20.72 - 21.21' Grainstone, light to medium grey, strong, competent, massive
						20.85' Fracture
						21.21 - 22.10' Packstone, light grey, strong, competent
						22.10 - 24.35' Siltstone, medium grey, strong, competent
						22.30' Fracture
						22.50' Fracture
						22.60' Fracture
						22.85' Fracture
						23.05' Fracture
						23.54 - 23.56' Geode
						23.69 - 23.75' Geode
						24.15 - 24.35' Geode cluster
						24.35' Fracture along geode, bedding plane
						24.35 - 27.05' Grainstone, light to medium grey, strong, competent
						24.60' Styolite
						26.95' Fracture
						27.05' Styolite
						27.10' Styolite, healed fracture
						27.05 - 28.18' Packstone, light grey, strong, competent
						28.18 - 28.67' Grainstone, light to medium grey, strong, competent
						28.52' Styolite
						28.56' Styolite
						28.61' Fracture with slight clay infill
						28.67' Fracture along bedding plane

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 4 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.09.09 @ 8:58 | Drilling Date/Time Completed: 11.09.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 705.1 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 35.13 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.13 | Water Loss: 15 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	9:05	--	BTEX, SVOCs, Metals
8 10	Grab	9:20	--	

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						28.67 - 30.67' Siltstone, medium grey, strong, competent
						28.80 - 29.85' Clay, medium grey, silty, soft
						29.77 - 29.85' Geode
						30.35 - 30.52' Geode cluster
						30.40' Fracture along geode
						30.67 - 31.15' Packstone/Grainstone, light grey, strong, competent
						31.05' Fracture
						31.15' Fracture along bedding plane
						31.15 - 31.97' Siltstone, medium grey, strong, competent
						31.91' Fracture along geode
						31.91 - 32.00' Geode
						31.97 - 32.24' Grainstone, light to medium grey, strong, competent
						32.05' Fracture
						32.20' Fracture
						32.24' Healed fracture
						32.24 - 32.92' Packstone, light grey, strong, competent
						32.36' Fracture
						32.65' Fracture
						32.85' Styolite
						32.92' Fracture along bedding plane
						32.92 - 33.00' Clay, medium grey, silty, soft
						33.00 - 33.95' Siltstone, medium grey, strong, competent; interbedded Packstone, light grey
						33.05 - 33.10' Geode
						33.10' Fracture along geode
						33.18 - 33.34' Geode cluster
						33.34' Fracture along geode
						33.34 - 33.57' Geode
						33.90' Fracture

ROCK CORING / SAMPLING LOG

Boring/Well: MW-33C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 5 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.09.09 @ 8:58 | Drilling Date/Time Completed: 11.09.09 @ 15:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 705.1 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 35.13 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.13 | Water Loss: 15 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	9:05	--	BTEX, SVOCs, Metals
8 10	Grab	9:20	--	

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						33.95 - 35.13' Packstone, light grey, strong, competent
						33.97 - 34.04' Geode, open
						34.33' Fracture
						34.40' Styolite

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: MW - 34A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.18.09 @ 11:04 | Drilling Date/Time Completed: 11.18.09 @ 14:23

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 685.2 feet | [X] Surveyed | [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 27.05 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 27.05 | Water Loss: 80 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	8:45	--	BTEX, SVOCs, Metals
2, - 4	Grab	8:50	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0.0 - 1.0'	**Topsoil**, organics, debris, gravels, some slag
2.0	4.0	100	0.0	--		1.0 - 4.0'	**Silty clay**, brown, plastic, soft, moist, sticky; Limestone fragments at 3.0'
						4.0 - 9.0'	**Limestone**, bedrock, weathered and competent materals, broken fragments, *Driller was going in and out of rock fragment layers and clay layers; became competent at 8.0'

ROCK CORING / SAMPLING LOG

Boring/Well: MW - 34A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.18.09 @ 11:04 | Drilling Date/Time Completed: 11.18.09 @ 14:23

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 685.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 27.05 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 27.05 | Water Loss: 80 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	8:45	--	BTEX, SVOCs, Metals
2, - 4	Grab	8:50	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
9.32	11.70	100	87.0	4.0	5	**9.32 - 9.61' Siltstone**, medium grey, massive, strong, geodes
11.70	16.88	100	100.0	9.0	10	9.43 - 9.50' Geode
16.88	21.96	100	100.0	7.0	37	9.56 - 9.61' Geode
21.96	27.05	100	100.0	7.0	28	9.61' Fracture along bedding plane, rough, partially healed, possible zone of water loss
						9.61 - 10.88' Wackestone, light grey, light green Glauconite, strong, massive, competent
						9.68' Styolite
						9.87' Styolite
						10.15' Styolite
						10.68' Styolite
						10.82' Styolite
						10.88 - 10.92' Fracture along bedding plane, 0.04' clay infill, semi-smooth, possible zone of water loss
						10.88 - 11.63' Siltstone, medium to dark grey, laminated, horizontal bedding, strong, competent
						11.63 - 11.72' Grainstone, medium grey, fossiliferous: crinoids, massive
						11.70 - 12.97' Vertical fracture, tight, rough, possible zone of water loss
						11.72 - 13.88' Wackestone, light grey, strong, competent, massive, fossiliferous: crinoids
						12.25' Styolite
						12.44' Styolite
						12.97' Styolite
						12.99' Fracture along styolite, partly healed, semi-smooth
						13.45' Fracture semi-smooth, some clay infill, possible zone of water loss
						13.88 - 14.37' Mudstone, light to medium grey, strong, competent, massive
						14.37 - 14.98' Siltstone/Mudstone/Packstone, interbedded, strong, competent, thin to medium beds
						14.60' Fracture, smooth
						14.37 - 14.43' Geode
						14.98 - 20.65' Siltstone, dark grey, strong, competent, thinly laminated, some interbedded Wackestone
						15.27 - 15.33' Geode
						15.10' Fracture, smooth
						15.40' Fracture, smooth

ARCADIS

ROCK CORING / SAMPLING LOG

Boring/Well: MW - 34A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.18.09 @ 11:04 | Drilling Date/Time Completed: 11.18.09 @ 14:23

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 685.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 27.05 Feet | Hole Diameter: 6" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 27.05 | Water Loss: 80 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	8:45	--	BTEX, SVOCs, Metals
2, - 4	Grab	8:50	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						16.20 - 16.29' Geode
						16.33' Fracture, slight clay infill, smooth
						17.52 - 17.61' Geode
						18.99 - 19.10' Geode sequence
						19.85 - 19.99' Geode
						19.99' Fracture; 0.02', possible zone of water loss
						20.50 - 20.58' Geode sequence
						20.65 - 21.04' Geode, light pink
						21.04 - 24.11' Wackestone/Packstone, some interbedded Mudstone, strong, competent, thin to thick bedded
						21.15' Fracture, 0.02', clay infill, semi-smooth, partly healed
						23.78 - 24.11' Clay, possible zone of water loss
						24.11 - 27.05' Siltstone, dark grey, strong, competent, thinly laminated
						25.08 - 25.20' Clay, possible zone of water loss

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: RW-1 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10.29.09 @ 9:00 | Drilling Date/Time Completed: 10.30.09 @ 11:41

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 689.0 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 44.02 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: I. Koorsen / S. Sharp | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 44.02 | Water Loss: 290 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX/PAH/Metals
2 - 4'	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	100	245	--		0.0 - 1.0'	Topsoil, organics
2.0	4.0	100	320	--		1.0 - 4.0'	**Clay**, silty, brown, red to grey mottling, organics, gravel, cohesive, sticky
4.0	6.0	100	300	--		4.0 - 5.0'	**Silty Clay**, brown, strong creosote odor, black mottling (staining), Limestone pebbles, gravel
						5.0 - 6.5'	**Limestone**, light grey, heavily fractured by drill
							6.43 - 6.49' Cement

ROCK CORING / SAMPLING LOG

Boring/Well: RW-1 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10.29.09 @ 9:00 | Drilling Date/Time Completed: 10.30.09 @ 11:41

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.0 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 44.02 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: I. Koorsen / R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 44.02 | Water Loss: 290 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
6.43	11.21	95.6	100.0	15.0	0	**6.49 - 7.24' Siltstone**, greenish, moderate strength, competent
11.21	16.21	100	96.0	11.0	3	6.49 - 6.82' Broken due to drilling process
16.21	16.35	100	0.0	5.0	0	6.90' Healed fracture
16.35	16.63	100	0.0	3.0	5	**7.24 - 8.15' Grainstone**, light grey, fossiliferous: crinoids, brachiopods
16.63	20.98	87	79.3	20.0	135	7.52' Fracture along bedding plane
20.98	26.06	100	98.8	11.0	21	8.00' Fracture with clay infill
26.06	31.09	100	100.0	11.0	65	**8.15 - 10.42' Packstone**, light grey, strong, competent, interbedded Siltstone approx. 0.02' in width
31.07	36.05	99	95.8	11.0	16	9.22' Fracture with clay infill
36.05	41.10	100	100.0	10.0	31	9.72' Fracture along styolite
41.10	44.02	100	100.0	4.0	14	10.62' Fracture along bedding plane
						10.82' Fracture along styolite
						10.84' Styolite
						10.42 - 10.62' Siltstone, greenish, moderate strength, competent
						10.62 - 11.40' Mudstone/Wackestone, light grey, strong, competent
						11.40 - 11.73' Mudstone, light grey, strong, competent
						11.73 - 12.08' Siltstone, medium grey, strong, competent
						12.08 - 12.30' Packstone, medium grey, strong, competent
						12.12' Fracture, slight clay infill
						12.23' Fracture
						12.30' Healed fracture along bedding plane
						12.30 - 12.70' Mudstone, light grey, strong, competent
						12.42 - 12.57' Geode
						12.70 - 12.78' Packstone, medium grey, strong, competent
						12.78' Clay and creosote infill, odor, sheen
						12.78 - 17.10' Siltstone, medium grey, strong, competent
						13.67 - 13.73' Geode
						14.92 - 15.02' Geode cluster
						16.21 - 16.5' Clay, creosote visible, odor

ARCADIS

ROCK CORING / SAMPLING LOG

Boring/Well: RW-1 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10.29.09 @ 9:00 | Drilling Date/Time Completed: 10.30.09 @ 11:41

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.0 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 44.02 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: I. Koorsen / R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 44.02 | Water Loss: 290 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						17.10 - 20.27' Packstone, light grey, strong, competent
						17.12' Fracture with slight clay infill
						18.10' Fracture along styolite
						18.22' Styolite
						18.63' Fracture with infill, possible zone of water loss, odor
						18.90' Fracture
						19.15' Fracture with slight infill
						19.40' Fracture
						20.27 - 20.95' Mudstone/Wackestone
						20.28' Fracture along styolite
						20.32' Fracture along styolite
						20.95 - 21.60' Siltstone, medium grey, competent
						21.60 - 23.26' Packstone, light grey, strong, competent, fossiliferous: brachiopods
						21.63' Fracture along styolite
						21.67' Fracture along styolite
						21.75' Styolite
						22.61' Fracture along styolite
						22.63' Styolite
						23.26' Fracture along bedding plane
						23.26 - 25.38' Siltstone, medium grey, strong, competent
						25.38 - 27.59' Packstone, light to medium grey, strong, fossiliferous: crinoids, brachiopods
						27.59' Fracture along bedding plane
						27.59 - 30.51' Siltstone, medium grey, strong, competent, interbedded Packstone approx. 0.04 - 0.06' in width at 21.29' and 29.40'
						30.51 - 31.09' Packstone, light to medium grey, strong, competent
						31.09 - 32.35' Siltstone, medium grey, strong, competent
						32.35' Fracture along bedding plane, partially healed with slight infill

ROCK CORING / SAMPLING LOG

Boring/Well: RW-1 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 10.29.09 @ 9:00 | Drilling Date/Time Completed: 10.30.09 @ 11:41

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.0 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 44.02 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: I. Koorsen / R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 44.02 | Water Loss: 290 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						32.35 - 36.32' **Wackestone/Packstone**, light grey, strong, competent
						32.84' Fracture along styolite
						33.73' Styolite
						34.55' Fracture along styolite, infill, partially healed
						34.58' Styolite
						34.84' Styolite
						34.90' Styolite
						35.70' Fracture along styolite
						36.32 - 37.90' **Siltstone/Packstone**, interbedded, approx. 0.1 - 0.3', strong, competent
						37.90 - 39.78' **Packstone**, light grey, strong, competent
						39.78 - 39.90' Clay, light grey, moderate to soft
						39.90 - 44.02' **Siltstone (Borden)**, medium grey, strong, competent, cross bedded.

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: RW-2 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.10.09 @ 11:18 | Drilling Date/Time Completed: 11.10.09 @ 14:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 685.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 11.26 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 11.26 | Water Loss: 12 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	11:35	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0.0 - 1.5'	**Topsoil**, dark brown, organics, glass, cinders, slightly moist
						1.5 - 2.0'	**Clay**, medium grey to light brown, very moist, pieces of coal, pebbles of Weathered Limestone
						2.0 - 4.57'	**Limestone**, light grey to medium grey, slightly weathered, moderate strength

ROCK CORING / SAMPLING LOG

Boring/Well: RW-2 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.10.09 @ 11:18 | Drilling Date/Time Completed: 11.10.09 @ 14:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 685.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 11.26 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 11.26 | Water Loss: 12 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	11:35	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
4.57	6.74	100	48.8	4.0	0	**4.57 - 4.85' Mudstone**, light grey, strong, competent
6.74	11.26	90.4	77.2	10.0	12	4.57 - 4.94' Broken due to drilling processes
						4.85 - 7.21' Siltstone, medium grey, strong, competent, massive
						5.18' Fracture with slight clay infill, brownish
						5.35' Fracture with soft clay infill
						5.82' Fracture with slight clay infill
						6.43' Fracture with clay infill
						6.43 - 6.51' Clay, medium grey, soft
						6.81' Fracture
						7.21' Fracture along bedding plane
						7.21 - 7.80' Grainstone, light to medium grey, strong, competent, fossiliferous: crinoids, brachiopods
						7.31' Fracture
						7.69' Fracture with creasote flakes, odor
						7.80 - 8.35' Packstone, light to medium grey, strong, comptent, interbedded Siltstone
						8.35 - 8.67' Siltstone
						8.38' Fracture
						8.46' Fracture
						8.67 - 9.82' Silstsone, medium grey, strong, competent
						8.80' Fracture
						9.27' Fracture
						9.46' Fracture
						9.82 - 10.14' Grainstone, medium grey, strong, competent, fossiliferous: crinoids, brachiopods
						10.01' Fracture

ARCADIS

ROCK CORING / SAMPLING LOG

Boring/Well: RW-2 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.10.09 @ 11:18 | Drilling Date/Time Completed: 11.10.09 @ 14:13

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 685.2 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 11.26 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 11.26 | Water Loss: 12 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	11:35	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						10.14 - 11.26' Siltstone, medium grey, strong, competent
						10.35 - 10.40' Geode
						10.46' Fracture
						10.52' Fracture along geode
						10.52 - 10.85' Geode cluster
						10.95' Fracture
						11.04' Fracture
						11.12' Fracture

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: RW-3 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.11.09 @ 7:58 | Drilling Date/Time Completed: 11.11.09 @ 11:54

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 685.5 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 42.07 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 42.07 | Water Loss: 475 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab		--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0.0 - 1.5'	**Topsoil**, dark brown, organics, cinders, slightly moist
						1.5 - 2.0'	**Clay**, brown, very moist, pebbles and fragments of weathered Limestone
						2.0 - 4.0'	**Limestone**, light grey to cream, slightly weathered, moderate strength

ROCK CORING / SAMPLING LOG

Boring/Well: RW-3 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.11.09 @ 7:58 | Drilling Date/Time Completed: 11.11.09 @ 11:54

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 685.5 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 42.07 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 42.07 | Water Loss: 475 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab		--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
4.17	6.80	100	28.1	7.0	10	**4.17 - 5.92' Packstone,** cream to light grey, fossiliferous: crinoids, ooids
6.80	11.79	99.8	61.3	8.0	15	4.22' Styolite
11.79	17.02	100	96.1	5.0	110	4.36' Fracture
17.02	21.71	93.8	79.9	9.0	65	4.53' Fracture with slight clay infill
21.71	26.71	100	100.0	7.0	50	4.86' Fracture along styolite
26.71	31.62	98.2	100.0	7.0	50	5.06' Fracture along styolite
31.62	36.62	100	91.4	12.0	90	5.29' Fracture
36.62	41.50	100	100.0	11.0	65	5.43' Fracture
41.50	42.07	100	64.9	1.0	20	5.50' Fracture along styolite
						5.92' Fracture along bedding plane
						5.92 - 8.13' Silstone, medium grey, greenish, strong, competent, massive
						5.92 - 6.10' Vertical fracture with slight clay infill
						6.10 - 6.22' Broken heavily
						6.32 - 6.34' Grainstone bed, crinoids, brachiopods
						6.45 - 6.52' Broken heavily, possible fracture zone
						7.14' Fracture, color change to greenish grey
						7.32' Fracture
						7.67' Fracture
						7.84' Fracture
						8.02' Fracture with odor
						8.13 - 8.69' Grainstone, light grey, strong ,competent, fossiliferous: crinoids
						8.38' Fracture along styolite, odor
						8.45 - 8.61' Geode, open
						8.69 - 10.20' Packstone, light grey, strong, competent
						10.08' Fracture
						10.20' Fracture along bedding plane

ARCADIS

ROCK CORING / SAMPLING LOG

Boring/Well: RW-3 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.11.09 @ 7:58 | Drilling Date/Time Completed: 11.11.09 @ 11:54

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 685.5 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 42.07 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 42.07 | Water Loss: 475 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab		--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
				--		**10.20 - 13.90' Silstone**, medium grey, strong, competent
						10.52' Fracture along geode
						10.52 - 10.62' Geode
						10.62' Fracture along geode
						11.34 - 11.42' Geode
						11.68' Fracture with clay infill
						13.18 - 13.23' Geode
						13.90' Fracture along bedding plane
						13.90 - 14.34' Grainstone, light to medium grey, strong, competent
						14.34 - 14.80' Siltstone, light to medium grey, strong, competent
						14.80 - 19.05' Packstone, light grey, strong, competent
						15.85' Fracture along styolite
						16.35 - 16.60' Fracture, styolite
						16.76' Styolite
						18.96' Fracture
						19.05' Fracture along bedding plane
						19.05 - 19.87' Siltstone, medium grey, moderate strength, slight odor
						19.10' Fracture
						19.31' Fracture
						19.61' Fracture
						19.87' Fracture along bedding plane
						19.87 - 21.20' Packstone, light grey, strong, competent, massive
						20.75' Fracture
						21.10' Fracture
						21.20' Styolite
						21.20 - 22.59' Siltstone, medium grey, strong, competent
						22.59 - 22.72' Grainstone, light to medium grey, strong, competent
						22.72 - 22.82' Siltstone, medium grey, strong, competent

ARCADIS

ROCK CORING / SAMPLING LOG

Boring/Well: RW-3 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 4 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.11.09 @ 7:58 | Drilling Date/Time Completed: 11.11.09 @ 11:54

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 685.5 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 42.07 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 42.07 | Water Loss: 475 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab		--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						22.82 - 23.35' Grainstone/Packstone, light to medium grey, strong, competent
						23.35 - 24.24' Siltstone, medium grey, strong, competent
						24.24' Fracture along bedding plane
						24.24 - 24.64' Grainstone, medium grey, strong, competent, fossiliferous
						24.64 - 24.17' Siltstone, medium grey, strong, competent
						25.17 - 25.84' Packstone, light grey, strong, competent
						25.17 - 25.31' Geode
						25.85 - 30.23' Siltstone, medium grey, competent; interbedded Grainstone, medium grey approx 0.03' in width
						27.23' Fracture along geode
						27.23 - 27.57' Geode
						27.57' Fracture along geode
						30.23 - 34.55' Packstone, light grey, strong, competent
						31.05' Fracture along styolite
						32.05' Fracture
						32.20' Styolite
						33.13' Fracture
						33.87' Fracture along styolite
						33.93' Styolite
						34.00' Fracture along styolite
						34.30' Fracture
						34.30 - 34.55' Siltstone, approx. 0.01' in width
						34.55 - 35.14' Grainstone, light to medium grey, strong, competent, fossiliferous: crinoids, brachiopods
						34.31' Fracture
						35.14 - 35.19' Siltstone, medium grey, competent
						35.19 - 35.65' Packstone, light grey, strong, competent
						35.33' Fracture

ROCK CORING / SAMPLING LOG

Boring/Well: RW-3 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 5 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.11.09 @ 7:58 | Drilling Date/Time Completed: 11.11.09 @ 11:54

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 685.5 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 42.07 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 42.07 | Water Loss: 475 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab		--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						35.65 - 36.50' Siltstone, medium grey, strong, competent, interbedded Packstone
						36.50 - 38.20' Grainstone/Packstone, light to medium grey, strong, competent
						37.45' Fracture with slight infill
						37.47' Styolite
						37.89' Fracture
						38.20 - 38.25' Siltstone, medium grey, strong, competent, interbedded Grainstone
						38.25 - 38.28' Grainstone
						38.28' Fracture along styolite
						38.28 - 42.07' Siltstone (Borden), medium grey, strong, competent, cross bedding, massive
						41.70' Fracture

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: RW - 4 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 2

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.13.09 @ 8:09 | Drilling Date/Time Completed: 11.13.09 @ 10:12

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 687.9 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 14.81 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 14.81 | Water Loss: 89 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	8:20	--	BTEX, SVOCs, Metals
2 - 4	Grab	8:25	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0.0 - 0.5'	**Topsoil**, dark brown, organics, soft
2.0	4.0	100	0.0	--		0.5 - 4.0'	**Clay**, light brown, slightly silty, soft
4.0	6.0	100	0.0	--		4.0 - 6.0'	**Clay**, light browish grey, slightly silty, saturated
						6.0 - 8.88'	**Limestone**, medium to light grey, moderate strength, fossiliferous: crinoids

ROCK CORING / SAMPLING LOG

Boring/Well: RW - 4 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 2

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.13.09 @ 8:09 | Drilling Date/Time Completed: 11.13.09 @ 10:12

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 687.9 feet [X] Surveyed [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 14.81 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 14.81 | Water Loss: 89 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	8:20	--	BTEX, SVOCs, Metals
2 - 4	Grab	8:25	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
8.88	11.71	100	56.8	11.0	40	**8.88 - 9.22' Wackestone**, light grey to medium brown; At 9.22' color change to light grey, competent
11.71	12.73	100	100.0	7.0	25	8.88 - 9.22' Heavily fractured due to drilling process
12.73	14.81	100	95.6	14.0	24	**9.41 - 14.81' Siltstone**, medium grey, strong, competent
						9.41 - 9.80' Heavily fractured due to drilling process
						9.83 - 9.86' Geode
						10.12' Fracture
						10.25' Fracture with slight clay infill, light brown
						10.90' Fracture
						11.60 - 11.71' Heavily fractured due to drilling process
						12.09 - 12.12' Geode
						12.58 - 12.65' Geode cluster
						12.84' Fracture
						12.94' Fracture
						13.20' Fracture
						13.36 - 13.62' Geode cluster
						14.21' Fracture along bedding plane
						14.21 - 14.81' Color change to light grey

ARCADIS

SOIL BORING / SAMPLING LOG

Boring/Well: RW - 5 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.16.09 @ | Drilling Date/Time Completed: 11.16.09 @ 15:22

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 2.0 feet

Land-Surface Elev.: 688.7 feet | [X] Surveyed | [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 43.46 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 43.46 | Water Loss: 105 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	8:45	--	BTEX, SVOCs, Metals
2, - 4	Grab	8:50	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	USCS Description/Interval	From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0.0 - 0.5'	**Topsoil**, dark brown, very soft, moist, organics, roots
2.0	4.0	100	0.0	--		0.5 - 6.0'	**Clay**, light brown, soft, plastic, slightly moist, Limestone fragments
4.0	6.0	100	0.0	--		6.0 - 8.17'	**Limestone**, light grey to cream, slightly weathered

ROCK CORING / SAMPLING LOG

Boring/Well: RW - 5 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.16.09 @ | Drilling Date/Time Completed: 11.16.09 @ 15:22

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 688.7 feet | [X] Surveyed | [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 43.46 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 43.46 | Water Loss: 105 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	8:45	--	BTEX, SVOCs, Metals
2, - 4	Grab	8:50	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
8.17	11.55	100	79.8	6.0	0	**8.17 - 10.05' Wackestone**, light grey, strong, competent; interbedded Packstone, approx. 0.02' thick
11.55	12.42	100	0.0	2.0	10	8.63' Fracture, slight clay infill, light brown
12.42	16.57	83	72.2	7.0	15	8.83' Healed fracture
16.57	21.51	98.8	100.0	8.0	50	8.88' Fracture, clay infill, light brown
21.51	26.44	98.6	100.0	7.0	0	9.30' Styolite
26.44	31.33	97.8	98.7	7.0	10	9.32' Fracture
31.33	36.56	100	89.6	7.0	8	9.47' Fracture
36.56	41.44	97.6	93.8	6.0	5	9.75' Fracture
41.44	43.46	100	100.0	3.0	7	**10.05 - 10.39' Grainstone**, medium grey, strong, competent, fossiliferous: crinoids, ooids; color change to light grey at 10.19'
						10.19' Fracture
						10.39 - 15.25' Silstone, medium grey, strong, competent
						10.62 - 10.69' Fracture, clay infill, light brown
						11.19' Fracture, clay infill, medium grey
						11.55 - 11.70' Heavily fractured due to drilling, large amounts of soft clay
						11.76 - 11.80' Fracture, clay infill, medium grey
						11.97 - 12.04' Fracture, clay infill, medium grey
						12.10' Fracture, slightly healed
						12.50' Fracture
						12.65' Fracture
						13.00 - 13.04' Fracutre, clay infill
						13.13 - 13.37' Heavily fractured due to drilling
						13.37 - 13.40' Fracture, clay infill
						13.51 - 13.58' Geode
						14.56 - 14.60' Fracture, heavily broken
						15.25' Fracture along bedding plane
						15.25 - 15.40' Grainstone, medium to dark grey, competent, fossiliferous: crinoids, ooids
						15.28' Fracture
						15.40' Fracture along bedding plane

ARCADIS

ROCK CORING / SAMPLING LOG

Boring/Well: RW - 5 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.16.09 @ | Drilling Date/Time Completed: 11.16.09 @ 15:22

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 688.7 feet | [X] Surveyed | [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 43.46 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 43.46 | Water Loss: 105 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	8:45	--	BTEX, SVOCs, Metals
2, - 4	Grab	8:50	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						15.40 - 16.36' Wackestone, light grey, strong, competent
						16.36 - 16.95' Grainstone, light grey, strong, competent, Fossiliferous: crinoids
						16.95' Fracture along bedding plane, possible zone of water loss
						16.95 - 18.50' Packstone/Grainstone, medium grey, strong, competent, fossiliferous: ooids, crinoids
						16.95 - 17.15' Packstone
						17.15 - 17.33' Grainstone
						17.33' Styolite
						17.33 - 18.05' Packstone
						18.05 - 18.50' Grainstone
						18.50 - 20.50' Silstone, light greenish grey to medium grey, strong, competent; interbedded Packstone
						19.62 - 19.72' Packstone, crinoids
						19.72' Fracture along bedding plane
						20.50 - 23.43' Wackestone, light grey, strong, competent, massive
						20.52' Styolite
						20.96' Styolite
						21.51' Fracture, clay infill
						21.51 - 22.00' Silty Clay, medium grey to light brown, soft to moderate strength (could be from reaming process)
						23.43 - 23.72' Grainstone, light grey, strong, competent, fossiliferous: crinoids, ooids; color change to medium to dark grey at 23.63'
						23.63' Fracture at color change
						23.70' Styolite
						23.72 - 31.28' Siltstone, medium grey, strong, competent
						24.05 - 24.22' Geode
						27.22 - 27.32' Geode cluster
						27.35 - 27.40' Geode
						27.22 - 31.28' Color change to medium to dark grey; interbedded Packstone, approx. 0.02' thick
						27.40' Fracture along geode
						29.28 - 29.36' Geode
						29.36' Fracture along geode

ROCK CORING / SAMPLING LOG

Boring/Well: RW - 5 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11.16.09 @ | Drilling Date/Time Completed: 11.16.09 @ 15:22

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0 feet

Land-Surface Elev.: 688.7 feet | [X] Surveyed | [ ] Estimated | Water: 5.0' coring barrel

Total Depth Drilled: 43.46 Feet | Hole Diameter: 8" | Coring Device: Sonic Core Barrel

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 43.46 | Water Loss: 105 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	Grab	8:45	--	BTEX, SVOCs, Metals
2, - 4	Grab	8:50	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						29.36' Geode
						31.28' Fracture along bedding plane
						31.28 - 31.62' Grainstone, medium grey, strong, competent, fossiliferous: crinoids, ooids
						31.32 - 31.33' Clay, medium grey
						31.57' Fracture
						31.62 - 32.14' Packstone, light grey, strong, competent; interbedded Siltstone, greenish grey
						32.83' Fracture, clay infill, greenish grey
						32.14 - 32.60' Siltstone, strong, competent, greenish grey
						32.60 - 33.20' Grainstone, light to medium grey, strong, competent, fossiliferous: brachiopods, crinoids, ooids
						32.20' Fracture along bedding plane
						33.20 - 34.72' Siltstone, medium grey, strong competent; interbedded Grainstone
						34.72 - 35.20' Packstone, light grey, strong, competent, fossiliferous: crinoids, ooids
						35.20 - 35.87' Siltstone, medium grey, strong, competent; interbedded Packstone
						35.87' Fracture along bedding plane
						35.87 - 36.79' Packstone, light grey, strong, competent, fossiliferous: ooids, crinoids
						36.79 - 37.79' Siltstone, medium grey, strong, competent: interbedded Packstone, light grey
						37.79 - 38.27' Grainstone, medium grey, strong, competent, fossiliferous: crinoids, ooids
						38.27 - 43.46' Siltstone (Borden), medium greenish grey, strong, competent; interbedded Packstone, light grey
						38.82' Fracture, clay infill, greenish grey
						38.92' Fracture along bedding plane
						38.92' color change to medium grey, cross bedding, massive
						38.92 - 39.08' Geode

SOIL BORING / SAMPLING LOG

Boring/Well: MW-35A | Project/No.: IN Creosote / IN000072.0049.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/8/10 @ 11:30 | Drilling Date/Time Completed: 2/9/10 @ 10:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 702.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.4 Feet | Hole Diameter: 4 1/2" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff, I. Koorsen | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 26.42 | Water Loss: 170 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:30	--	BTEX, SVOCs, Metals: As, Pb
3'-5'	Grab	10:35	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0	--	TS	0.0'-0.5'	**Topsoil**, grass, organics, asphalt,
2.0	4.0	100	0.0	--	CL	0.5'-4.5'	**Clay**, Reddish Brown, mottled, pebbles, plastic, soft, moist
4.0	6.0	100	0.0	--	LS	4.5'-5.0'	**Weathered Limestone**, heavily fractured, lt. grey, hard, weathered
6.0	8.0	100	0.0	--	CL	5.0'-12.0'	**Clay**, Reddish Brown, sl. Mottled, pebbes, limestone fragments, soft, moist
8.0	10.0	100	0.0	--	LS	12.0'-14.0'	**Bedrock (Limestone)**, competant
10.0	12.0	100	0.0	--			*Set 6" temporary SS casing to 14.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-35A | Project/No.: IN Creosote / IN000072.0049.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/8/10 @ 11:30 | Drilling Date/Time Completed: 2/9/10 @ 10:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 702.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.42 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.42 | Water Loss: 170 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:30	--	BTEX, SVOCs, Metals: As, Pb
3'-5'	Grab	10:35	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
13.9	16.4	100	82.50	10.0	12	**13.90'-20.51', Wackestone/Packestone**, Medium Grey, strong, massive, competant, sl. Fractured
16.35	21.33	100	100.0	12.0	91	13.90'-14.01', Heavily fractured due to setting of temp. casing.
21.33	26.42	100	96.0	9.0	67	14.76'-14.83', Fracture (0.05' at largest point), possible zone of water loss, semi smooth, partly
						healed, clean
						15.00', Styolite
						15.02', Styolite
						15.12', Styolite
						15.59', Styolite
						15.81', Styolite
						15.88', Styolite
						15.91', Styolite
						16.00', Styolite
						16.07'-16.35', Large Geode
						16.60'-16.70', Geode, Styolite
						16.89', Fracture, possible zone of water loss
						17.51', Fracture, iron staining, possible zone of water loss
						17.51'-17.83', Vertical fracture, iron staining, possible zone of water loss

SOIL BORING / SAMPLING LOG

Boring/Well: MW-35A | Project/No.: IN Creosote / IN000072.0049.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/8/10 @ 11:30 | Drilling Date/Time Completed: 2/9/10 @ 10:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 702.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.42 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.42 | Water Loss: 170 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:30	--	BTEX, SVOCs, Metals: As, Pb
3'-5'	Grab	10:35	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						17.95', Styolite
						18.02', Styolite
						18.40', Fracture along styolite, possible zone of water loss
						19.16', Fracture, possible zone of water loss
						20.51'-23.25', Siltstone, Lt. Greenish Grey-Med. Grey, strong, thinly bedded, competant
						21.33'-21.47', Geode Cluster
						23.16', Styolite
						23.25'-26.42', Wackestone w/ Interbedded Packstone, Lt. Grey, packstone beds ~ 0.02' wide,
						strong, massive, competant
						24.24', Fracture
						24.33'-24.43', Fracture, iron staining, possible zone of water loss
						24.62', Styolite
						24.92', Fracture along styolite
						EOB @ 26.42.
						Set Well @ 26.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-35B / MW-35C Project/No.: IN Creosote / IN000072.0049.00001 Page 1 of 3

Site Location: Bloomington, Indiana Drilling Date/Time Started: 2/9/10 @ 12:37 Drilling Date/Time Completed: 2/11/10 @ 11:35

Drilling Contractor: Boart Longyear Driller: Jason Greer

Drilling Fluid Used: Water Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" Sampling Interval: 5.0 feet

Land-Surface Elev.: 703.1 feet [X] Surveyed [ ] Estimated Water:

Total Depth Drilled: 44.8 Feet Hole Diameter: 8" Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff, I. Koorsen Hammer Weight: Hammer Drop: ins.

Boring Termination Depth: 44.84 Water Loss: 466 gallons GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:40	--	BTEX, SVOCs, Metals: As, Pb
2'-4'	Grab	10:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	2.0	100	0.0	--	TS	0.0'-0.5'	**Topsoil**, grass, organics
2.0	4.0	100	0.0	--		0.5'-14.0'	**Clay**, Reddish Brown, mottled, pebbles, plastic, soft, moist.
4.0	6.0	100	0.0	--			3.0'-4.0', Weathered Limestone fragments
6.0	8.0	100	0.0	--			5.0'-6.0', Weathered, Limstone/Clay mix, Reddish Brown, soft, moist
8.0	10.0	100	0.0	--			10.0'-11.0', Weathered Limestone/Clay mix
10.0	12.0	100	0.0	--		14.0'-16.0'	**Bedrock (Limestone)**, Lt.-Med. Grey, stong, competant, fractured due to drilling
12.0	14.0	100	0.0	--			*Set 6" temp. SS casing @ 16.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-35B / MW-35C Project/No.: IN Creosote / IN000072.0049.00001 Page 2 of 3

Site Location: Bloomington, Indiana Drilling Date/Time Started: 2/9/10 @ 12:37 Drilling Date/Time Completed: 2/11/10 @ 11:35

Drilling Contractor: Boart Longyear Driller: Jason Greer

Drilling Fluid Used: water Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel Sampling Interval: 5.0' feet

Land-Surface Elev.: 703.1 feet [X] Surveyed [ ] Estimated Water:

Total Depth Drilled: 44.84 Feet Hole Diameter: 8" Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen Hammer Weight: N/A Hammer Drop: N/A ins.

Boring Termination Depth: 44.84 Water Loss: 466 gallons GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:40	--	BTEX, SVOCs, Metals: As, Pb
2'-4'	Grab	10:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
16.0	16.36	100	0.00	2.0	9	**16.00'-21.30', Wackestone/Packstone**, Lt. Grey, crinoids and ooids, strong, competant, massive
16.36	21.51	100	94.7	8.0	19	16.74', Styolite
21.51	26.73	100	94.2	9.0	50	17.24', Fracture along styolite
26.73	31.04	100	92.3	10.0	85	18.10', Styolite
31.04	31.42	100	0.0	1.0	0	18.35', Styolite
31.42	36.60	100	75.0	13.0	123	18.40', Fracture along styolite
36.50	41.29	100	98.90	8.0	100	18.75', Styolite
41.29	44.84	100	96.00	7.0	80	19.30'-19.33', Fracture along styolite, clay infill, possible zone of water loss
						19.59', Fracture, iron staining, possible zone of water loss
						20.00'-21.30', Interbedded Siltstone w/in the Wackestone/Packstone, ~0.02'-0.05' thick
						21.30'-24.16', Siltstone, Lt. Greenish Grey, thinly bedded, competant, strong
						22.12', Fracture
						24.16'-29.74', Wackestone/Packstone, Lt Grey, strong, competant, massive
						25.08'-25.38', Bit Drop, possible zone of water loss
						25.60', Styolite
						25.90', Fracture along styolite
						26.21', Styolite
						27.73'-27.12', Heavily fractured by drilling
						29.74'-39.21', Siltstone, Med.-Dk. Grey, strong, competant, thinly bedded
						29.74', Geode Cluster
						29.74'-30.12', Interbedded Wackestone, ~0.01' thick
						30.38', Fracture
						31.04'-31.21', Heaevily fractured by drilling
						31.88'-31.85', Fracture, possible zone of water loss
						32.13', Fracture, slight clay infill, possible zone of water loss
						32.61', Fracture along bedding plane
						32.61'-32.69', Grainstone, fossiliferous, crynoids and ooids
						32.98'-33.08', Interbedded Packstone, ooids

SOIL BORING / SAMPLING LOG

Boring/Well: MW-35B / MW-35C | Project/No.: IN Creosote / IN000072.0049.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/9/10 @ 12:37 | Drilling Date/Time Completed: 2/11/10 @ 11:35

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 703.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 44.84 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 44.84 | Water Loss: 466 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:40	--	BTEX, SVOCs, Metals: As, Pb
2'-4'	Grab	10:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						34.72', Fracture along geode
						34.72'-34.82', Geode
						34.90'-35.12', Geode cluster
						35.60'-35.65', Geode Cluster
						35.90'-36.16', Geode
						35.80'-36.20', Heavily fractured by drilling
						36.30'-36.50', Geode
						38.02', Fracture along geode
						38.02'-38.15', Geode Cluster
						39.21'-40.73', Packstone, Lt-Med Grey, strong, competant, massive
						39.41'-39.46', Fracture, possible zone of water loss
						40.15', Styolite
						40.73'-41.20, Siltstone w/ Interbedded Packstone, Lt-Med Grey, strong, competant, ooids ~0.02'
						thick.
						41.20'-42.10', Packstone/Grainstone w/ Interbedded Siltstone, Lt-Med Grey, strong, competant,
						siltstone beds ~0.04' thick.
						41.80', Fracture
						42.10'-44.84', Packstone, Lt Grey, strong, competant, massive
						42.44', Fracture along styolite
						43.14', Fracture
						43.58', Fracture
						44.18', Fracture, clay infill, possible zone of water loss
						44.74', Fracture
						EOB @ 44.84'
						Set MW-35B @ 27.0'
						Set MW-35C @ 45.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-36A / MW-36B | Project/No.: IN Creosote / IN000072.0049.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/11/10 @ 14:52 | Drilling Date/Time Completed: 2/15/10 @ 15:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 697.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 33.9 Feet | Hole Diameter: 8 " | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff, I. Koorsen | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 33.91 | Water Loss: 86 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	15:30	--	BTEX, SVOCs, Metals: As, Pb
8'10'	Grab	15:35	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	2.0	100	0.0	--	TS	0.0'-0.05'	**Topsoil**, organics
2.0	4.0	100	0.0	--	CL	0.05'-10.0'	**Clay**, Reddish Brown, plastic, moist, soft, cinders, mottled (lt. brown)
4.0	6.0	100	0.0	--			5.0'-6.0', Weathered Limestone/Clay mix, fragments
6.0	8.0	100	0.0	--			9.0'-10.0', Weathered Limestone/Clay mix, fragments
8.0	10.0	100	0.0	--	LS	10.0'-12.0'	**Bedrock (Limestone)**, Lt.-Med. Grey, fossiliferous (crinoids, ooids), heavily fractured by drilling
							*Set 6" temp. casing @ 12.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-36A / MW-36B | Project/No.: IN Creosote / IN000072.0049.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/11/10 @ 14:52 | Drilling Date/Time Completed: 2/15/10 @ 15:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 697.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 33.91 Feet | Hole Diameter: 8 " | Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 33.91 | Water Loss: 86 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	15:30	--	BTEX, SVOCs, Metals: As, Pb
8'10'	Grab	15:35	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
11.7	16.7	99	86.80	8.0	0	**11.70'-17.47', Wackestone/Packstone**, Lt. Grey, strong, competant
16.65	21.60	99	93.7	7.0	10	12.20'-12.30', Fracture, clay infill, silty, med grey-greenish, soft, possible zone of water loss
21.60	26.74	100	91.2	9.0	50	13.42', Styolite
27.00	32.02	100	91.8	9.0	25	14.34', Styolite
32.02	33.91	100	100.0	3.0	1	14.35', Fracture, silty clay infill, med grey-greenish, soft, possible zone of water loss
						14.80'-17.47', Interbedded Siltstone, thin, ~0.01' thick or less.
						16.25', Fracture, silty clay infill, possible zone of water loss
						17.47'-20.85', Siltstone, Lt Grey-Greenish Med Grey, strong, competant
						17.86'-17.95', Geode
						18.19'-18.45', Geode Cluster
						19.07', Fracture along geode
						19.07'-19.25', Geode
						19.38'-19.85', Geode Cluster
						20.72'-20.77', Geode
						20.85'-27.41', Wackestone/Packstone, Lt-Med Grey, strong, competant, fossiliferous (crinoids and
						ooids)
						21.24', Fracture along styolite, sl clay infill, possible zone of water loss
						21.47'-21.51', Fracture, lt brown clay infill, soft
						21.83', Fracture
						21.90', Styolite
						21.98', Styolite
						22.04', Healed fracture
						22.31', Fracture along bedding plane
						22.31'-22.66', Grainstone, med grey, crinoids and ooids
						22.93', Fracture, clay infill, possible zone of water loss
						23.55', Fracture
						23.66', Styolite
						23.84', Styolite

SOIL BORING / SAMPLING LOG

Boring/Well: MW-36A / MW-36B | Project/No.: IN Creosote / IN000072.0049.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/11/10 @ 14:52 | Drilling Date/Time Completed: 2/15/10 @ 15:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 697.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 33.91 Feet | Hole Diameter: 8 " | Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 33.91 | Water Loss: 86 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	15:30	--	BTEX, SVOCs, Metals: As, Pb
8'10'	Grab	15:35	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						24.71'-24.73', Fracture, greenish silty clay infill, possible zone of water loss
						26.74'-27.00', Missing Rock due to over reaming.
						27.00'-27.21', Heavily fractured due to reaming
						[illegible] return
						water
						27.41'-32.02', Siltstone, Med Grey, strong, competant, thinly bedded
						28.50'-28.55', Geode
						28.75'-28.90', Geode, open
						29.32'-29.38', Geode Cluster
						29.58'-29.64', Geode Cluster
						29.82'-29.92', Geode
						30.78'-30.84', Geode
						31.06'-31.12', Geode
						31.97'-32.12', Geode, open
						32.02'-32.18', Grainstone, Lt Grey, massive, strong, competant, crinoids and ooids
						32.18'-33.91', Packstone/Wackestone, Lt. Grey, strong, competant, massive
						32.82', Styolite
						32.83', Styolite
						EOB @ 33.91'
						Set MW-36A @ 24.5'
						Set MW-36B @ 34.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-36C | Project/No.: IN Creosote / IN000072.0049.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/15/10 @ 16:35 | Drilling Date/Time Completed: 2/17/10 @ 11:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 697.6 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 60.0 Feet | Hole Diameter: 4 1/2" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff, T. Porter | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 59.95 | Water Loss: 127 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	16:40	--	BTEX, SVOCs, Metals: As, Pb
7'-9'	Grab	16:50	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	2.0	100	0.0	--	ML/CL	0.0'-0.5'	**Clay**, Dk Brown-Black, organics, sl. Moist
2.0	4.0	100	0.0	--	ML/CL	0.5'-9.5'	**Clay**, Reddish organge, sl. Moist, few cinders starting at 3.75'; weathered Limestone fragments from
4.0	6.0	100	0.0	--			4.2'-5.5' w/ decreasing size and content with depth; 9.0'-9.5' weathered Limestone fragments
6.0	8.0	100	0.0	--		9.5'-12.5'	**Bedrock (Limestone)**, competant at 11.5'; driller noted void near 11.0'
8.0	10.0	100	0.0	--			*Set 6" temp. SS casing @ 12.5'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-36C | Project/No.: IN Creosote / IN000072.0049.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/15/10 @ 16:35 | Drilling Date/Time Completed: 2/17/10 @ 11:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 697.6 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 59.95 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 59.95 | Water Loss: 127 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	16:40	--	BTEX, SVOCs, Metals: As, Pb
7'-9'	Grab	16:50	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
12.2	16.8	100	96.10	15.0	35	**12.15'-12.30', Limestone**, Broken fragments from setting of temp. casing
16.80	21.92	100	72.1	8.0	0	**12.30'-12.75', Mudstone/Wackestone**, Lt. Bluish Grey, massive, strong, cross bedding, unfractured
21.92	27.12	100	53.4	9.0	0	**12.75'-18.09', Packstone/Grainstone**, Lt Grey, massive, competant, strong, sl fractured
27.12	30.58	100	94.8	14.0	18	12.79', Fracture along bedding plane
30.58	32.07	100	100.0	4.0	35	13.37'-13.52', Clay and broken Limestone interval, soft, possible zone of water loss
32.07	36.81	94.8	54.4	8.0	6	14.39', Fracture
36.81	42.10	100	100.00	9.0	18	14.90'-14.96', Clay and broken Limestone interval, soft, possible zone of water loss
42.10	46.63	100	93.40	8.0	0	14.96', Styolite
46.63	51.93	100	96.20	9.0	0	15.15', Styolite
51.93	54.99	100	100.0	4.0	10	15.40', Begin to see Glauconite
54.99	56.75	100	100.00	4.0	0	16.68', Styolite
56.75	59.93	100	100.00	6.0	5	**18.09'-22.16', Siltstone**, Lt Greenish Grey, med bedded, horizontal, sl disentegrated, mod fractured
						18.23', Fracture along bedding plane.
						18.23'-18.49', Heavily fractured by drilling;
						18.78'-18.92', Large geode
						18.92'-19.10', Heavily fractured by drilling
						19.10'-19.25', Large geode
						20.10'-20.18', Geode
						20.54'-20.57', Geode
						20.75'-21.10', Heavily fractured by drilling; color change to dk. Grey
						21.45'-21.62', Heavily fractured by drilling
						22.07'-22.16', Clay and Siltstone fragments interval, possible zone of water loss
						22.16'-28.15', Packstone/Grainstone, Lt. Grey, massive, mod.-sl. fractured, competant, mod
						strength
						22.16'-23.70', Vertical fracture w/ several horizontal breaks w/in; oxidation staining, possible
						zone of water loss; heavy oxidation stainging from 23.0'-23.50'
						23.87', Fracture, semi smooth, some clay infill
						24.85', Fracture, semi smooth, some clay infill

SOIL BORING / SAMPLING LOG

Boring/Well: MW-36C | Project/No.: IN Creosote / IN000072.0049.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/15/10 @ 16:35 | Drilling Date/Time Completed: 2/17/10 @ 11:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 697.6 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 59.95 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 59.95 | Water Loss: 127 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	16:40	--	BTEX, SVOCs, Metals: As, Pb
7'-9'	Grab	16:50	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						25.23', Fracture, rough, clay infill
						26.30'-26.85', Heavily fractured by drilling
						27.76'-27.97', Large geode
						28.15'-28.20', Grainstone, Med Grey, fossiliferous, massive, strong
						28.20', Fracture, bedding plane, smooth
						28.20'-32.07', Siltstone, Dk Grey, thinly bedded, horizontal, small geodes
						28.23', Fracture, bedding plane, smooth
						29.80'-29.94', Large Geode
						30.00'-30.20', Geode cluster
						30.44', Fracture above geode
						30.44'-30.56', Large Geode
						30.56', Fracture along geode
						31.09'-31.20', Geode cluster
						32.07'-34.83', Packstone, Med Grey, massive, strong, mod fractured
						33.10', Fracture, semi smooth
						33.13', Styolite
						33.21', Styolite
						33.29', Styolite
						33.21'-35.41', Vertical fracture, possible zone of water loss.
						34.03', Fracture, bedding plane
						34.20', Fracture, bedding plane
						34.74', Fracture, bedding plane
						34.83'-35.35', Mudstone, Greenish Grey, massive, strong, competant
						35.35'-35.39', Grainstone, Med Grey-Greenish Grey, massive, strong
						35.39'-40.67', Siltstone, Dk Grey, thinly bedded, horizontal, unfractured, strong
						36.45'-36.52', Geode
						36.72'-36.81', Geode
						38.88', 38.99', Geode

SOIL BORING / SAMPLING LOG

Boring/Well: MW-36C | Project/No.: IN Creosote / IN000072.0049.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/15/10 @ 16:35 | Drilling Date/Time Completed: 2/17/10 @ 11:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 697.6 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 59.95 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 59.95 | Water Loss: 127 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	16:40	--	BTEX, SVOCs, Metals: As, Pb
7'-9'	Grab	16:50	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						40.67', Fracture, bedding plane, geode, possible water loss; odor and sheen in return water
						40.67'-43.57', Packstone/Grainstone, Grey, massive, strong, unfractured, competant
						42.10'-42.40', Fractured due to setting of temp. casing.
						43.57'-48.51', Siltstone w/ Interbedded Grainstone, Dk Grey, thinly bedded, unfractured, strong,
						lots of geodes
						44.80'-45.00', Large Geode
						45.74'-45.81', Large Geode
						45.98'-46.05', Large Geode
						48.51'-48.60', Clay, weathered interval, Dk Greyish Green, soft, odor; sheen and odor in return water
						48.60'- 48.70', Weathered Siltstone, Greenish Grey, weak-mod strength, odor
						48.70'-49.52', Wackestone, Lt Grey, massive, strong, unfractured, competant
						49.52', Fracture, begin to transition into siltstone, bedding plane, sl clay infill, possible zone of
						water loss
						49.52'-54.87', Interbedded Siltstone/Mudstone/Grainstone, thin-med bedding, strong, unfractured
						54.87'-55.56', Grainstone, Med Grey, massive, strong, competant
						55.28', Fracture
						55.56'-55.70', Weathered Siltstone, Dk. Greenish Grey, thinly bedded
						55.70'-59.93', Siltstone (Borden), Dk Grey, thinly bedded, strong, competant, some cross bedding
						EOB @ 59.95'
						Set Well @ 60.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-37A/ MW-37B Project/No.: IN Creosote / IN000072.0049.00001 Page 1 of 3

Site Location: Bloomington, Indiana Drilling Date/Time Started: 2/17/10 @ 15:15 Drilling Date/Time Completed: 2/18/10 @ 14:00

Drilling Contractor: Boart Longyear Driller: Jason Greer

Drilling Fluid Used: Water Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" Sampling Interval: 5.0 feet

Land-Surface Elev.: 684.4 feet [X] Surveyed [ ] Estimated Water:

Total Depth Drilled: 31.7 Feet Hole Diameter: 8 " Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff, T. Porter Hammer Weight: N/A Hammer Drop: N/A ins.

Boring Termination Depth: 31.69 Water Loss: 185 gallons GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	15:25	--	BTEX, SVOCs, Metals: As, Pb
5'-7'	Grab	15:30	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	2.0	100	0.0	--	ML-SM	0.0'-3.0'	**Silty Sandy Clay**, Dk Brown, fine sands, sl. Moist, cohesive, organics
2.0	4.0	100	0.0	--	CL-ML	3.0'-7.5'	**Clay**, Reddish Brown, sl moist-moist, cohesive, organics; color becomes less res and lighter brown
4.0	6.0	100	0.0	--			with depth; limestone fragments with clay from 6.0'-7.5'
6.0	8.0	100	0.0	--	SS/LS	7.5'-9.5'	**Weathered Silstone and Limstone**, pebbles, river rock
8.0	10.0	100	0.0	--	LS	9.5'-12.0'	**Bedrock (Limestone)**, competant, fractured by drilling
10.0	12.0	100	0.0				*Set 6" temp. casing at 12.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-37A/ MW-37B | Project/No.: IN Creosote / IN000072.0049.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/17/10 @ 15:15 | Drilling Date/Time Completed: 2/18/10 @ 14:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 684.4 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 31.69 Feet | Hole Diameter: 8 " | Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 31.69 | Water Loss: 185 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	15:25	--	BTEX, SVOCs, Metals: As, Pb
5'-7'	Grab	15:30	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
11.83	16.8	100	85.60	9.0	0	**11.83'-12.32', Limestone Fragments**, broken by setting of temp. casing
16.83	21.83	100	94.4	9.0	55	**12.32'-13.11', Wackestone**, Lt Grey, massive, strong, unfractured
21.83	26.83	100	91.2	11.0	75	**13.11'-14.44', Mudstone**, Med-Grey-Greenish Grey, massive-mod bedding, strong
26.83	31.69	97.2	97.2	11.0	55	13.15', Styolite
						13.65', Styolite
						14.22', Styolite
						14.44'-14.63', Grainstone, Grey-Greenish Grey, massive, strong, sl fractured
						14.44'-14.52', Geode
						14.52', Fracture, semi smooth, Greenish Grey, some clay infill
						14.63'-16.75', Wackestone/Mudstone, Lt Greenish Grey-Med Grey, massive, strong, competant
						15.82'-15.94', Geode
						15.99', Fracture, rough pitted, dk. Grey, sl clay infill
						16.48'-16.75', Large geode
						16.75', Fracture, clay infill, dk greenish grey-dk grey
						16.75'-21.45', Siltstone, Dk Grey, thinly bedded, strong, sl fractured, lots of geodes
						16.83'-16.87', Weaker strength siltstone
						16.87', Fracture, clay infill, smooth
						18.19', Fracture, bedding plane, smooth
						18.44'-19.97', Geode Cluster
						21.30'-21.45', Geode Cluster
						21.45'-22.25', Grainstone, Lt-Med Grey, massive, strong
						21.61', Fracture, rough, sl clay infill
						21.66', fracture, rough, sl clay infill
						22.55'-26.52', Wackestone, Lt Greenish Grey, massive, strong, sl fractured
						24.12', Fracture, semi smooth
						24.19', Fracture, semi smooth, sl clay infill
						24.46'-24.57', Geode
						25.41'-25.47', Fracture, wackestone fragments with clay infill; possible zone of water loss

SOIL BORING / SAMPLING LOG

Boring/Well: MW-37A/ MW-37B | Project/No.: IN Creosote / IN000072.0049.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 2/17/10 @ 15:15 | Drilling Date/Time Completed: 2/18/10 @ 14:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 684.4 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 31.69 Feet | Hole Diameter: 8 " | Coring Device: HQ

Prepared By: R. Woodruff / I. Koorsen | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 31.69 | Water Loss: 185 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	15:25	--	BTEX, SVOCs, Metals: As, Pb
5'-7'	Grab	15:30	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						26.52', Fracture, contact plane
						26.52'-26.83', Siltstone w/ Clay, Dk Greenish Grey, mod strength, thinly bedded; siltstone
						fragments with clay
						26.59', Fracture, smooth, clay infill, possible zone of water loss.
						26.71', Fracture, clay infill, possible zone of water loss
						26.83'-27.22', **Packstone**, Med Greenish Grey, massive, strong
						27.22'-31.69', Interbedded Siltstone/Mudstone/Graistone, Dk-Med Grey, massive, strong
						29.67'-29.86', Large geode
						EOB @ 31.69
						Set MW-37A @ 17.0'
						Set MW-37B @ 32.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-38A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/22/10 13:58 | Drilling Date/Time Completed: 3/23/10 0:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 698.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.42 Feet | Hole Diameter: 4.0 | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.42 | Water Loss: 150 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	14:20	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	14:25	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0.0'-0.75'	**GRAVEL**
2.0	4.0	100	0.0	--	SP	0.75'-9.0'	**SANDY CLAY** w/ gravels, Reddish brown, sl. Moist, firm-hard, sl. plastic
4.0	6.0	100	0.0	--	ml/cl	9.0'-17.0'	**SILTY CLAY**, Brownish grey, trace gravels, stiff-soft, plastic-sl plastic; moist and very plastic at
6.0	8.0	100	0.0	--			10.0'; 0.25' sand seam at 16.75'
8.0	10.0	100	0.0	--		17.0'-18.0'	**WEATHERED SILTSTONE AND LIMESTONE**
10.0	12.0	100	0.0	--		18.0'-20.0'	**BEDROCK**; set temp casing at 20.0'
12.0	14.0	100	0.0	--			
14.0	16.0	100	0.0	--			
16.0	18.0	100	0.0	--			

SOIL BORING / SAMPLING LOG

Boring/Well: MW-38A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/22/10 13:58 | Drilling Date/Time Completed: 3/23/10 0:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 698.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.42 Feet | Hole Diameter: 4.0 | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.42 | Water Loss: 150 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	14:20	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	14:25	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
20.17	21.80	100	0.00	4.0	15	**20.17'-20.40' Wackestone;** med-lt grey w/ sl green, strong, competant, massive
21.80	26.69	100	80.0	10.0	0	**20.40'-22.0'; Siltstone;** dk grey, moderate strength, heavily fractured, thinly bedded
26.69	28.97	100	33.7	8.0	70	20.40', Fracture, contact
28.97	32.09	100	83.3	6.0	65	20.40'-20.68', Heavily fractured, clay infill, possible zone of water loss
						20.68', Fracture, smooth
						21.00'-21.11', Geode
						21.14'-21.58', Heavily fractured
						21.80'-22.00', Geode
						22.00'-22.09', Grainstone; dk grey, massive, strong, unfractured.
						22.00', Fracture, along geode and contact
						22.09', Fracture, contact
						22.09'-23.04', Wackestone; lt greenish grey, massive, thinly bedded, horizontal, strong, competant
						23.04'-23.17', Grainstone; dk grey, massive, strong, competant
						23.04', Fracture, contact; zone of possible water loss
						23.17', Fracture, contact
						23.17'-24.68' Wackestone/Mudstone; lt greenish grey, massive, strong, competant
						24.68'-25.29', Int. Mudstone/Wackestone; massive, strong, competant
						25.29'-25.60', Wackestone/Packstone; dk grey, massive, strong, competant
						25.60', Fracture, contact, sl clay infill
						25.60'-25.96', Siltstone; dk grey, heavily fractured, moderate strength, thinly bedded
						25.74', Fracture, bedding
						25.83', Fracture, bedding
						25.96', Fracture, contact
						25.96'-26.68', Packstone/Grainstone; med grey, massive, strong, competant, unfractured
						26.68'-27.39', Int. Siltstone/Grainstone; dk grey, moderate strength, heavily fractured, possible
						zone of water loss, clay infill along fractures
						26.68'-26.76', Fractures, clay infill
						26.89'-27.00', Fractures, clay infill

SOIL BORING / SAMPLING LOG

Boring/Well: MW-38A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/22/10 13:58 | Drilling Date/Time Completed: 3/23/10 0:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 698.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.42 Feet | Hole Diameter: 4.0 | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.42 | Water Loss: 150 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	14:20	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	14:25	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						27.19', Fracture along geode
						27.19'-27.27', Geode
						27.27', Fracture along geode
						27.39', Fracture, contact
						27.39'-28.45', Packstone; med grey, massive, strong, sl fractured
						27.49, Styolite
						28.00', Styolite
						28.08', Fracture along styolite, rough
						28.23', Fracture, clay infill, possible zone of water loss
						28.45'-28.53', Clay Interval; soft, some sands, possible zone of water loss
						28.53'-28.97', Int. Siltstone/Wackestone; grey, horrizontal bedding, strong, competant
						28.97'-30.31', Grainstone; lt blue-greenish grey, massive, strong, competant, unfractured
						29.65'-30.20', Large broken geode
						30.31'-32.09', Siltstone w/ Int. Mudstone; thinly bedded, lt greenish grey, strong, sl fractured
						30.50', Fracture along geode
						30.50'-30.75', Geode cluster
						31.33'-31.65', Geode cluster

SOIL BORING / SAMPLING LOG

Boring/Well: MW-38B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/23/10 10:49 | Drilling Date/Time Completed: 3/23/10 16:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 697.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 31.68 Feet | Hole Diameter: 4.0 | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 31.68 | Water Loss: 175 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:55	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	11:10	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
19.83	21.80	100	33.00	5.0	15	**19.83'-21.80' Siltstone;** dr grey, thinly bedded, moderate strength; sl disentegrated, highly fractured
21.80	26.78	99.9	57.8	12.0	80	19.83'-20.12', Fragments, clay infill
26.78	31.68	98.0	90.8	11.0	80	20.20', Fracture, bedding
						20.36', Fracture, bedding
						20.59', Fracture, bedding
						20.73', Fracture, bedding
						20.73'-21.16', Heavily fractured,
						21.62'-21.80', Geode cluster
						21.80'-21.93', Grainstone; dk grey, massive, strong, competant
						21.93', Fracture, contact
						21.93'-23.45' Mudstone/Wackestone; lt greenish grey, massive, strong, sl fractured, competant,
						22.16', Fracture, smooth, possible zone of water loss
						23.00', Fracture, sl clay infill, possible zone of water loss
						23.45'-24.42', Packstone/Grainstone; med grey w/ lt green, massive, straong, competant
						23.50'-23.65', Large geode
						24.42'-25.42' Int. Mudstone/Packstone; lt greenish grey, massive, strong, competant
						25.42'-26.31' Siltstone; dk grey, thinly bedded, horizontal, moderate strength
						26.31', Fracture, contact, clay infill, possible zone of water loss
						26.31'-26.78', Packstone/Grainstone; grey-bluish grey, massive, strong, competant
						26.31'-26.38', Geode
						26.78'-26.88', Siltstone; dk grey, thinly bedded, horizontal, competant, moderate strength
						26.88', Frecture, contact
						26.88'-26.97' Grainstone; dk grey, massive, strong, competant
						26.97', Fracture, contact
						26.97'-28.02' Wackestone; med grey, strong, massive, competant, moderately fractured
						27.38', Styolite
						27.33', Styolite
						27.77', Fracture, sl clay infill, possible zone of water loss

SOIL BORING / SAMPLING LOG

Boring/Well: MW-38B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/23/10 10:49 | Drilling Date/Time Completed: 3/23/10 16:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 697.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 31.68 Feet | Hole Diameter: 4.0 | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 31.68 | Water Loss: 175 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:55	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	11:10	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						27.86'-27.96', Broken fragments w/ clay infill; possible zone of water loss
						28.02'-28.60', Mudstone/Wackestone; greenish-grey, strong, massive, competant
						28.60'-29.80' Grainstone; med grey, massive, strong, competant
						29.34'-29.49', Geode
						29.80'-31.68', Siltstone; grey, thinly bedded, strong, competant
						31.00'-31.10', Geode

SOIL BORING / SAMPLING LOG

Boring/Well: MW-38C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 2

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/23/10 @ 16:40 | Drilling Date/Time Completed: 3/26/11 @ 16:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 697.4 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 65.60 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 65.60 | Water Loss: 83 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
27.46	31.95	89.9	87.50	11.0	50	**** Blank drilled from surface to 27.0'; noted bit drop ~25.5'**
31.95	34.55	100	100.0	6.0	12	
34.55	36.84	100	100.0	6.0	0	**27.46'-27.93', Wackestone/Packstone;** lt blue-grey, massive, strong, moderately fractured
36.84	42.07	100	97.7	9.0	0	27.46-27.55', Fractured by reaming
42.07	47.11	100	98.0	8.0	0	27.87', Fracture, semi rough, sand and clay infill, possible zone of water loss
47.11	52.14	100	100.0	7.0	3	27.93', Fracture, clay infill, possible zone of water loss
52.14	57.08	98.8	100.0	6.0	0	**27.93'-28.00', Clay Interval;** w/ mudstone fragments, sl odor, soft clay
57.08	62.09	100	100.0	7.0	18	28.00', Fracture, contact
62.09	65.60	100	100.0	5.0	0	**28.00'-28.45', Int. Mudstone/Siltstone/Wackestone;** lt greenish grey, thin beds, competant, strong
						28.45'-30.15', Grainstone/Packstone; lt grey-blue grey, massive, strong, competant,
						28.83', Fracture, clean, rough
						29.67, Fracture along styolite, rough
						30.15'-37.13', Int. Mudstone/Siltstone; w/ small .05' beds of Packstone, med grey, strong, massive,
						competant, unfractured

SOIL BORING / SAMPLING LOG

Boring/Well: MW-38C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 2

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/23/10 @ 16:40 | Drilling Date/Time Completed: 3/26/11 @ 16:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 697.4 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 65.60 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 65.60 | Water Loss: 83 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						32.20'-32.28', Geode cluster
						32.43'-32.73', Packstone bed
						32.45-32.60', Geode
						33.05'-33.10', Geode
						33.50'-33.70', Packstone bed
						34.75'-35.00', Geode cluster
						35.00', Fracture along geode, sl clay infill
						35.80'-35.83', Geode cluster
						37.13'-37.50', Packstone; grey, massive, strong, competant.
						37.50'-38.77', Wackestone; lt grey, massive, strong, competant
						37.60'-37.70', Weathered clay interval
						38.73', Fracture along styolite, rough
						38.77'-44.75', Int. Mudstone/Siltstone w/ small beds of Wackestone; medium bedded, strong,
						competant
						39.75'-39.82', Geode
						40.28'-40.37', Geode
						40.39', Fracture along geode
						42.60', Wackestone/Packestone bed
						44.33'-44.45', Geode cluster
						44.75'-44.84', Packestone/Grainstone; med-dk grey, massive, strong, competant
						44.84', Fracture, contact
						44.84'-45.05', Wackestone/Mudstone; lt greenish grey, sl weathered, moderate strength
						44.92', Fracture, clay infill
						45.05'-65.60', Siltstone (Borden); grey, thinly bedded, horizontal and cross beds, strong, competant,
						unfractured, pyrite and glauconite mineralization.

SOIL BORING / SAMPLING LOG

Boring/Well: MW-38D | Project/No.: IN Creosote/IN000072.0047 | Page 1 of 1

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/24/2010 15:49 | Drilling Date/Time Completed: 3/29/2010 16:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated | Water _____

Total Depth Drilled _____ Feet | Hole Diameter _____ | Coring Device: HQ

Prepared By: Randy Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth _____ | Water Loss _____ gallons | GPS Coordinates _____

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
			--	
			--	

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
26.89	32.11	91.1	--	12.0	0	**** Blank drilled from surface to 27.0'**
32.11	36.70	98	92.0	8.0	0	**26.89'-28.75', Packstone/Grainstone;** lt greenish grey, massive, strong, competant, sl fractured
36.70	41.70	100	100.0	16.0	3	26.89'-27.30', Fracture by reaming
41.70	46.53	96.6	--	14.0	0	27.30', Fracture, bedding, along geode, clay infill, possible zone of water loss
						27.30'-27.61', Geode cluster
						28.51', Styolite
						28.75'-29.36', Grainstone; blue grey, massive, strong, competant, un fractured
						28.79'-29.03', Geode
						29.36'-37.25', Int. Mudstone/Siltstone w/ small intervals of Wackestone; thin-med beds, horizontal,
						strong, competant
						30.90'-31.15', Fractures around geode
						31.47'-32.11', Lost due to clearing out of grout
						32.37', Fracture, bedding, along geode, rough, sl pitted
						35.32', Fracture, bedding, pitted surface
						37.25'-38.45', Mudstone/Wackestone; greenish grey, strong, med grained, thinly bedded, sl
						decomposed, sl disintegrated, sl fractured
						37.37'-37.43', Fracture, bedding, horizontal, pitted, partly healed, pyrite mineralization, sl clay
						infill, damp
						38.15', Styolite, tight, pyrite mineralization
						38.41'-38.45', Fracture, bedding, pitted, narrow, partly healed, pyrite mineralization, rough, wet
						38.45'-43.83', Mudstone/Siltstone; lt brownish grey, small geode inclusions, amorphous banding,
						lamications, sl calcareous, inc fossilization to 39.0'
						40.25', Fracture, bedding, narrow, mod healed, wet, cohesive sediment, clay infill, smooth
						42.25'-42.45', Grainstone interval
						43.83'-44.83', Packstone/Wackestone; lt blue grey, crinoid fragments, pyrite and glauconite
						mineralization, strong, massive, competant
						44.83'-46.53', Siltstone (Borden), grey, thinly bedded, horizontal and cross beds, strong, competant,
						mineralization
						44.83'-44.88', Fracture, contact, horizontal, pitted, decomposed, partly healed, pyrite
						mineralization, wet

SOIL BORING / SAMPLING LOG

Boring/Well: MW-39A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/30/10 @ 14:00 | Drilling Date/Time Completed: 3/31/10 @ 13:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: feet [ ] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 37.9 Feet | Hole Diameter: 4.0 | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 37.88 | Water Loss: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:00	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	15:08	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0.0'-0.5'	**Asphalt**
2.0	4.0	100	0.0	--	CL	0.5'-1.5'	**Silty Clay w/ gravels,** lt brown, dry, soft, non plastic
4.0	6.0	100	0.0	--	CL	1.5'-10.0'	**Silty Clay w/ sands and gravels,** sl moist, sl plastic, soft-stiff
6.0	8.0	100	0.0	--		10.0'-12.0'	**Bedrock,** weathered limestone; set temp casing at 12.0'
8.0	10.0	100	1.3	--			
10.0	12.0	100	0.0	--			

SOIL BORING / SAMPLING LOG

Boring/Well: MW-39A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/30/10 @ 14:00 | Drilling Date/Time Completed: 3/31/10 @ 13:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: _____ feet ☐ Surveyed ☐ Estimated | Water: _____

Total Depth Drilled: 37.88 Feet | Hole Diameter: _____ | Coring Device: HQ

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 37.88 | Water Loss: _____ gallons | GPS Coordinates: _____

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:00	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	15:08	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
12.00	16.63	100	91	11.0	71	**12.0'-15.92', Mudstone/Wackestone;** strong, lt greenish grey, amorphous banding, competant,
16.63	21.50	96	87	7.0	60	massive, fine-med grained, fresh, sl fractured
21.50	24.25	68	16	20.0	0	12.22', Styolite
24.25	25.50	100	98	4.0	0	rough,
26.50	31.50	100	96	11.0	20	wet
31.50	36.50	100	99	10.0	8	13.94'-14.0', Fracture along styolite, partly healed, pyrite and glauconite mineralization, wet
36.50	37.88	100	78	4.0	0	15.71'-15.92', Geode
						15.92'-19.83', Siltstone; dk grey, strong, fine, laminated, amorphous banding, geode inclusions,
						fresh,
						competant
						15.92'-16.0', Fracture along geode, joint/bedding
						17.56'-17.64', Geode
						18.00'-18.16', Geode
						19.54'-19.73', Possible clay interval; possibly washed out; possible zone of water loss
						19.83'-24.25', Wackestone/Packstone; strong, fine, massive, fresh, competant, large geodes,
						laminated, amorphous banding
						19.99'-20.03', Fracture zone around geode, very narrow, partly healed, sl decomposed, pyrite
						mineralization, sl clay infill, rough, wet
						21.33'-21.50', Geode
						21.50'-24.25', Core destroyed due to carbide bits from 6" temp casing breaking and entering into
						the 2" diamond core barrel.
						24.25'-24.48', Siltstone; strong, dk grey, fine, sl calcareous, thinly bedded, laminated, int Mudstone,
						fresh
						24.48'-27.63', Mudstone/Wackestone; strong, lt greenish grey to blue grey, fine, thinly laminated,
						fresh, sl fractured
						25.05', Fracture, bedding, extremely narrow, pyrite mineralization
						25.74'-25.76', Fracture, bedding, very norrow, partly headed, minor cohesive clay infill, pyrite
						mineralization, rough, damp
						27.60', Fracture, contact, very narrow, partly healed, minor clay infill, ungulating surface, damp

SOIL BORING / SAMPLING LOG

Boring/Well: MW-39A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/30/10 @ 14:00 | Drilling Date/Time Completed: 3/31/10 @ 13:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: _____ feet ☐ Surveyed ☐ Estimated | Water: _____

Total Depth Drilled: 37.88 Feet | Hole Diameter: _____ | Coring Device: HQ

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 37.88 | Water Loss: gallons | GPS Coordinates: _____

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:00	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	15:08	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						27.63'-35.32', Siltstone; calcareous, strong, greenish grey, fine, thinly laminated, amorphous banding
						trace geode inclusions, competant, moderately fractured
						27.92', Fracture along geode, bedding, narrow, rough, dry
						29.10'-29.11', Fracture along geode, bedding, partly healed, pyrite mineralization, rough, dry
						29.26', Fracure along geode, bedding, partly healed, pyrite mineralization, rough, wet
						29.71'-31.27', Fracture, sub-vertical (75 degrees), joint, narrow, partly healed, calcite
						mineralization, smooth, wet, DNAPL in fracture
						33.20', Fracture along geode, bedding, rough, dry
						34.52'-34.54', Fracture along geode, bedding, narrow, partly healed, minor cohesive clay infill,
						damp, undulating surface
						35.25'-35.32', Fracture zone along contact, narrow, partly healed, minor clay infill, pyrite
						mineralization, rough, undulating surface, continuous seepage
						35.32'-37.88', Wackestone/Packstone; lt grey, strong, fresh, fine, amorphous banding, competant
						slightly fractured
						35.76', Styolite, trace pyrite infilling
						36.96', Fracture along styolite, bedding, partly healed, pyrite mineralization, undulating surface,
						wet
						37.60', Fracture, extremely narrow, rough, minor calcite mineralization, dry
						37.72', Fracture, extremely narrow, rough, minor calcite mineralization, dry

SOIL BORING / SAMPLING LOG

Boring/Well: MW-39B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/30/10 @ 8:30 | Drilling Date/Time Completed: 3/30/10 @ 13:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: feet | ☐ Surveyed ☐ Estimated | Water:

Total Depth Drilled: 26.4 Feet | Hole Diameter: 4.0 | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 26.42 | Water Loss: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:10	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	9:10	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0.0-0.5'	**Asphalt**
2.0	4.0	100	0.0	--	CL	0.5'-1.5'	**Silty Clay w/ Gravels,** dry, soft, non plastic, gravels
4.0	6.0	100	0.0	--	CL	1.5'-10.0'	**Silty Clay w/ sands and gravels,** sl moist, sl plastic, soft-stiff; dec moisture and stiffness at 8.5'
6.0	8.0	100	0.0	--		10.0'-12.0'	**Bedrock;** set temp casing at 12.0'
8.0	10.0	100	0.0	--			
10.0	12.0	100	0.0	--			

SOIL BORING / SAMPLING LOG

Boring/Well: MW-39B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/30/10 @ 8:30 | Drilling Date/Time Completed: 3/30/10 @ 13:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated | Water: _____

Total Depth Drilled _____ Feet | Hole Diameter _____ | Coring Device: HQ

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth _____ | Water Loss _____ gallons | GPS Coordinates _____

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:10	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	9:10	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
11.80	16.80	100	88.00	10.0	4	11.80'-12.38', Core destroyed to overdrilling w/ temp casing
16.80	21.80	100	96.0	10.0	39	**12.38'-12.63', Mudstone/Siltstone;** lt greenish grey, laminated, sl calcareous
21.80	26.71	100	100.0	17.0	74	**12.63'-15.45', Wackestone/Packstone;** lt greenish grey, strong, competent, glauconite mineralization
26.71	29.20	100	100.0	7.0	36	12.73'-12.86', Geode cluster
						12.88-12.99', Geode cluster
						13.46'-13.50', Fracture, bedding, horizontal, narrow, partly healed, oxidation staining
						13.99', Fracture along styolite, stepped, sl clay infill, possible zone of water loss, wet
						15.45'-19.18', Siltstone; dk grey, thinly laminated, amorphous banding, tr geode inclusions
						15.45'-15.48', Fracture, contact, horizontal, pitted, decomposed, sl clay intill, wet
						19.05'-19.15', Fracture, bedding, narrow, horizontal, sl clay infill, moderately healed, decomposed,
						undulating surface, possible zone of water loss
						19.18'-19.50', Packstone/Grainstone; strong, massive, competent
						19.50'-20.72', Mudstone/Wackestone; lt greenish grey, massive, strong, competent, amorphous
						banding, pyrite mineralization
						19.50'-19.56', Fracture, bedding, joint, narrow, deconposed, cohesive clay infill, rough, wet,
						possible zone of water loss.
						20.72.'-23.20', Wackestone/Packstone; fresh, competent, glauconite, lt greenish grey-blue grey
						20.89'-20.91', Fracture along styolite, narrow, partly healed, sl clay infill, pyrite infill, wet, stepped
						22.78'-22.79', Fracture, bedding, horizontal, very narrow, partly healed, decomposed, pyrite, clay
						infill, stepped, damp
						23.20'-24.50', Siltstone/Mudstone; med-dk grey, strong, fine, laminated, amorphous banding, fresh,
						competent
						23.20'-23.23', Fracture, bedding, horizontal, narrow, pitted, moderately healed, deconposed,
						cohesive clay infill, pyrite, wet
						23.43'-23.63', Clay interval, dk grey, cohesive, med soft, plastic, pliable, wet
						24.49'-24.50', Fracture, bedding, horizontal, narrow, moderately healed, decomposed, sl clay infill,
						damp

SOIL BORING / SAMPLING LOG

Boring/Well: MW-39B | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 3/30/10 @ 8:30 | Drilling Date/Time Completed: 3/30/10 @ 13:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated | Water _____

Total Depth Drilled _____ Feet | Hole Diameter _____ | Coring Device: HQ

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth _____ | Water Loss: gallons | GPS Coordinates _____

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:10	--	BTEX, SVOCs, Metals: As, Pb
8'-10'	Grab	9:10	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						24.50'-29.53', Mudstone/Wackestone; strong, lt grey, fine, massive, fresh, competent, pyrite,
						amorphous banding, dissolution features
						25.70', Fracture, bedding, narrow
						25.62', Styolite
						25.72'-25.90', Clay interval, med-stiff, plastic, pliable, cohesive, wet
						27.00'-27.74', Inc. fossilization, Packstone/Grainstone
						27.74', Fracture, bedding, narrow, pyrite, dry

SOIL BORING / SAMPLING LOG

Boring/Well: MW-40A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 4/2/10 @ 9:45 | Drilling Date/Time Completed: 4/5/10 @ 16:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 692.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.42 Feet | Hole Diameter: 4.0 | Coring Device: 5.0' coring barrel

Prepared By: TP / MG | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.42 | Water Loss: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab		--	BTEX, SVOCs, Metals: As, Pb
2 - 4'	Grab		--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth From - To		Sample/Core Description
						0.0-1.0'	**Sandy Silty Clay,** dk brown, moist, sticky, mixed w/ black/grey fil;, many roots, cinders at 1.0'
						1.0'-2.0'	**Silty Sand,** reddish brown, med-coarse, wet, loose, few gravels/cobbles, cinders at 2.0'
						2.0'-4.5'	**Silty Clay,** greyish-lt brown, very moist, sticky, few sands, trace gravels,
						4.5'-6.0'	**Sands and Gravels,** reddish brown, compressed, wet, loose, med-coarse
						6.0'-8.0'	**Bedrock;** set temp casing at 8.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-40A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 4/2/10 @ 9:45 | Drilling Date/Time Completed: 4/5/10 @ 16:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 692.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: Feet | Hole Diameter: | Coring Device: HQ

Prepared By: TP / MG | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: | Water Loss: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab		--	BTEX, SVOCs, Metals: As, Pb
2 - 4'	Grab		--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
8.38	11.3	100	73.00	9.0	17	**8.38'- 15.40', Wackestone/Packstone;** lt grey, strong, competent, massive, fresh, sl fractured
11.25	16.37	100	96.0	9.0	0	8.65'-8.67', Fracture along styolite, partly healed, narrow, cohesive clay infill, rough, wet
17.00	21.35	100	91.3	16.0	17	8.89', Fracture, bedding, narrow, pitted, partly healed, clean, stepped, rough, damp
21.35	26.17	96.4	97.9	16.0	13	9.41', Fracture, bedding, narrow, not healed, DNAPL staining, rough, stepped, damp
26.17	31.23	100	100.0	9.0	33	9.55', Fracture, bedding, narrow, not healed, DNAPL staining, rough, stepped, wet
31.23	36.10	99.9	100.0	8.0	38	10.17'-10.21', Fracture along styolite, bedding, pitted, narrow, moderately healed, decomposed,
36.10	41.16	99.9	100.00	7.0	12	cohesive clay infill, stepped, rough, wet
41.16	46.09	98.6	100.00	8.0	22	11.15', Fracture along styolite, beddig, tight, pitted, partly healed, sl decomposed, rough, stepped,
						wet
						11.79'-11.81', Fracture along styolite, bedding/joint, narrow, not healed, rough, stepped, damp
						12.52', Fracture, bedding , narrow, partly healed, sl clay infill, stepped, wet
						13.87'-13.99', Geode
						14.12'-14.20', Fracture zone, narrow, mod healed, stepped, cohesive clay infill
						15.40'-21.72', Siltstone; strong, greenish grey-dk greenish grey, laminated, amorphous banding
						competent
						16.37'-17.00', Lost in setting of temp casing
						18.48'-18.58', Geode
						19.00'-19.08', Geode
						19.37'-19.41', Geode
						19.71'-19.77', Geode
						19.86'-19.89', Geode
						20.26'-20.43', Geode
						21.72'-23.95', Packstone; lt-med grey, massive, strong, competent, sl fractured
						21.75', Styolite
						22.29', Styolite
						22.44', Styolite
						22.80', Styolite
						23.67', Fracture, bedding, clay infill, possible zone of water loss

SOIL BORING / SAMPLING LOG

Boring/Well: MW-40A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 4/2/10 @ 9:45 | Drilling Date/Time Completed: 4/5/10 @ 16:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 692.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: Feet | Hole Diameter: | Coring Device: HQ

Prepared By: TP / MG | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: | Water Loss: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab		--	BTEX, SVOCs, Metals: As, Pb
2 - 4'	Grab		--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						23.95'-25.30', Grainstone; lt grey-lt greenish grey, strong, massive, competent, sl fractured,
						glauconite
						25.30'-25.45', Weathered Siltstone; greenish-dk grey, moderate strength
						25.30', Fracture, clay infill, possible zone of water loss
						25.40', Fracture, clay infill, possible zone of water loss
						25.45'-29.45', Grainstone; lt grey-grey, strong, massive, competant
						25.46', Styolite
						25.52', Styolite
						25.63', Styolite
						25.73', Styolite
						26.49', Styolite
						26.60'-26.80, Styolite zone
						26.87', Styolite
						27.41', Styolite
						28.10', Styolite
						28.65', Styolite
						28.78', Styolite
						28.87', Fracture, clay infill, possible zone of water loss
						29.45'-31.53', Siltstone; lt grey-grey, thinly bedded, strong, competent
						31.53'-37.52'-, Int. Siltstone/Mudstone/Packstone; thinner Packstone beds, strong, massive,
						competent
						33.90'-34.09', Geode cluster
						37.52'-37.59', Grainstone; dk blue-grey, massive, strong, competent
						37.59', Fracture, contact, sl clay infill, smooth, possible zone of water loss
						37.59'-39.00', Int. Siltstone/Mudstone/Wackestone; greenish grey, massive, strong, competent,
						glauconite
						39.00', Healed fracture

SOIL BORING / SAMPLING LOG

Boring/Well: MW-40A | Project/No.: IN Creosote / IN000072.0047.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 4/2/10 @ 9:45 | Drilling Date/Time Completed: 4/5/10 @ 16:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 692.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: Feet | Hole Diameter: | Coring Device: HQ

Prepared By: TP / MG | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: | Water Loss: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab		--	BTEX, SVOCs, Metals: As, Pb
2 - 4'	Grab		--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						39.00'-40'85', Wackestone; lt grey, massive, strong, competent
						39.90', Fracture, partly healed, sl clay infill, possible zone of water loss
						40.85'-41.16', Packstone/Grainstone; blue-grey, strong, massive, competent
						41.16'-44.58', Int. Siltstone/Mudstone/Packstone; med grey, massive, strong, competent
						44.58', Fracture, contact, sl clay infill, possible zone of water loss
						44.58'-46.09', Siltstone (Borden); dk greenish grey-dk grey, moderate-strong, thinly bedded,
						competent.

SOIL BORING / SAMPLING LOG

Boring/Well: MW-40B/C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 4/6/10 @ 745 | Drilling Date/Time Completed: 4/7/10 @ 748

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 692.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.87 Feet | Hole Diameter: 8" | Coring Device: 5.0' coring barrel

Prepared By: RW / TP | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.87 | Water Loss: 0 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX / PAH / Metals
2 - 4'	grab		--	BTEX / PAH / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0.0'0.5'	**Silty Clay-Clayey Silt,** lt reddish brown, moist, sticky, many roots, organic matter
2.0	4.0	100	0.0	--		0.5'-1.5'	**Coarse Sands and Gravels,** black, mixed with cinders, wet, loose
4.0	6.0	100	0.0	--		1.5'-5.5'	**Silty Clay-Clayey Silt,** lt grey-lt brown, very moist, tr organic matter; 3.0'-5.5' inc in moisture
							content, sticky w/ grey mottling
						5.5'-6.0'	**Crushed limestone** fragments w/ sandy silty clays
						6.0'-8.0'	**Bedrock;** set temp casing at 8.0'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-40B/C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 4/6/10 @ 745 | Drilling Date/Time Completed: 4/7/10 @ 748

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 692.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.87 Feet | Hole Diameter: 8" | Coring Device: 5.0' coring barrel

Prepared By: RW / TP | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.87 | Water Loss: 0 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX / PAH / Metals
2 - 4'	grab		--	BTEX / PAH / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
8.17	11.50	100	96.10	8.0	0	**8.17'-15.20', Int. Mudstone/Packstone/Grainstone;** lt grey-lt greenish grey, massive, strong,
11.50	16.46	99.2	100.0	8.0	0	competent, moderately fractured; odor in return water, sheen
16.46	21.50	100	91.6	12.0	0	8.30', Fracture, clean
21.50	26.67	100	--	10.0	0	8.73', Fracture, clay infill, sl odor, possible zone of water loss.
						9.43', Fracture, clay infill, sl odor, possible zone of water loss
						10.00', Styolite
						10.06', Fracture along styolite, DNAPL, odor, clay infill, possible zone of water loss
						10.60', Fracture along styolite, DNAPL, odor, clay infill, possible zone of water loss
						11.05', Fracture along styolite, DNAPL, odor clay infill, possible zone of water loss
						11.50', Fracture, odor, sheen, DNAPL flakes
						13.50'-13.80', Geode
						15.20'-17.35', Siltstone (Ramp Creek); med-dk grey, strong, competent, thinly bedded, sl fractured
						16.00'-16.05', Geode cluster
						16.05', Fracture, clay infill, possible zone of water loss
						16.46'-16.75', Fractured by reaming
						17.35'-17.52', Grainstone; dk grey-dk blue grey, massive, strong, competent
						17.40', Fracture, sl clay infill
						17.52', Fracture, contact, sl clay infill
						17.52'-21.45', Siltstone; dk grey-grey, strong, competent, thinly bedded
						18.38'-18.52', Geode cluster
						18.50', Fracture along geode, clay infill
						19.20'-19.33', Geode
						20.69'-20.90', Geode cluster
						21.45'-25.02', Int. Grainstone/Packstone; dk grey, massive, strong, competent
						23.57', Fracture, clean
						24.81', Fracture, clean

SOIL BORING / SAMPLING LOG

Boring/Well: MW-40B/C | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 4/6/10 @ 745 | Drilling Date/Time Completed: 4/7/10 @ 748

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 692.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.87 Feet | Hole Diameter: 8" | Coring Device: 5.0' coring barrel

Prepared By: RW / TP | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.87 | Water Loss: 0 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX / PAH / Metals
2 - 4'	grab		--	BTEX / PAH / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						25.02'-25.39', Soft Clay w/ weathered Siltstone; dk greenish grey, moderate-weak strength
						siltstone, soft clay
						25.39'-26.87', Grainstone/Packstone; med-lt grey, massive, strong, competent
						25.54', Fracture, clay infill
						25.69', Fracture, sl clay infill

SOIL BORING / SAMPLING LOG

Boring/Well: MW-41A | Project/No.: INCreosote / IN000072.0056.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/2/10 @ 13:10 | Drilling Date/Time Completed: 11/3/10 @ 9:55

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 699.5 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 33.9 Feet | Hole Diameter: 4 1/2" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 33.86 | Water Loss: 142 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0' - 2'	Grab	14:50	--	BTEX / PAH / Metals
12' - 14'	Grab	15:10	--	BTEX / PAH / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.00			0 - 0.2	**Topsoil**
2.00	4.00	100	0.0			0.2 - 9.0	**Silty Clay,** reddish brown, oxidation staining, trace gravels, dry, friable; dark red mottling, stiff;
4.00	6.00	100	0.9				gravels at 3.0'; becomes plastic at 5.0'; limestone fragments at 8.0'
6.00	8.00	100	0.4			9.0 - 10.0	**Silty Sandy Clay w/ gravels,** grey, cinders, slightly moist, soft, plastic
8.00	10.00	100	0.5			10.0 - 11.0	**Silty Clay,** grey, trace gravels, stiff, slightly plastic, dry
10.00	12.00	100	0.5			11.0 - 13.5	**Silty Clay w/ gravels,** brown, oxidation staining, stiff
12.00	14.00	100	0.00			13.5 - 14.0	**Weathered Bedrock,** rock fragments and clay
						14.0 - 16.5	**Bedrock,** void noted by driller from 15.5'-16.0'; push temp. casing to 16.5'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-41A | Project/No.: INCreosote / IN000072.0056.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/2/10 @ 13:10 | Drilling Date/Time Completed: 11/3/10 @ 9:55

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 699.5 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 33.86 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 33.86 | Water Loss: 142 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0' - 2'	Grab	14:50	--	BTEX / PAH / Metals
12' - 14'	Grab	15:10	--	BTEX / PAH / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
17.02	21.00	100	93.50	15.0	21	**17.02-18.25, Siltstone,** dark grey, geodes present, machanically broken due to reaming
21.00	25.68	93.6	77.50	18.0	50	18.13, fracture, along geode
25.68	30.68	100.00	97.9	14.0	38	18.13-18.25, geode cluster
30.68	33.85	100	100.00	5.0	33	18.25, beddign plane fracture, along geode, partly healed, slight sand and clay infill
						18.25-20.28, Grainstone/Packstone, light bluish grey, fossiliferous, crinoids, styolites, geodes,
						medium bedded, slightly disintegrated, moderately fractured
						18.78, fracture, along styolite, pyrite, trace sand infill
						19.32-19.35, fracture, along styolite, trace pyrite
						19.35-19.58, increased fossilization
						19.58, styolite
						19.87, styolite
						20.28, bedding plane fracture, along styolite, trace pyrite, trace sand infill
						20.28-21.21, Wackestone, light grey, crinoids, styolites, moderately fractured
						20.50-20.66, fracture along styolite, moderately healed, clay infill
						21.21, bedding plane fracture, trace pyrite
						21.21-22.65, Packstone/Grainstone, light grey, crinoids, glauconite, massive, slightly fractured
						22.33-22.36, fracture along styolite, glauconite, trace pyrite
						22.58-22.59, fracture, along styolite, glauconite, trace pyrite
						22.65, bedding plane fracture, clay infill
						22.65-24.27, Siltstone, dark grey, mechanically broken, horizontal bedding
						24.27-25.38, Wackestone, medium grey, crinoids, styolites, massive, competant
						24.27-24.32, abuntant fossils
						25.17-25.20, fracture, along styolite, brachiopods
						25.35-25.52, Siltstone, dark grey, horizontal bedding
						25.38-25.45, clay and mud, possible zone of water loss
						25.52, bedding plane fracture, moderately healed, clay infill, possible zone of water loss

ROCK CORING / SAMPLING LOG

Boring/Well: MW-41A | Project/No.: INCreosote / IN000072.0056.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/2/10 @ 13:10 | Drilling Date/Time Completed: 11/3/10 @ 9:55

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 699.5 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 33.86 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 33.86 | Water Loss: 142 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0' - 2'	Grab	14:50	--	BTEX / PAH / Metals
12' - 14'	Grab	15:10	--	BTEX / PAH / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						25.52-27.69, Packstone/Grainstone, Medium grey, fossiliferous, styolites, crinoids, geodes
						26.58-26.59, fracture
						27.52, geode
						27.69, bedding plane fracture
						27.69-29.62, Wackestone, dark grey, massive, competant, geodes
						28.16-28.18, geode
						29.62-30.92, Packstone/Grainstone, light grey, crinoids, styolites, geodes, massive
						30.55, fracture along geode
						30.68, Geode
						30.92-33.86, Siltstone w/ int. Wackestone, geodes, massive, competant, moderately fractured.
						31.35-31.36, fracture, along geode
						32.13-32.14, fracture, along geode
						32.13-32.24, geode
						32.48-32.52, geode
						32.78-32.81, geode
						32.78-32.97, geode
						32.89-32.91, geode
						End

SOIL BORING / SAMPLING LOG

Boring/Well: MW-42A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/3/10 @ 12:40 | Drilling Date/Time Completed: 11/4/10 @ 14:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 696.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.9 Feet | Hole Diameter: 4 1/2" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 35.9 | Water Loss: 153 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0' - 2'	Grab	10:55	--	BTEX / PAH / Metals
8' - 10'	Grab	13:35	--	BTEX / PAH / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0			0 - 0.4	**Asphalt**
2.0	4.0	100	0.0			0.4 - 0.8	**Gravels**
4.0	5.0	100	0.0			0.8 - 2.5	**Silty Clay,** brown, gravels, dark red mottling, dry, slightly plastic
5.0	6.0	100	2.2			2.5 - 3.0	**Silty Clay,** Greyish brown, some sands, trace gravels, organics, stiff, slightly plastic
6.0	8.0	100	2.1			3.0 - 10.0	**Silty Clay,** brownish red, trace gravels, dry, stiff; light brown and grey mottling at 9.0'
8.0	10.0	100	0.5			10.0-12.0	**Bedrock,** push temp 6" dia. casing to 12.0'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-42A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/3/10 @ 12:40 | Drilling Date/Time Completed: 11/4/10 @ 14:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 696.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.90 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.90 | Water Loss: 153 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0' - 2'	Grab	10:55	--	BTEX / PAH / Metals
8' - 10'	Grab	13:35	--	BTEX / PAH / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
12.46'	15.30'	100	63.90	18.0	0	**12.46-13.89, Wackestone,** light grey, slightly fractured, styolites, trace crinoids
15.30'	16.54'	100	66.0	3.0	10	12.46-12.90, mechanically broken due to reaming
16.54'	21.54'	100	80.0	16.0	65	13.08-13.11, fracture, along styolite, discoloration, trace sands, rough
21.54'	25.97'	100	--	14.0	35	13.46-13.62, styolite
25.97'	30.90'	100	89.0	17.0	29	13.89-13.96, bedding plane fracture, rough, staining, trace sands
30.90'	35.90'	100	96.6	14.0	14	**13.96-14.90, Siltstone,** dark grey, laminated
						14.43-14.46, fracture, some clay and sand infill
						14.72, fracture, along geode, clay infill
						14.90-15.30, Packstone/Grainstone, light grey, crinoids, small geodes, glauconite
						15.30-17.23, Int. Siltstone and Packstone, gark greenish grey to light greenish grey, highly
						fractured, crinoids, brachiopods
						15.30-15.75, vertical fracture, geodes, glauconite, pyrite
						16.10-16.11, fracture, pyrite, glauconite, rough
						17.23-17.52, Mudstone/Wackestone, light greenish grey, unfractured, pyrite
						17.52, fracture, bedding plane, sand and caly infill, moist; possible zone of water loss
						17.52-21.08, Siltstone, dark grey, horizontal bedding, geodes, laminated, pyrite, moderately fractured
						17.57, fracture, sand and clay infill, possible zone of water loss
						17.80, fracture, along geode
						17.80-18.00, geodes
						18.00, fracture, along geode, slight clay infill
						20.45, fracture, along geode
						20.45-20.54, geode
						20.54, fracture, along geode
						20.88, fracture, along geode
						20.88-21.08, geodes
						21.08, fracture, along geodes, bedding plane

ROCK CORING / SAMPLING LOG

Boring/Well: MW-42A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/3/10 @ 12:40 | Drilling Date/Time Completed: 11/4/10 @ 14:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 696.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.90 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.90 | Water Loss: 153 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0' - 2'	Grab	10:55	--	BTEX / PAH / Metals
8' - 10'	Grab	13:35	--	BTEX / PAH / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						21.08-24.67, Packstone/Grainstone, medium grey to medium bluish grey, massive, crinoids,
						competant
						21.20, fracture, partly healed, smooth
						22.34, fracture, along styolite
						22.93, fracture, along styolite, possible zone of water loss
						23.01, styolite
						24.25, fracture, along styolite
						24.67, bedding plane fracture, smooth, slight clay infill
						24.67-25.75, Siltstone, dark grey, horizontal bedding, laminated, geodes, moderately fracctured
						24.79-24.84, weathered siltstone, fractured, mostly headed, clay infill
						25.36-25.39, fracture, rough, geode
						25.75-25.97, Lost due to reaming to 26.0'
						25.97-26.34, Mechanically broken due to reaming
						26.34-28.56, Packstone/Grainstone, grey, medium bedded, moderately fractured, crinoids, styolites,
						geodes
						26.34-26.40, styolite
						26.87, fracture, narrow, slight clay infill
						27.60, fracture, norrow, slight clay infill
						27.86, increasing fossilization
						28.24-28.26, fracture, clean, possible zone of water loss
						28.36-28.38, fracture, clean, possible zone of water loss
						28.41-28.42, fracture, clean, possible zone of water loss
						28.47-28.49, fracture, clean, possible zone of water loss
						28.56-35.90, Siltstone w/ Int. Wackestone, dark grey, moderately fractured, horizontally banded
						28.56-28.76, geode
						28.78, fracture, very narrow, undulating, some clay infill
						29.42-29.44, fracture, very narrow, some clay infill

ROCK CORING / SAMPLING LOG

Boring/Well: MW-42A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/3/10 @ 12:40 | Drilling Date/Time Completed: 11/4/10 @ 14:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 696.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.90 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.90 | Water Loss: 153 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0' - 2'	Grab	10:55	--	BTEX / PAH / Metals
8' - 10'	Grab	13:35	--	BTEX / PAH / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						30.22, fracture, very narrow, some clay infill
						30.31-30.39, geode
						30.97-31.46, **Packstone** interval
						31.09-31.10, fracture, very norrow, possible zone of water loss
						31.98-32.00, fracture, along geode, smooth, slight clay infill
						32.92-32.93, fracture, along geode, smooth, slight clay infill
						33.15-33.16, fracture, along geode, smooth, slight clay infill
						34.00, fracture, along geode, smooth, slight clay infill
						35.86-35.90, geode
						End

SOIL BORING / SAMPLING LOG

Boring/Well: MW-42B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/3/2010 11/5/10 @ 8:14 | Drilling Date/Time Completed: 11/8/10 @ 11:20

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 696.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 46.0 Feet | Hole Diameter: 4 1/2" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 46.02 | Water Loss: 111 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	11:00	--	BTEX/PAH/Metals
8'-10'	Grab	8:30	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0			0 - 0.4	**Asphalt**
2.0	4.0	100	0.0			0.4 - 0.8	**Gravels**
4.0	5.0	100	0.0			0.8 - 2.5	**Silty Clay,** brown, gravels, dark reddish motling, dry, slightly plastic, stiff
5.0	6.0	100	0.6			2.5 - 3.0	**Silty Clay,** greyish brown, some sands, trace gravels, organics, stiff, slightly plastic
6.0	8.0	100	0.7			3.0 - 10.0	**Silty Clay,** reddish brown, trace gravels, dry stiff; trace organics, light brown and light grey mottling
8.0	10.0	100	0.0			10.0 - 12.0	**Bedrock,** push temp 6" dia. Casing to 12.0'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-42B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/5/10 @ 8:14 | Drilling Date/Time Completed: 11/8/10 @ 11:20

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 696.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 46.02 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 46.02 | Water Loss: 111 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	11:00	--	BTEX/PAH/Metals
8'-10'	Grab	8:30	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
12.63'	15.95	100	100.00	15.0	13	**12.63-13.56, Packstone/Wackestone,** light grey, thickly bedded, fresh, crinoids, styolites
15.95	17.44	100	55.0	6.0	18	13.56, bedding plane fracture, smooth, tight\
17.44	21.48	100	72.0	14.0	22	**13.56-14.94, Siltstone,** dark bluish grey, horizontalbanding, geodes, fractured
21.48	26.15	9307	76.7	18.0	34	14.41-14.44, fracture, along geode, some clay infill
26.76	31.10	100	100.0	14.0	12	14.44-14.64, geode
31.10	36.18	100	100.0	14.0	0	14.94, bedding plane fracture, extremely narrow, some clay infill, trace sand, slight staining
36.18	41.13	100	100.00	20.0	0	**14.94-16.66, Packstone/Wackestone,** light grey, moderately fractured, crinoids, geodes
41.13	46.02	97.8	100.00	16.0	12	15.44-15.56, geode
						15.58, fracture, along geode, very narrow, rough, fresh
						16.04-16.92, vertical fracture, some sand and caly infill
						16.66-20.70, Siltstone, dark bluish grey, geodes, horizontal banding, fractured
						16.97-17.44, **clay interval**, wet, highly plastic, very soft
						18.36, fracture, slight clay infill, smooth, very narrow
						18.46, fracture, along geode, smooth, very narrow
						19.30, fracture, very narrow, smooth
						19.56, fracture, along geode, smooth, very narrow
						20.20, fracture, very narrow, smooth, wet, clay infill
						20.70, bedding plane fracture, along geode, rough, narrow, clay infill
						20.70-23.62, Packstone/Grainstone, dark grey, fractured, staining, dissolution crinoids
						20.70-21.10, geode
						20.87, fracture, in geode, narrow, rough
						21.00, pyrite band
						21.14, fracture, along geode, narrow, rough, staining
						21.57, bedding plane fracture, rough; decreasing fossilization after
						22.54, fracture, rough, along styolite
						22.78-22.86, bluish grey fossiliferous inclusion
						23.11, fracture, narrow, slight clay infill

ROCK CORING / SAMPLING LOG

Boring/Well: MW-42B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/5/10 @ 8:14 | Drilling Date/Time Completed: 11/8/10 @ 11:20

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 696.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 46.02 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 46.02 | Water Loss: 111 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	11:00	--	BTEX/PAH/Metals
8'-10'	Grab	8:30	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						23.38, fracture, very narrow, clay infill, rough
						23.42, fracture, narrow, rough, slight clay infill
						23.57, fracture, narrow, rough, clay infill
						23.62-24.79, Siltstone w/ Int. Grainstone/Packstone, dark grey to light grey, fractured, geodes,
						clay, horizontal banding
						23.79-23.88, clay interval, highle plastic, soft, wet
						24.05, fracture, along geode
						24.42, small geode
						24.47-24.62, bluish grey fossiliferous band
						24.79-28.80, Packstone/Grainstone, grey, styolites, crinoids, fractured, staining,
						24.92, fracture, along styolite
						26.15-26.76, lost due to reaming/setting of temp casing
						27.52-27.59, geode
						27.87, fracture, tight
						28.80-36.60, Siltstone w/ Int. Wackestone, massive, horizontal banding, geodes, dark grey,
						slightly fractured
						30.43, fracture, along geode, slight clay infill, slight staining
						30.43-30.52, geode layer
						31.17-31.59, Packstone, light grey, crinoids
						32.25-32.43, geode
						33.22-33.25, geode
						36.60, bedding plane fracture, narrow, rough, glauconite, slight clay infill
						36.60-41.00, Packstone/Wackestone, grey, massive, moderately fractured, crinoids, styolites
						37.12, fracture, along styolite
						37.88, fracture, along styolite
						37.88-38.02, styolite
						39.01, fracture, rough, pyrite

ROCK CORING / SAMPLING LOG

Boring/Well: MW-42B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/5/10 @ 8:14 | Drilling Date/Time Completed: 11/8/10 @ 11:20

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 696.7 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 46.02 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 46.02 | Water Loss: 111 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	11:00	--	BTEX/PAH/Metals
8'-10'	Grab	8:30	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						39.36, styolite
						40.28, fracture, very narrow, smooth
						40.57, fracture, very narrow, smooth
						41.00-43.88, Siltstone w/ Int. Wackestone, dark grey, massive, slightly fractured, horizontal banding
						geodes
						41.22-41.28, geode
						41.61-41.66, geode
						42.35-42.41, geode
						42.74-42.79, geode
						42.80, fracture, along geode, narrow, smooth
						42.92-42.95, geode
						43.85, fracture at geode
						43.85-43.88, geode
						43.88-46.02, Siltstone (Borden), dark grey, glauconite, horizontal bedding, thinly bedded.
						End

SOIL BORING / SAMPLING LOG

Boring/Well: MW-43A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/8/10 @ 13:15 | Drilling Date/Time Completed: 11/9/10 @ 10:20

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 688.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.7 Feet | Hole Diameter: 4.0 | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.74 | Water Loss: 55 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	8:10	--	BTEX/PAH/Metals
2'-4'	Grab	8:15	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0			0 - 3.5	**Clayey Sands w/ some Silts and Gravels,** loose, dry; trace organics and debris; friable
2.0	4.5	100	0.0			3.5 - 3.75	**Limestone Fragments**
						3.75 - 4.5	**Silty Clay w/ Organics,** dark brown to brown, hard, friable, dry; oxidation staining, brown and grey
							mottling
						4.5 - 6.0	**Bedrock**
						6.0 - 7.5	**Silty Clay,** light brown, grey mottling, dry, friable; weathered bedrock
						7.5 - 8.5'	**Bedrock,** push temp 6" dia casing to 8.5'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-43A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/8/10 @ 13:15 | Drilling Date/Time Completed: 11/9/10 @ 10:20

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 688.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.74 Feet | Hole Diameter: | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.74 | Water Loss: 55 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	8:10	--	BTEX/PAH/Metals
2'-4'	Grab	8:15	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
9.14'	10.90	100	44.90	7.0	0	**9.14-9.51, Limestone Fragments,** heavily fractured by reaming
10.90	15.88	99.9	93.6	10.0	9	**9.51-11.65, Wackestone,** light grey, bryozoans, strong, massive, slightly fractured
15.88	20.94	100	95.2	13.0	1	9.82, fracture, clean, smooth, bryozoans
20.94	25.74	96	87.6	12.0	45	9.94-10.10, crinoid sequence
						10.00-10.20, geode
						10.11, fracture, along geode, sand and clay infill
						10.16, healed fracture
						11.65-11.80, Clay interval, grey, soft, some sands, possible zone of water loss
						11.80-12.85, Wackestone/Packstone, dark bluish grey, some Int. Siltstone layers (0.01')
						11.98, fracture, smooth
						12.35, fracture, smooth, slight sand and clay infill, possible zone of water loss
						12.85, bedding plane fracture, sand and clay infill, possible zone of water loss
						12.85-16.48, Siltstone, medium to dark grey, thinly bedded, horizontal bedding, geodes
						13.46-13.55, geodes
						15.21-15.33, geodes
						15.33, gracture, along geode
						16.48-18.55, Packstone/Grainstone, light bluish grey to bluish grey, massive, strong, competant,
						crinoids, unfractured
						17.92, styolite
						18.05, styolite
						18.55-19.65, Mudstone/Wackestone, greenish grey, glauconite, massive, strong, unfractured, fossils
						19.65-19.78, Packstone, light greenish grey, massive, competant, unfractured
						19.78, bedding plane fracture
						19.78-19.95, Siltstone, thinly bedded, greenish grey to dark grey, srtong, unfractured
						19.95-20.07, Grainstone, dark bluish grey, crinoids, massive, strong, unfractured
						20.07-20.55, Siltstone, dark grey to dark greenish grey, thinly bedded, moderate, slightly fractured
						20.19-20.24, weak zone, fractured w/ clay infill
						20.55, bedding plane fracture

ROCK CORING / SAMPLING LOG

Boring/Well: MW-43A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/8/10 @ 13:15 | Drilling Date/Time Completed: 11/9/10 @ 10:20

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 688.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.74 Feet | Hole Diameter: | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.74 | Water Loss: 55 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	8:10	--	BTEX/PAH/Metals
2'-4'	Grab	8:15	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						20.55-20.94, Packstone/Grainstone, medium grey to bluish grey, strong, massive, competant
						20.85-20.94, geode
						20.94-22.68, Siltstone, dark grey, thinly bedded, strong, competant, slightly fractured
						22.33-22.40, weak zone, heavily fractured, possible zone of water loss
						22.68, bedding plane fracture, clay infill, possible zone of water loss
						22.68-22.82, Grainstone, dark grey to dark bluish grey, massive, moderate
						22.75, healed fracture
						22.82, bedding plane fracture, clay infill, possible zone of water loss
						22.82-23.60, Wackestone, light greenish grey, massive, srtong, unfractured
						23.60-24.75, Packstone, medium greenish grey, massive, strong, unfractured, crinoids
						24.75-25.74, Mudstone, light grey, massive, srtong, unfractured
						End

SOIL BORING / SAMPLING LOG

Boring/Well: MW-44A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 2

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/11/10 @ 11:04 | Drilling Date/Time Completed: 11/12/10 @ 9:10

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 701.5 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.2 Feet | Hole Diameter: 4 1/2" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / T. Porter | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.24 | Water Loss: 29 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX/SVOC/METALS
7 - 9'	grab		--	BTEX/SVOC/METALS

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0			0 - 1.0	**Silty Clay,** reddish brown, moderate medium granular stucture; many roots, much organic matter in
2.00	4.00	100	0.0				top 0.5'; dry
4.00	6.00	100	0.0			1.0 - 8.0	**Silty Clay,** reddish brown, moderate coarse sub-angular blocky structure; common concretions; dry ,
6.00	8.00	100	0.0				bedrock fragments from 7.5'-8.0'
8.00	9.50	100	0.0			8.0 - 10.0	**Bedrock,** push temp 6" dia casing to 10.0'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-44A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 2

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/11/10 @ 11:04 | Drilling Date/Time Completed: 11/12/10 @ 9:10

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 701.5 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 25.24 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / T. Porter | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 25.24 | Water Loss: 29 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX/SVOC/METALS
7 - 9'	grab		--	BTEX/SVOC/METALS

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
9.94'	10.85	100	40.60	6.0	0	**9.94-13.59, Wackestone/Packstone w/ Int. Mudstone,** massive, strong, moderately fractured,
10.85	15.95	100	100.0	12.0	15	medium greenish grey
15.95	21.05	100	95.0	13.0	12	10.30, fracture, clean glauconite, crinoids
21.05	25.24	100	90.5	8.0	2	10.61, fracture, partly healed, glauconite
						11.30, 11.43, 11,51, 11.57, styolites
						11.65, fracture, smooth, clay infill, possible zone of water loss
						11.92, 11.95, 12.02, 12.05, styolites
						12.28-13.27, increased Mudstone sequence
						13.59, styolite, bedding plane
						13.59-22.40, Grainstone, light to medium grey, massive, crinoids, bryozoans, strong, slightly
						fractured
						13.69, styolite
						14.60, fracture, along styolite, slight clay infill, possible zone of water loss
						15.12, 15.95, 16.92, 17.07, styolites
						17.38, fracture, clean
						17.43, styolite
						17.48, fracture, smooth, slight clay infill, possible zone of water loss
						17.57, styolite
						17.60, fracture, partly healed, slight clay infill
						17.66, 18.46, 19.82, 20.17, 20.51, styolites
						21.91, fracture, along styolite
						22.40-25.24, Int. Wackestone and Mudstone, greenish grey, massive, strong, moderately fractured
						22.78, fracture, clean, smooth
						23.08, fracture, clean, smooth
						23.17, fracture, clean, smooth
						End

SOIL BORING / SAMPLING LOG

Boring/Well: MW-45A / B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/12/10 @ 12:30 | Drilling Date/Time Completed: 11/16/10 @ 15:45

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 698.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 55.8 Feet | Hole Diameter: 8" | Coring Device: 5.0' coring barrel

Prepared By: M. Hicks / R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 55.75 | Water Loss: 87 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	12:50	--	BTEX/PAH/Metals
6'-8'	Grab	13:00	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0			0 - 0.25	**Clay,** reddish brown, dry, gravels, organics, friable
2.0	4.0	100	0.0			0.25 - 4.75	**Silty Clay,** light brown, loose, dry, gravels
4.0	6.0	100	1.9			4.75 - 8.5	**Silty Clay,** light brown, hard, dry, friable, gravels
6.0	8.0	100	1.0			8.5 - 10.5	**Bedrock,** push temp 6" dia casing to 10.5'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-45A / B Project/No.: IN Creosote / IN000072.0056.00001 Page 2 of 5

Site Location: Bloomington, Indiana Drilling Date/Time Started: 11/12/10 @ 12:30 Drilling Date/Time Completed: 11/16/10 @ 15:45

Drilling Contractor: Boart Longyear Driller: Jason Greer

Drilling Fluid Used: water Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.1 feet [X] Surveyed [ ] Estimated Water:

Total Depth Drilled: 55.75 Feet Hole Diameter: 8" Coring Device: HQ

Prepared By: M. Hicks / R. Woodruff / W. Kuhn Hammer Weight: N/A Hammer Drop: N/A ins.

Boring Termination Depth: 55.75 Water Loss: 87 gallons GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	12:50	--	BTEX/PAH/Metals
6'-8'	Grab	13:00	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
10.76'	15.80	100	82.90	13.0	0	**10.76-12.95, Packstone/Grainstone,** light brown to medium grey, massive, intensly fractured,
15.80	20.84	100	96.0	10.0	13	crinoids, styolites
20.84	25.78	98.8	92.0	14.0	0	11.26, styolite
25.78	30.66	98	94.0	14.0	35	11.35, fracture, along styolite, very norrow, rough, some sand and clay infill
30.66	35.76	100	91.8	15.0	0	11.53, fracture, along styolite, rough, narrow, damp, sand and clay infill
35.76	40.80	100	91.4	12.0	0	11.62, fracture, along styolite, tight
40.80	45.72	98.4	98.90	14.0	39	11.80-12.92, vertical fracture, rough, light pink color in sections, some sand
45.72	50.76	100	97.40	13.0	0	12.12, fracture
50.76	55.75	100	96.80	14.0	0	12.35, fracture
						12.95-14.38, Packstone w/ some Int. Siltstone, medium grey, crinoids, styolites, horizontal banding
						13.11-13.14, fracture, partly healed, clay infill
						14.00, styolite
						14.38, bedding plane fracture, along styolite, moderately healed, clay infill
						14.38-18.51, Siltstone w/ Int. Wackestone, greenish grey, horizontal banding, competant, slightly
						fractured, glauconite, geodes
						16.10, fracture, very narrow, rough
						17.10, geode
						17.84-18.08, geode layer
						18.08, fracture, along geode, smooth
						18.08-18.20, geode
						18.51-21.08, Siltstone, dark grey, massive, slightly fractured, horizontal bedding
						19.05-19.15, geode
						19.95, fractured, moderately healed, clay infill, smooth
						20.12, fracture, along geode, some clay infill, smooth
						21.08, bedding plane fracture, rough, clay infill,
						21.08-21.53, Grainstone/Packstone, bluish grey, crinoids, styolites
						21.30, fracture, along styolite, along Packstone/Grainstone contact.

ROCK CORING / SAMPLING LOG

Boring/Well: MW-45A / B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/12/10 @ 12:30 | Drilling Date/Time Completed: 11/16/10 @ 15:45

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 55.75 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: M. Hicks / R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 55.75 | Water Loss: 87 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	12:50	--	BTEX/PAH/Metals
6'-8'	Grab	13:00	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						21.53-21.68, Clay interval, dark grey, sticky, cohesive
						21.68-23.35, Siltstone, dark grey, massive, horizontal bedding, geodes, moderately fractured
						21.71, fracture, slight clay infill
						21.76, fracture, slight clay infill
						23.28-23.35, geode
						23.35-25.38, Packstone/Wackestone, grey, massive, crinoids, styolites
						23.55, fracture, along styolite
						23.76, styolite
						24.65-24.67, **Siltstone** bed
						24.76-24.80, **Siltstone** bed
						24.80-25.05, increased fossilization
						25.05, styolite
						25.15, fracture, tight, clean, rough
						25.38-31.89, Siltstone w/ Int. Wackestone, dark grey, massive, slightly fractured, horizontally
						bedded, geodes
						28.31, fracture, along geode, very narrow, smooth
						28.58, fracture, along geode, narrow, clean, possible zone of water loss
						29.76-29.91, geode
						30.44-30.54, geode
						31.13, color change to grey
						31.24-31.38, geode
						31.30, fracture, very narrow, slight clay infill
						31.89, bedding plane fracture, very narrow, rough, clean
						31.89-35.53, Packstone, grey, crinoids, fractured
						31.92, fracture, rough, clean
						32.45, fracture, along styolite, moderately narrow, rough
						34.40, fracture, very narrow
						35.20-35.32, **Mudstone**, greenish grey

ROCK CORING / SAMPLING LOG

Boring/Well: MW-45A / B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/12/10 @ 12:30 | Drilling Date/Time Completed: 11/16/10 @ 15:45

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 55.75 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: M. Hicks / R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 55.75 | Water Loss: 87 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	12:50	--	BTEX/PAH/Metals
6'-8'	Grab	13:00	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						35.20, fracture, rough
						35.26, healed fracture
						35.53, bedding plane fracture, rough
						35.53-36.57, Siltstone, dark grey, thinly bedded, strong
						35.07-35.25, geode
						36.25, fracture, along geode, some clay infill
						36.57-40.61, Wackestone, grey, massive, slightly fractured, styolites, horizontal bedding
						36.36, fracture, rough, very narrow
						36.63, fracture, smooth
						37.60, styolite
						39.40-40.05, **Packstone/Grainstone** bed
						40.50, fracture, along styolite, rough, slight staining on face
						40.61-40.65, fracture, rough, staining
						40.61-42.44, Packstone/Grainstone, medium bluish grey, brachiopods, crinoids, some oxidation
						staining
						41.86, fracture, rough, slight staining
						42.44-54.50, Siltstone w/ Int. Wackestone, dark grey, massive, slightly fractured, geodes, horizontal
						banding
						42.85-42.89, **Grainstone** bed
						42.89, fracture, smooth to rough, pyrite
						43.23-43.33, geode
						43.38-43.42, geode
						43.75, fracture, smooth, extremely narrow, pyrite
						44.02, geode
						44.61, fracture, along geode, smooth, extremely narrow
						44.56-44.72, geode
						45.35-45.45, geode
						45.45, color change to grey

ROCK CORING / SAMPLING LOG

Boring/Well: MW-45A / B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 5 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/12/10 @ 12:30 | Drilling Date/Time Completed: 11/16/10 @ 15:45

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 55.75 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: M. Hicks / R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 55.75 | Water Loss: 87 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	12:50	--	BTEX/PAH/Metals
6'-8'	Grab	13:00	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						45.64, fracture, along geode, undulating, very narrow, slight snad and clay infill
						47-18-47.21, **Grainstone** bed
						47.32, bedding plane fracture, very narrow, undulating
						47.32-47.54, **Packstone** bed, bluish purple, banded
						47.55, styolite
						47.55-49.32, **Wackestone/Packstone/Siltstone** interval, grey, brachiopods, crinoids, styolites,
						slightly fractured
						47.96, fracture, rough, slight staining, very narrow
						49.16-49.30, **Packstone** interval
						49.65-49.78, **Packstone** interval
						49.84-49.97, **Packstone** interval
						50.44-50.53, geode
						51.35-51.90, **Packstone/Grainstone** bed
						52.33, fracture, pyrite, very narrow, smooth
						53.48, fracture, pyrite, very narrow, smooth
						53.55-54.50, horned coral
						54.50, bedding plane fracture,
						54.50-55.75, Siltstone (Borden), massive, competant, thin to medium bedding, horizontal banding,
						dark green w/ slight greenish tint, glauconite.
						End

SOIL BORING / SAMPLING LOG

Boring/Well: MW-45C | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/17/10 @ 11:27 | Drilling Date/Time Completed: 11/17/10 @ 15:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 698.4 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.0 Feet | Hole Diameter: 4 1/2" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.03 | Water Loss: 5 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	8:40	--	BTEX/PAH/Metals
6'-8'	Grab	8:50	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0 - 0.75	**Clay,** brown to reddish brown, gravels, organics, dry, slightly plastic, firm
2.0	4.0	100	0.0	--		0.75 - 8.5	**Clayey Silt,** light brown, dry, medium stiff, friable; color change to dark brown at 4.5'; increasin
4.0	6.0	100	0.0	--			silt content at 4.5'; color change to light brown at 5.0'
6.0	8.5	100	0.0	--		8.5 - 10.5	**Bedrock,** push temp 6" dia casing to 10.5'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-45C | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/17/10 @ 11:27 | Drilling Date/Time Completed: 11/17/10 @ 15:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.4 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.03 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.03 | Water Loss: 5 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	8:40	--	BTEX/PAH/Metals
6'-8'	Grab	8:50	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
10.88'	16.0	100	94.50	20.0	0	25.03-25.08, Siltstone bed
16.00	20.91	98.2	100.0	14.0	0	11.58, fracture, oxidation, sand and clay
20.91	26.03	100	100.0	16.0	5	End
						12.00, fracture, oxidation
						12.10, fracture, oxidation
						12.60-13.03, fracture, 60 degree orientation, clean
						13.11, styolite
						13.12, fracture, alonf styolite, sand and clay
						13.20-14.60, non-parted vertical fracture, oxidation
						14.00, fracture, oxidation
						14.66, bedding plane fracture, along styolite, clay infill
						14.67-18.75, Int. Packstone/Grainstone w/ Mudstone, massive, strong, medium greenish grey,
						moderately fractured
						15.38, fracture, clay infill, soft
						17.06-17.08, fracture, clay in fill, soft
						18.08-18.85, geode sequence
						18.40, fracture, along geode, clean
						18.75-21.29, Siltstone, dark grey, thinly bedded, strong, unfractured, pyrite
						21.29, bedding plane fracture
						21.29-22.10, Grainstone, bluish grey, massive, strong
						21.46-21.60, **Clay** interval, soft, moist, sand, pebbles; possibly weathered siltstone
						21.67, fracture, sand and clay infill
						21.97, fracture, clay intill
						22.06, fracture, clean
						22.10-23.60, Int. Siltstone/Mudstone/Wackestone, dark greenish grey, strong, horizontal bedding
						23.60-25.63, Packstone/Grainstone, bluish grey, massive, strong, moderately fractured
						23.82, fracture, along styolite, sand and clay infill
						24.03, 24.13, styolites

ROCK CORING / SAMPLING LOG

Boring/Well: MW-45C | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/17/10 @ 11:27 | Drilling Date/Time Completed: 11/17/10 @ 15:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.4 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 26.03 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 26.03 | Water Loss: 5 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	8:40	--	BTEX/PAH/Metals
6'-8'	Grab	8:50	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						25.03-25.08, Siltstone bed
						25.63-26.03, Mudstone/Wackestone, light greenish grey, horizontal, strong
						End

SOIL BORING / SAMPLING LOG

Boring/Well: MW-46A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/18/10 @ 9:00 | Drilling Date/Time Completed: 11/18/10 @ 17:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 686.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 36.0 Feet | Hole Diameter: 4 1/2" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.95 | Water Loss: 110 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	9:05	--	BTEX/PAH/Metals
6'-8'	Grab	9:10	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0 - 0.5	**Topsoil,** organics, dark brown, silty clay, slightly moist
2.0	4.0	100	0.0	--		0.5 - 8.5	**Clayey Silt,** light brown, soft, dry, friable; color change to brown at 2.0'; hard at 5.0'
4.0	6.0	100	0.0	--		8.5 - 11.5	**Bedrock;** clay interval at 10.25'-1075'; push temp 6" dia casing to 11.5'
6.0	8.5	100	0.0	--			

ROCK CORING / SAMPLING LOG

Boring/Well: MW-46A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/18/10 @ 9:00 | Drilling Date/Time Completed: 11/18/10 @ 17:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 686.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.95 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.95 | Water Loss: 110 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	9:05	--	BTEX/PAH/Metals
6'-8'	Grab	9:10	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
12.0	16.00	100	87.60	12.0	37	**11.96-13.20, Mudstone/Siltstone,** light greenish grey, horizontal, strong, moderately fractured
16.00	20.90	98	96.1	11.0	23	12.00-12.12, geode
20.90	26.10	100	84.4	13.0	35	12.12, fracture, along geode, clean
26.10	30.94	96.8	89.5	13.0	15	12.50, fracture, clean
30.94	35.95	100	95.0	18.0	0	12.85, fracture, along geode
						12.85-13.20, geode, pink
						13.20-14.78, Packstone, medium grey, massive, strong, moderately fractured
						13.60, fracture, partly healed, clay infill
						14.00, fracture, along styolite, clay infill
						14.38, fracture, along styolite, clay infill
						14.50, fracture, along geode
						14.50-14.78, geode, pink
						14.78, fracture, along geode
						14.78-15.75, Mudstone Int. w/ Packstone/Wackestone, strong, horizontal, massive, moderately
						fractured
						15.38, fracture, along geode
						15.38-15.75, geode, pink
						15.75-16.47, Siltstone, medium greenish grey, horizontal, strong, unfractured, thinly bedded
						16.47-18.38, Packstone, bluish grey, massive, strong, moderately fractured
						16.57, fracture, along geode
						16.57-16.70, geode
						17.53, fracture, clean
						18.38, bedding plane fracture, along geode
						18.38-18.81, Grainstone, bluish grey, massive, strong, large grinoids
						18.38-18.58, geode on back side of core
						18.58, fracture, along geode
						18.81-19.73, Mudstone, light to medium grey, massive, strong, unfractured
						19.73, bedding plane fracture, weak, clay infill

ROCK CORING / SAMPLING LOG

Boring/Well: MW-46A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/18/10 @ 9:00 | Drilling Date/Time Completed: 11/18/10 @ 17:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 686.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.95 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.95 | Water Loss: 110 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	9:05	--	BTEX/PAH/Metals
6'-8'	Grab	9:10	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						19.73-23.77, Siltstone, dark grey, strong, thinly bedded
						19.92-20.07, geode
						21.67-21.80, geodes
						21.80, fracture , along geode
						22.05, fracture, clean
						22.75, fracture, clean
						23.48, fracture, along geode, clean
						23.48-23.60, geode
						23.77, bedding plane fracture
						23.77-24.35, Grainstone, bluish grey massive, strong, unfractured
						24.35, bedding plane fracture
						24.35-24.70, Mudstone, greyish green, strong, massive, unfractured
						24.70-25.75, Packstone, light bluish grey, moderately fractured, strong, massive
						25.38, fracture, slight clay infill
						25.75, bedding plane fracture, clay infill
						25.75-26.67, Int. Mudstone and Wackestone, greyish green, strong, horizontal, unfractured
						26.67-27.08, Grainstone, greenish grey, strong, massive, moderately fractured
						26.80, fracture, clean
						27.08-28.86, Siltstone, dark greenish grey, moderate to strong, moderately fractured
						27.08-27.25, weak siltstone zone
						27.14, frqacture, clay infill
						27.22, fracture, clay infill
						28.18, fracture, clay infill
						28.86, fracture, clay infill
						28.86-29.10, Wackestone/Packstone, dark grey, Int. Siltstone, strong massive
						29.10, bedding plane fracture, weak, clay infill
						29.10-29.18, Siltstone, dark grey, weak, thinly bedded
						29.18, bedding plane fracture, clay infill

ROCK CORING / SAMPLING LOG

Boring/Well: MW-46A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/18/10 @ 9:00 | Drilling Date/Time Completed: 11/18/10 @ 17:40

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 686.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.95 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.95 | Water Loss: 110 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	9:05	--	BTEX/PAH/Metals
6'-8'	Grab	9:10	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						29.18-30.06, Packstone/Grainstone, light greenish grey, moderate, massive, moderately fractured
						29.83-29.91, fractured, weak zone
						30.06-31.14, Int. Mudstone/Wackestone, greenish grey, massive, strong, unfractured
						31.14-31.55, Grainstone, bluish grey, massive, strong, unfractured
						31.55-32.25, Int. Mudstone/Wackestone, medium grey, strong, massive, moderately fractured
						32.25, bedding plane fracture, clean
						32.25-33.59, Grainstone, medium grey, strong, massive, moderately fractured
						33.47, fracture, partly healed, clean
						33.59-35.23, Int. Mudstone/Wackestone/Grainstone, greyish green, strong, massive
						33.72, fracture, clay infill
						33.94-34.15, geode, pink
						34.68-34.87, geode, pink
						35.23-35.95, Siltstone, dark grey, thinly bedded, strong, unfractured
						35.60-35.72, geode
						End

SOIL BORING / SAMPLING LOG

Boring/Well: MW-47A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/19/10 @ 8:10 | Drilling Date/Time Completed: 11/22/10 @ 11:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 680.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.6 Feet | Hole Diameter: 4 1/2" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 35.6 | Water Loss: 13 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:35	--	BTEX/PAH/Metals
4'-5'	Grab	10:40	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0 - 0.75	**Topsoil,** organics, dark brown, clay, large gravels from .25'-.75'
2.0	4.0	100	0.4	--		0.75 - 4.0	**Clayey Silt,** light brown, dry, soft, friable, trace gravels, organics
4.0	5.5	100	1.9	--		4.0 - 5.5	**Silty Clay,** brownish grey, moist, soft, sticky; weathered linestone fragments at 4.75'
						5.5 - 7.5	**Bedrock,** push temp 6" dia casing to 7.5'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-47A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/19/10 @ 8:10 | Drilling Date/Time Completed: 11/22/10 @ 11:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 680.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.60 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.60 | Water Loss: 13 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:35	--	BTEX/PAH/Metals
4'-5'	Grab	10:40	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
7.6	11.00	100	95.50	10.0	0	**7.63-7.85, Fractured Bedrock,** fractured from reaming
11.00	16.93	98.6	--	14.0	0	**7.85-12.40, Packstone/Grainstone w/ Int. Mudstone,** medium greenish grey, strong, massive,
16.93	20.30	87.4	--	19.0	0	crinoids, moderately fractured
20.30	22.58	100	--	9.0	0	8.35, fracture, sand and clay infill
22.58	25.67	100	--	10.0	13	8.71, fracture, clean
25.67	30.55	97.6	100.0	14.0	0	9.15, fracture, along styolite, partly healed, sand and clay infill
30.55	35.60	100	95.00	20.0	0	9.70, fracture, clean
						10.40, styolite
						11.36, fracture, bedding plane, clean
						12.07-12.40, weak zone
						12.07, fracture, weak, sand and clay infill
						12.19, fracture, weak, sand and clay infill
						12.19-12.40, **Clay interval**, weathered bedrock fragments, soft, moist
						12.40-15.80, Siltstone, dark grey, srtong, thinly bedded, moderately fractured
						13.22, fracture, sand and clay infill
						14.38-14.45, fracture zone, geode, sand and clay infill
						15.00-15.05, fracture, geode
						15.80, bedding plane fracture, clean
						15.80-20.90, Packstone/Grainstone, medium bluish grey, massive, strong; color change to greenish
						grey at 17.00'
						16.92, fracture, slight clay infill
						17.85, fracture, partly healed, clay infill
						18.70, fracture, partly healed, clay infill
						20.23, fracture, sand and clay infill
						20.30-20.90, **Clay interval**, moist with bedrock fragments to 20.70, firm to 20.90
						20.90-22.18, Siltstone, dark grey, thinly bedded, strong, moderately fractured
						21.34, fracture, clean

ROCK CORING / SAMPLING LOG

Boring/Well: MW-47A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/19/10 @ 8:10 | Drilling Date/Time Completed: 11/22/10 @ 11:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 680.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 35.60 Feet | Hole Diameter: 4 1/2" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 35.60 | Water Loss: 13 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	10:35	--	BTEX/PAH/Metals
4'-5'	Grab	10:40	--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						22.18-22.30, Grainstone, bluish grey, moderate strength, massive
						22.18, bedding plane fracture
						22.30, bedding plane fracture, sand infill
						22.30-22.68, Mudstone/Wackestone, light greenish grey, massive, strong
						22.68-24.42, Int. Mudstone/Grainstone/Wackestone, blue-greenish grey, massive, strong,
						moderately fractured
						24.00, fracture, clean
						24.42-24.92, Int. Mudstone/Packstone, dark greenish grey, srtong, massive, unfractured
						24.92-26.45, Mudstone, medium grey, strong, massive, moderately fractured
						25.09, fracture, clean
						26.45-31.03, Int/ Mudstone/Packstone/Siltstone, massive, bedded, strong, unfractured
						31.03-31.82, Grainstone/Packstone, greenish grey, massive, strong, moderately fractured
						31.13, fracture, partly healed
						31.38, fracture, partly healed, clay infill
						31.82, bedding plane fracture.
						31.82-35.45, Mudstone/Wackstone, light greenish grey, strong massive, unfractured
						35.45-35.60, Grainstone, massive, strong, unfractured
						End

SOIL BORING / SAMPLING LOG

Boring/Well: RW-6 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 4/1/10 @ 8:15 | Drilling Date/Time Completed: 4/7/10 @ 16:20

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 687.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 40.98 Feet | Hole Diameter: 6 | Coring Device: 5.0' coring barrel

Prepared By: MG / RW | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 40.98 | Water: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	17:30	--	BTEX, SVOCs, Metals: As, Pb
2'-4'	Grab	17:40	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	2.0	100	0.0	--	Si/CL	0.0'-3.9'	**Silty Clay,** brown, medium soft, cohesive, pliable, moist, organics
2.0	4.0	100	0.0	--		3.9'-6.0'	**Bedrock;** set temp casing at 6.0'
4.0	6.0	100	0.0	--			

SOIL BORING / SAMPLING LOG

Boring/Well: RW-6 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 4/1/10 @ 8:15 | Drilling Date/Time Completed: 4/7/10 @ 16:20

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 687.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 40.98 Feet | Hole Diameter: 6 | Coring Device: HQ

Prepared By: RW | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 40.98 | Water Loss: 159 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	17:30	--	BTEX, SVOCs, Metals: As, Pb
2'-4'	Grab	17:40	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
6.02	8.84	100	74.00	14.0	20	6.02'-6.40', Core destroyed due to overdrilling of temp casing
8.84	11.34	100	68.0	12.0	53	**6.40'-8.84', Mudstone/ Wackestone;** lt greenish grey, strong, competent, glauconite, thinly bedded,
11.34	16.61	100	97.0	11.0	53	thinly laminated
16.61	21.50	97.8	58.9	11.0	0	6.76'-6.79', Fracture, sub horizontal bedding, pitted, narrow, partly healed, cohesive clay infill,
21.50	26.30	96	94.6	9.0	13	damp
26.30	31.40	100	96.7	9.0	20	6.96', Fracture, sub horizontal bedding, pitted, narrow, pyrite
31.40	36.10	94	91.10	10.0	0	8.75', Fracture along geode, bedding, sl clay infill
36.10	40.98	97.6	100.00	8.0	0	**8.84'-12.17', Siltstone;** strong, dk grey, fine, laminated, amorphous banding, fresh, competent
						8.84'-8.89', Fracture zone along geode, bedding/joint,
						9.88'-9.90', Fracture along geode, bedding/joint, cohesive clay infill, possible zone of water loss
						10.15'-10.17', Fracture, bedding, partly healed, sl clay infill, wet
						10.52'-10.60', Fracture zone, horizontal, partly healed, sl clay infill, wet, possible zone of water
						loss
						12.17'-15.95', Wackestone/Packstone; strong, fine-med, fresh, competent, glauconite
						12.62'-12.66', Fracture, bedding, narrow, partly healed, sl decomposed, pyrite, sl clay infill, rough,
						wet
						14.46'-14.57', Fracture (45 degrees), narrow, partly healed, sl decomposed, pyrite, clay infill, wet
						15.95'-16.37', Mudstone/Wackestone; lt grey-lt greenish grey, fine, thinly bedded, strong,
						competent
						16.37'-16.61', Lost due to reaming
						16.61'-17.83', Siltstone; dk grey, strong-moderate, thinly bedded, competent, moderately fractured
						17.83', Fracture, contact, odor (DNAPL), clay infill
						17.83'-18.95', Packstone/Wackestone; med grey, massive, strong, competent, sl fractured
						18.62', Fracture along styolite
						18.87', Fracture, smooth

SOIL BORING / SAMPLING LOG

Boring/Well: RW-6 | Project/No.: IN Creosote / IN000072.0047.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 4/1/10 @ 8:15 | Drilling Date/Time Completed: 4/7/10 @ 16:20

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 687.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 40.98 Feet | Hole Diameter: 6 | Coring Device: HQ

Prepared By: RW | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 40.98 | Water Loss: 159 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	17:30	--	BTEX, SVOCs, Metals: As, Pb
2'-4'	Grab	17:40	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						18.95'-36.10', Int. Mudstone/Siltstone/Grainstone; .01'-.30', massive, strong, unfractured,
						competent, lt grey-lt greenish grey
						21.72'-21.92', Geode cluster
						22.48'-22.92', Geode cluster
						22.67', Fracture along geode, sl clay infill, possible zone of water loss
						24.71'-24.85', Geode cluster
						28.55', Fracture, bedding, posible zone of water loss
						28.97', Fracture, bedding, clean, smooth
						29.13', Fracture along styolite, clay intill, possible zone of water loss
						29.19', Styolite
						29.90', Fracture, bedding, sl clay infill, possible zone of water loss
						35.67'-35.77', Fractured, weak-moderate Siltstone unit, clay infill, possible zone of water loss
						36.00', Fracture, bedding, clay infill, possible zone of water loss
						36.10'-40.98', Siltstone (Borden); dk grey, strong, competent, thinly bedded, horizontal and cross
						beds, pyrite, unfractured
						End

SOIL BORING / SAMPLING LOG

Boring/Well: RW-7 | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/01/10 @ 13:04 | Drilling Date/Time Completed: 11/10/10 @ 11:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 689.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 49.4 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / M. Hicks / K. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 49.39 | Water Loss: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX/PAH/Metals
6 - 8'	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0 - 3.2	**Fill,** rock fragments, brick, debris; black
2.0	4.0	100	0.0	--		3.2 - 6.18	**Silty Clay,** dark browm, light brown mottling, low plasticity, moist to dry, medium stiff, trace
4.0	6.0	100	0.0	--			gravels to very largd pebbles; color change to dark yellowish brown at 4.5'; ash at 5.45' with very
6.0	8.5	100	0.0	--			large pebbles.
						6.18 - 8.5	**Silt/Weathered Bedrock,** light yellowish brown, non pliable, no dilatancy, dry, trace bedrock
							fragments
						8.5 - 10.5	**Bedrock,** push temp 6" dia casing to 10.5'

ROCK CORING / SAMPLING LOG

Boring/Well: RW-7 | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/01/10 @ 13:04 | Drilling Date/Time Completed: 11/10/10 @ 11:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 689.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 49.39 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks / K. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 49.39 | Water Loss: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX/PAH/Metals
6 - 8'	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
9.75'	10.48	100	0.00	3.0	0	**9.75-9.93, Fractured bedrock,** due to reaming
10.48	14.93	95.7	62.5	15.0	14	**9.93-11.22, Packstone/Grainstone,** light greenish grey, crinoids, masive, moderately fractured
14.93	16.03	100	72.3	3.0	0	10.27, fracture, clean, slight sheen
16.03	16.82	100	46.0	5.0	--	10.74-11.65, vertical fracture, rough, clean, creosote staining, odor
16.82	21.18	87.2	84.6	8.0	31	10.79-11.05, healed vertical fracture
20.84	26.00	100	84.1	17.0	8	**11.22-12.05, Wackestone,** greenish grey, competant, moderately fractured
26.00	30.95	99	98.00	12.0	0	11.62-11.64, fracture, clay infill
30.95	36.02	100	100.00	11.0	18	11.70-11.72, fracture, clay infill, damp
36.02	40.87	97	100.00	12.0	7	**12.05-15.72, Grainstone/Packstone,** light grey, crinoids, brachiopods, massive, slightly fractured
40.87	46.00	100.00	95.4	13.0	13	12.65-12.68, fracture, along styolite
46.00	48.39	100	100.00	6.0	0	13.38-13.40, fracture, along styolite, rough, pitted
						14.54, fracture, along styolite, rough pitted
						14.71, fracture, partly healed, clay infill
						15.72, bedding plane fracture
						15.72-20.72, Siltstone, greenish grey, moderately fractured, thinly bedded
						16.03-16.31, vertical fracture, clean
						16.03-16.46, **Packstone,** light grey, crinoids
						16.40-16.46, fracture, rough pitted, partly healed, slight clay infill
						17.80-17.88, fracture, geodes, clay infill, moderately healed, possible zone of water loss
						18.13-18.22, geodes
						18.22-18.23, fracture, along geode
						18.86, fracture, clean
						19.03, fracture, along geode
						19.03-19.58, geode
						19.58, fracture, along geode
						20.72-21.91, Grainstone/Packstone, bluish grey, crinoids
						20.72, bedding plane fracture, rough pitted

ROCK CORING / SAMPLING LOG

Boring/Well: RW-7 | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/01/10 @ 13:04 | Drilling Date/Time Completed: 11/10/10 @ 11:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 689.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 49.39 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks / K. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 49.39 | Water Loss: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX/PAH/Metals
6 - 8'	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						21.11, fracture, partly healed, some clay infill
						21.25, styolite
						21.31, fracture, rough, pitte, some sand and clay
						21.47, fracture, partly healed, rough, pitted
						21.91, styolite, bedding plane
						21.91-23.00, Wackestone, medium grey, massive, slightly fractured, srtong
						22.02, fracture, large crinoids, rough, glauconite
						23.00-24.13, Packstone/Grainstone, medium greenish grey, glauconite, massive, strong, slightly
						fractured
						23.47, fracture, clean
						24.13-25.37, Siltstone, moderate, thinly bedded, dark grey
						24.33, fracture, weak, clay infill
						25.37-26.72, Int. Packstone w/ Siltstone, strong, massive; siltstone beds increasing in size w/ depth
						25.50-25.60, geode
						26.47, fracture, along geode
						26.47-26.58, geode
						26.58, fracture, along geode
						26.68, crinoid bed
						26.72-27.10, Wackestone, light greenish grey, strong, massive, unfractured
						27.10-30.08, Packstone/Grainstone, medium grey, massive, strong, slightly fractured
						27.77, fracture, partly healed
						29.08, fracture, partly healed
						30.08-30.38, Mudstone/Siltstone, massive, strong, unfractured, light greenish grey
						30.38-30.83, Grainstone, dark bluish grey, massive, strong, unfractured.
						30.83-31.52, Grainstone w/ Int. Siltstones, dark bluish grey, massive, strong, unfractured
						31.52-35.94, Siltstone w/ Int/ Wackestone/Mudstone, dark grey, geodes, slightly fractured,
						thinly bedded
						32.19, fracture, along geode

ROCK CORING / SAMPLING LOG

Boring/Well: RW-7 | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 11/01/10 @ 13:04 | Drilling Date/Time Completed: 11/10/10 @ 11:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 689.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 49.39 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks / K. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 49.39 | Water Loss: gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab		--	BTEX/PAH/Metals
6 - 8'	grab		--	BTEX/PAH/Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						32.19-32.34, geode
						32.45-32.52, geode
						33.02, fracture, slightly pitted
						34.58, fracture
						34.55-34.62, geode
						35.10, fracture, rough, clay infill, possible zone of water loss
						35.94-36.67, Grainstone,medium bluish grey, massive, srtong, unfractured
						36.67, fracture, along styolite, bedding plane, glauconite, partly healed
						36.67-38.43, Wackestone w/ Int. Packestone and Siltstone, medium greenish grey, slightly
						fractured
						37.00-37.20, **Grainstone** sequence
						37.20, fracture, along styolite, glauconite
						37.27, styolite
						37.94, styolite
						38.43-41.25, Siltstone w/ Int. Wackestone, medium grey, thinly bedded, geodes, strong
						38.82, fracture, clean
						41.25-41.48, Grainstone, dark greenish grey, massive, srtong, unfractured
						41.48-43.63, Siltstone w/ Int. Wackstone, medium grey, thinly bedded, geodes, strong, unfractured
						43.63-44.28, Grainstone, dark greenish grey, massive, strong, unfractured
						43.68, bedding plane fracture
						44.28, bedding plane fracture, contact with Borden
						44.28-49.39, Siltstone (Borden), dark grey, thinly bedded, strong, cross bedding
						44.28-44.85, dark green, glauconite zone
						44.46, fracture, weak, clay infill.
						End

SOIL BORING / SAMPLING LOG

Boring/Well: MW-37C | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 9/2/11 @ 8:37 | Drilling Date/Time Completed: 9/7/11 @ 15:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: feet [ ] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 45.8 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 45.8 | Water Loss: 75 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	8:40	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	4.5	100	--	--		0 - 0.25'	**Topsoil**
						0.25' - 2.50'	**Silty Clay,** light brown to light brownish grey, friable, dry, organics
						2.50' - 4.50'	**Silty Clay,** light brown, slightly moist, friable, trace sand; moist/wet at 3.5', brown and grey
							mottling, increasing sand content with depth; bedrock fragments and pebbles at 4.0'; coarse sand
						4.50' - 7.50'	**Bedrock Fragments/Pebbles w/ Clay,** light grey clay, moist/wet; more competent bedrock from
							7.25'-7.50'.
						7.50' - 10.0'	**Clay,** light greyish brown, soft, plastic, wet, bedrock fragments
						10.0' - 12.0'	**Bedrock,** competant, fractured by drilling; push temporary 6" casing to 12.0'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-37C | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 9/2/11 @ 8:37 | Drilling Date/Time Completed: 9/7/11 @ 15:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: feet ☐ Surveyed ☐ Estimated | Water:

Total Depth Drilled: 45.80 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 45.80 | Water Loss: 75 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	8:40	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
12.27	16.00	100	48.5	8	0	**12.27' - 12.70', Packstone,** light grey, strong, competant, brachiopods, unfractured, massive
16.00	20.90	98	95.1	11	35	**12.70' - 14.15', Wackestone/Mudstone,** medium greenish grey, strong, medium beds, moderately
20.90	26.00	100	85.1	12	3	fractured.
26.00	30.91	98.2	90.4	12	27	12.70', healed fracture
30.91	35.80	97.8	94.7	11	10	12.71' - 12.75', fracture along styolite, weak
36.40	41.00	92	97.8	7	0	13.23' - 13.24', fracture along styolite, clay, possible zone of water loss
41.00	45.80	96	93.8	10	0	13.36' - 13.38', fracture along styolite, clay, possible zone of water loss
						13.80' - 13.83', fracture along styolite, clay, possible zone of water loss
						14.15', fracture, contact, clay
						14.15' - 14.26', Packstone/Grainstone, dark bluish grey, weak, fractured
						14.15' - 14.26', vertical fracture
						14.26', fracture, contact
						14.26' - 15.35', Wackestone/Mudstone, light grey, strong, masisve, fractured
						14.26' - 15.35', vertical fracture, clay, possible zone of water loss
						15.06' - 15.10', fracture, clay, possible zone of water loss
						15.35' - 16.48', Packstone w/ Int. Mudstones, medium greenish grey, glauconite present, strong,
						massive w/ medium mudstone beds, slightly fractured
						15.35' - 15.75', vertical fracture
						16.44' - 16.48', fracture, contact, clay, possible zone of water loss; believed to be where circulation
						was lost.
						16.48' - 20.90', Siltstone, dark grey, moderate strength, mechaniclly broken/fractured, thinly bedded,
						more competent siltstone near 20.25'
						20.78' - 20.90', geode cluster
						20.90' - 22.16', Packstone, dark to medium grey, strong, massive, crinoids, slightly fractured
						20.90', fracture, contact, along geode
						20.90' - 21.05', geode cluster
						21.13' - 21.14', fracture, clean
						21.42', fracture along styolite, rough

ROCK CORING / SAMPLING LOG

Boring/Well: MW-37C | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 9/2/11 @ 8:37 | Drilling Date/Time Completed: 9/7/11 @ 15:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: _____ feet ☐ Surveyed ☐ Estimated | Water: _____

Total Depth Drilled: 45.80 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 45.80 | Water Loss: 75 gallons | GPS Coordinates: _____

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	8:40	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						22.11' - 22.16', fracture, contact, criniods, clean
						22.16' - 27.86', Wackestone/Mudstone, light grey, strong, massive, slightly fractured, brachiopods
						23.37', fracture, clean
						23.50' - 23.62', fracture, weak
						25.02' - 25.06', fracture, weak
						26.02' - 26.12', fracture, clay, along geode, possible zone of water loss
						26.12' - 26.27'. Geode
						26.16' - 26.27', fracture, clay, along geode, possible zone of water loss
						27.86', fracture, contact, along geode
						27.86' - 28.20', Packstone, dark grey, strong, massive, unfractured
						27.86' - 28.08', geode, open, pink and light yellow
						28.20' - 29.52', Mudstone, medium grey, strong, massive, unfractured, competent
						29.52' - 30.91', Packstone/Mudstone, medium grey, strong, medium bedded, beds of packstone and
						mudstone, slightly fractured
						30.02' - 30.04', fracture, clean, semi smooth
						30.91'- 35.42', Siltstone/Mudstone, dark grey, strong, thinly bedded, trace geodes, unfractured
						35.42' - 36.50', Packstone, dark bluish grey, strong, massive, slightly fractured
						35.54', fracture, clean
						35.80' - 36.40', lost due to casing advancement
	*** With temporary casing set at 36.0', tooling was pulled for weekend 9/2/11. Well was set on 9/7/11. There was no signs of DNAPL in core or in borehole on 9/2/11. Returning to site on 9/7/11, borehole was checked with a bailer for presence of DNAPL at 15:30. Approximately 2 feet of DNAPL was present.**					**36.50' - 42.04', Siltstone/Mudstone,** medium grey, geodes, thinly bedded, moderate strength to
						strong, mechanically broken/fractured, trace wackestone beds
						42.04' - 42.20', Grainstone, white to light grey, all crinids, strong, massive, unfractured
						42.20' - 43.08', Siltstone/Mudstone, dark grey, strong, thinly bedded, unfractured
						43.08' - 43.58', Int. Packstone/Mudstone, dark to medium grey, strong, massive, unfractured
						43.58' - 43.64', Weathered Siltstone w/ Clay, dark gray, weak, siltstone fragments
						43.64' - 45.80', Siltstone (Borden), dark grey, strong, thinly bedded, cross bedding, unfractured
						EOB at 45.80'

SOIL BORING / SAMPLING LOG

Boring/Well: MW-48 A & B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/4/11 @ 10:45 | Drilling Date/Time Completed: 1/6/11 @ 16:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 709.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 71.07 Feet | Hole Diameter: 8" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff, M. Hicks | Hammer Weight: -- | Hammer Drop: -- ins.

Boring Termination Depth: 71.07 | Water Loss: 118 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	11:15	--	BTEX, SVOCs, Metals: As, Pb
18'-20'	Grab	11:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	2.0	100	0.0	--		0.0 - 0.25'	**Top Soil**
2.0	4.0	100	0.0	--		0.25 - 2.25'	**Sandy Clay**, reddish brown, brown mottling, trace gravels, coarse sands, dry, firm
4.0	6.0	100	0.0	--		2.25 - 6.0'	**Silty Sandy Clay**, brown, trace gravels, slightly moist, stiff, reddish brown mottling, increasing silt content with depth
6.0	8.0	100	0.0	--		6.0 - 20.0'	**Clayey Silt**, light brown to reddish brown, dry, firm to medium, friable; brown mottling, color change to dark reddish brown @ 9.0', increasing clay content with depth; Limestone fragments @ 15.0'
8.0	10.0	100	0.0	--		20.0 - 24.0'	**Bedrock**
10.0	12.0	100	0.0	--			set temporary 6" diameter casing @ 22.0'
12.0	14.0	100	0.0	--			**** Driller notes large fracture @ 21.0', no water return; will push temporary casing depth to 24.0'**
14.0	16.0	100	0.0	--			
16.0	18.0	100	0.0	--			
18.0	20.0	100	0.0	--			

ROCK CORING / SAMPLING LOG

Boring/Well: MW-48 A & B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/4/11 @ 10:45 | Drilling Date/Time Completed: 1/6/11 @ 16:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 709.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 71.07 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 71.07 | Water Loss: 118 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	11:15	--	BTEX, SVOCs, Metals: As, Pb
18'-20'	Grab	11:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
24.57	26.00	100	62.9	7	0	**24.57 - 26.82' Packstone**, light grey, fractured, styolites
26.00	26.60	100	83.3	11	0	24.65' styolite
26.60	27.23	100	0.0	10	0	24.73' fracture at styolite, some clay and sand infill
27.23	30.51	100	81.7	15	104	24.81' healed fracture at styolite
31.00	33.50	100	42.0	13	0	24.85 - 24.95' fracture, clay with little granules in infill, damp
33.50	35.92	100	63.6	8	0	25.50' fracture, trace clay infill, very narrow
35.92	40.86	98.8	76.0	14	0	25.66' moderately healed fracture, clay infilling, damp
40.86	45.75	98.7	97.7	16	9	26.50' fracture at styolite, very narrow
45.75	50.83	100	96.0	12	0	26.82' bedding plane fracture, oxidation staining
50.83	55.95	100	100.0	11	0	**26.82 - 30.0' Wackestone**, medium grey, fractured, some interbedded Packstone
55.95	61.07	100	100.0	11	5	27.05' fracture, sand infill, fossils, narrow
61.07	66.07	100	100.0	11	0	27.23' styolite
66.07	71.07	100	89.0	12	0	27.95' fracture
						28.0' fracture, slight sand and clay infill, very narrow; color change to bluish grey
						28.24' fracture, clean, crinoids, very narrow
						28.33' fracture at styolite, narrow, clean
						28.76' fracture at styolite, narrow, clean
						30.0 - 32.22' Mudstone/Wackestone, bluish/greenish grey, trace fossils, geodes, moderate to weak
						30.28' fracture
						30.51 - 31.0' lost due to reaming
						31.0 - 33.5' heavily fractured (mechanical)
						31.96 - 32.35' geode layer
						32.22 - 35.18' Siltstone, dark grey, horizontal banding, geodes, mechanically broken
						32.35' fracture along geode
						34.40' fracture at geode, little clay infill
						34.71' fracture at geode, little clay infill
						34.82' fracture at geode, little clay infill
						34.84 - 34.86' Grainstone seam

ROCK CORING / SAMPLING LOG

Boring/Well: MW-48 A & B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/4/11 @ 10:45 | Drilling Date/Time Completed: 1/6/11 @ 16:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 709.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 71.07 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 71.07 | Water Loss: 118 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	11:15	--	BTEX, SVOCs, Metals: As, Pb
18'-20'	Grab	11:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
						35.08' fracture at geode
						35.18 - 37.32' Grainstone/Packstone, thinly bedded, with few Siltstone beds, medium grey, fossiliferous
						35.85 - 35.92' Clay
						37.32' bedding plane fracture
						37.32 - 44.28' Siltstone, dark grey, moderately fractured, geodes, horizontal banding
						38.22 - 38.64' geode
						38.36' fracture
						39.54 - 39.97' Grainstone/ Packstone
						39.97' bedding plane fracture
						40.50' fracture, very narrow
						40.75 - 40.86' geode
						42.17' fracture at geode
						42.17 - 42.29' geode
						42.69' fracture at geode
						44.28' bedding plane fracture
						44.28 - 47.88' Grainstone/ Packstone, medium to light grey, medium bedded, crinoids, brachiopods, slightly fractured
						44.82 - 44.96' geode
						45.22' fracture, trace clay, rough, very narrow
						45.33' fracture, narrow, trace clay, oxidation
						46.37' styolite
						47.88 - 51.56' Siltstone, with little Limestone seams, dark grey, massive, geodes, horizontal banding
						47.88 - 47.92' clay
						47.37' styolite
						47.37 - 47.48' Packstone
						47.48' bedding plane fracture
						49.41' fracture at geode
						50.66 - 50.74' geode layer
						50.76 - 50.83' clay

ROCK CORING / SAMPLING LOG

Boring/Well: MW-48 A & B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/4/11 @ 10:45 | Drilling Date/Time Completed: 1/6/11 @ 16:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 709.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 71.07 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 71.07 | Water Loss: 118 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	11:15	--	BTEX, SVOCs, Metals: As, Pb
18'-20'	Grab	11:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
						51.56 - 53.40' Packstone/Wackestone, interbedded, light grey to medium grey, crinoids, geodes
						52.72' fracture
						52.40 - 55.75' Packstone/Grainstone,
						53.55 - 53.69' geode
						54.67' fracture, tight
						55.75' fracture, contact
						55.75 - 59.0' Siltstone/Mudstone, dark greenish grey, horizontal, thin, strong, Limestone seams
						56.45 - 56.82' Grainstone
						57.14' fracture at geode
						57.14 - 57.27' geode
						57.45 - 57.56' geode
						57.70 - 57.76' geode
						58.17' fracture at geode
						58.17 - 58.32' geode
						59.0 - 69.45' Wackestone/Packstone, bluish grey, some interbedded Siltstone
						59.19' fracture, extremely narrow, pyrite mineralization, dry
						60.94 - 61.22' Grainstone/Packstone
						61.22 - 61.27' styolite
						**61.15' fracture, rough, odor
						61.95' fracture along styolite
						62.75' fracture, extremely narrow, smooth
						64.22 - 64.36' geode
						64.36 - 64.45' geode
						64.47 - 64.58' geode
						65.44' fracture, extremely narrow, smooth
						67.78' fracture
						68.0 - 68.8' Packstone/Grainstone
						68.7' fracture

ROCK CORING / SAMPLING LOG

Boring/Well: MW-48 A & B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 5 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 1/4/11 @ 10:45 | Drilling Date/Time Completed: 1/6/11 @ 16:25

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 709.2 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 71.07 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 71.07 | Water Loss: 118 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0'-2'	Grab	11:15	--	BTEX, SVOCs, Metals: As, Pb
18'-20'	Grab	11:45	--	BTEX, SVOCs, Metals: As, Pb

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss (gallons)	Sample/Core Description
						68.9' fracture, clay
						69.04' fracture, slity clay infill
						69.23' fracture
						69.45 - 71.07' Siltstone, Borden, dark grey, massive, competent, horizontal banding
						71.07' End of boring

SOIL BORING / SAMPLING LOG

Boring/Well: MW-49A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 7/26/11 @ 14:15 | Drilling Date/Time Completed: 7/28/11 @ 10:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 705.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.1 Feet | Hole Diameter: 8" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 61.05 | Water Loss: 120 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	14:05	--	BTEX, SVOC, Metals
8'-10'	Grab	14:45	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	10.0	100	--	--		0 - 0.5'	**Fill Material,** dark brown, medium sands, pebbles to cobbles, slag
						0.5' - 1.25'	**Fill Material,** brown, medium-coarse sands, pebbles to cobbles
						1.25' - 10.0'	**Silty Clay,** light brown, fine, dry, friable; slightly moist and slightly cohesive at 1.75'; trace pebbles
							and organics (black) from 6.25'-8.75'
						10.0' - 12.0'	**Bedrock,** mudstone, fractured to to reaming; set temporary casing at 12.0'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-49A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 7/26/11 @ 14:15 | Drilling Date/Time Completed: 7/28/11 @ 10:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 705.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.05 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 61.05 | Water Loss: 120 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab	14:05	--	BTEX, SVOC, Metals
8 -10'	grab	14:45	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
12.30	16.27	100	90.4	12	35	**12.30' - 12.77', Mudstone,** light brown-light grey, slightly weathered, pitted, moderate strength,
16.27	21.36	100	93.5	11	40	massive, slightly disentegrated , moderately fractured
21.36	26.36	100	100.0	14	0	12.59'-12.60, fracture along geode
26.36	31.25	98	91.8	12	0	12.50'-12.64', geode
31.25	36.17	98.4	96.5	14	0	12.70'-12.80', geode
36.17	41.05	96.6	100.0	12	0	**12.77' - 13.31', Wackestone,** light grey, trace fossils, thinly bedded, unfractured
41.05	46.21	100	90.0	12	0	13.31'-13.34', fracture, contact, weathered, possible zone of water loss, sand and clay infill
46.21	51.05	96.8	98.0	13	5	**13.31' - 16.28', Packstone w/ Int. Wackestone,** medium-bluish grey, strong, massive, moderately
51.05	56.20	100	100.0	14	30	fractured, crinoids
56.20	61.09	97.80	90.8	12	10	13.41', fracture, rough, pitted, trace sand, possible zone of water loss
						13.67'-13.72', styolites
						13.90'-14.0', fracture (30 dregees), trace sand
						15.60'-15.80', styolites
						15.69'-15.73', fracture along styolite, clay infill, possible zone of water loss
						15.88'-16.46', geode, crystals
						16.28' - 20.05', Grainstone, light greyish-whiteish grey, massive, strong, crinoids, fenestrate
						bryozoa.
						16.28'-16.46', 30 degree healed fracture
						17.47'-17.51', styolite
						17.90'-17.91', fracture, smooth, weatherd edges
						18.67'-18.78', styolites
						20.05' - 22.35', Wackestone/Grainstone, medium bluish grey, strong, massive, slightly fractured,
						trace glauconite
						20.05'-20.09', fracture, contact, clay infil
						20.25'-20.37', fracture, clay infill
						20.65', styolite
						21.96'-21.97', fracture, slightly smooth
						22.35', fracture, along styolite, contact

ROCK CORING / SAMPLING LOG

Boring/Well: MW-49A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 7/26/11 @ 14:15 | Drilling Date/Time Completed: 7/28/11 @ 10:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 705.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.05 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 61.05 | Water Loss: 120 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab	14:05	--	BTEX, SVOC, Metals
8 -10'	grab	14:45	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						22.35' - 28.98', Grainstone, light grey-whiteish grey, strong, massive, crinoids, brachiopods
						22.55', styolite
						22.90', styolite
						23.66'-23.67', fracture, clean
						24.31'-21.45', styolite
						24.84'-24.85', fracture, rough, along styolite
						26.45'-28.98', vertical fracture, clean, healed from 26.45'-26.77'
						26.77'-26.78', fracture, along styolite, clean, rough
						28.98' - 29.12', Clay Interval, medium grey, fracture/weatherd limestone and siltstone, soft
						28.98', fracture, contact, clay infill
						29.12', fracture, contact, clay infill
						29.12' - 29.42', Weathered Siltstone, greyish green, glauconite, moderate strength, intensely
						fractured
						29.27'-29.34', heavily fractured zone, clay infill
						29.42' - 31.25', Siltstone, medium-dark grey, thinly bedded, strong, unfractured, small geodes
						31.25' - 31.45', Packstone/Grainstone, dark bluish grey, massive, strong, unfractured
						31.45' - 32.07', Grainstone, medium grey, glauconist, massive, strong, unfractured
						31.50'-31.60', styolites
						32.07'-32.09', fracture, contact, weathered, smooth
						32.07' - 32.15', Weathered Siltstone, greyish green, glauconite, moderate strength, unfractured
						32.15' - 33.58', Siltstone, dark grey, thinly bedded, strong, moderately fractured
						33.30', fracture, bedding plane
						33.30'-33.40', geode, open, crystalline
						33.46'-33.47', fracture, clean, smooth
						33.52'-33.38', geode
						33.58' - 38.00', Packstone/Grainstone, medium bluish grey, strong, massive, moderately fractured
						34.41'-34.42', fracture, smooth
						34.91'-35.05', styolites

ROCK CORING / SAMPLING LOG

Boring/Well: MW-49A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 7/26/11 @ 14:15 | Drilling Date/Time Completed: 7/28/11 @ 10:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 705.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.05 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 61.05 | Water Loss: 120 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab	14:05	--	BTEX, SVOC, Metals
8 -10'	grab	14:45	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						35.75'-35.76', fracture, smooth
						37.42'-37.46', fracture, clay infill, partly healed
						38.00' - 38.69', Int. Mudstone/Packstone, light greenish grey, crinoids, brachiopods, strong, massive
						unfractured
						38.69' - 41.05', Int. Siltstone/Wackestone, medium grey, small geodes, strong, massive/thick beds,
						unfractured
						41.05' - 42.40', Siltstone, dark grey, strong, thinly bedded, moderately fractured,
						42.45', fracture, bedding plane
						42.64'-42.65', fracture, rough, weathered, some clay
						42.40' - 42.85', Weathered Siltstone, medium greenish grey, glauconite, weak, thinly bedded,
						fractured
						42.80', fracture, bedding plane
						42.85', fracture, contact
						42.85' - 45.18', Wackestone w/ Int. Mudstone, light grey, decreasing mudstone w/ depth, strong,
						massive, moderately fractured
						43.85', fracture, clean
						44.88', fracture, clean
						45.18' - 47.08', Mudstone, light-medium grey, strong, massive, unfractured
						45.75'-45.80', geode
						47.08' - 58.95', Siltstone/Mudstone/Wackestone w/ Int. Grainstone, medium-dark grey, strong,
						massive w/ thin beds of siltstone, slightly fractured.
						47.45'-47.71', geode sequence
						47.56'-47.64', grainstone
						48.00'-48.23', grainstone
						48.36', 48.68', grainstone
						48.40'-48.88', geode sequence
						49.05'-49.24', grainstone
						49.96'-50.01', grainstone

ROCK CORING / SAMPLING LOG

Boring/Well: MW-49A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 5 of 5

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 7/26/11 @ 14:15 | Drilling Date/Time Completed: 7/28/11 @ 10:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 705.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 61.05 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 61.05 | Water Loss: 120 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	grab	14:05	--	BTEX, SVOC, Metals
8 -10'	grab	14:45	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						50.87'-50.90', grainstone
						50.88'-50.90', fracture, partly healed, possible zone of water loss
						51.05', end of run, fracture, sub horizontal, partly healed, possible zone of water loss
						52.80'-52.84', fractured rock, fragments, possible zone of water loss
						52.86'-52.98', geode
						53.14'-53.46', grainstone, small geodes
						54.26'-54.28', fracture, contact, siltstone/grainstone, possible zone of water loss
						54.28'-54.98', grainstone, geodes
						54.98'-56.20', geodes
						56.89'-57.29', grainstone
						56.52', 56.53', fracture, partly healed, possible zone of water loss
						58.95' - 59.15', Weathered Siltstone, greyish green, glauconite, moderate-weak, heavily fractured,
						thinly bedded
						58.95', fracture, contact
						58.97', fracture, bedding plane
						59.05', fracture, bedding plane
						59.15' - 61.05', Siltstone (Borden), dark grey, cross bedding, strong, thinly bedded, slightly fractured
						59.38', fracture, badding plane
						60.57', fracture, bedding plane

SOIL BORING / SAMPLING LOG

Boring/Well: MW-49C | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 2

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 7/28/11 @ 10:45 | Drilling Date/Time Completed: 7/28/11 @ 16:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 705.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 23.2 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 23.23 | Water Loss: 0 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	10:55	--	BTEX, SVOC, Metals
8'-10'	Grab	11:30	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	10.0	100	--	--		0 - 1.1'	**Fill Material,** sand, pebbles to cobbles, slag, debris
						1.1' - 10.0'	**Clayey Silt,** light brown, slightly plastic, dry, trace pebbles, trace sand, trace organics, stiff
						10.0' - 14.0'	**Bedrock,** heavily fractured from 10'-12', river rock from 12'-13', competant at 13'; set temporary
							casing at 14'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-49C | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 2

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 7/28/11 @ 10:45 | Drilling Date/Time Completed: 7/28/11 @ 16:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 705.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 23.23 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 23.23 | Water Loss: 0 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	10:55	--	BTEX, SVOC, Metals
8'-10'	Grab	11:30	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
14.11	15.48	100	63.5	10	0	**14.11' - 15.85', Int. Wackestone/Packstone,** light-medium grey, massive, heavily fractured,
15.48	16.26	100	100.0	4	0	moderate strength, crinoids
16.26	21.09	96.6	100.0	15	0	14.20'-14.37', heavily fractured, fragments, possible zone of water loss
21.09	23.23	100	100.0	5	0	14.74'-14.81', fracture, possible zone of water loss, semi smooth
						14.93'-15.01', fracture, possible zone of water loss, semi smooth
						15.20'-15.24', styolite
						15.80'-15.85', fracture along styolite, partly healed, trace clay
						15.85' - 23.23', Grainstone, medium grey-medium bluish grey, strong, massive, moderately fractured
						crinoids, fenestrate bryozoa, brachiopods
						17.65'-17.68', styolite
						17.75'-17.79', styolite
						21.09'-21.16', styolite
						21.49', 21.51', fracture, partly healed, rough
						22.20'-22.20', fracture, partly healed, smooth
						22.50'-22.55', styolite
						23.23' End of boring

SOIL BORING / SAMPLING LOG

Boring/Well: MW-50A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/1/11 @ 9:25 | Drilling Date/Time Completed: 8/3/11 @ 14:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 698.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 73.0 Feet | Hole Diameter: 8" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / E. Gercke | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 73.0 | Water Loss: 280 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:45	--	BTEX, SVOC, Metals
8'-9'	Grab	12:40	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	9.0	100	--	--		0 - 8.0'	**Air Knife/No Geology**
						8.0' - 9.0'	**Silty Clay,** brown-reddish brown, rock fragments, soft, sticky, moist, trace sand
						9.0' - 11.0'	**Bedrock,** limestone, fragmented/broken due to reaming, set temporary casing at 11.0'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-50A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/1/11 @ 9:25 | Drilling Date/Time Completed: 8/3/11 @ 14:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 73.0 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / E. Gercke | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 73.0 | Water Loss: 280 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:45	--	BTEX, SVOC, Metals
8'-9'	Grab	12:40	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
11.07	11.50	100	0.0	5	0	**11.07' - 12.95', Wackestone,** with nodules of crystalline carbonate chert (possible Salem?), brownish
11.50	16.00	100	75.1	12	10	grey to grey, light brown nodules, slightly weathered, strong, some fossils, thin beds, small beds of
16.00	20.93	98.6	95.9	10	15	packstone, intensely fractured.
20.93	25.87	98.8	77.7	13	20	11.82'-11.85', fracture at nodule, weathered,
26.00	31.00	100	95.8	15	5	12.02'-12.04', fracture, weathered
31.00	35.88	97.6	100.0	19	0	12.35'-12.45', fracture, sub horizontal
35.88	40.88	100	86.5	20	15	12.45'-12.50', styolite
40.88	45.96	100	94.3	15	0	12.88'-12.95', fracture, contact
45.96	50.62	93.2	87.5	21	65	**12.95' - 14.10', Packstone,** dark bluish grey, mud clasts, strong, fossil layers, moderately fractured
50.62	55.81	104.00	83.9	15	40	13.90', fracture
56.00	60.92	98.4	97.4	--	0	13.80'-14.0', 45 degree contact to grainstone nodule/layer
60.92	65.91	99.8	83.8	18	50	14.10', fracture, contact
65.91	70.92	100	98.0	18	40	**14.10' - 16.62', Wackestone,** light grey, thinly bedded, strong, moderately fractured
70.92	73.00	100	84.0	--	20	14.30'-14.40', sub horizontal fracture, clay infill, rock fragments
						14.35'-14.4', fracture, clay infill, rock fragments
						15.20', fracture along styolite
						16.50'-16.62', fracture along styolite
						16.62' - 21.58', Packstone, light grey, thinly bedded/ massive, slightly pitted, strong, moderately
						fractured
						17.46', fracture, slightly weatherd, clean
						18.40'-18.65', zone of weathered fractures and styolite
						19.55', fracture, slightly weathered, clean
						20.0'-20.05', fracture along styolite
						21.55'-21.58', fracture w/ rock fragments, weathered.
						21.58' - 23.93', Packstone/Wackestone, light grey, massive, strong, moderately fractured
						21.65', styolite
						22.34', styolite
						22.60', fracture along styolite

ROCK CORING / SAMPLING LOG

Boring/Well: MW-50A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/1/11 @ 9:25 | Drilling Date/Time Completed: 8/3/11 @ 14:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 73.0 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / E. Gercke | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 73.0 | Water Loss: 280 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:45	--	BTEX, SVOC, Metals
8'-9'	Grab	12:40	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						22.81'-22.86', styolite
						23.05'-23.11', styolite
						23.20'-23.26', styolite
						23.57', fracture, slightly weathered
						23.93'-23.96', fracture along styolite, sand, possible zone of water loss
						23.93' - 27.48', Packstone/Wackestone w/ Int. Mudstone lenses, light grey-brown w/ green,
						aphanitic lenses, intensely fractured, some healed fractures, strong, crinoids, bryozoans
						24.0'-24.1', styolite zone
						24.26'-24.30', fracture weathered
						24.35'-24.65', mudstone lenses, healed fractures, bryozoans
						24.65'-24.68', fracture along styolite, sandy infill, possible zone of water loss
						24.68'-25.20', sub vertical fracture, possible zone of water loss
						25.05', fracture, possible zone of water loss
						25.18'-25.20', fracture along styolite, possible zone of water loss
						25.43'-25.46', fracture along styolite
						25.87'-26.00', lost due to over reaming and advancing temporary casing
						26.25'-26.31', styolite
						26.37', styolite
						26.39'-26.40', fracture, clean, rough
						26.70'-26.77', styolite, w/ clay infill
						26.90', fracture partly healed, semi smooth
						27.00'-27.04', styolite
						27.40'-27.48', fracture, partly healed, semi smooth, clay infill, possible zone of water loss
						27.48' - 32.45', Wackestone, medium greenish grey, strong, medium bedded, slightly fractured,
						mudstone lenses
						27.48'-27.60', healed fracture zone
						27.63'-27.67', fracture, partly healed, rough, possible zone of water loss
						28.05'-28.09', fracture, clean

ROCK CORING / SAMPLING LOG

Boring/Well: MW-50A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/1/11 @ 9:25 | Drilling Date/Time Completed: 8/3/11 @ 14:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 73.0 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / E. Gercke | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 73.0 | Water Loss: 280 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:45	--	BTEX, SVOC, Metals
8'-9'	Grab	12:40	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						30.26'-30.28', fracture, clean
						32.37', fracture, clean
						32.45' - 35.45', Int. Mudstone/Siltstone, medium-dark grey, medium/thinly bedded, strong, slightly
						fractured
						32.47'-32.72', geode
						32.72'-32.73', fracture along geode, clean
						33.28'-33.30', fracture, along geode, semi smooth
						33.30'-33.39', geode
						33.72'-33.77', packstone layer
						35.45'- 41.43', Packstone, dark bluish grey, massive, strong, moderately fractured
						35.98', fracture, weathered
						36.40', fracture, weathered
						36.70'-36.76', mudstone
						36.74', fracture, weathered
						37.70'-37.72', fracture, weathered, slight clay infill
						37.82'-37.84', fracture, weathered, contact
						37.84'-38.33', mudstone/siltstone, dark grey, trace fossils
						38.46'-39.14', packstone/grainstone
						38.61'-38.64', fracture, weathered, some clay/sand intill
						38.74', fracture, slightly weathered
						38.92'-38.96', fracture, weathered
						40.63'-40.66', fracture, clay infill
						41.43'-41.46', fracture, weathered, contact
						41.43' - 47.53', Mudstone/Siltstone, dark grey-bluish, massive, strong, moderately fractured, trace
						fossils, nodules/geodes
						43.04'-43.07', fracture, slightly weathered, along geode
						43.07'-43.17', geode
						43.35'-43.39', fracture, weathered

ROCK CORING / SAMPLING LOG

Boring/Well: MW-50A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 5 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/1/11 @ 9:25 | Drilling Date/Time Completed: 8/3/11 @ 14:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 73.0 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / E. Gercke | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 73.0 | Water Loss: 280 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:45	--	BTEX, SVOC, Metals
8'-9'	Grab	12:40	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						46.53'-46.54', fracture, sand intill
						46.87', fracture, clean
						47.55'-47.58', fracture, contact, slightly weathered, sand infill, possible zone of water loss
						47.53' - 50.62', Packstone/Grainstone, light grey, massive/ bedded in places, moderately fractured,
						srtong
						47.58'-47.63', zone of coarse grains, crinoids
						47.75'-47.78', fracture, along styolite, weathered, sand infill, possible zone of water loss
						48.45'-48.78', interbedded mudstones
						48.89'-48.91', fracture, slightly weathered, sand infill
						48.95'-48.96', styolite
						49.05', fracture, slightly weathered, sand infill
						50.42'-50.46', fracture, some clay infill
						50.56'-50.62', fractured rock with clay, contact
						50.62' - 51.85', Mudstone/Siltstone, dark bluish grey, intensely fractured, moderate strength,
						thinly bedded, layers of lighter colored material
						50.84', fracture, some sand infill
						51.09', fracture, clean
						51.35'-51.37', fracture, clean
						51.79'-51.81', fracture, contact
						51.85'-57.02', Packstone/Wackestone, w/ some layers of mudstone, light grey, srtong, moderately
						fractured, medium bedded
						52.14'-52.15', fracture, contact, slightly weathered
						52.14'-52.23', wackestone
						52.22'-52.23', fracture, contact
						53.27'-53.28', fracture, slightly weathered
						54.34', fracture,
						54.00'-54.11', increased fossil content
						55.03'-55.44', laminated mudstone

ROCK CORING / SAMPLING LOG

Boring/Well: MW-50A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 6 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/1/11 @ 9:25 | Drilling Date/Time Completed: 8/3/11 @ 14:50

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 698.0 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 73.0 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: R. Woodruff / E. Gercke | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 73.0 | Water Loss: 280 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	9:45	--	BTEX, SVOC, Metals
8'-9'	Grab	12:40	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						55.37', fracture, slightly weathered
						56.53', fracture, clean
						57.02' - 61.79', Musdtone/Siltstone, dark bluish grey, medium bedded, moderately fractured, strong,
						lenses or lighter colored material, geodes/nodules
						57.85'-57.87', fracture, slightly weathered, along geodized layer
						58.60'-58.62', fracture, clean
						59.37'-59.45', geode
						59.50'-59.61', fracture, rock fragments/geode
						61.79' - 66.0', Packstone/Wackestone, light grey-light greenish grey, massive, thin beds in places,
						moderate-intensely fractured, strong, crinoid layers
						61.90'-62.0', fracture, clean, 20 degrees
						62.37'-62.39', fracture, clean
						62.42'-62.45', fracture, along styolite
						62.96'-63.01', fracture, along styolite, slightly more fossiliferous layer
						63.27', styolite, lighter grey on bottom
						63.66'-63.69', fracture along styolite
						63.96'-63.98', fracture along styolite
						65.39'-65.42', fracture, clean, 15 degrees
						65.69'-65.72', fracture, along styolite
						66.0' - 70.07', Mudstone/Wackestone, dark grey, banded, some interbedded packstone, geodes
						66.22'-66.35', geode
						66.77'-66.78', fracture, along geode
						67.64'-67.65', fracture, along geode
						68.78'-68.79', fracture, crinoids abundant
						70.07' - 73.0', Siltstone (Borden), dark grey, slightly fractured, strong, thinly bedded
						71.97'-72.01', fracture along geode
						72.43', fracture
						72.56', fracture

SOIL BORING / SAMPLING LOG

Boring/Well: MW-51A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/4/11 @ 11:30 | Drilling Date/Time Completed: 8/8/11 @ 12:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 691.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 55.9 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / E. Gercke / M. Hicks | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 55.87 | Water Loss: 115 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	11:30	--	BTEX, SVOC, Metals
8'-10'	Grab	14:00	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS Description/Depth	From - To	Sample/Core Description
0.0	12.0	100	--	--		0 - 10.0'	**Silt,** minor clay, dark yellowish brown, moist, friable, low plasticity; increasing clay content at 7.0';
							rock fragments increase with depth starting at 8.0', along with darker brown/black organics
						10.0' - 14.0'	**Bedrock,** packstone, chert, fragments/broken due to reaming, weathered; more competant at 12.0',
							set temporary casing at 14.0'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-51A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/4/11 @ 11:30 | Drilling Date/Time Completed: 8/8/11 @ 12:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 691.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 55.87 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / E. Gercke / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 55.87 | Water Loss: 115 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	11:30	--	BTEX, SVOC, Metals
8'-10'	Grab	14:00	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
13.81	15.66	100	84.2	10	10	**13.81' - 17.29', Mudstone,** bluish grey, interbedded wackestone/packstone, thinly bedded, moderate
15.66	20.69	100	97.5	17	0	strength, moderately fractured, geodes
21.00	25.71	94.2	62.5	15	50	14.10', fracture, slightly weathered
26.00	31.00	100	86.7	16	0	17.29'-17.33', fracture, weathered, contact
31.00	35.98	99.6	89.0	19	25	**17.29'-20.69', Packstone/Wackestone,** dark blue grey-light grey, thinly bedded strong, intensely
35.98	40.82	96.8	95.7	15	10	fractured
40.82	45.82	100	91.7	19	20	17.29'-17.50', grainstone
45.82	50.92	100	94.3	18	0	17.72'-17.74', fracture, along styolite, weathered, clean
50.92	55.87	73.1	73.1	15	0	18.05'-18.17', fracture, along styolite, thick clay infill, 45 degrees
						18.45'-18.56', fracture, along styolite, weathered, clay infill, irregular
						18.55'-18.85', interbedded mudstones
						19.39'-19.41', fracture, along layer of large crinoids, slightly weathered, clean
						19.92'-19.97', fracture, weathered, along crinoid layer
						20.57'-20.61', fracture, slightly weathered
						20.69'-21.00', lost to due over reaming/ casing advance
						21.00' - 21.05', Clay Interval, dark grey, soft
						21.05' - 27.99', Mudstone/Wackestone, dark bluish grey-dark grey, trace fossils, thinly bedded,
						geoded, moderate strength.
						21.13'-21.14', fracture, weathered
						21.78'-21.79', fracture, along packstone bed, slightly weathered
						21.78'-21.90', packstone bed, crinoids
						22.04'-22.05', fracture, some clay infill
						23.29'-23.31', fracture, little clay infill, possible zone of water loss
						23.58'-23.59', fracture along geode
						23.58'-23.66', geode
						23.66', fracture along geode
						23.66'-23.89', slightly weathered zone, shallow pitting on edges of core
						23.89'-23.95', fracture, along geode, weathered, possible zone of water loss

ROCK CORING / SAMPLING LOG

Boring/Well: MW-51A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/4/11 @ 11:30 | Drilling Date/Time Completed: 8/8/11 @ 12:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 691.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 55.87 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / E. Gercke / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 55.87 | Water Loss: 115 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	11:30	--	BTEX, SVOC, Metals
8'-10'	Grab	14:00	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						24.78', fracture, cleam
						25.43, fracture, weathered, clay infill
						26.25'-26.27', fracture, slightly weathered, some geodes at break
						27.66'-27.78', fracture, along geodes, clean
						27.95'-27.99', fractures, contact, geode layer
						27.99' - 31.16', Packstone, light grey, strong, slightly fractured, massive/thin beds, large crinoid
						layers, interbedded mudstone
						29.14', fracture along geode
						29.14'-29.31', geode
						29.31'-30.10', mudstone, finely laminated, greenish grey, occasional packstone layers
						30.22'-30.23', fracture along styolite
						31.11'-31.13', fracture along styolite/crinoid layer
						31.16', fracture, contact
						31.16' - 31.28', Weathered Mudstone/Clay, grey soft, weak, one geode nodule
						31.28' - 33.96', Mudstone w/ Int. Packstone, dark grey w/ lighter colored packstones, strong,
						moderately fractured, geodes, thinly bedded/laminated
						32.54'-32.57', fracture, clean
						32.88'-33.96', increasing geodes/nodules, and packstone layers
						33.48'-33.39', fracture, clean
						33.80'-33.82', fracture, along large fossil layer, clean
						33.96', fracture, contact
						33.96' - 39.06', Wackestone w/ occasional Packstone, light bluish grey, geodes, strong, massive,
						thinly bedded, slightly fractured
						35.36'-35.38', fracture, clean
						36.93'-36.94', fracture, clean
						37.32'-37.33', fracture, clean, along fossil layer
						38.05'-38.08, fracture, along geodes, weathered
						39.06', fracture, contact

ROCK CORING / SAMPLING LOG

Boring/Well: MW-51A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 4

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/4/11 @ 11:30 | Drilling Date/Time Completed: 8/8/11 @ 12:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 691.9 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 55.87 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / E. Gercke / M. Hicks | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 55.87 | Water Loss: 115 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0-2'	Grab	11:30	--	BTEX, SVOC, Metals
8'-10'	Grab	14:00	--	BTEX, SVOC, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						39.06' - 43.45', Mudstone, dark bluish grey w/ light grey nodules, moderately fractured, strong,
						thinly bedded
						40.21'-40.23', fracture, slightly weathered, clean
						40.41'-40.46', fracture, along geodes, trace clay
						40.41'-40.47', geode
						41.65'-41.66', fracture, clean, slightly weathered,
						41.66'-43.34', increased amounts of brownish laminae
						43.34'-43.36', fracture, contact
						43.36'-43.43, packstone, dark grey, crinoids
						43.43'-43.45', fracture, contact, weathered, clay infill
						43.45' - 44.63', Packstone/Wackestone, light bluish grey, srtong, unfractured, massive/thin beds,
						large crinoids
						43.78', fracture, along styolite, contact, weathered
						43.78'-43.83', packstone, large crinoids
						44.63' - 50.63', Mudstone, dark grey w/ brown-light brown laminae, thinly bedded, strong,
						unfractured, geodes, sparse crinoids
						45.82'-45.96', fracture, sand and clay infill layer
						50.21'-50.45', packstone, crinoids
						50.62'-50.63', fracture, slightly weathered, contact
						50.63' - 55.87', Siltstone (Borden), dark grey, thinly bedded, laminated and cross bedded, strong
						50.63'-50.79', weathered siltstone, glauconite, notice DNAPL in return water
						51.24'-51.26', fracture, clean
						51.60'-51.61', fracture, clean
						51.79'-51.80', fracture, clean
						52.06'-52.08', fracture, clean
						52.26'-52.27', fracture, clean
						54.27', fracture, trace clay.
						55.87' End of boring

SOIL BORING / SAMPLING LOG

Boring/Well: MW-51B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/8/11 @ 14:05 | Drilling Date/Time Completed: 8/9/11 @ 11:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 691.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 29.70 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: -- | Hammer Drop: -- ins.

Boring Termination Depth: 29.7 | Water Loss: 78 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
N/A				

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	9.5	100	--	--		0 - 2.5'	**Clayey Silt,** yellowish brown, few black conretions, friable, very silty, dry-very slightly moist
						2.5' - 5.0'	**Same as above,** color change to reddish light brown
						5.0' - 9.5'	**Clayey Silt,** reddish brown, increase in clay from above layer, slightly moist, slightly plastic, few
							common roots; 8'-9.5' organic matter, weathered limestone fragments.
						9.5' - 13.5'	**Bedrock,** grainstone/packstone, crinoids, brachiopods, fenestrate bryozoa. Fragmented due to
							reaming, more competant at 11.5'; set temporary casing as 13.5'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-51B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/8/11 @ 14:05 | Drilling Date/Time Completed: 8/9/11 @ 11:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 691.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 29.70 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: -- | Hammer Drop: -- ins.

Boring Termination Depth: 29.70 | Water Loss: 78 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
			--	
			--	

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
13.29	15.72	100	76.50	11	5	**13.29' - 13.46', Grainstone,** light grey, broken due to seting of casing, massive, fenestrate bryozoa,
15.72	20.71	99.9	61.5	16	0	13.42'-13.46', fracture, contact, trace clay
20.71	24.87	83.2	77.4	15	8	**13.46' - 14.73', Int. Wackestone/Packstone/Mudstone,** medium greenish grey, strong, thin-medium
24.87	29.70	96.6	90.7	14	65	bedded, slightly fractured
						13.88'-13.90', fracture, clean
						14.73' - 16.60', Mudstone/Wackestone, medium-dark grey, strong, thinkly bedded, moderately
						fractured
						14.84'-14.86', fracture, clean
						14.92'-14.93', fracture, clean
						15.40', fracture, clean
						16.06', fracture, clean
						16.35', fracture, clean
						16.60' - 17.37', Int. Mudstone w/ some Siltstone, dark grey, strong, thinly bedded, moderately
						fractured
						16.82'-16.83', fracture, clean
						17.17'-17.18', fracture, clean
						17.18'-17.37', pyrite zone
						17.37'-17.38', fracture, contact, pyrite, slight clay infill, along geode
						17.37' - 19.56', Wackestone/Packstone w/ Int. Mudstones, strong, massive, layered intervals,
						moderately fractured
						17.37'-17.60', geode
						17.53'-17.63', fracture, along geode, clay infill
						17.73'-17.78', clay layer
						18.15'-18.21', fracture, partly healed, styolite
						18.50', fracture, clay infill, partly healed
						19.56' - 20.12', Grainstone w/ Int. Mudstones, light-medium greenish grey, massive, layered
						intervals, moderately fractured
						19.58'-19.66', fracture zone, partly healed, trace clay

ROCK CORING / SAMPLING LOG

Boring/Well: MW-51B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 3

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/8/11 @ 14:05 | Drilling Date/Time Completed: 8/9/11 @ 11:30

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 691.8 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 29.70 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: -- | Hammer Drop: -- ins.

Boring Termination Depth: 29.70 | Water Loss: 78 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
			--	
			--	

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						20.12', fracture, partly healed, contact, pyrite
						20.12' - 20.24', Grainstone, light greyish white, strong, massive, unfractured
						20.23'-20.24', fracture, contact, partly healed, trace clay
						20.24' - 23.60', Mudstone w/ Int. Siltstone and Wackestone, various greys, thin-medium bedded,
						strong, slightly fractured
						20.56'-20.58', fracture, clean
						21.61'-21.63', fracture, bedding plane, clean
						21.69'-21.72', crinoid zone
						23.50'-23.60', fracture, weak zone, contact
						23.60' - 26.73', Siltstone, dark grey, thinly bedded, strong, heavily fractured due to drilling
						24.00'-24.10', geode, open
						24.16'-25.85', heavily fractured/broken, fell out of core tooling back down hole; had to go back
						down and retrieve.
						25.78'-25.85', fracture along geode, clean
						25.78'-25.87', geode, crystalline, open
						26.14'-26.36', small geodes
						26.49'-26.51', fracture along geode, clean, bedding plane
						26.51'-26.72', geode sequance
						26.72'-26.73', contact fracture, partly healed, trace clay
						26.73' - 28.10', Packstone/Grainstone, medium bluish-grey, strong, massive, slightly fractured,
						crinoids
						27.96'-27.99', fracture, clean, crinoids
						28.08'-28.10', contact fracture, partly healed, trace clay
						28.10' - 28.72', Interbedded Mudstone/Wackestone, medium greenish-grey, strond, medium bedde
						unfractured
						28.72' - 29.70', Packstone, light greenish-grey, strond, massive, slightly fractured
						29.10', fracture, partly healed
						29.70' End of boring

SOIL BORING / SAMPLING LOG

Boring/Well: MW-52A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/10/11 @ 8:30 | Drilling Date/Time Completed: 8/11/11 @ 17:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: 710.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 50.36 Feet | Hole Diameter: 6" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / W. Kuhn / M. Hicks | Hammer Weight: -- | Hammer Drop: -- ins.

Boring Termination Depth: 50.36 | Water: 520 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	grab	8:45	--	BTEX / SVOCs / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches		USCS Description/Depth From - To	Sample/Core Description
0.0	5.0	100	--	--		0.0' - 0.5'	**Asphalt**
						0.5' - 0.75'	**Gravels,** cobbles
						0.75' - 5.0'	**Clay,** brown, could not get geology due to airknife
							1.0'-1.75', boulders, cobbles
							1.75', color change to red
						5.0' - 7.0'	**Bedrock, Limestone**, broken due to reaming; push 6" temporary casing to 7.0'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-52A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/10/11 @ 8:30 | Drilling Date/Time Completed: 8/11/11 @ 17:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 710.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 50.36 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn / M. Hicks | Hammer Weight: -- | Hammer Drop: -- ins.

Boring Termination Depth: 50.36 | Water: 520 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	grab	8:45	--	BTEX / SVOCs / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
7.01	10.85	100	90.8	14	33	**7.01' - 13.07', Wackestone/Packstone,** medium to light grey, strong, massive, crinoids, brachiopods,
10.85	15.95	82	89.2	13	0	fenestrate, bryozoa, moderately fractured
16.84	20.68	76.8	88.5	16	45	7.17'-7.19', fracture, 30 degrees, clay infill
21.07	25.80	94.6	37.2	19	72	7.23'-7.27', fracture along styolite, rough, weathered, trace clay
25.80	30.82	100	60.4	15	110	7.27'-7.34', styolite
30.82	35.69	92.6	97.4	17	65	8.34'-8.40', fracture, clay layer/infill, possible zone of water loss
35.69	40.65	99.2	92.7	16	55	8.92'-8.95', fracture, clean
40.65	45.60	99	100	13	70	9.10'-9.11', fracture, clean
45.60	50.36	95.2	100	15	70	9.85', fracture along styolite, partly healed, trace clay
						10.32'-10.37', styolite
						10.91'-10.92', styolite, healed fracture
						11.76', fracture along styolite, clean
						12.95'-12.96', fracture along styolite, trace clay
						12.95'-12.98', styolite
						12.98'-13.03', healed fracture
						13.07', contact fracture
						13.07' - 14.58', Clay, brown, sticky, trace bedrock fragments, possible zone of water loss
						14.58' - 17.03', Grainstone, light grey, strong, massive, brachiopods, fenestrate, bryozoa, moderately
						fractured
						14.64'-14.72', fracture, clay infill, oxidation, possible zone of water loss
						14.76'-14.78', fracture, clay, possible zone of water loss
						15.57'-15.80', fracture, 75 degrees, oxidation, possible zone of water loss
						15.75'-15.80', fracture, clean
						*15.95'-16.84', lost due to over reaming when pushing temporary casing
						16.90'-16.92', fracture, clean
						17.01'-17.03', styolite, healed contact fracture
						17.03' - 17.86', Mudstone/Wackestone, medium to dark grey, strong, massive, moderately fractured
						17.14'-17.35', bit dropped, possible zone of water loss

ROCK CORING / SAMPLING LOG

Boring/Well: MW-52A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 3 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/10/11 @ 8:30 | Drilling Date/Time Completed: 8/11/11 @ 17:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 710.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 50.36 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn / M. Hicks | Hammer Weight: -- | Hammer Drop: -- ins.

Boring Termination Depth: 50.36 | Water: 520 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	grab	8:45	--	BTEX / SVOCs / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						17.81'-17.86', contact fracture, partly healed, trace clay
						17.86' - 20.46', Packstone, light to medium grey, strong, massive, slightly fractured
						17.92'-17.96', healed fracture
						18.97'-19.00', fracture, clean
						20.17'-20.29', mudstone zone
						20.22'-20.27', fracture, clean, weak
						20.46' - 22.86', Mudstone/Wackestone, medium to dark greyish-green, medium bedded, strong;
						intensive fracturing due to drill bit coming apart
						22.86'-22.88', contact fracture
						22.86' - 23.65', Packstone, light grey, strong, massive, intensely fractured due to drill bit coming apa
						23.65' - 24.41', Wackestone, medium grey, strong, massive, intensely fractured due to drill bit comin
						apart
						24.13'-24.23', styolite
						24.20'-24.26', fracture along styolite, trace clay infill
						24.30'-24.33', styolite
						24.41' - 27.95', Wackestone/Mudstone, light to medium grey, strong, massive, intensely fractured du
						to drill bit coming apart
						25.55'-25.62', fracture along styolite
						25.56'-25.72', styolite
						25.80'-26.82', heavily fractured, possible zone of water loss, oxidation, clay
						27.00', increased mudstone
						27.95' - 28.42', Packstone, medium grey to light greenish-grey, strong, massive, moderately fractured
						28.07'-28.08', fracture, clean
						28.20'-28.23', fracture, clean
						28.40'-28.42', contact fracture, clean
						28.42' - 31.31', Mudstone/Siltstone, medium greenish-grey, thinly bedded, moderate strength,
						intensely fractured
						29.18'-29.23', fracture, weak, trace clay

ROCK CORING / SAMPLING LOG

Boring/Well: MW-52A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/10/11 @ 8:30 | Drilling Date/Time Completed: 8/11/11 @ 17:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 710.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 50.36 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn / M. Hicks | Hammer Weight: -- | Hammer Drop: -- ins.

Boring Termination Depth: 50.36 | Water: 520 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	grab	8:45	--	BTEX / SVOCs / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						29.51'-29.56', fracture, weak, trace clay
						29.68'-29.80', geode, open
						29.78'-30.05', heavily fractured, weak
						30.10'-30.20', geode sequence, open
						30.45'-30.52', fractured, moderate, trace clay
						31.08'-31.13', geode
						30.96'-30.98', fracture, smooth, trace clay
						31.31' - 36.30', Wackestone, grey, strong, massive, slightly fractured, crinoids, brachiopods
						31.69'-31.78', styolite
						31.78'-32.19', mudstone/siltstone lens
						32.65', fracture, clean, rough
						32.80'-32.82', fracture, rough, clay infill
						32.85'-32.88', styolite
						33.38'-33.48', siltstone/mudstone lens
						34.15'-34.27', fracture along styolite, trace clay, rough
						34.73'-34.74', fracture, rough, trace clay, glauconite
						35.28'-35.51', geode, open
						35.18'-35.55', mudstone/siltstone lens
						36.30' - 37.82', Siltstone/Mudstone, greenish-grey, thinly bedded, moderately fractured, moderate
						strength
						36.40'-37.14', vertical fracture, clean, slightly rough
						36.69'-36.72', fracture, clean, slightly rough, possible zone of water loss
						37.12'-37.14', fracture, clean, slightly rough
						37.34'-37.36', fracture, clean, slightly rough
						37.41'-37.43', geode
						37.52'-37.66', geode
						37.68'-37.70', fracture, clean, smooth
						37.69'-37.81', zone of geodes

ROCK CORING / SAMPLING LOG

Boring/Well: MW-52A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 5 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/10/11 @ 8:30 | Drilling Date/Time Completed: 8/11/11 @ 17:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 710.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 50.36 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn / M. Hicks | Hammer Weight: -- | Hammer Drop: -- ins.

Boring Termination Depth: 50.36 | Water: 520 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	grab	8:45	--	BTEX / SVOCs / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						37.82 - 40.78', Packstone/Wackestone, light greenish-grey, strong, massive, unfractured, brachiopod
						37.88'-37.91', fracture along styolite, rough, trace clay infill
						37.95'-37.99', styolite
						38.22'-38.24', fracture, rough, clay infill
						39.08'-39.40', geode, open
						39.19'-39.21', fracture, smooth, clean
						39.77'-39.87', mudstone lens
						40.10'-40.15', mudstone lens
						40.78' - 41.86', Wackestone, grey, strong, massive
						41.01'-41.03', fracture, rough, trace clay infill
						41.86' - 42.62', Mudstone/Siltstone, medium greenish-grey, thinly bedded, strong, unfractured
						42.62' - 44.72' Siltstone, dark grey, thinly bedded, strong
						42.73'-42.76', fracture, smooth, trace clay
						42.75'-42.82', Wackestone/Packstone lens
						43.65'-43.67', fracture, smooth, trace clay
						43.76'-43.78', geode
						44.21'-44.32', geode
						44.63'-44.71', geode
						44.72' - 46.15', Grainstone/Packstone, light grey, strong, massive, slightly fractured, brachiopods
						44.93'-44.98', fracture, rough, trace clay
						45.17'-45.21', styolite
						46.04'-46.07', styolite
						46.15' - 50.36', Mudstone/Siltstone, medium greenish-grey, thinly bedded, strong, slightly fractured
						46.24'-46.25', fracture, smooth, clean
						46.50'-46.59', geode
						46.71'-46.78', geode
						46.77'-46.79', fracture along geode, clean, smooth
						47.38'-47.40', fracture, clean, slightly rough

ROCK CORING / SAMPLING LOG

Boring/Well: MW-52A | Project/No.: IN Creosote / IN000072.0056.00001 | Page 6 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/10/11 @ 8:30 | Drilling Date/Time Completed: 8/11/11 @ 17:00

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: 710.1 feet [X] Surveyed [ ] Estimated | Water:

Total Depth Drilled: 50.36 Feet | Hole Diameter: 6" | Coring Device: HQ

Prepared By: R. Woodruff / W. Kuhn / M. Hicks | Hammer Weight: -- | Hammer Drop: -- ins.

Boring Termination Depth: 50.36 | Water: 520 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2	grab	8:45	--	BTEX / SVOCs / Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						47.58'-47.64', geode
						48.35'-48.73', Packstone lens
						48.61'-48.62', fracture, clean, smooth
						48.90'-48.95', Packstone lens
						49.41'-49.48', geode layer
						49.88'-49.90', fracture along Packstone lens, glauconite, trace clay
						50.36', End of boring

SOIL BORING / SAMPLING LOG

Boring/Well: MW-53A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 1 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/29/11 @ 15:45 | Drilling Date/Time Completed: 9/1/11 @ 14:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: Water | Drilling Method: Sonic

Length and Diameter of Coring Device: 5.0' core barrel / 4" | Sampling Interval: 5.0 feet

Land-Surface Elev.: feet ☐ Surveyed ☐ Estimated | Water:

Total Depth Drilled: 100.4 Feet | Hole Diameter: 8" | Coring Device: 5.0' coring barrel

Prepared By: R. Woodruff / W. Kuhn | Hammer Weight: | Hammer Drop: ins.

Boring Termination Depth: 100.44 | Water Loss: 57 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	15:00	--	BTEX, SVOCs, Metals
10' - 12'	Grab	16:00	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	OVM Reading (ppm)	Blow Counts per 6 inches	USCS	Description/Depth From - To	Sample/Core Description
0.0	14.0	100	--	--		0 - 0.5'	**Asphalt w/ gravel base.**
						0.5' - 6.0'	**Clay,** brown, little sand, soft, dry; red and tan mottling at 5.0'
						6.0' - 12.0'	**Clay,** red w/ tan and black mottling, very hard, slightly plasic, dry
						12.0' - 14.0'	**Bedrock,** fractured due to casing advancement; advanced 6" dia. temporary casing to 14.0'

ROCK CORING / SAMPLING LOG

Boring/Well: MW-53A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 2 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/29/11 @ 15:45 | Drilling Date/Time Completed: 9/1/11 @ 14:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: _____ feet ☐ Surveyed ☐ Estimated | Water: _____

Total Depth Drilled: 100.44 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: E. Gercke/ R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 100.44 | Water Loss: 57 gallons | GPS Coordinates: _____

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	15:00	--	BTEX, SVOCs, Metals
10' - 12'	Grab	16:00	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
14.13	16.00	100	93.3	6	0	**14.13' - 15.20', Wackestone,** tan to brown, strong, ,assove, moderately fractured, small nodules
16.00	20.83	96.6	88.8	10	0	14.69' - 14.79', fracture, slightly weathered, clay infill with rock fragments
20.83	25.88	100	89.3	10	0	**15.20' - 19.38', Packstone,** dark grey to light grey, strong, thinly bedded, slightly pitted, moderately
25.88	30.80	98.4	100.0	9	0	fractured
30.80	35.99	100	93.6	8	0	16.97' - 17.02', fracture along styolite
35.99	41.04	100	95.9	8	0	17.18' - 17.20', fracture, slightly weathered, clay infill
41.04	46.14	100	96.7	8	0	18.65' - 18.67', fracture along silty laminae
46.14	51.04	98	86.4	11	7	19.11' - 19.27', Packstone layer, large grains
51.04	56.25	100	96.0	12	0	19.27' - 19.38', fracture, weathered, clay infill
56.25	61.44	100	96.8	11	15	**19.38' - 21.77', Siltstone,** dark grey, slightly pitted, strong, thinly bedded, moderately fractured,
61.44	66.34	98	96.6	12	0	grading to Packstone at 21.77'
66.34	71.30	99.2	98.7	12	20	19.55' - 19.56', fracture, planar, slight clay infill
71.30	76.38	100	86.9	12	0	19.98', fracture, planar
76.38	81.62	100	86.5	17	15	20.73' - 20.77', fracture, clay infill
81.62	86.40	95.6	100.0	15	0	21.02', fracture, planar, slighty weathered
86.40	90.39	79.8	100.0	12	0	21.53' - 21.62', fracture along nodule layer, weathered, rock fragment infill, possible zone of water
90.39	95.71	100	100.0	12	0	loss
95.71	100.44	94.6	100.0	14	0	**21.77' - 38.10', Wackestone/Packstone,** light grey to dark grey, strong, thinly bedded, slightly
						fractured, rip up clasts of lighter material
						23.91' - 23.95', fracture, along silty layer, clay infill
						24.96' - 24.98', fracture, clean
						25.65' - 25.67', fracture, slightly weathered, very little sand infill
						26.56' - 26.57', fracture along silty laminae
						29.44', fracture, clean, slightly weathered
						30.12' - 30.16', fracture, slightly weathered
						30.42' - 31.03', nodule/muddly clasts in Wackestone
						30.91', fracture along silty laminae, uneven, slightly weathered
						31.52' - 31.54', fracture along Packstone layer

ROCK CORING / SAMPLING LOG

Boring/Well MW-53A/B Project/No. IN Creosote / IN000072.0056.00001 Page 3 of 6

Site Location: Bloomington, Indiana

Drilling Date/Time Started: 8/29/11 @ 15:45

Drilling Date/Time Completed: 9/1/11 @ 14:15

Drilling Contractor: Boart Longyear

Driller: Jason Greer

Drilling Fluid Used: water

Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel

Sampling Interval: 5.0' feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated

Water _____

Total Depth Drilled: 100.44 Feet

Hole Diameter: 8"

Coring Device: HQ

Prepared By: E. Gercke/ R. Woodruff

Hammer Weight: N/A

Hammer Drop: N/A ins.

Boring Termination Depth: 100.44

Water Loss: 57 gallons

GPS Coordinates _____

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	15:00	--	BTEX, SVOCs, Metals
10' - 12'	Grab	16:00	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						32.42' - 32.55', Grainstone layer, large grains, large clasts
						32.62' - 32.68', fracture, weathered rock fragments and clay infill, possible zone of water loss
						33.67' - 33.69', fracture, clean
						34.76', fracture, clean
						35.27' - 36.10', Packstone layer
						36.84', fracture, slightly weathered
						37.13' - 37.70', Packstone layer w/ interbedded siltstone, large crinoids and horn corals
						37.75' - 37.79', fracture along styolite, clay infill, weathered
						37.90' - 38.10', fracture along styolite, 45 degrees, slight clay infill, contact
						38.10' - 46.08', Mudstone/Wackestone, very light grey to white, strong, slightly fractured, small
						grey laminae, geodes
						40.57' - 40.74', geode, fracture, large crystals
						43.03' - 43.05', fracture along grey laminae, slightly weathered
						44.19' - 44.23', fracture along dark siltstone layer, rock fragments and clay infill
						44.34' - 44.37', fracture, weathered, 15 degrees
						45.42' - 45.43', fracture, slightly weathered
						46.08' - 67.84', Packstone w/ Wackestone layers, dark grey changing to light grey at 48.20', strong,
						intensely to moderately fractured, thin beds, dark laminae
						46.26' - 46.31', fracture along styolite, little clay infill
						46.53', fracture, planar
						47.35' - 47.37', fracture, slightly weathered
						47.63' - 47.65', fracture, slightly weathered
						48.09' - 48.10', fracture, clean
						48.40' - 48.41', fracture along styolite, slightly weathered
						49.50' - 49.54', fracture along styolite
						49.65', fracture along styolite, clay infill
						50.78' - 50.85', fracture, clay infill
						50.88' - 50.94', branching bryozoa layer

ROCK CORING / SAMPLING LOG

Boring/Well: MW-53A/B | Project/No.: IN Creosote / IN000072.0056.00001 | Page 4 of 6

Site Location: Bloomington, Indiana | Drilling Date/Time Started: 8/29/11 @ 15:45 | Drilling Date/Time Completed: 9/1/11 @ 14:15

Drilling Contractor: Boart Longyear | Driller: Jason Greer

Drilling Fluid Used: water | Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel | Sampling Interval: 5.0' feet

Land-Surface Elev.: feet | ☐ Surveyed ☐ Estimated | Water:

Total Depth Drilled: 100.44 Feet | Hole Diameter: 8" | Coring Device: HQ

Prepared By: E. Gercke/ R. Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

Boring Termination Depth: 100.44 | Water Loss: 57 gallons | GPS Coordinates:

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	15:00	--	BTEX, SVOCs, Metals
10' - 12'	Grab	16:00	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						50.99' - 51.04', fractured, rock fragments
						52.31' - 52.33', fracture, weathered, clay infill
						53.02' - 53.03', fracture, clay infill
						53.03' - 54.36', Mudstone interval, dark grey, no fossils
						54.63' - 54.70', fracture along styolite
						55.40' - 55.42', fracture along dark grey laminae
						56.00' - 56.25', Clay layer, rock fragmets, moist
						57.56' - 57.57', fracture, clean
						58.64' - 60.74', Wackestone/Mudstone interval, dark grey, many geodes
						61.09' - 61.13', fracture along styolite, some sandy infill, possible zone of water loss
						61.65' - 61.66', styolite
						62.53' - 62.56', fracture along geode
						63.85' - 63.88', fracture along styolite, little clay infill
						64.01' - 64.02' - fracture along dark laminae
						64.10' - 64.14', styolite
						64.77', fracture along styolite, clean
						65.88', fracture, planar, slightly weathered
						67.50' - 67.52', fracture within geode, possible zone of water loss
						67.83' - 67.84', fracture along geode, contact, slightly weathered, possible zone of water loss
						67.84' - 72.67', Silstone/Mudstone, dark grey, strong, thinly bedded to massive, slightly fractured,
						nodules, slightly pitted
						68.29' - 68.34', fracture within geode
						69.91' - 70.00', fracture along geode/styolite, slight clay infill
						70.59' - 70.61', fracture, planar, slightly pitted on surface, little clay infill
						71.22' - 71.26', fracture along geode, clean, pyrite
						71.55' - 71.56', fracture, clean, slightly weathered
						72.58' - 72.61', fracture along geode, clean

ROCK CORING / SAMPLING LOG

Boring/Well MW-53A/B Project/No. IN Creosote / IN000072.0056.00001 Page 5 of 6

Site Location: Bloomington, Indiana

Drilling Date/Time Started: 8/29/11 @ 15:45

Drilling Date/Time Completed: 9/1/11 @ 14:15

Drilling Contractor: Boart Longyear

Driller: Jason Greer

Drilling Fluid Used: water

Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel

Sampling Interval: 5.0' feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated

Water _____

Total Depth Drilled: 100.44 Feet

Hole Diameter: 8"

Coring Device: HQ

Prepared By: E. Gercke/ R. Woodruff

Hammer Weight: N/A

Hammer Drop: N/A ins.

Boring Termination Depth: 100.44

Water Loss: 57 gallons

GPS Coordinates _____

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	15:00	--	BTEX, SVOCs, Metals
10' - 12'	Grab	16:00	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						72.67' - 76.14', Packstone w/ Wackestone intervals, light grey to light greenish grey, strong, thinly
						bedded, moderately fractured, glauconite within the Wackestone
						72.67' - 72.81', crinoid layer, large, dark grey
						72.81' - 72.83', fracture along crinoid layer/styolite, some clay infill
						73.90', fracture along criniods, coarse, large crinoids, some clay infill
						74.61' - 74.63', fracture along styolite, clay infill, slightly weathered
						75.90' - 75.91', fracture, clay infill, slightly weathered
						76.14' - 80.87', Mudstone/Siltstone, dark gray, thinly bedded to massive, moderate strength,
						heavily fractured
						76.19' - 76.20', fracture, clay infill, weathered
						76.31' - 76.38', fissile, platy layers of Mudstone, many fractures, some clay
						76.58' - 76.60', fracture, clean, weathered
						76.71' - 76.73', fracture, clean, weathered
						76.88' - 76.90, fracturre, clean, weathered
						77.57' - 77.66', fracture, sub vertical to horizontal components, clean, slightly weathered
						79.80' - 79.86', fracture along geode
						79.86' - 80.06', geode
						80.06' - 80.07', fracture along geode
						80.43' - 80.46', fracture, slightly weathered, clay infill, sub vertical
						80.86' - 80.87, fracture, contact,
						80.87' - 96.08', Int. Packstone/Wackestone, light grey to dark grey w/ greenish brown laminae, some
						coarse crinoid layers, srtong, slightly fractured, thinly bedded, some mudstone layers
						82.67' - 82.71', fracture, clean, slightly weathered
						83.46' - 83.49', fracture along large brachiopod
						85.34', fracture along coarse crinoid layer
						87.73' - 87.75', fracture along coarse crinoid layer, clean
						88.28' - 88.29', fracture, contact
						88.29'- 88.36', Mudstone layer, dark grey

ROCK CORING / SAMPLING LOG

Boring/Well MW-53A/B Project/No. IN Creosote / IN000072.0056.00001 Page 6 of 6

Site Location: Bloomington, Indiana

Drilling Date/Time Started: 8/29/11 @ 15:45

Drilling Date/Time Completed: 9/1/11 @ 14:15

Drilling Contractor: Boart Longyear

Driller: Jason Greer

Drilling Fluid Used: water

Drilling Method: Mini Sonic

Length and Diameter of Coring Device: 5' by 4 1/2" barrel

Sampling Interval: 5.0' feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated

Water _____

Total Depth Drilled: 100.44 Feet

Hole Diameter: 8"

Coring Device: HQ

Prepared By: E. Gercke/ R. Woodruff

Hammer Weight: N/A

Hammer Drop: N/A ins.

Boring Termination Depth: 100.44

Water Loss: 57 gallons

GPS Coordinates _____

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
0 - 2'	Grab	15:00	--	BTEX, SVOCs, Metals
10' - 12'	Grab	16:00	--	BTEX, SVOCs, Metals

Boring/Well Location Sketch:

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	RQD (%)	Minutes/ Run	Water Loss	Sample/Core Description
						89.65' - 89.69', fracture along styolite, rock fragments, 10 degree angle
						89.71' - 89.80', styolite
						90.39' - 95.00', several mechanical fractures due to core falling back into borehole/overdrilling
						94.04' - 94.08', fracture along geode
						94.38' - 94.40', fracture, clean
						96.07' - 96.08', fracture, contact
						96.08' - 100.44', Siltstone (Borden), dark grey, strong, slightly to moderately fractured, thinly
						laminated, cross bedded
						96.21' - 96.22', fracture, planar, some clay infill
						99.52' - 99.54', fracture, planar
						100.00' -100.01', fracture, slightly weathered
						100.07' - 100.08', fracture, clay intfill, slightly weathered, 10 degree angle.
						EOB at 100.44'

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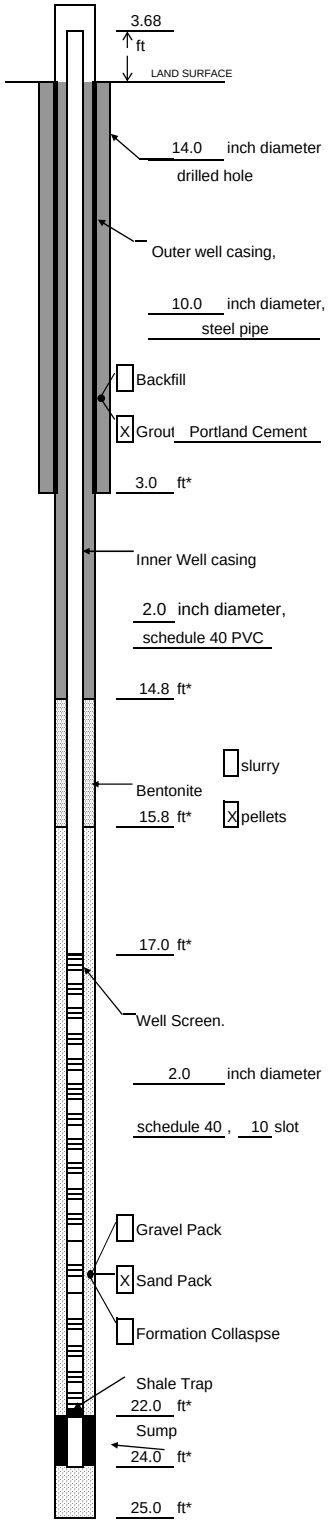
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project: CSXT IN000072.0042 Well: MW-24A

City: Bloomington

County: Monroe State: Indiana

Land-Surface Elevation and Datum:

684.88 feet [X] Surveyed [ ] Estimated

Installation Date(s): 7/24/2008

Drilling Contractor: Boart Longyear

Driller/License #:

Drilling Method: Mini-Sonic

Drilling Fluid: Water

Measurement Point (M.P=TOC. 687.96 feet Surveyed

Development Technique(s) and Date(s)

Whale pump

Static Depth to Water 4.27 feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ hours

Well Purpose: monitoring well

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	Schedule 40
Diameter	2.0"
Slot Size	0.01
Joint Type	thread
Top Blank	na
Bottom Sump	2.0'
Total Screen	5.0'
Total Length	5.0'

Inner Well Casing:

Type	Schedule 40
Diameter	2.0"
Joint Type	thread
Total Length	17.0'

Filter (Sand) Pack:

Type:	Global
Size:	#5

Bentonite Seal:

Type:	Medium Gold Chips
Size:	3/8"

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.68'

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Toni Schoen

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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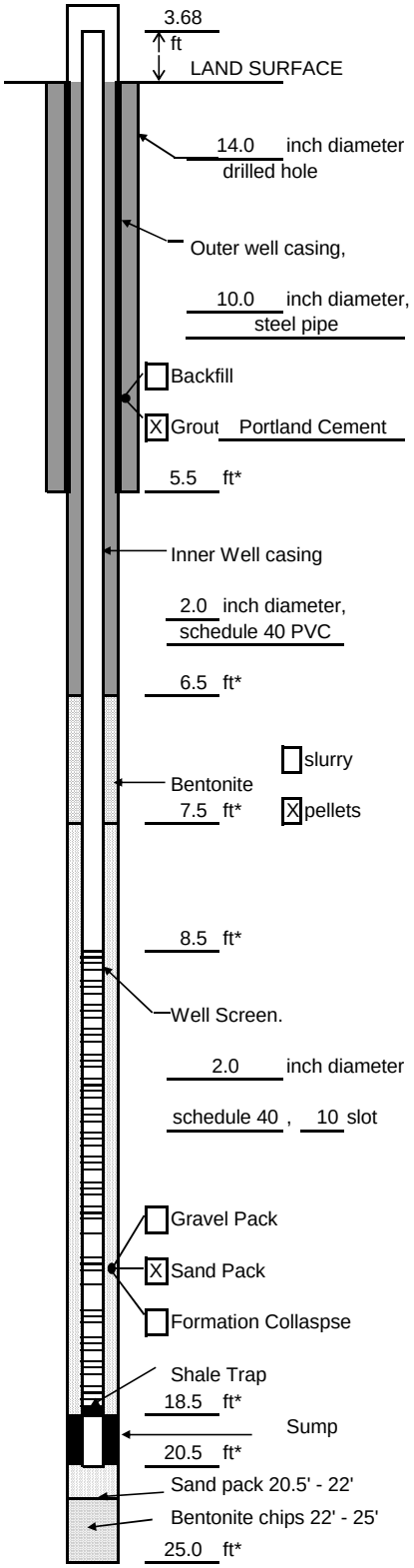
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project	CSXT IN000072.0042	Well	MW-25A
City	Bloomington		
County	Monroe	State	Indiana

Land-Surface Elevation and Datum:

689.53 feet [X] Surveyed [ ] Estimated

Installation Date(s)	7/28/2008
Drilling Contractor	Boart Longyear
Driller/License #	
Drilling Method	Mini-Sonic
Drilling Fluid	Water
Measurement Point (M.P.=TOC):	692.65 feet surveyed

Development Technique(s) and Date(s)

Whale pump

Static Depth to Water	feet below M.P.
Water Removed During Development	gallons
Pumping Duration	hours
Well Purpose	monitoring well
Depth To Bottom (Post Development)	ft. below M.P.

Screen:

Type	Schedule 40
Diameter	2.0"
Slot Size	0.01
Joint Type	thread
Top Blank	na
Bottom Sump	2.0'
Total Screen	10.0'
Total Length	10.0'

Inner Well Casing:

Type	Schedule 40
Diameter	2.0"
Joint Type	thread
Total Length	8.5'

Filter (Sand) Pack:

Type:	Global
Size:	#5

Bentonite Seal:

Type:	Medium Gold Chips
Size:	3/8"

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.68'

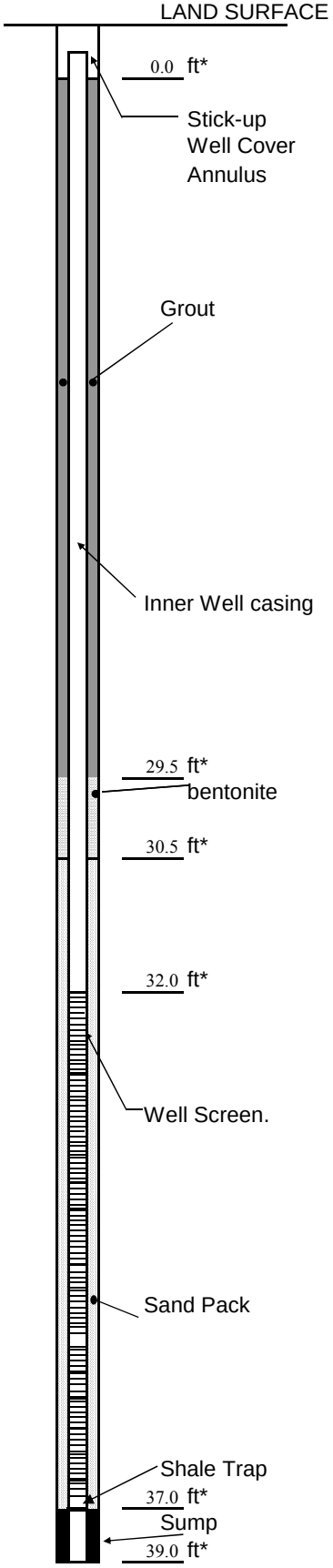
Final Measurements:

Depth To Bottom:_____ ft. below M.P.

Prepared by: TAO

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

WELL CONSTRUCTION LOG- TELESCOPING



Project: CSXT IN000072.0042 Well: MW-26A

City: Bloomington

County: Monroe State: Indiana

Land-Surface Elevation and Datum:

689.44 feet [X] Surveyed

[ ] Estimated

Installation Date(s): 8/5/2008

Drilling Contractor: Boart Longyear

Driller/License #:

Drilling Method: Mini-Sonic

Drilling Fluid: Water

Measurement Point (M.P.=TOC): 692.00 feet Surveyed

Development Technique(s) and Date(s)

Whale pump

Static Depth to Water: 8.68 feet below M.P.

Water Removed During Development: _____ gallons

Pumping Duration: _____ hours

Well Purpose: monitoring well

Depth To Bottom (Post Development): _____ ft. below M.P.

Screen:

Type	Schedule 40
Diameter	2.0"
Slot Size	0.01
Joint Type	thread
Top Blank	na
Bottom Sump	2.0'
Total Screen	5.0'
Total Length	5.0'

Inner Well Casing:

Type	Schedule 40
Diameter	2.0"
Joint Type	thread
Total Length	32.0'

Filter (Sand) Pack:

Type:	Global
Size:	#5

Bentonite Seal:

Type:	Medium Gold Chips
Size:	3/8"

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	2.85'

Final Measurements:

Depth To Bottom: ____ ft. below M.P.

Prepared by: Toni Schoen

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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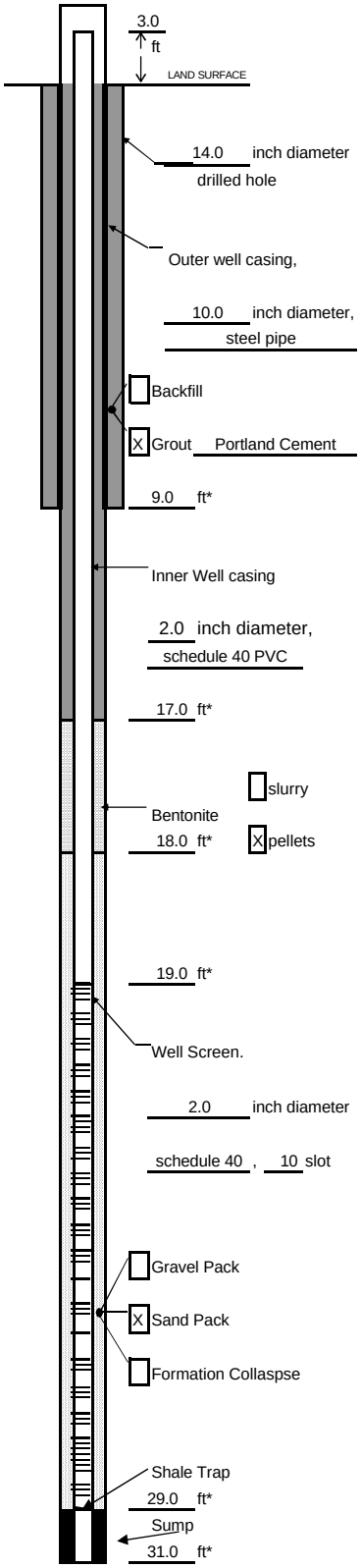
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project: CSXT IN000072.0042 Well: MW-27A

City: Bloomington

County: Monroe State: Indiana

Land-Surface Elevation and Datum:

685.97 feet [X] Surveyed

[ ] Estimated

Installation Date(s): 8/7/2008

Drilling Contractor: Boart Longyear

Driller/License #:

Drilling Method: Mini-Sonic

Drilling Fluid: Water

Measurement Point (M.P.=TOC): 689.81 feet Surveyed

Development Technique(s) and Date(s)

Whale pump

Static Depth to Water: 5.4 feet below M.P.

Water Removed During Development: _____ gallons

Pumping Duration: _____ hours

Well Purpose: monitoring well

Depth To Bottom (Post Development): _____ ft. below M.P.

Screen:

Type	Schedule 40
Diameter	2.0"
Slot Size	0.01
Joint Type	thread
Top Blank	na
Bottom Sump	2.0'
Total Screen	10.0'
Total Length	10.0'

Inner Well Casing:

Type	Schedule 40
Diameter	2.0"
Joint Type	thread
Total Length	19.0'

Filter (Sand) Pack:

Type:	Global
Size:	#5

Bentonite Seal:

Type:	Medium Gold Chips
Size:	3/8"

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.0'

Final Measurements:

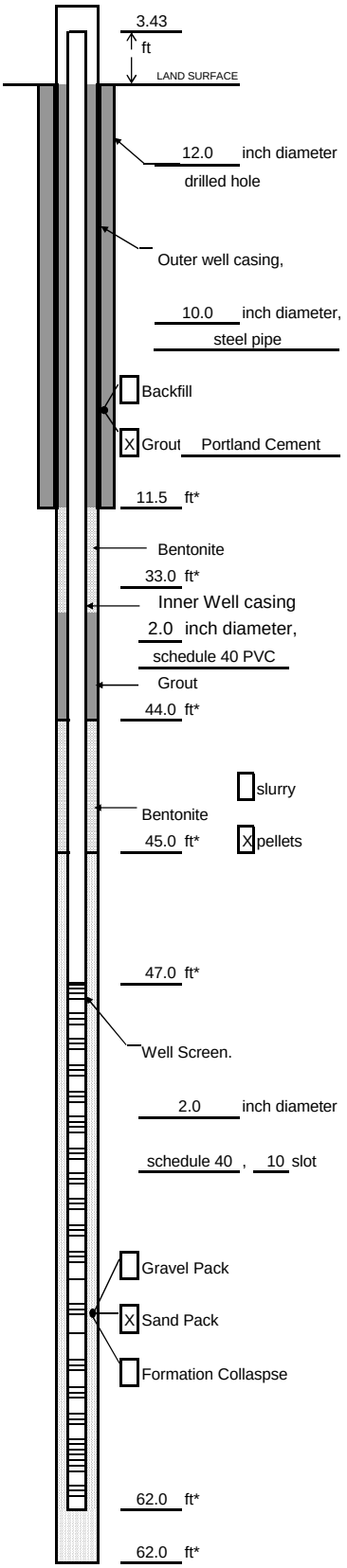
Depth To Bottom:____ ft. below M.P.

Prepared by: Toni Schoen

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project: CSXT IN000072.0045 Well: MW-28A

City: Bloomington

County: Monroe State: Indiana

Land-Surface Elevation and Datum:

689.11 feet [X] Surveyed

[ ] Estimated

Installation Date(s): 1/20/2009

Drilling Contractor: Boart Longyear

Driller/License #:

Drilling Method: Sonic

Drilling Fluid: Water

Measurement Point (M.P.): TOC @ 692.54'

Development Technique(s) and Date(s)

Submersible Hurricane Pump, surge well

1/26/2009

Static Depth to Water: 3.71 feet below M.P.

Water Removed During Development: 10 gallons

Pumping Duration: 0.1 hours

Well Purpose: monitoring well

Depth To Bottom (Post Development): 65.67 ft. below M.P.

Screen:

Type	Schedule 40
Diameter	2.0"
Slot Size	0.01
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	15.0
Total Length	15.0

Inner Well Casing:

Type	Schedule 40
Diameter	2.0"
Joint Type	threaded
Total Length	47.0'

Filter (Sand) Pack:

Type:	Global
Size:	#5

Bentonite Seal:

Type:	Medium Gold Chips
Size:	3/8"

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.43'

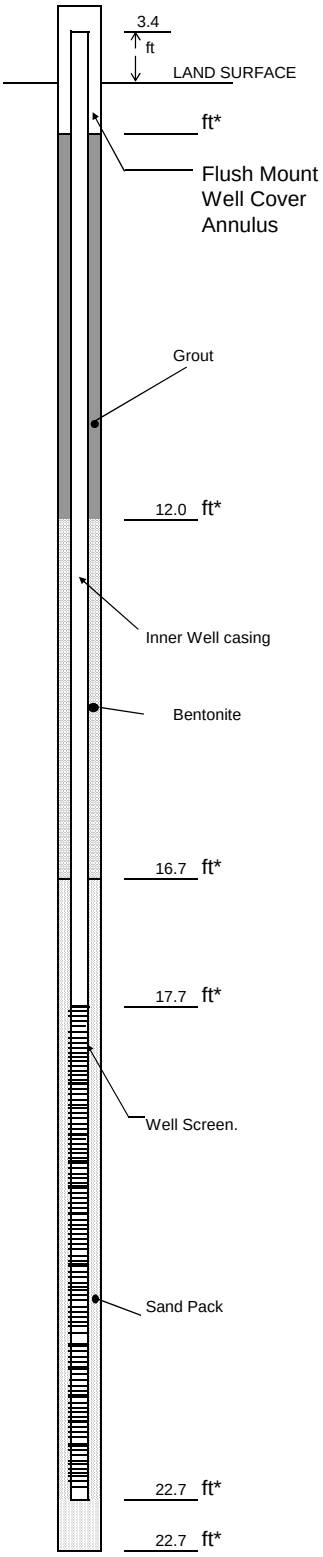
Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Meryl Hicks, Randy woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

WELL CONSTRUCTION LOG



* Depth Below Land Surface

Project: Bloomington CSXT Well: MW-28B

City: Bloomington

County: Monroe State: Indiana

Land-Surface Elevation and Datum:

688.88 feet [x] Surveyed

[ ] Estimated

Installation Date(s): 1/20/2009

Drilling Contractor: Boart Longyear

Driller/License #:

Drilling Method: Sonic

Drilling Fluid: water

Measurement Point (M.P.): TOC @ 692.28'

Development Technique(s) and Date(s)

Submersible Hurricane Pump, surging

1/26/2009

Static Depth to Water: 9.23 feet below M.P.

Water Removed During Development: 85 gallons

Pumping Duration: 0.8 hours

Well Purpose: monitoring well

Depth To Bottom (Post Development): 26.42 ft. below M.P.

Screen:

Type	Schedule 40
Diameter	2.0"
Slot Size	0.01
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10.0
Total Length	10

Inner Well Casing:

Type	Schedule 40
Diameter	2.0"
Joint Type	threaded
Total Length	17.7

Filter (Sand) Pack:

Type:	Global
Size:	#5

Bentonite Seal:

Type:	Medium Gold Chips
Size:	3/8"

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.40'

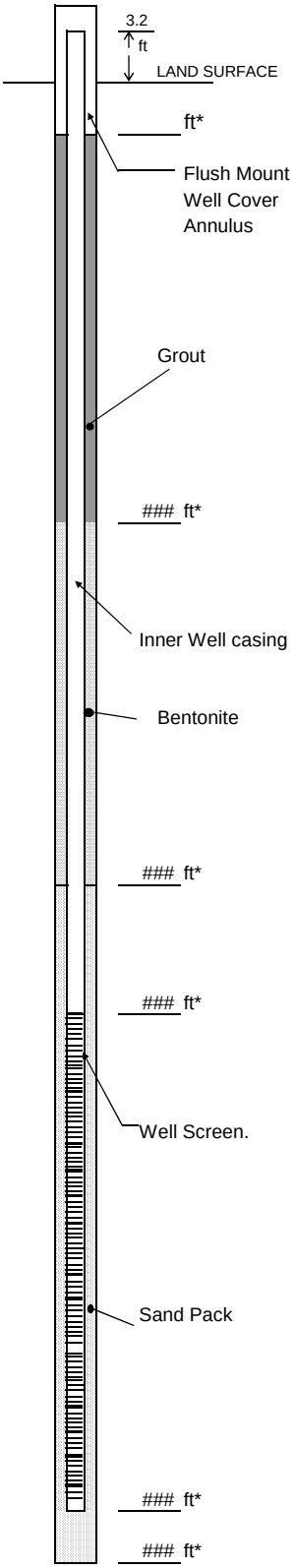
Final Measurements:

Depth To Bottom: ____ ft. below M.P.

Prepared by: Meryl Hicks, Randy Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

WELL CONSTRUCTION LOG



* Depth Below Land Surface

Project: Bloomington CSXT Well: MW-28C

City: Bloomington

County: Monroe State: Indiana

Land-Surface Elevation and Datum:

689.48 feet [X] Surveyed

[ ] Estimated

Installation Date(s): 1/20/2009

Drilling Contractor: Boart Longyear

Driller/License #:

Drilling Method: Sonic

Drilling Fluid: water

Measurement Point (M.P.): TOC @ 692.71'

Development Technique(s) and Date(s)

Submersible Hurricane Pump, surging

1/26/2009

Static Depth to Water: 9.20 feet below M.P.

Water Removed During Development: 5 gallons

Pumping Duration: 0.08 hours

Well Purpose: monitoring well

Depth To Bottom (Post Development): 38.69 ft. below M.P.

Screen:

Type	Schedule 40
Diameter	2.0"
Slot Size	0.01
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10.0
Total Length	10

Inner Well Casing:

Type	Schedule 40
Diameter	2.0"
Joint Type	threaded
Total Length	25.7

Filter (Sand) Pack:

Type:	Global
Size:	#5

Bentonite Seal:

Type:	Medium Gold Chips
Size:	3/8"

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.20'

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Meryl Hicks, Randy Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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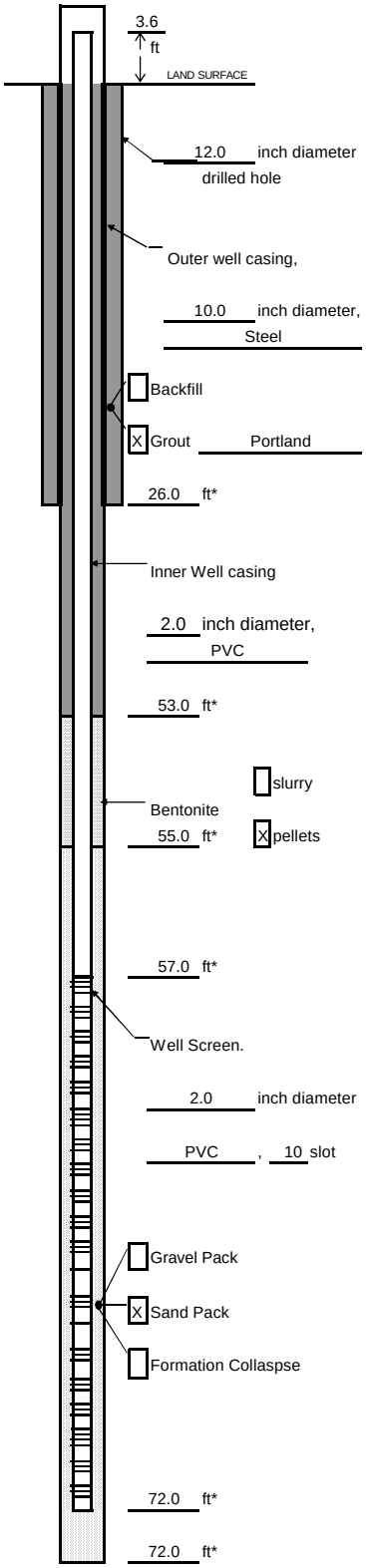
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project: IN000072.0045.00001 Well: MW-29A

City: Bloomington

County: Monroe State: Indiana

Land-Surface Elevation and Datum:

692.69 feet [X] Surveyed

[ ] Estimated

Installation Date(s): 2/4/2009

Drilling Contractor: Boart Longyear

Driller/License #:

Drilling Method: Sonic

Drilling Fluid: Water

Measurement Point (M.P.): TOC @ 696.28'

Development Technique(s) and Date(s)

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ hours

Well Purpose: Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	15
Total Length	15.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	57.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.60'

Final Measurements:

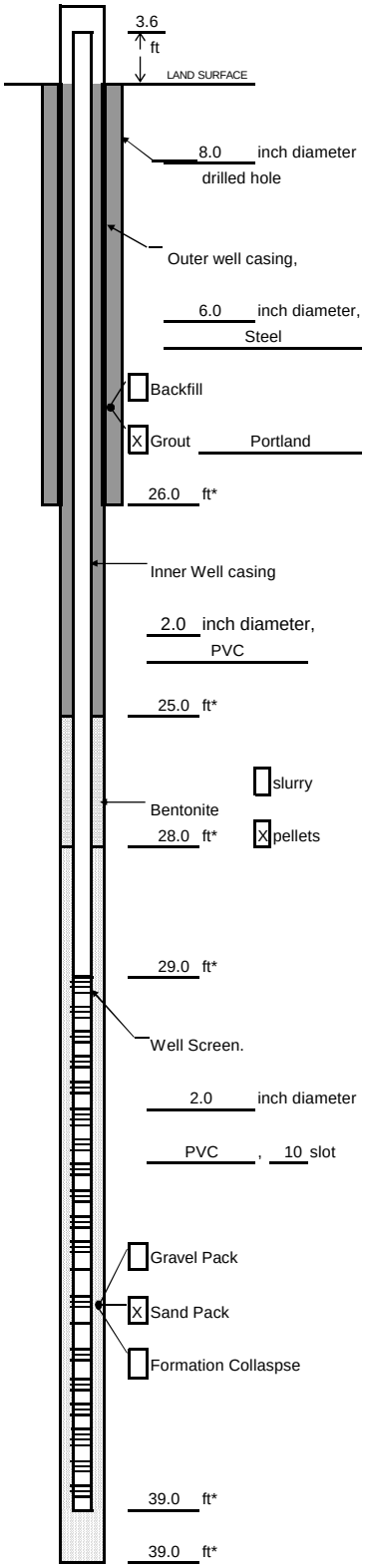
Depth To Bottom:____ ft. below M.P.

Prepared by: Meryl Hicks

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project: IN000072.0045.00001 Well: MW-29B

City: Bloomington

County: Monroe State: Indiana

Land-Surface Elevation and Datum:

692.67 feet [X] Surveyed

[ ] Estimated

Installation Date(s): 2/6/2009

Drilling Contractor: Boart Longyear

Driller/License #:

Drilling Method: Sonic

Drilling Fluid: Water

Measurement Point (M.P.): TOC @ 696.23'

Development Technique(s) and Date(s)

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ hours

Well Purpose: Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	29.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.60'

Final Measurements:

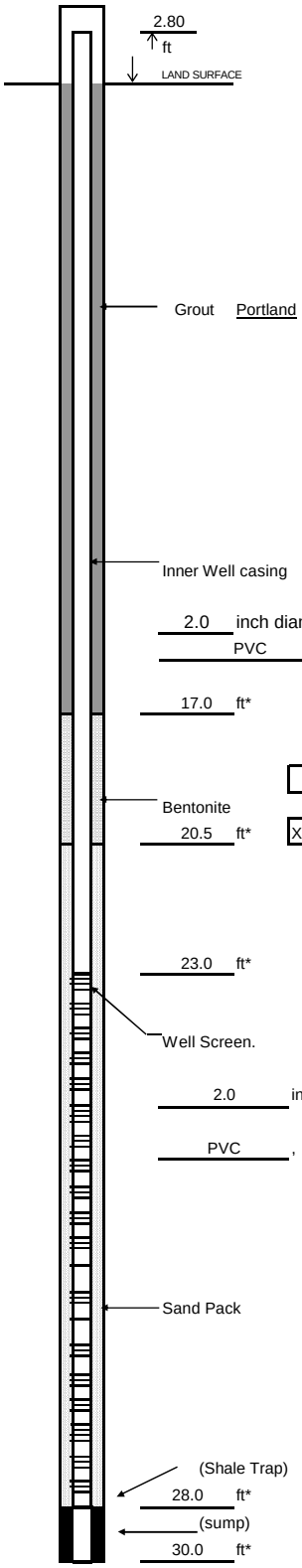
Depth To Bottom:____ ft. below M.P.

Prepared by: Meryl Hicks

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-30A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

688.59 feet [X] Surveyed

[ ] Estimated

Installation Date(s) 10/14/2009

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 691.39'

Development Technique(s) and Date(s)

Whale pump with surging

10/21/2009

Static Depth to Water _____ feet below M.P.

Water Removed During Development 20 gallons

Pumping Duration 14 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	2.0'
Total Screen	5.0'
Total Length	5.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	23.0'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	2.80'

Final Measurements:

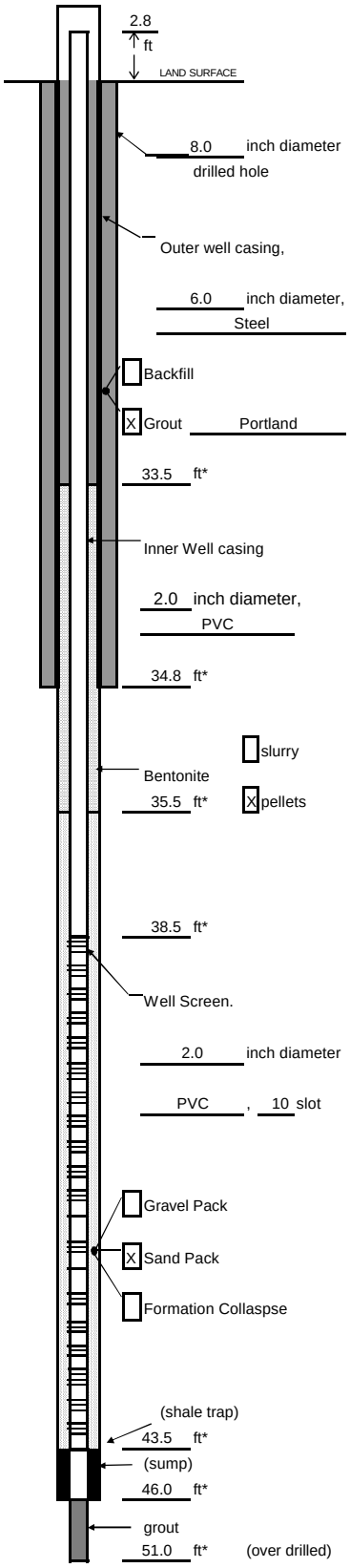
Depth To Bottom:____ ft. below M.P.

Prepared by: Meryl Hicks

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



* Depth Below Land Surface

Project	IN000072.0047.00001	Well	MW-30B
City	Bloomington		
County	Monroe	State	Indiana

Land-Surface Elevation and Datum:

688.78 feet [X] Surveyed

[ ] Estimated

Installation Date(s)	10/16/2009
Drilling Contractor	Boart Longyear
Driller/License #	
Drilling Method	Sonic
Drilling Fluid	Water
Measurement Point (M.P.):	TOC @ 691.58'

Development Technique(s) and Date(s)

whale pump while surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 20 gallons

Pumping Duration 14 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	2.0'
Total Screen	5.0'
Total Length	5.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	38.5'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	2.8

Final Measurements:

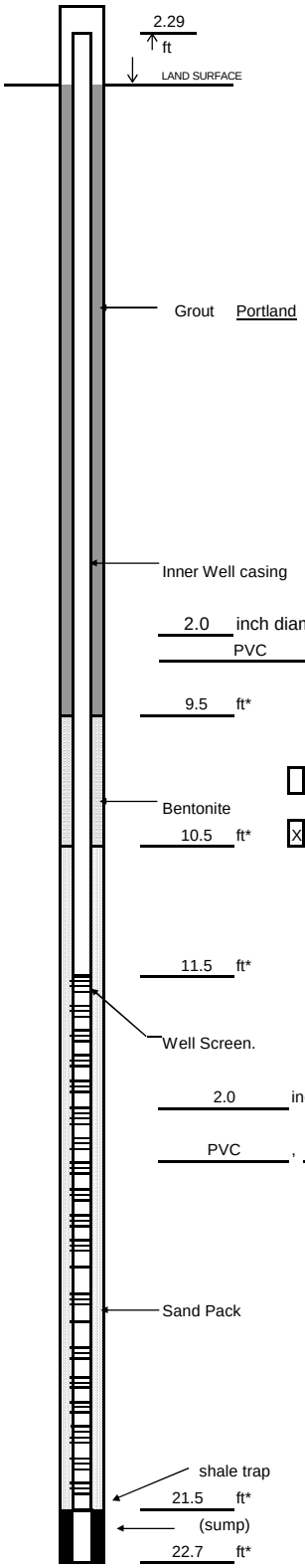
Depth To Bottom:____ ft. below M.P.

Prepared by: Meryl Hicks

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-31A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

690.59 feet [X] Surveyed

[ ] Estimated

Installation Date(s) 10/19/09 -10/19/09

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 692.88'

Development Technique(s) and Date(s)

Whale pump with surging

10/22/2009

Static Depth to Water _____ feet below M.P.

Water Removed During Development 55 gallons

Pumping Duration 36 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	1.2'
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	15.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	2.29

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Meryl Hicks

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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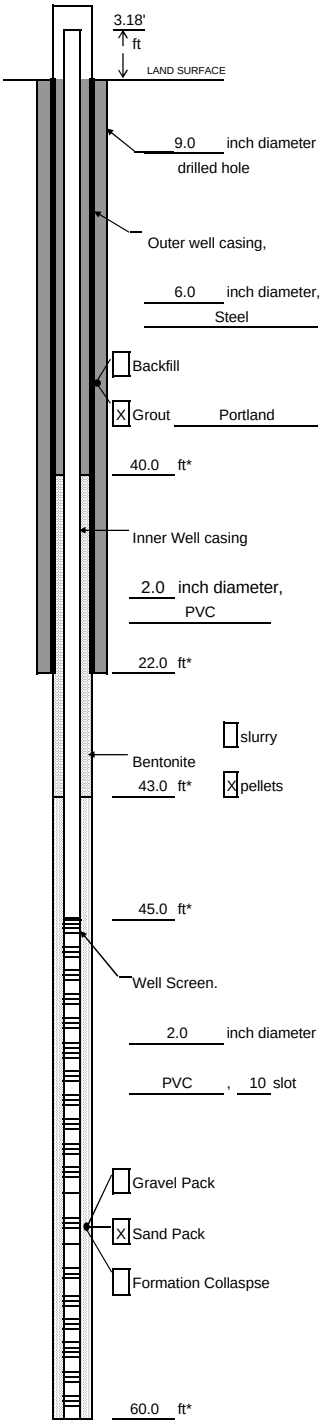
WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0047.00001 Well MW-31B

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

689.37 feet [X] Surveyed

[ ] Estimated

Installation Date(s) 10/20/2009 - 10/23/2009

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 692.55'

Development Technique(s) and Date(s)

whale pump while surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	15
Total Length	15.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	45.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.18'

Final Measurements:

Depth To Bottom:____ ft. below M.P.

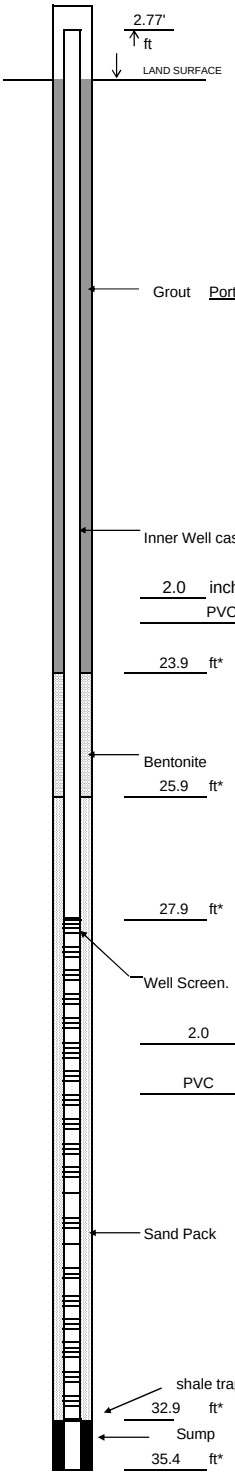
Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

* Depth Below Land Surface

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-31C

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

690.03' feet [x] Surveyed

[ ] Estimated

Installation Date(s) 10/26/2009

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 692.80'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	2.5
Total Screen	5
Total Length	5.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	27.9

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	2.77'

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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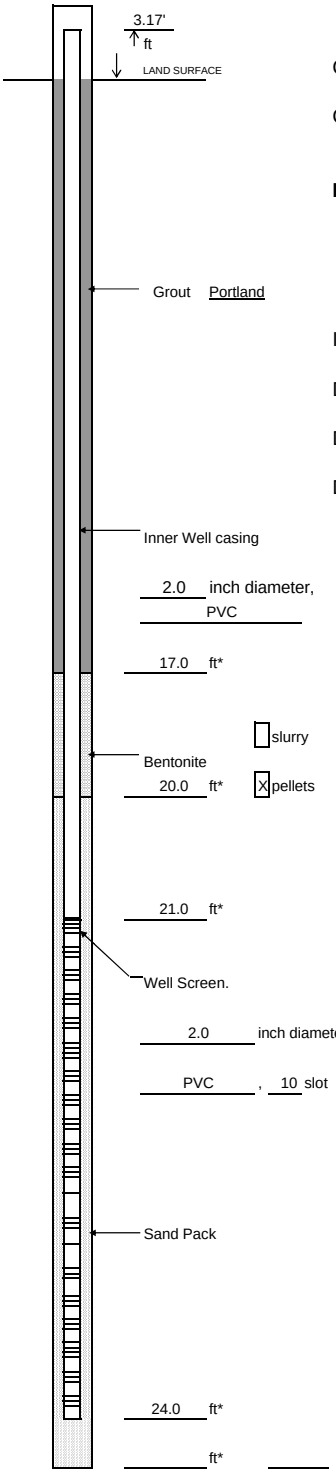
WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0047.00001 Well MW-32A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

687.34 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 10/27/2009-10/28/09

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 690.51'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	3
Total Length	3.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	21.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.17'

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

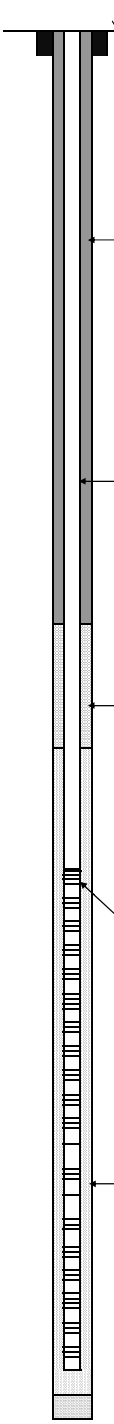
Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-33A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

703.23 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11-2-09/11-4-09

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 703.07'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	40.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	flush mount
Diameter	8"
Total Length (If applicable)	na

Final Measurements:

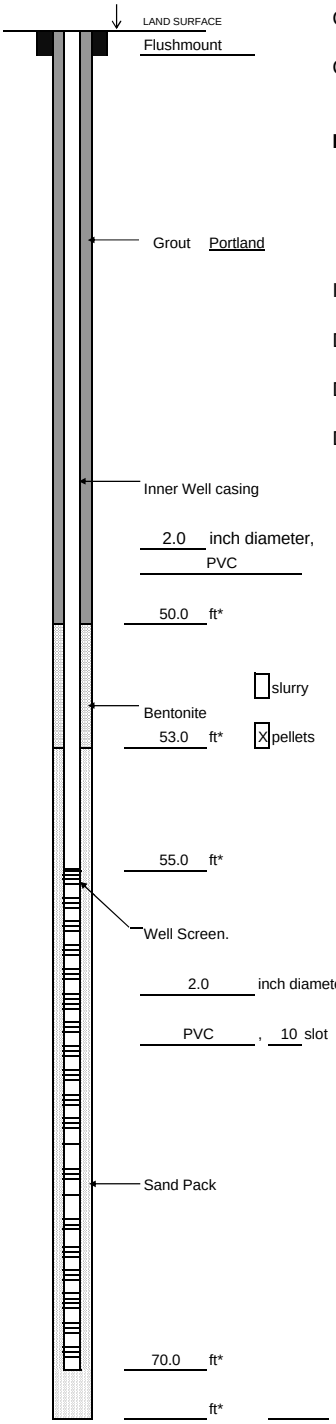
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-33B

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

704.78 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/5/09-11/6/09

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 704.53'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	15
Total Length	15.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	55.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	flush mount
Diameter	8"
Total Length (If applicable)	na

Final Measurements:

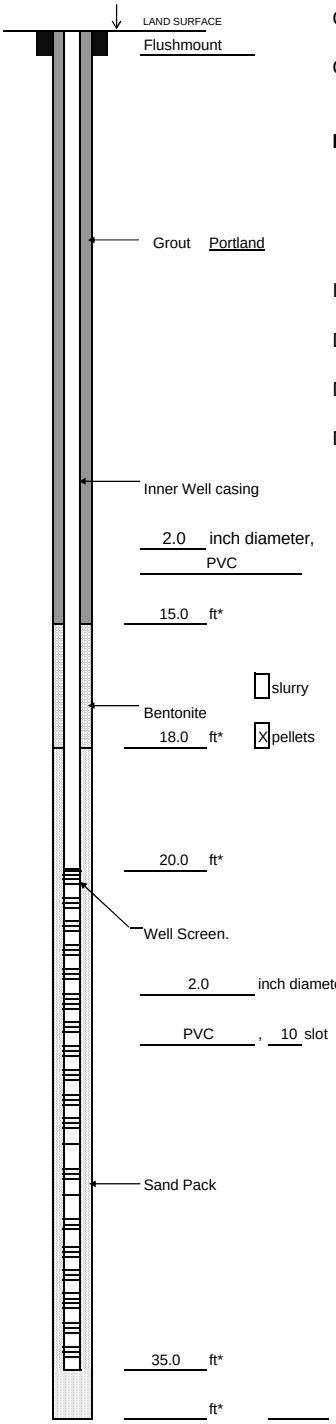
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-33C

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

705.05 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/9/2009

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 704.68'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	15
Total Length	15.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	20.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	flush mount
Diameter	8"
Total Length (If applicable)	na

Final Measurements:

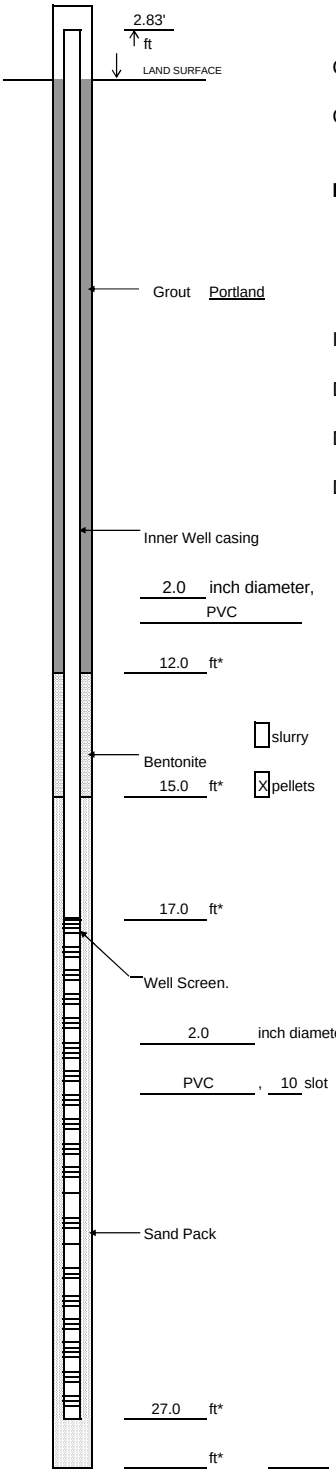
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-34A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

685.18 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/18/2009

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 688.01'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	17.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	2.83'

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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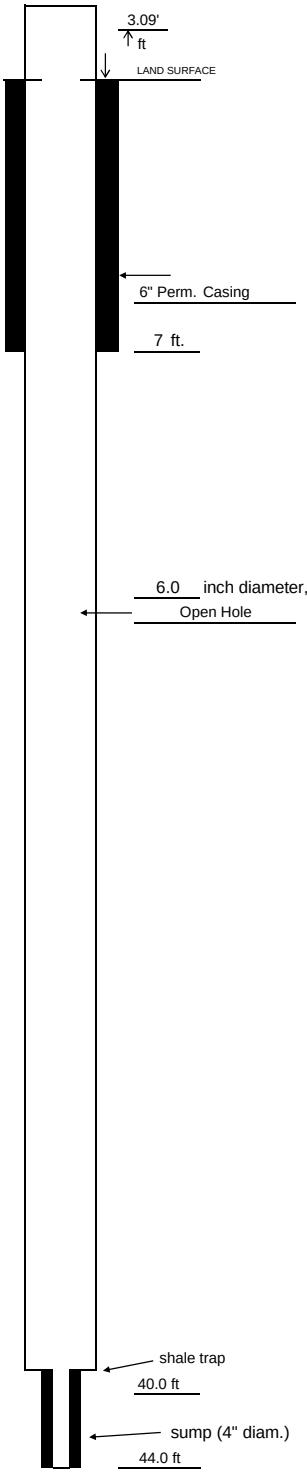
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well RW-1

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

689.01 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 10/29/09-10/30/09

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 692.10'

Development Technique(s) and Date(s)

Air Lifting

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:
Type PVC
Diameter 2.0"
Slot Size 0.010'
Joint Type threaded
Top Blank na
Bottom Sump 4.0'
Total Screen na
Total Length na

Inner Well Casing:
Type SS
Diameter 6.0"
Joint Type na
Total Length 6.5'

Filter (Sand) Pack:
Type: Quartz
Size: #5

Bentonite Seal:
Type: Chips
Size: Medium

Guard Pipe:
Type stick up
Diameter 6"
Total Length 3.09
(If applicable)

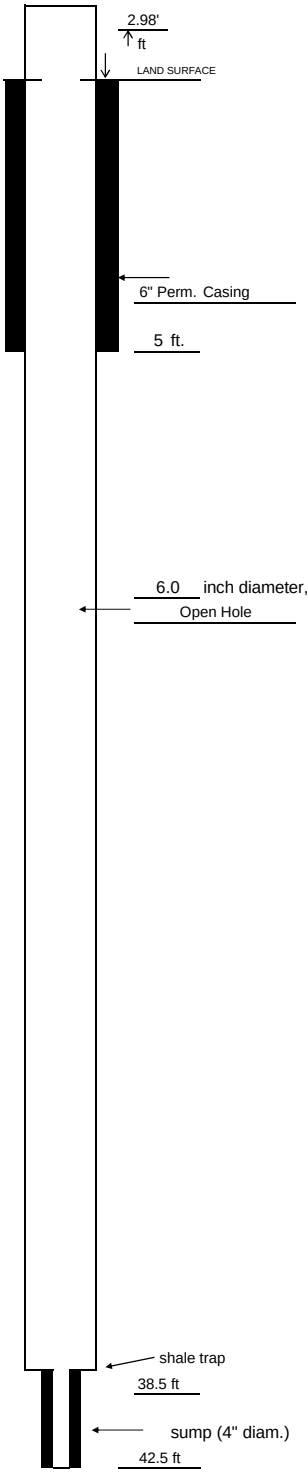
Final Measurements:
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well RW-2

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

685.21 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/10/09-11/12/09

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 688.19'

Development Technique(s) and Date(s)

Air Lifting

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	4.0'
Total Screen	na
Total Length	na

Inner Well Casing:

Type	SS
Diameter	6.0"
Joint Type	na
Total Length	5.0'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6.0"
Total Length (If applicable)	2.98'

Final Measurements:

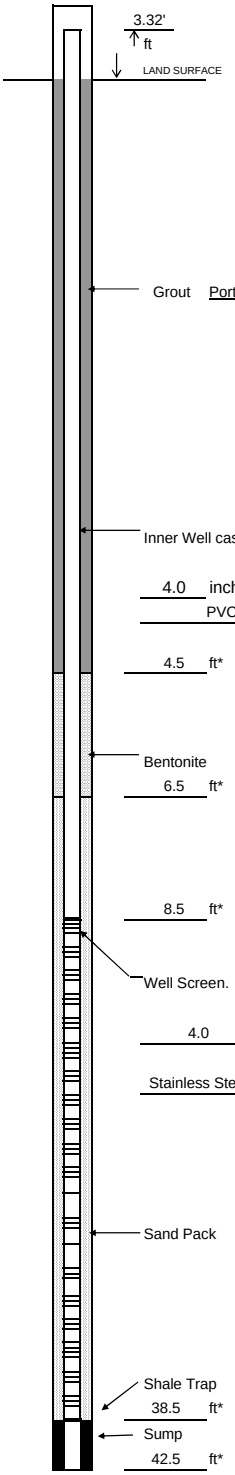
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well RW-3

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

685.51 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/10/09-11/11/09

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 688.83'

Development Technique(s) and Date(s)

Air Lifting

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	4.0'
Total Screen	30.0'
Total Length	30.0'

Inner Well Casing:

Type	PVC
Diameter	4.0"
Joint Type	threaded
Total Length	8.5'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	3.32'

Final Measurements:

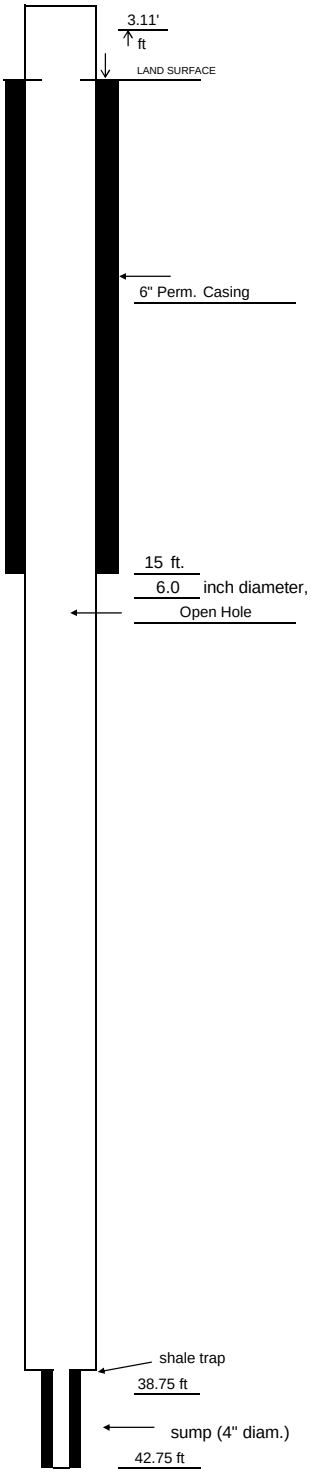
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well RW-4

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

687.93 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/13/09-11/17/09

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 691.04'

Development Technique(s) and Date(s)

Air Lifting

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	4.0'
Total Screen	na
Total Length	na

Inner Well Casing:

Type	SS
Diameter	6.0"
Joint Type	na
Total Length	15.0'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	3.11'

Final Measurements:

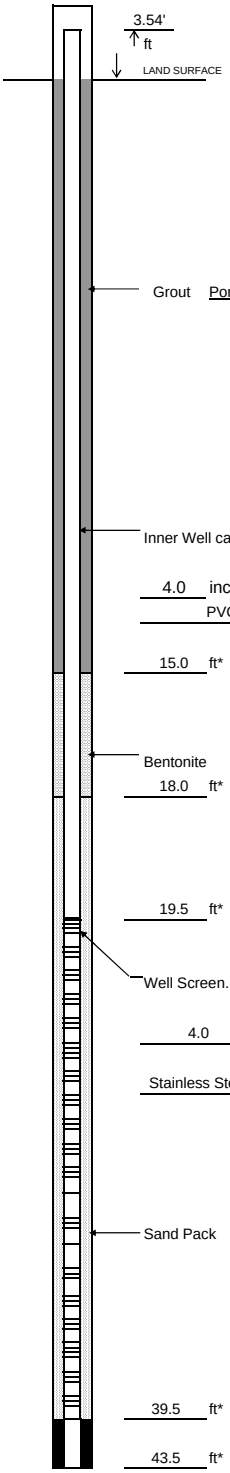
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well RW-5

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

688.65 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/13/09-11/17/09

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 692.19'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	4.0'
Total Screen	20.0'
Total Length	20.0'

Inner Well Casing:

Type	PVC
Diameter	4.0"
Joint Type	threaded
Total Length	19.5

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	3.54'

Final Measurements:

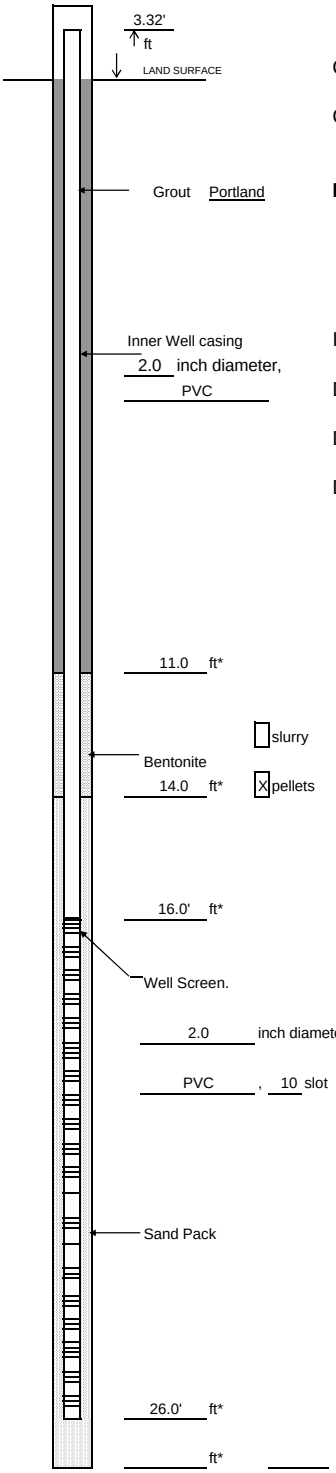
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0049.00001 Well MW-35A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

702.83 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 2/8/10 to 2/9/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 706.06'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	16.0'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.32'

Final Measurements:

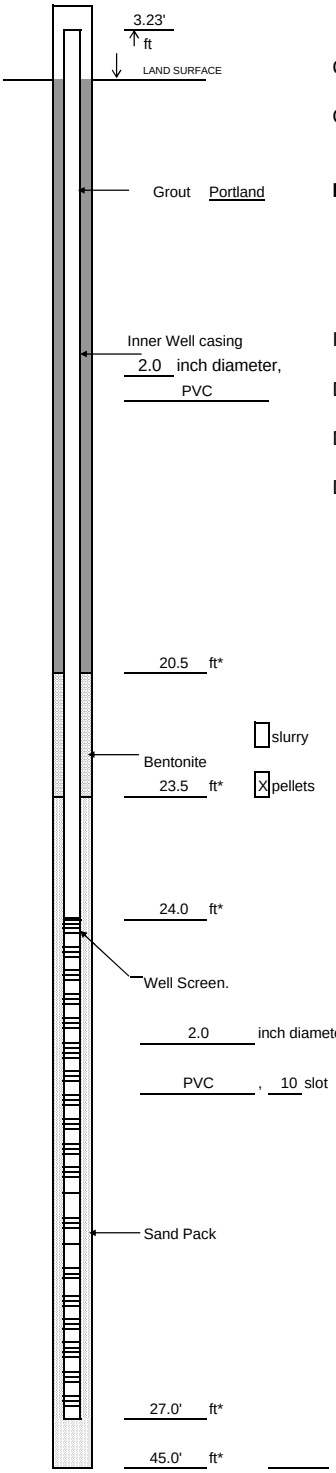
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0049.00001 Well MW-35B

****Dual well: Reference MW-35C for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

703.15 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 2/9/10 to 2/11/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 706.37'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	3.0'
Total Length	3.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	24.0'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	3.23'

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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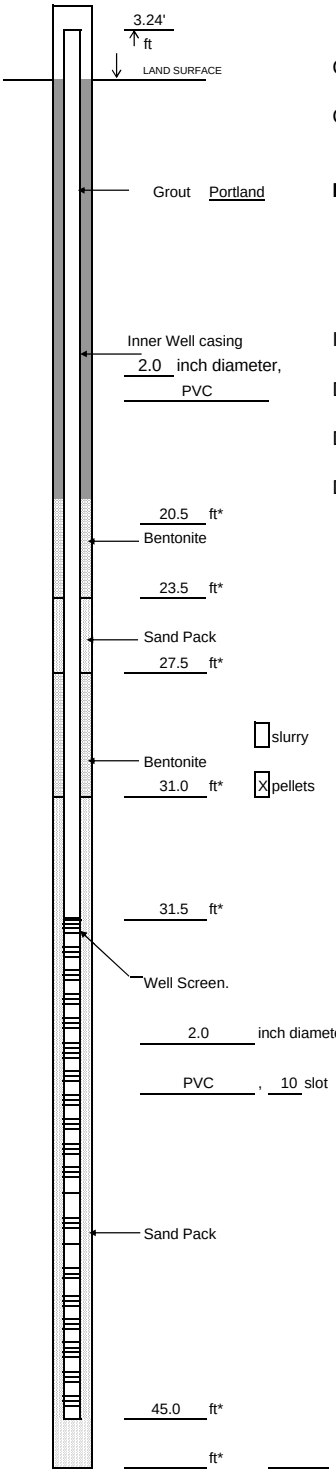
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0049.00001 Well MW-35C

****Dual well: Reference MW-35B for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

703.15 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 2/9/10 to 2/11/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 706.38'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	13.5'
Total Length	13.5'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	31.5'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	3.24'

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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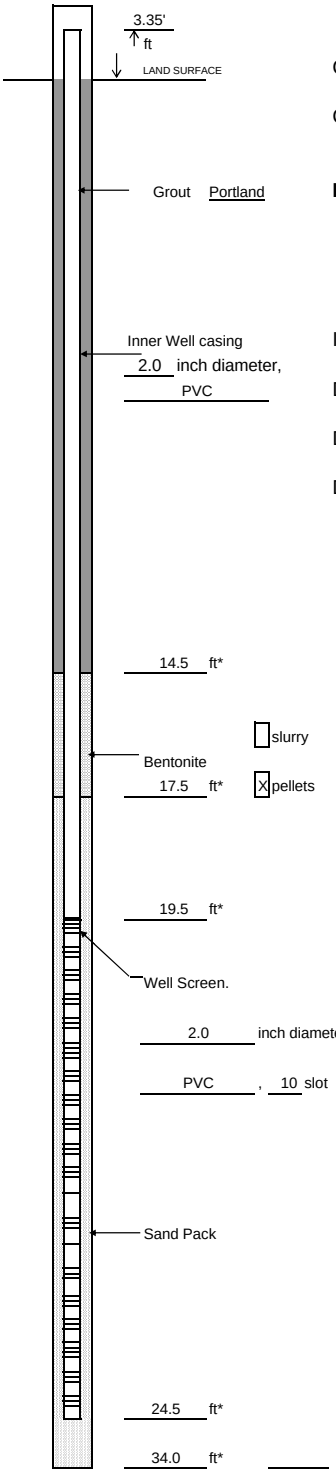
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0049.00001 Well MW-36A

****Nested Wells (one boring-two wells): Reference MW-36B for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

697.09 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 2/11/10 to 2/15/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 700.44'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	5
Total Length	5.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	19.5'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	3.35'

Final Measurements:

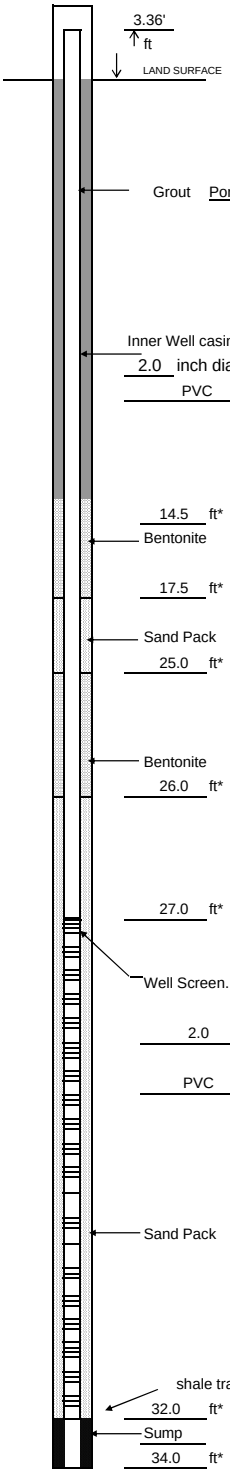
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0049.00001 Well MW-36B

****Nested Wells (one boring-two wells): Reference MW-36A for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

679.09 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 2/9/10 to 2/11/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 700.45'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	2.0'
Total Screen	5.0'
Total Length	5.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	27.0'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	3.36'

Final Measurements:

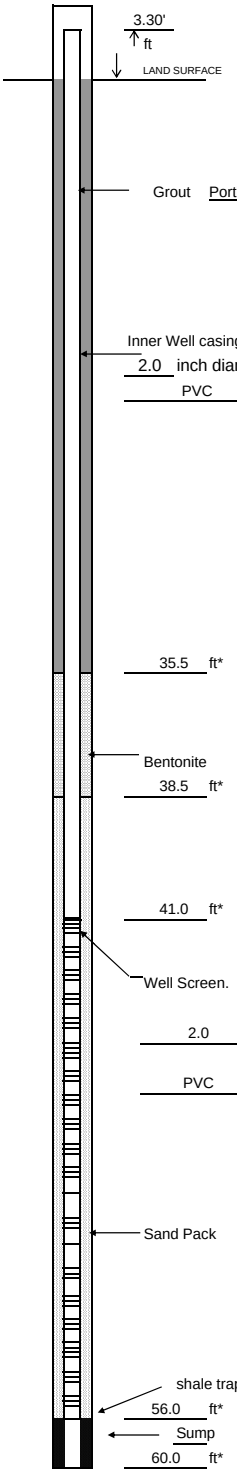
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0049.00001 Well MW-36C

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

697.56 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 2/15/10 to2/17/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 700.85'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	4.0'
Total Screen	15.0'
Total Length	15.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	41.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	3.30'

Final Measurements:

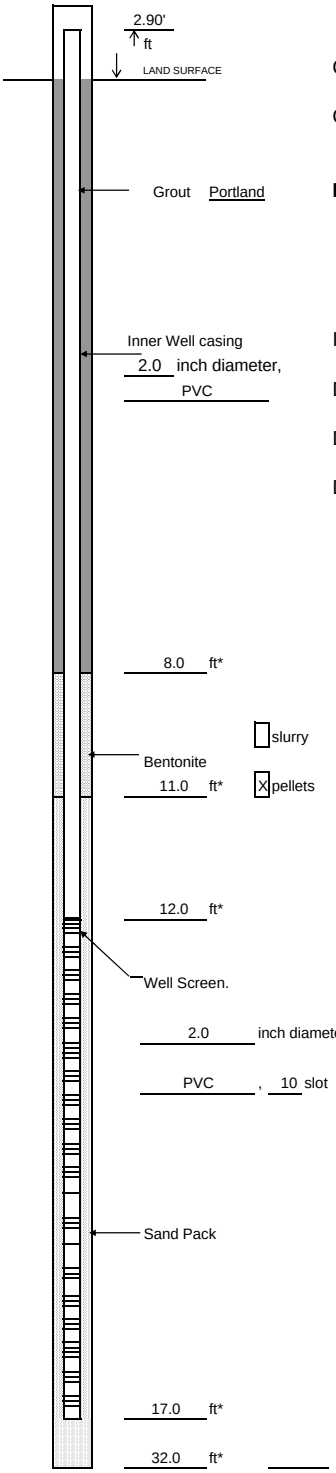
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0049.00001 Well MW-37A

****Nested Wells (one boring-two wells): Reference MW-37B for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

684.39 feet [X] Surveyed

[ ] Estimated

Installation Date(s) 2/17/10 to 2/18/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 687.29'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	5
Total Length	5.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	12.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	2.90'

Final Measurements:

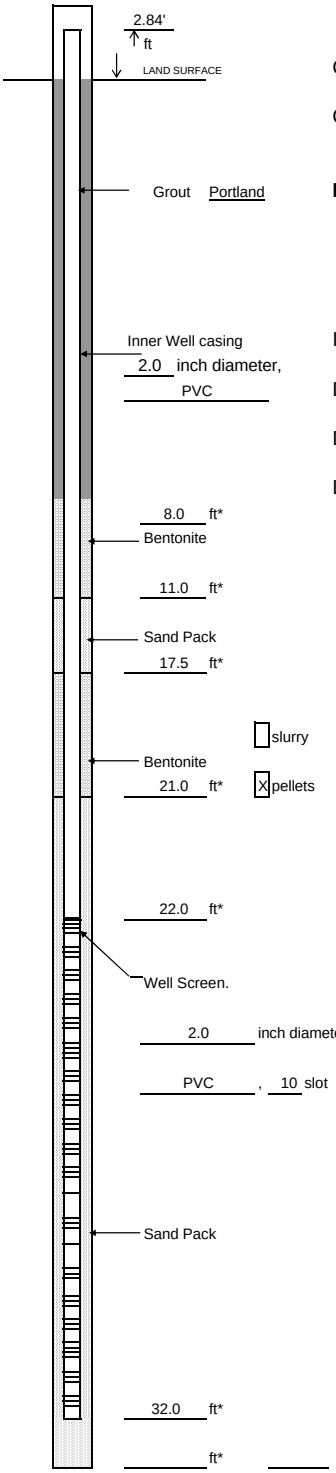
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0049.00001 Well MW-37B

****Nested Wells (one boring-two wells): Reference MW-37A for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

684.39 feet [X] Surveyed

[ ] Estimated

Installation Date(s) 2/17/10 to 2/18/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC @ 687.23'

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development _____ gallons

Pumping Duration _____ minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10.0'
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	22.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	2.84'

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

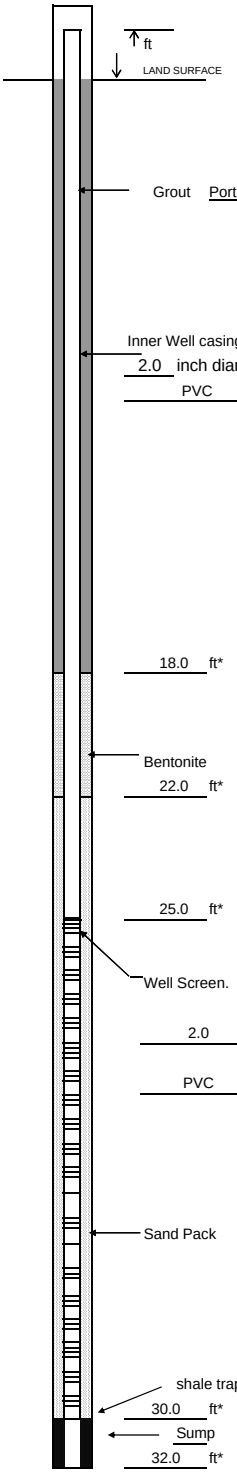
Measuring Point is Top of Well Casing Unless Otherwise Noted.

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

* Depth Below Land Surface

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-38A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

698.19 feet ☐ Surveyed

☐ Estimated

Installation Date(s) 3/22/2010

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 150 gallons

Pumping Duration 140 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	2.0'
Total Screen	5.0'
Total Length	5.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	25.0'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

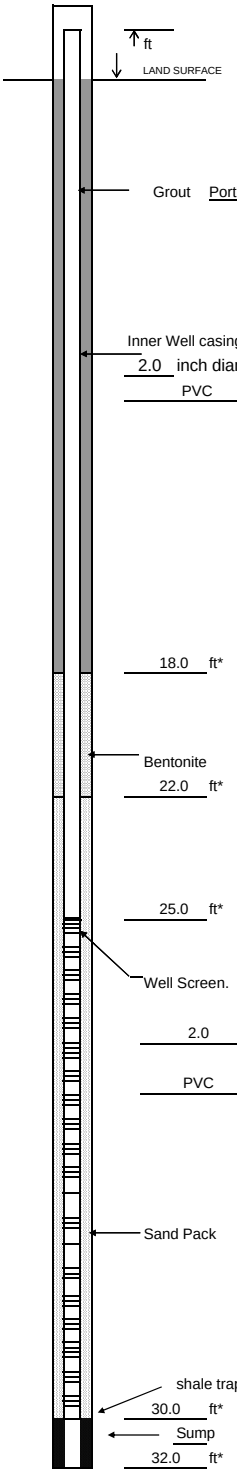
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-38B

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

697.72 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 3/22/10-3/23/2010

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 150 gallons

Pumping Duration 138 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	2.0'
Total Screen	5.0'
Total Length	5.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	25.0'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

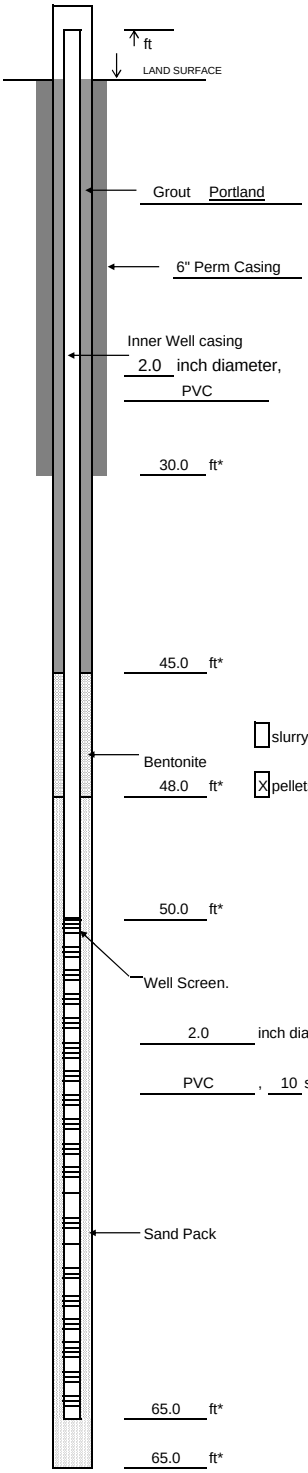
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-38C

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

697.43 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 3/23/10-3/26/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 20 gallons

Pumping Duration 96 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	15.0'
Total Length	15.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	50.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

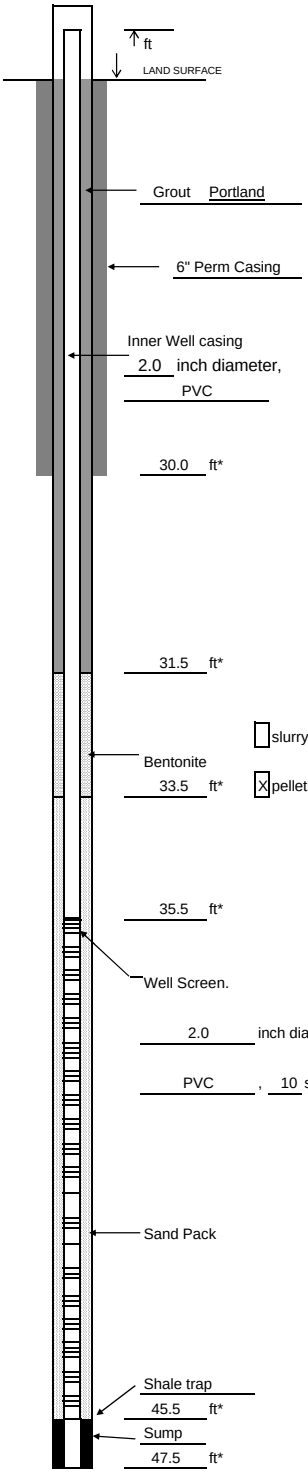
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-38D

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

697.71x feet ☐ Surveyed

☐ Estimated

Installation Date(s) 3/24/10-3/29/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 20 gallons

Pumping Duration 56 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	2.0'
Total Screen	10.0'
Total Length	10.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	35.5'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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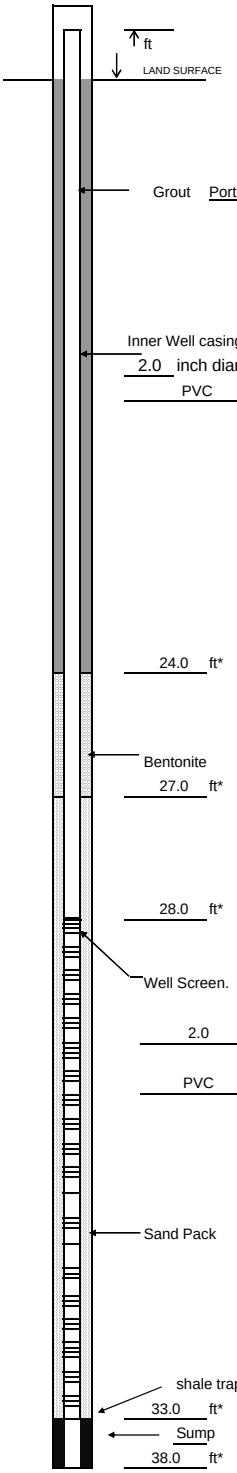
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-39A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

694.38 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 3/30/10-3/31/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 11 gallons

Pumping Duration 32 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	5.0'
Total Screen	5.0'
Total Length	5.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	28.0'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

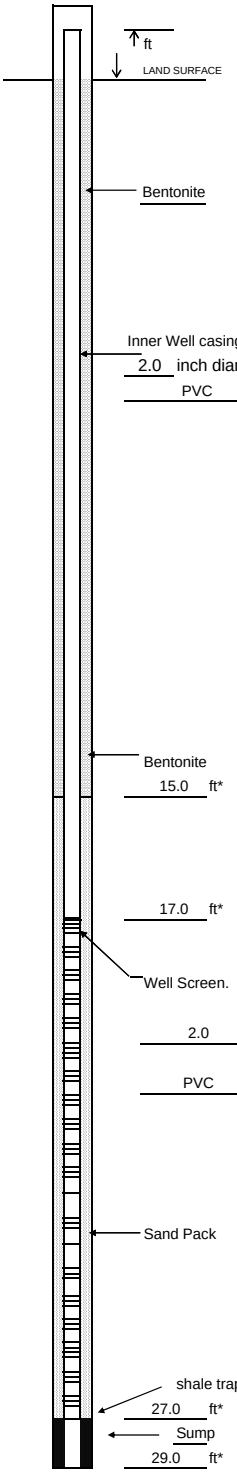
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-39B

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

694.19 feet [x] Surveyed

[ ] Estimated

2

Installation Date(s) 3/30/2010

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 150 gallons

Pumping Duration 233 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:		**Filter (Sand) Pack:**	
Type	PVC	Type:	Quartz
Diameter	2.0"	Size:	#5
Slot Size	0.010'	**Bentonite Seal:**	
Joint Type	threaded	Type:	Chips
Top Blank	na	Size:	Medium
Bottom Sump	2.0'		
Total Screen	10.0'	**Guard Pipe:**	
Total Length	10.0'	Type	stick up
		Diameter	4"
Inner Well Casing:		Total Length	
Type	PVC	(If applicable)	
Diameter	2.0"		
Joint Type	threaded	**Final Measurements:**	
Total Length	17.0'	Depth To Bottom:____	ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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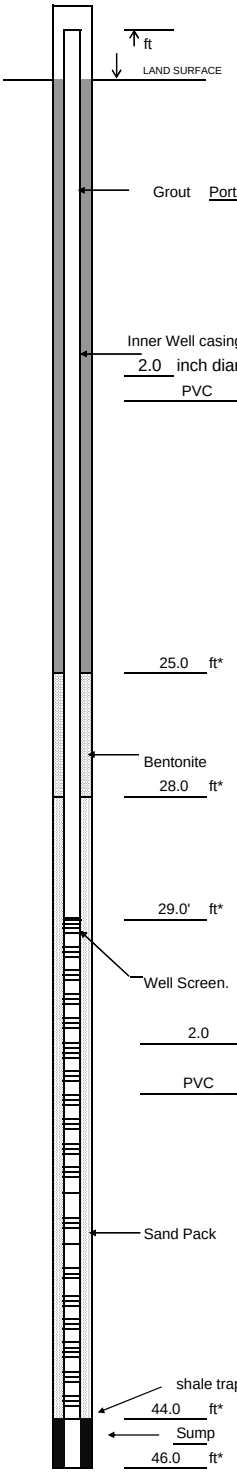
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-40A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

692.06 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 4/2/10-4/5/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 19 gallons

Pumping Duration 44 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	2.0'
Total Screen	15.0'
Total Length	15.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	29.0'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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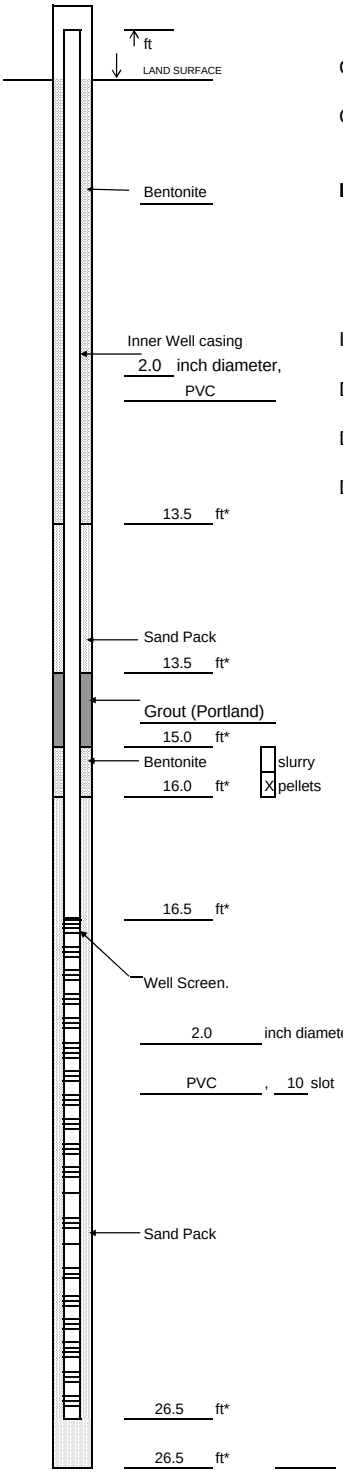
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0049.00001 Well MW-40B

****Nested Wells (one boring-two wells): Reference MW-40C for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

692.16 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 4/6/2010

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 50 gallons

Pumping Duration 102 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10.0'
Total Length	10.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	16.5'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

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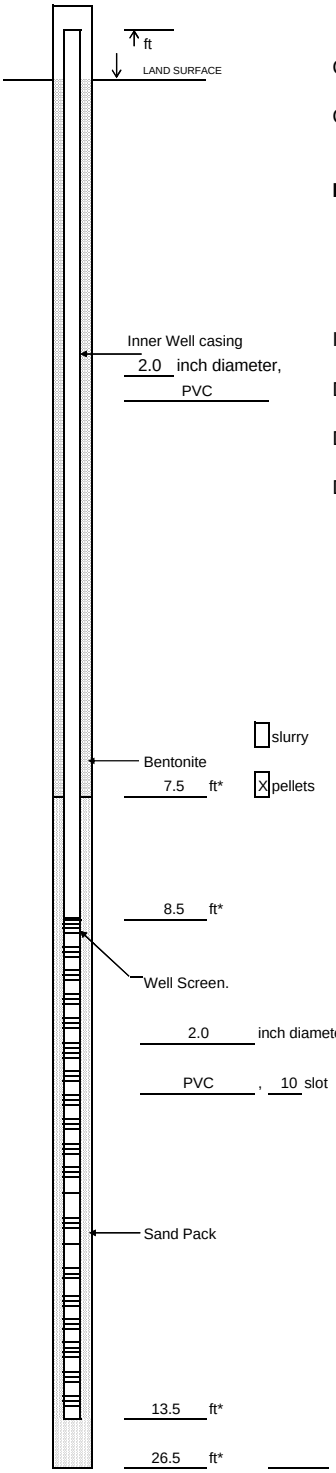
WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well MW-40C

****Nested Wells (one boring-two wells): Reference MW-40B for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

692.16 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 4/6/2010

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 100 gallons

Pumping Duration 141 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	5.0'
Total Length	5.0'

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	8.5'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

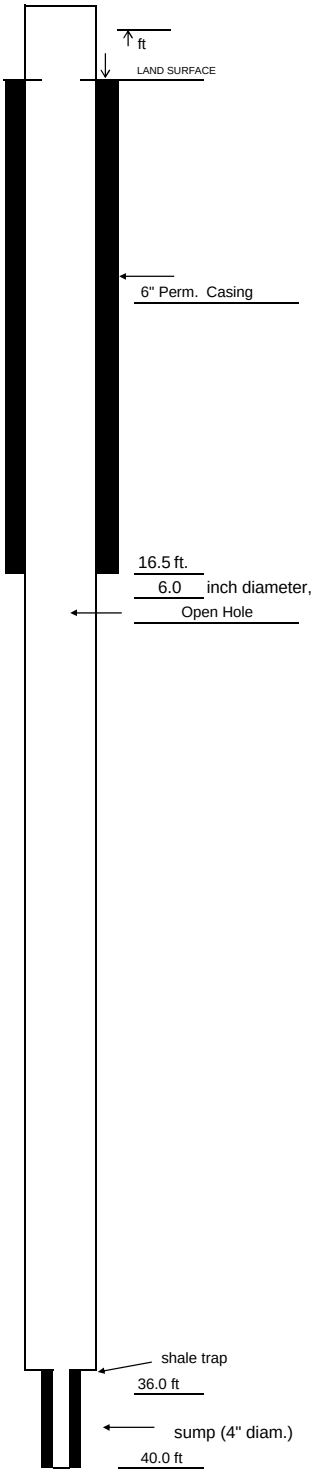
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0047.00001 Well RW-6

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

687.05 feet [X] Surveyed

[ ] Estimated

Installation Date(s) 3/31/10-4/7/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Air Lifting

Static Depth to Water _____ feet below M.P.

Water Removed During Development 170 gallons

Pumping Duration 160 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	4.0'
Total Screen	na
Total Length	na

Inner Well Casing:

Type	SS
Diameter	6.0"
Joint Type	na
Total Length	16.5'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	

Final Measurements:

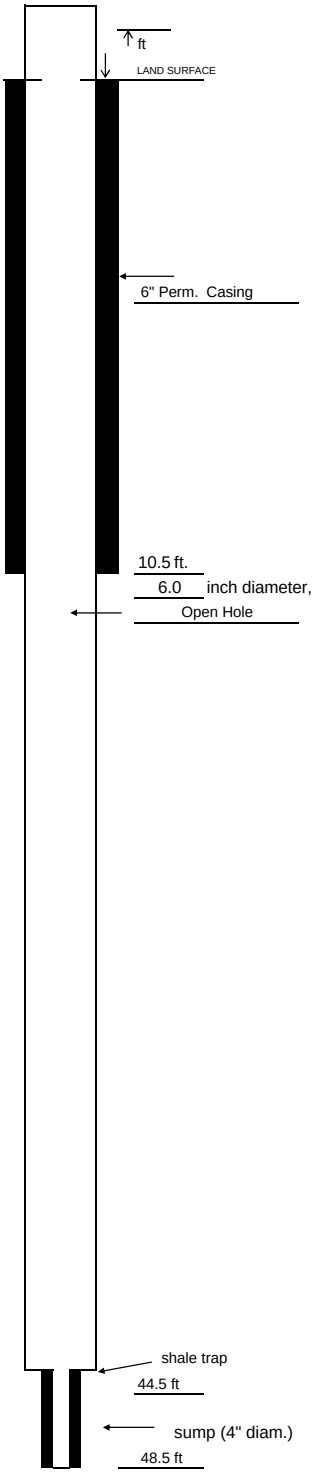
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well RW-7

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

689 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/1/10 - 11/10/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic

Drilling Fluid Water

Measurement Point (M.P.): _____

Development Technique(s) and Date(s)

Air Lifting

Static Depth to Water _____ feet below M.P.

Water Removed During Development 80 gallons

Pumping Duration 35 minutes

Well Purpose Monitoring/Recovery

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	4.0'
Total Screen	na
Total Length	na

Inner Well Casing:

Type	SS
Diameter	6.0"
Joint Type	na
Total Length	10.5'

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	

Final Measurements:

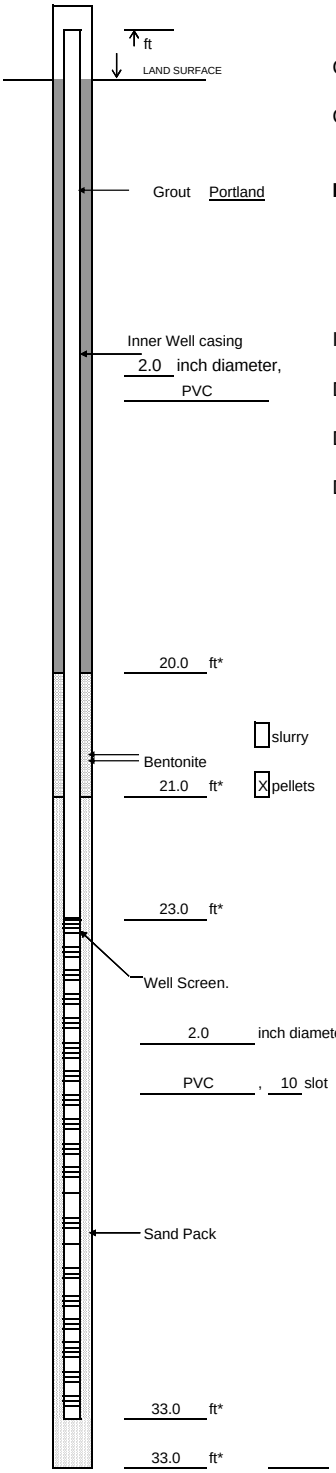
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-41A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

699.53 feet [X] Surveyed

[ ] Estimated

Installation Date(s) 11/2/10 - 11/3/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 6.25 gallons

Pumping Duration 5 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	23.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	2.90'

Final Measurements:

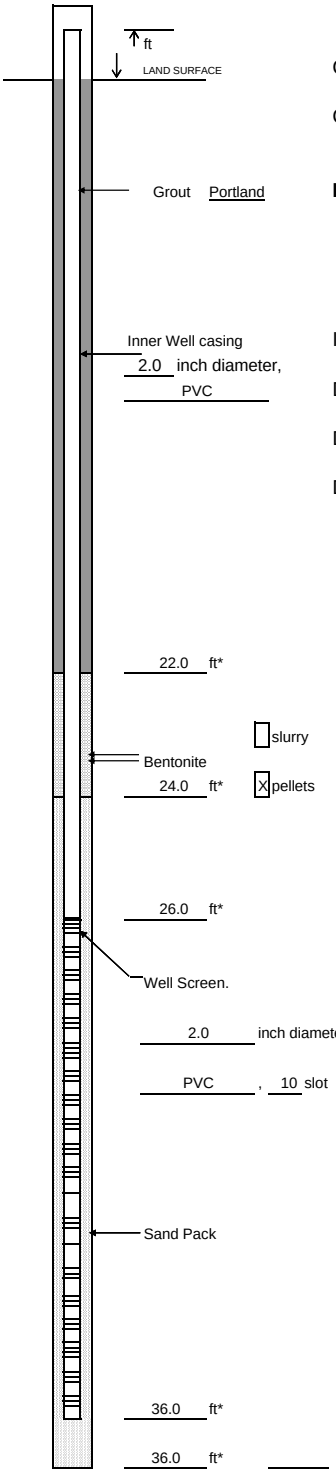
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-42A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

696.65 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/3/10 - 11/4/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 10 gallons

Pumping Duration 23 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	26.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Flush mount
Diameter	n/a
Total Length (If applicable)	n/a

Final Measurements:

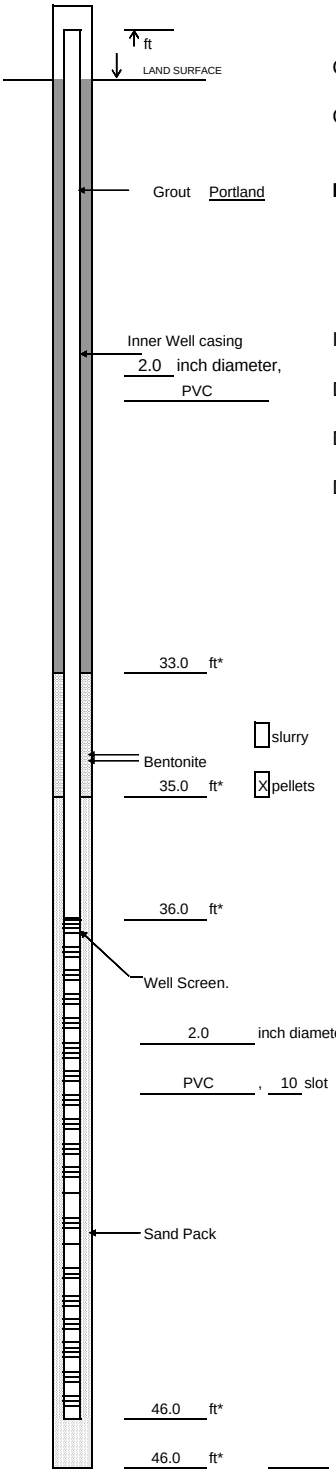
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-42B

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

696.57 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/3/10 - 11/8/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 10 gallons

Pumping Duration 17 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	36.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Flush mount
Diameter	n/a
Total Length (If applicable)	n/a

Final Measurements:

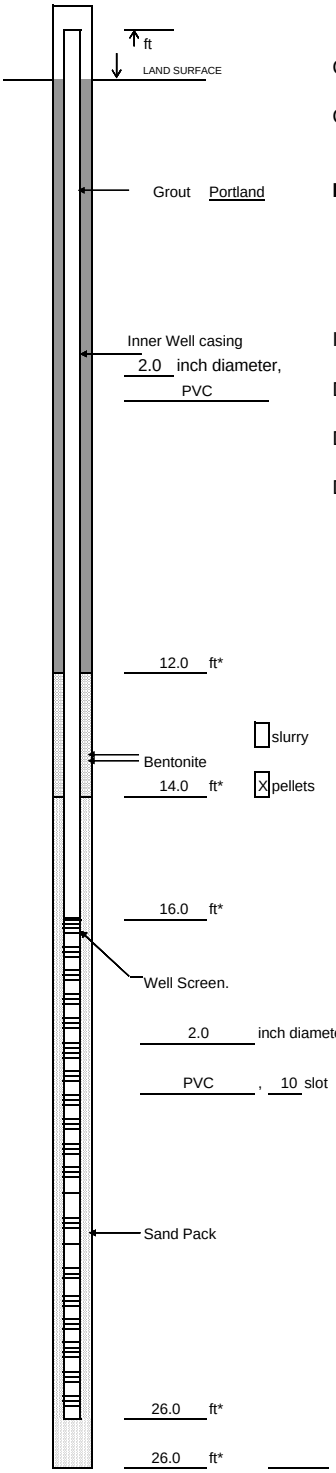
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-43A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

688.06 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/8/10 - 11/9/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 100 gallons

Pumping Duration 41 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	16.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

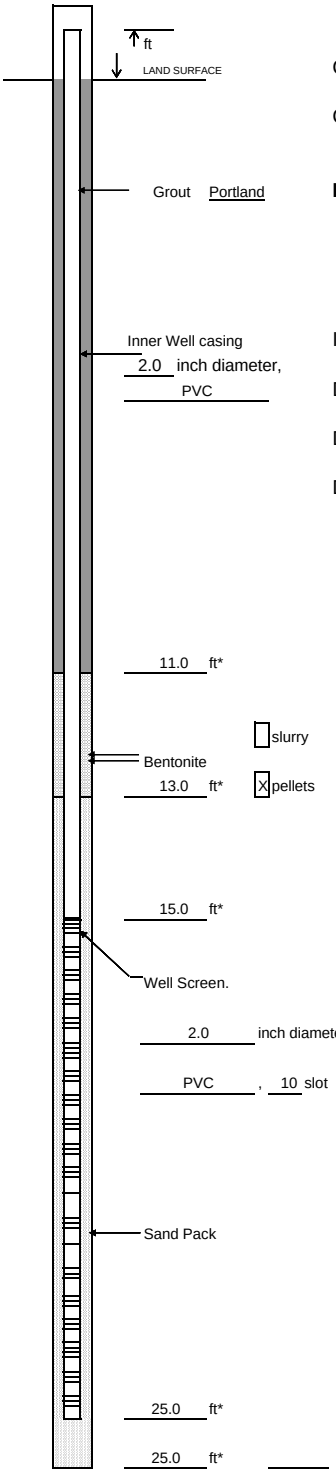
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-44A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

701.54 feet [X] Surveyed

[ ] Estimated

Installation Date(s) 11/11/10 - 11/12/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 12 gallons

Pumping Duration 6 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	15.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

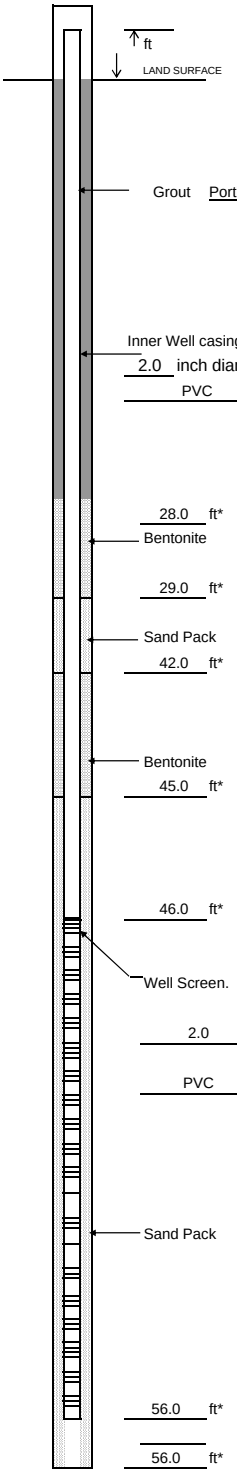
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-45A

****Nested Wells (one boring-two wells): Reference MW-45B for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

698.1 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/12/10 - 11/16/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 12.5 gallons

Pumping Duration 7 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	2.0'
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	46.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	

Final Measurements:

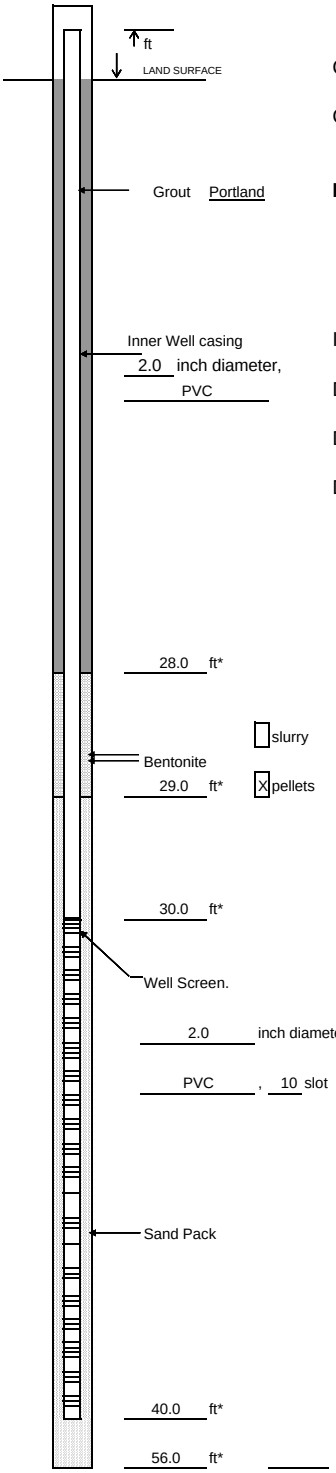
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-45B

****Nested Wells (one boring-two wells): Reference MW-45A for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

698.1 feet [X] Surveyed

[ ] Estimated

Installation Date(s) 11/12/10 - 11/16/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): _____

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 10.5 gallons

Pumping Duration 10 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	30.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	6"
Total Length (If applicable)	

Final Measurements:

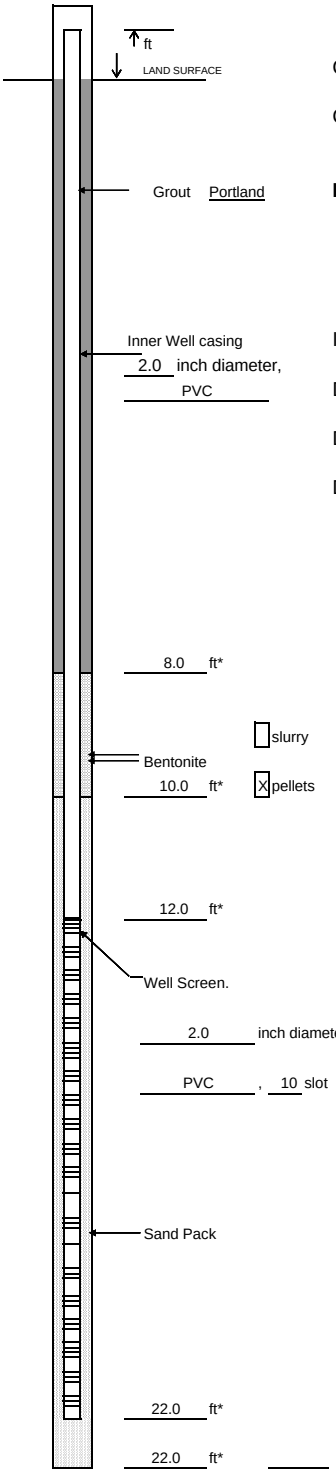
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-45C

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

698.42 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/17/2010

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 15 gallons

Pumping Duration 14 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	12.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

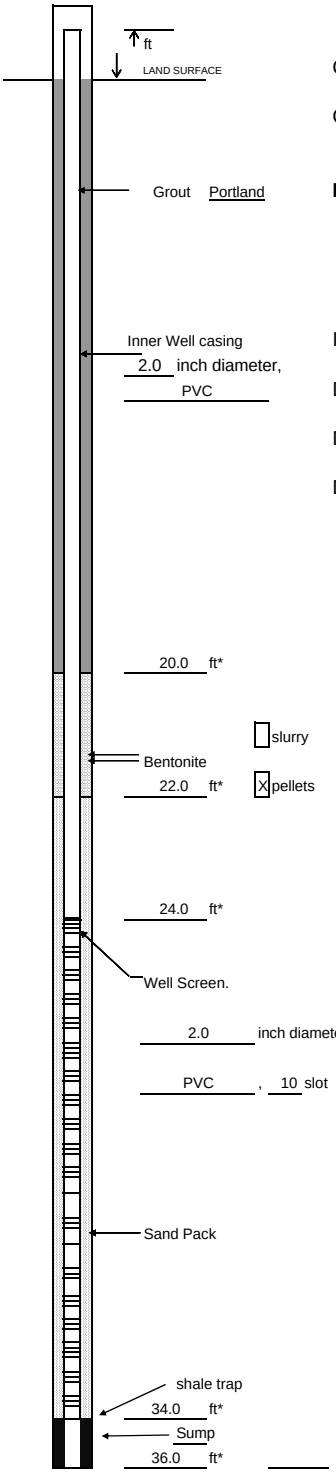
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-46A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

686.75 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/18/2010

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 13 gallons

Pumping Duration 6 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	24.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

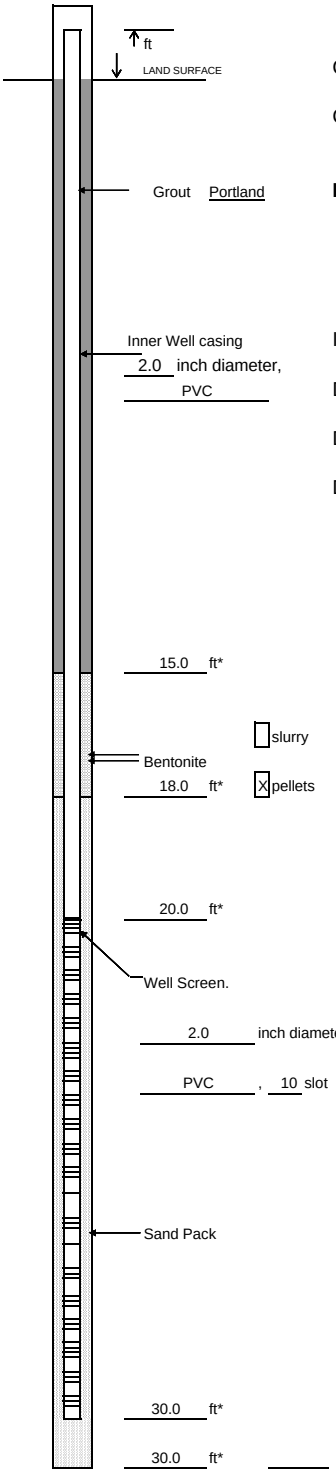
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-47A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

680.78 feet [X] Surveyed

[ ] Estimated

Installation Date(s) 11/19/10 - 11/22/10

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 9.75 gallons

Pumping Duration 8 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	20.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	stick up
Diameter	4"
Total Length (If applicable)	

Final Measurements:

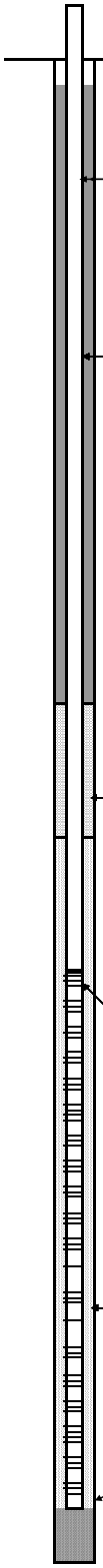
Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0056.00001 Well MW-37C

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

_____ feet ☐ Surveyed

☐ Estimated

Installation Date(s) 9/2/11 - 9/7/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): _____

Development Technique(s) and Date(s)

Whale pump with surging

☐ slurry 9/8/2011

Static Depth to Water 4.75 feet below M.P.

Water Removed During Development 16.5 gallons

Pumping Duration 16 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	SS
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	
Total Length	10.0

Inner Well Casing:

Type	SS
Diameter	2.0"
Joint Type	threaded
Total Length	34.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Flush
Diameter	12"
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom:____ ft. below M.P.

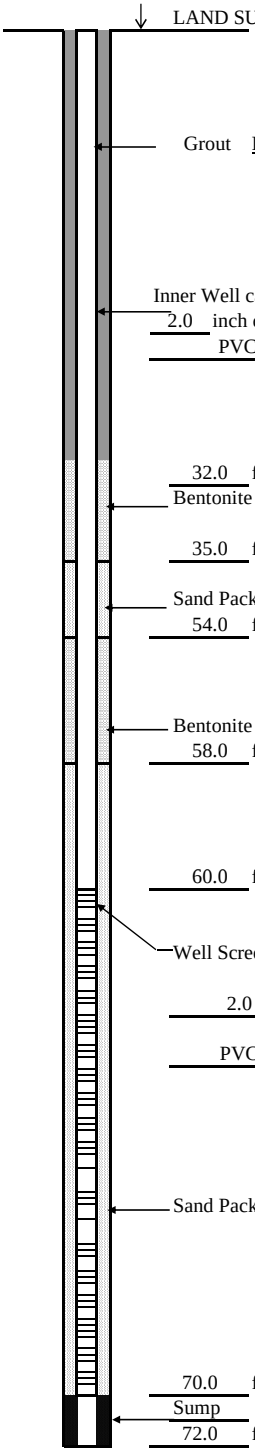
Prepared by: R. Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

* Depth Below Land Surface

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



LAND SURFACE

Grout Portland

Inner Well casing
2.0 inch diameter,
PVC

32.0 ft*
Bentonite

35.0 ft*
Sand Pack
54.0 ft*

☐ slurry
Bentonite
58.0 ft* ☒ pellets

60.0 ft*
Well Screen.

2.0 inch diameter
PVC , 10 slot

Sand Pack

70.0 ft*
Sump
72.0 ft*

Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project IN000072.0056.00001 Well MW-48A

****Nested Wells (one boring-two wells): Reference MW-48B for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

709.15 feet ☒ Surveyed
☐ Estimated

Installation Date(s) 1/4/11 - 1/6/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water _____ feet below M.P.

Water Removed During Development 11 gallons

Pumping Duration 7 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Sump	2.0'
Total Screen	10
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	62.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Flush
Diameter	12"
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom:____ ft. below M.P.

Prepared by: Randall Woodruff

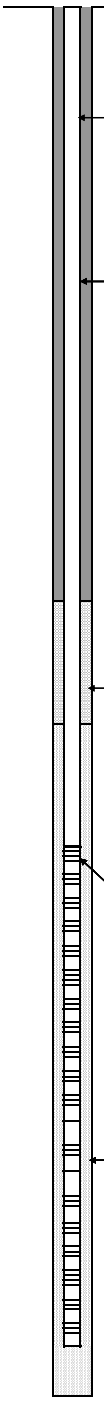
Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING

Project IN000072.0056.00001 Well MW-48B

****Nested Wells (one boring-two wells): Reference MW-48A for other well**



LAND SURFACE

City Bloomington

County Monroe State Indiana

Grout Portland

Land-Surface Elevation and Datum:

709.15 feet [x] Surveyed

[ ] Estimated

Inner Well casing 2.0 inch diameter, PVC

Installation Date(s) 1/4/11 - 1/6/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

32.0 ft*

Whale pump with surging

[ ] slurry

Bentonite

35.0 ft* [X] pellets

Static Depth to Water _____ feet below M.P.

Water Removed During Development 19.5 gallons

Pumping Duration 11 minutes

38.0 ft*

Well Purpose Monitoring

Well Screen.

Depth To Bottom (Post Development) _____ ft. below M.P.

2.0 inch diameter

PVC , 10 slot

Sand Pack

53.0 ft*

53.0 ft* _____

Screen:		**Filter (Sand) Pack:**	
Type	PVC	Type:	Quartz
Diameter	2.0"	Size:	#5
Slot Size	0.010'	**Bentonite Seal:**	
Joint Type	threaded	Type:	Chips
Top Blank	na	Size:	Medium
Bottom Blank	na		
Total Screen	10	**Guard Pipe:**	
Total Length	15.0	Type	Flush
		Diameter	12"
Inner Well Casing:		Total Length	n/a
Type	PVC	(If applicable)	
Diameter	2.0"		
Joint Type	threaded	**Final Measurements:**	
Total Length	38.0	Depth To Bottom:____	ft. below M.P.

Prepared by: Randall Woodruff

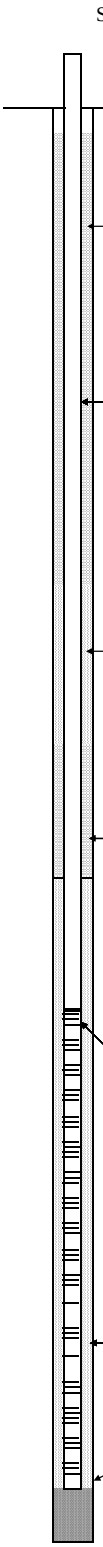
Measuring Point is Top of Well Casing Unless Otherwise Noted.

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

* Depth Below Land Surface

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0056.00001 Well MW-49A

****Nested Wells (one boring-two wells): Reference MW-49B for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

709.15 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 7/26/11 - 7/28/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water 10.24 feet below M.P.

Water Removed During Development 11 gallons

Pumping Duration 13 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	na
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Stickup
Diameter	
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom:____ ft. below M.P.

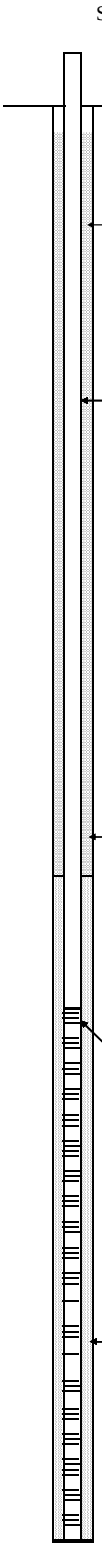
Prepared by: Meryl

* Depth Below Land Surface

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0056.00001 Well MW-49B

****Nested Wells (one boring-two wells): Reference MW-49A for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

_____ feet ☐ Surveyed

☐ Estimated

Installation Date(s) 7/26/11 - 7/28/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC

Development Technique(s) and Date(s)

Whale pump with surging

☐ slurry

X pellets

Static Depth to Water 11.05 feet below M.P.

Water Removed During Development 10.5 gallons

Pumping Duration 11 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	na
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Stickup
Diameter	
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom:____ ft. below M.P.

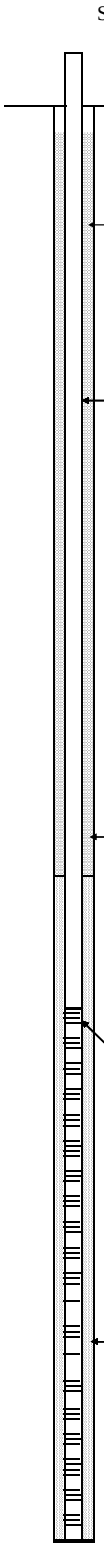
Prepared by: Meryl

* Depth Below Land Surface

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0056.00001 Well MW-49C

City Bloomingtonn

County Monroe State Indiana

Land-Surface Elevation and Datum:

_____ feet ☐ Surveyed

☐ Estimated

Installation Date(s) 7/28/2011

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC

Development Technique(s) and Date(s)

Whale pump with surging

☐ slurry

☒ pellets

Static Depth to Water 4.62 feet below M.P.

Water Removed During Development 7 gallons

Pumping Duration 8 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	na
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Stickup
Diameter	
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom:____ ft. below M.P.

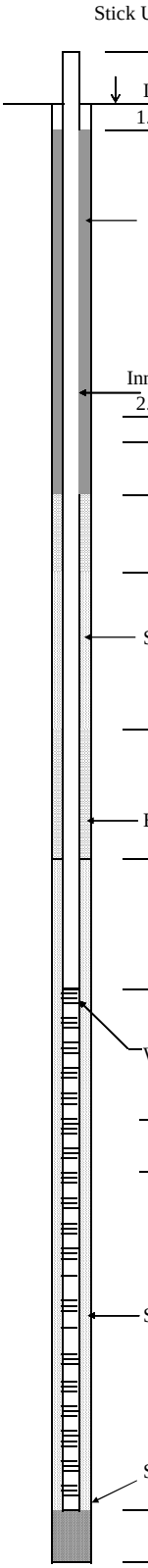
Prepared by: Meryl

* Depth Below Land Surface

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0056.00001 Well MW-50A

****Nested Wells (one boring-two wells): Reference MW-50B for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

_____ feet ☐ Surveyed

☐ Estimated

Installation Date(s) 8/1/11 - 8/3/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water 4.07 feet below M.P.

Water Removed During Development 16 gallons

Pumping Duration 26 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	na
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Stickup
Diameter	
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom: 71.71 ft. below M.P.

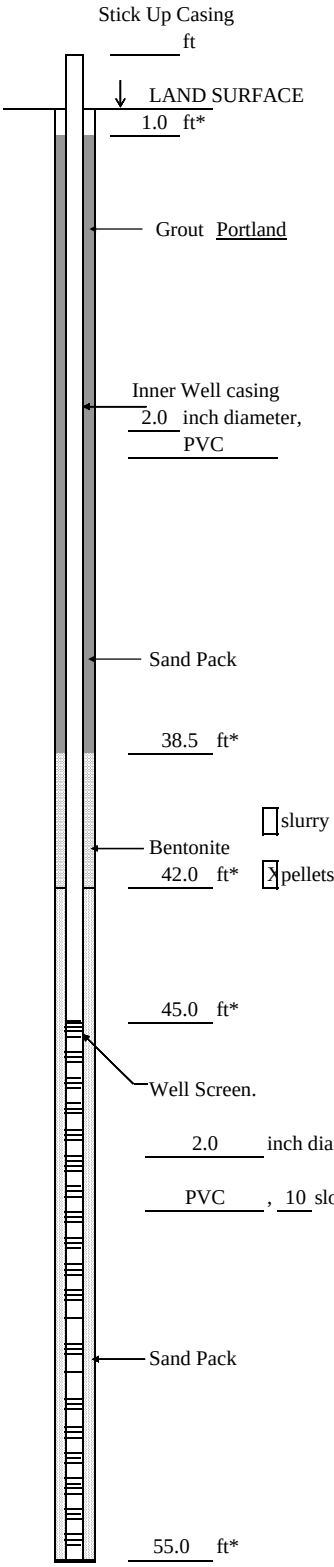
Prepared by: Meryl Hicks

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

* Depth Below Land Surface

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0056.00001 Well MW-50B

****Nested Wells (one boring-two wells): Reference MW-50A for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

_____ feet ☐ Surveyed

☐ Estimated

Installation Date(s) 8/1/11 - 8/3/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC

Development Technique(s) and Date(s)

Whale pump with surging

Static Depth to Water 13.61 feet below M.P.

Water Removed During Development 16 gallons

Pumping Duration 26 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	na
Total Length	10.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Stickup
Diameter	
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom: 54.6 ft. below M.P.

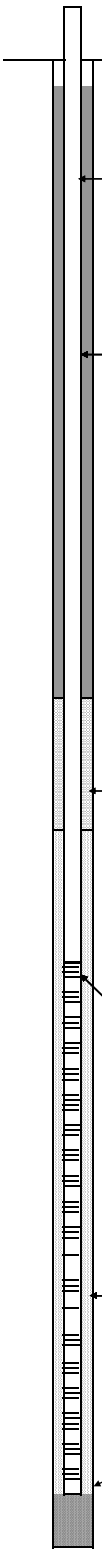
Prepared by: Meryl

* Depth Below Land Surface

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Stick Up Casing ____ ft

LAND SURFACE

1.0 ft*

Grout Portland

Inner Well casing 2.0 inch diameter, PVC

36.0 ft*

Bentonite

42.0 ft* ☐ slurry ☒ pellets

43.0 ft*

Well Screen.

2.0 inch diameter

PVC , 10 slot

Sand Pack

Shale trap

53.0 ft*

57.0 ft* sump

Project IN000072.0056.00001 Well MW-51A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

____ feet ☐ Surveyed

☐ Estimated

Installation Date(s) 8/4/11 - 8/8/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): ____

Development Technique(s) and Date(s)

Whale pump with surging

8/9/2011

Static Depth to Water 10.08 feet below M.P.

Water Removed During Development 20 gallons

Pumping Duration 16 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) ____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	15.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Flush
Diameter	12"
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom:____ ft. below M.P.

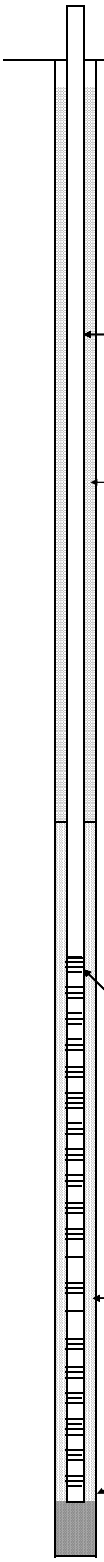
Prepared by: Meryl

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

* Depth Below Land Surface

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Stick Up Casing ____ ft

LAND SURFACE 1.0 ft*

Inner Well casing 2.0 inch diameter, PVC

Bentonite [ ] slurry [X] pellets

15.0 ft*

17.0 ft*

Well Screen.

2.0 inch diameter

PVC , 10 slot

Sand Pack

Shale trap 27.0 ft*

29.0 ft* sump

Project IN000072.0056.00001 Well MW-51B

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

____ feet [ ] Surveyed

[ ] Estimated

Installation Date(s) 8/8/11 - 8/9/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): ____

Development Technique(s) and Date(s)

Whale pump with surging

8/9/2011

Static Depth to Water 13.75 feet below M.P.

Water Removed During Development 75 gallons

Pumping Duration 60 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) ____ ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	15.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	____

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Flush
Diameter	12"
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom:____ ft. below M.P.

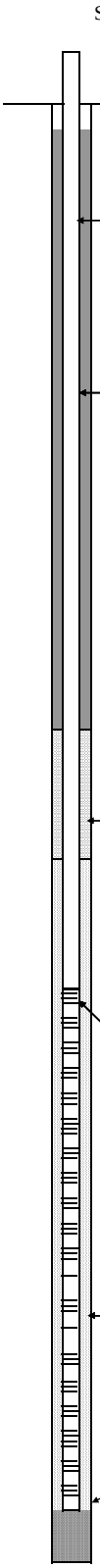
Prepared by: Meryl

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

* Depth Below Land Surface

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0056.00001 Well MW-52A

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

feet ☐ Surveyed

☐ Estimated

Installation Date(s) 8/10/11 - 8/11/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.):

Development Technique(s) and Date(s)

Whale pump with surging

☐ slurry 8/12/2011

Static Depth to Water 27.24 feet below M.P.

Water Removed During Development 125 gallons

Pumping Duration 92 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) ft. below M.P.

Screen:

Type	PVC
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	10
Total Length	15.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Flush
Diameter	12"
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom: 47.05 ft. below M.P.

Prepared by: Meryl

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

* Depth Below Land Surface

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING

Flush Mount

Project IN000072.0056.00001 Well MW-53A

****Nested Wells (one boring-two wells): Reference MW-53B for other well**

LAND SURFACE

1.0 ft*

City Bloomington

County Monroe State Indiana

Grout Portland

Land-Surface Elevation and Datum:

726 feet [ ] Surveyed

[X] Estimated

Inner Well casing

2.0 inch diameter,

PVC

Installation Date(s) 8/29/11 - 9/1/11

Drilling Contractor Boart Longyear

55.0 ft*

Driller/License # Jason Greer

Bentonite

60.0 ft*

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Sand Pack

Measurement Point (M.P.): TOC

Development Technique(s) and Date(s)

78.0 ft*

Whale pump with surging

[ ] slurry

9/6/2011

Bentonite

85.0 ft* [X] pellets

Static Depth to Water 2.93 feet below M.P.

Water Removed During Development 15 gallons

Pumping Duration 27 minutes

87.0 ft*

Well Purpose Monitoring

Well Screen.

Depth To Bottom (Post Development) _____ ft. below M.P.

2.0 inch diameter

PVC , 10 slot

Screen:		**Filter (Sand) Pack:**	
Type	SS	Type:	Quartz
Diameter	2.0"	Size:	#5
Slot Size	0.010'	**Bentonite Seal:**	
Joint Type	threaded	Type:	Chips
Top Blank	na	Size:	Medium
Bottom Blank	na		
Total Screen	na	**Guard Pipe:**	
Total Length	10.0	Type	Stickup
		Diameter	
Inner Well Casing:		Total Length	n/a
Type	PVC	(If applicable)	
Diameter	2.0"		
Joint Type	threaded	**Final Measurements:**	
Total Length	87.0	Depth To Bottom:	ft. below M.P.

Sand Pack

Shale trap

97.0 ft*

99.0 ft* sump

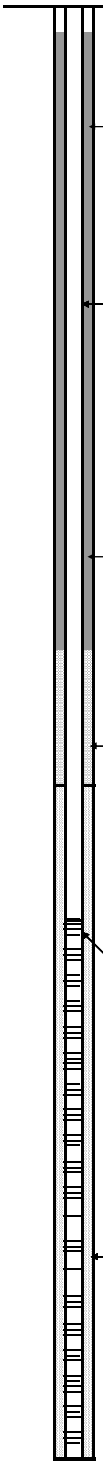
Prepared by: R. Woodruff

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

* Depth Below Land Surface

ARCADIS

WELL CONSTRUCTION LOG- TELESCOPING



Project IN000072.0056.00001 Well MW-53B

****Nested Wells (one boring-two wells): Reference MW-53A for other well**

City Bloomington

County Monroe State Indiana

Land-Surface Elevation and Datum:

726 feet [ ] Surveyed

[X] Estimated

Installation Date(s) 8/29/11 - 9/1/11

Drilling Contractor Boart Longyear

Driller/License # Jason Greer

Drilling Method Mini Sonic / HQ

Drilling Fluid Water

Measurement Point (M.P.): TOC

Development Technique(s) and Date(s)

Whale pump with surging

9/6/2011

[ ] slurry [X] pellets

Static Depth to Water 3.95 feet below M.P.

Water Removed During Development 11 gallons

Pumping Duration 17 minutes

Well Purpose Monitoring

Depth To Bottom (Post Development) _____ ft. below M.P.

Screen:

Type	SS
Diameter	2.0"
Slot Size	0.010'
Joint Type	threaded
Top Blank	na
Bottom Blank	na
Total Screen	na
Total Length	15.0

Inner Well Casing:

Type	PVC
Diameter	2.0"
Joint Type	threaded
Total Length	62.0

Filter (Sand) Pack:

Type:	Quartz
Size:	#5

Bentonite Seal:

Type:	Chips
Size:	Medium

Guard Pipe:

Type	Stickup
Diameter	
Total Length (If applicable)	n/a

Final Measurements:

Depth To Bottom: ft. below M.P.

Prepared by: R. Woodruff

* Depth Below Land Surface

Note: Measuring Point (M.P.) is Top of Casing (TOC) unless noted otherwise.

EWC *Ewers Water Consultants Inc.*

160 Redwood Drive, Richmond, Kentucky 40475
Phone & Fax (859) 623-8464 E-mail: ewc@mis.net

Phase I, Final Report
DYE TRACING STUDY
Former CSX Wood Treating Facility
Bloomington, Indiana

Ralph O. Ewers Ph.D.

December 10 , 2009

EXECUTIVE SUMMARY

Ewers Water Consultants (EWC) Conducted a dye tracing study in conjunction with ARCADIS U.S. Inc. at the former CSX wood treating facility in Bloomington Indiana. The purpose of the study was to investigate groundwater flow beneath the site in order to understand the fate and transport of creosote constituents in the groundwater.

Groundwater appears to be primarily driven by local recharge through the soil. Flow in the aquifer was confined principally to conduits that appeared to be partly occluded by clay-rich sediments. The conduits were sufficiently interconnected that small amounts of the tracer dye were carried southward to some of the monitoring wells. The groundwater flow eastward through the overburden and into the nearby creek was sufficiently slow that the tracer dyes were only irregularly detectable in the creek and primarily directly eastward of the major creosote releases.

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Map 2, Well Monitoring Locations . . . . . .Rear Pocket

INTRODUCTION

A dye tracing study was conducted by Ewers Water Consultants (EWC) in conjunction with ARCADIS-US Inc. to evaluate the potential fate and transport of creosote constituents in groundwater beneath the former CSX wood treating facility in Bloomington, Indiana (CSX Site). The study was begun on 4/14/08 with a dye background analysis. Dye receptors were deployed in an array of spring and stream sites to identify the groundwater discharge point or points for groundwater flow from the site. Other dye receptors were suspended in selected monitoring wells to further elucidate the dye movement in the aquifer.

Location

The site was located in southern Bloomington, Indiana, between South Rogers Street on the west and South Walnut/Old State Rt. 37 on the east. Country Club Drive divided the site into north and south sections. The site was situated on a narrow flood plain along the west side of Clear Creek (Map 1, rear pocket).

Geology / Hydrology

The hydro-stratigraphic unit of interest was the Ramp Creek Formation, a dolostone and limestone unit, which underlies the site. This formation exhibits wide spread anastomoses along bedding planes, both in situ and on detached slabs along streams. Thus, it has great potential to form a karst aquifer. The Ramp Creek Formation also exhibits jointing with significant enlargement by dissolution. This formation is overlain by the Harrodsburg Formation, and underlain by the less soluble Borden Group. The flood plain beneath the site had fine flood deposits of clay and silt overlying coarser point bar deposits of gravel sand and clay, which covered the Ramp Creek carbonates.

Normally, the upper few tens of feet of most soluble carbonate rocks become dissolved into a complex sponge-work of conduits usually mantled by a soil cover and partly in-filled with sediment. This zone is referred to as an epikarst. The prevalent anastomoses and solution widened joints seen in outcrops, and shallow voids encountered in drilling, indicate that the Ramp Creek beneath the site possesses such an epikarst. Because the site is located on an active flood plain, the epikarst was likely to be at least partly filled with various sediments.

The site is adjacent to Clear Creek, which formes the local base level. Shallow wells and trenches (discussed below) indicated that the flood and point bar deposits overlying the carbonate rocks were at least partially saturated throughout the year, and the potentiometric surface lay within these sediments.

THE TRACER INVESTIGATION

Fluorescent dyes have a proven record of effectiveness for investigations of groundwater flow in karst aquifers (Quinlan and Ewers, 1985; Kass, 1998). They appear to be well understood in terms of their lack of toxicity and lack of mutagenic

effects (Smart & Laidlaw, 1977; Smart, 1984; Field, et al 1995). In this study the dye was released into a monitoring well in the region of the aquifer known to be affected by creosote constituents. Groundwater discharge features, including springs, wells and streams, were monitored for the dyes, using activated carbon receptors (see ***Field Procedures*** and ***Laboratory Procedures,*** Appendix B and C). Table 1 lists some of the fluorescent dyes commonly employed for tracing in karst aquifers.

Table 1
Groundwater Tracing Dyes

Dye Name	Colour Index
Fluorescein	Acid Yellow 73
Rhodamine WT	Acid Red 388
Sulphorhodamine B	Acid red 52
Eosine	Acid Red 87
Pyranine	Drug & Cosmetic Green #8
Optical Brightener	F. B. 28
Direct Yellow	Direct Yellow 96

Reconnaissance and Dye Receptor Deployment

A thorough reconnaissance was conducted by EWC from April 12 through April, 14, 2008. This included examination of Clear Creek, for springs and surface water inputs. The stream reconnaissance was conducted from 0.25 mi above monitoring location 1, to monitoring point 16 (Map-1). During the reconnaissance, dye receptors were deployed at all of the stream monitoring locations shown on Map-1 and monitoring was maintained throughout the study with regular receptor exchanges. In addition to Clear Creek, its tributaries and springs, dye receptors were also deployed in monitoring wells on the CSX Site.

Springs - Eight springs were found. These are shown on Map 1 and they are listed in Appendix A. Pertinent attributes of these springs are listed in Table 2. Springs in karst terranes are frequently observed to discharge water from the side of a stream opposite from the spring's location. For this reason, springs on both the east and west sides of Clear Creek were included in the monitoring plan.

Table 2
Monitored Springs at the Bloomington, Indiana CSX Site

Location Number Map 1	Spring Name	Location E or W of Creek	Typical Discharge CFS	Notes
6	Watercress	W	2	Emerges from Harrodsburg Formation*
8	Single Culvert	W	0.1	Rises between RR rights of way
9	Double Culvert	W	0.1	Rises between RR rights of way
10	Bedding Plane Tube	W	0.25	Rises between RR rights of way
18	Gasoline	W	0.2	Site of past petroleum remediation
19	Pinewood	E	0.75	Rises in a large swamp Directly south of MW-28A, B, C
20	CVS	E	0.1	Original rise was likely beneath an existing commercial building Immediately south of MW-27
22	Ellington	W	?	Discharge was difficult to estimate

* Personal Communication Michael Cobb, ARCADIS

Streams - Clear Creek formed the local base level and flowed along the east side of the site. This fast-flowing stream, indeed any stream, can readily hide many groundwater discharge locations including large springs. For this reason, tracer studies customarily include monitoring at frequent intervals along streams at locations that are lower than the elevation of the site of concern, and that could reasonably be expected to discharge groundwater passing beneath the site. Clear Creek and its tributaries were monitored for the tracer dyes at 15 locations along its length (Map-1 and Appendix A). Clear Creek was monitored at nine locations (1, 2, 3, 7, 11, 13, 14, 16, and 23) and

six tributary streams (4, 5, 12, 15, 17, and 21) were monitored above their confluences with Clear Creek.

Clear Creek left its established channel at a point south of stream monitoring point 11 due to an immense log-jam. At that location it flowed westward across the flood plain and reentered the channel near spring monitoring point 10. Beaver activity formed and maintained a shallow impoundment across the flood plain at this location.

Monitoring Wells - Selected monitoring wells on and adjacent to the CSX Site were monitored for the tracer. Initially, only wells that had encountered a recognized void or had a record of contamination were used. As new monitoring wells were drilled during the study, they were added to the monitoring plan. Dye receptors were suspended in the vicinity of voids or centered in the screened interval. Wells with longer screens were monitored with a pair of dye receptors which were located at 1/3 and 2/3 of the screened interval depth. Monitored well locations are shown on Map-2 (rear pocket), and positions of the dye receptors are shown on Table 3.

DYE TESTING

Background Monitoring

Dye receptors were collected on 4/21/08, 4/29/08, and 5/6/08 and analyzed for all of the commonly used fluorescent tracer dyes prior to dye injection. The results of these analyses are shown on Table 4 (rear pocket). Fluorescein was found to be present in Clear Creek and in several monitoring wells during the background monitoring period. This dye is a constituent in many commercial products and is often found in waters in urban settings. This widespread fluorescein background precluded its use in testing at the CSX Site.

Strong fluorescence near the wavelength emitted by sulphorhodamine B in Clear Creek precluded the use of this dye and made the use of rhodamine-WT with its nearby emission peak inadvisable. There was no eosine present during the background monitoring.

Dye Injection

Injection Location Selection - On 4/15/08, four wells, MW-12D, MW-14D, MW-15D, and MW-16D, in the area of presumed maximum creosote release were tested for use as tracer insertion points by the injection of potable water. The objective was to select a well that demonstrated a good connection with the conduit porosity of the aquifer. That connection would be evidenced by the well's ability to readily accept injected water. Wells MW-15D and MW-16D were filled to the top of their casings and showed virtually no water level change in a 15 minute interval. Well MW-12D initially took water but slowed substantially as time progressed. A total of 47 gallons was inserted in an hour. Well MW-14D took water at a consistent rate of 0.6 gallons per minute, over a period of one hour. The locations of these wells are shown on Map 2.

Table 3
Monitored Wells at the Bloomington, Indiana CSX Site

Well Number	Screened Interval, Ft. BGS	Comments	Depth of Dye Receptor, Ft.	Well Group
MW-4D	11-16		13.5	Deep Well
MW-5D	15-20		17.5	"
MW-12D	7.5-18.5	usually cannot bail dry	11 & 15	"
MW-17D	10.5-16.5		16	"
MW-18D	11.5-16.5		12.5	"
MW-19D	11.5-16.5		12	"
MW-20D	8-23		10 & 19.5	"
MW-21D	8-23	usually cannot bail dry	9 & 18	"
MW-22D	18-23	cannot bail dry	20	"
MW-23D	16-21		17.5	"
MW-13	These wells were occasionally dry. The depth for the dye receptors in these wells was adjusted in the field to place them just off the existing well bottom.			Shallow Well
MW-17S				"
MW-20S				"
MW-24A	17-22	2nd shallow monitoring point set in the field to avoid free product	Upper &19	New Well Group 1
MW-25A	8.5-18.5		13	"
MW-27A	19-29		24	"
MW-28A	47-62		52, 57	New Well Group 2
MW-28B	17.7-22.7		20	"
MW-28C	25.7-35.7		31	"
MW-29A	57-72		64	"
MW-29B	29-39		34	"

Two trenches oriented parallel to Clear Creek were prepared using a track-hoe. Trenches that take water readily are an excellent means of inserting tracers into karst aquifers because they have a high probability of intersecting a grike, a solution widened joint in the carbonate bedrock. The trench locations are shown on Map 2. Trench A was dug to bedrock, but quickly began to fill with water. Trench B began to fill with water before bedrock was reached.

The trenches clearly encountered a water table in the flood plane sediments rendering that mode of dye injection unsuitable at this site. Although the wells were less than ideal, given their poor connection to the aquifer, they were the only reasonable choice available. Well MW-14D was selected for the injection.

Dye Selection - Rhodamine-WT has a relatively high tendency for sorption loss, compared to other tracer dyes. That characteristic, combined with the proximity of its peak fluorescence wavelength to that of the sulphorhodamine B that was initially present in the Clear Creek made it a poor choice for this trace. Eosine, with a fluorescence peak midway between fluorescein and rhodamine-WT, together with its high detectablility and low sorption loss, made it the logical choice for injection into well MW-14D.

Dye Quantity - Dye quantities are normally determined on the basis of the quantity of spring and stream flow at the time of injection, the probable distance the dye will have to travel, the characteristics of the dye, the presence of background fluorescence, the presence of dye background[1], and thirty years of experience with hundreds of prior tracer tests with these dyes, many in geologically similar situations.

Dye Injection - Dye injection in Monitoring Well MW-14D occurred on 5/6/08. Water for the dye injection was obtained from the local potable source, and brought to the site by truck. After a priming injection of potable water, 5 pounds of 50% eosine solution was introduced to the well through an EWC tremi injection device. The dye was introduced below the surface of the water and near the bottom of the well. Approximately 600 gallons of flush water was injected immediately after the dye release. The flush water was alternately introduced at the bottom of the well via the tremi and from the top. This procedure ensured that dye was not left isolated in stagnant portions of the water column in the well.

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[1] For a discussion of background fluorescence and dye background, please refer to the laboratory QA/QC appended to this document.

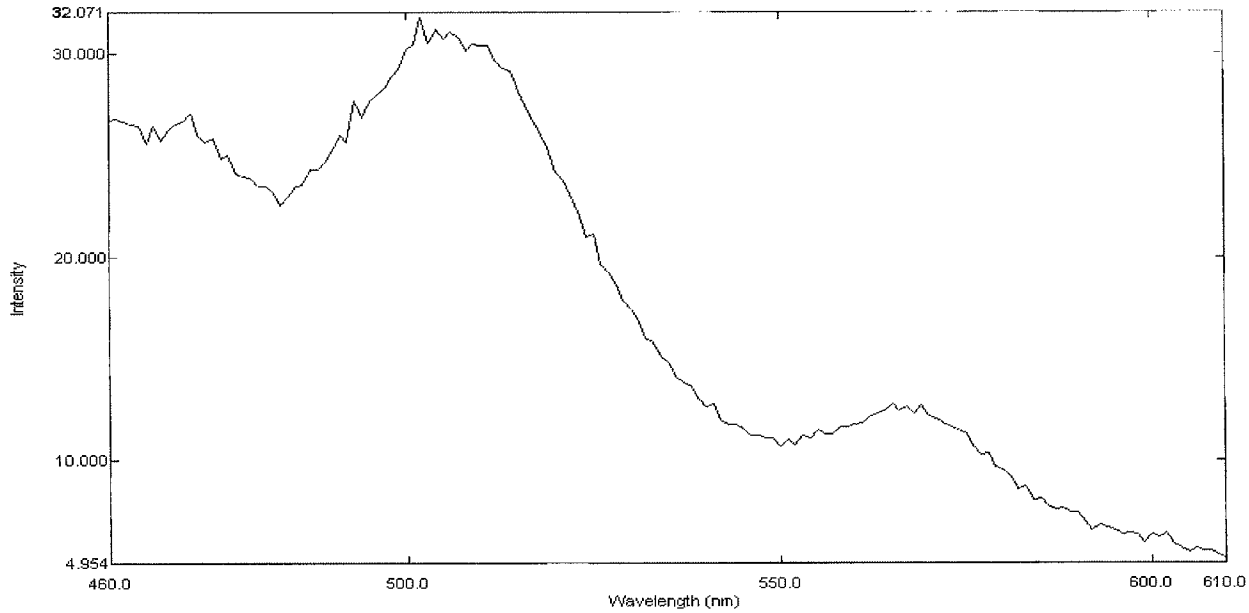
The Problem of Dye Quantification in Activated Carbon Receptors Deployed in Wells

Figure 1 shows a spectrofluorometric scan of eluent from a dye receptor retrieved from a monitoring well where all of the common fluorescent dyes commonly used in groundwater tracing were judged to be absent. This scan shows two broad ragged peaks above the general fluorescence background near wavelengths 512 nm. and 569 nm. These peaks are the result of substances in activated carbon which gradually disperse into water flowing through the dye receptor. The presence of these peaks in eluent from a dye receptor is referred to as a low-flow signature. Because of the minimal groundwater movement through most monitoring wells, these substances disperse very slowly and their associated fluorescence remains in the dye receptor.

Both the low-flow signature peaks and the level of general background fluorescence must be subtracted from the peak height or the area under the curve to accurately quantify the dye present in the eluent. Both of these values have some degree of variability, but fortunately that variability is relatively small for well samples. When duplicate elutions are prepared from dye receptors by ordinary means, the variability can be as high as +/-20%. The elution techniques employed by EWC involving drying of the activated carbon and weighing a consistent amount to be eluted reduces this variability at least by half. Thus, the error in the quantification of dye present in a well receptor must be expressed with a +/-10% variance.

The amount of dye sorbed from the water in which a receptor is placed depends not only on the concentration of the dye in the water, but on the velocity and turbulence of the water, the ambient temperature which controls diffusion, and the presence and the nature of competing molecules which can attach to the receptor sites on the activated carbon. It is for these reasons that we only report order of magnitude values for the concentration of a dye present in the elutant from activated carbon dye receptors. Doing otherwise implies a greater precision than is warranted by the data.

Figure 1



Spectrofluorometric Scan From an Activated Carbon Receptor Exposed in a Monitoring Well

This scan of dye receptor eluent shows a low-flow signature typical of activated carbon that has had minimal exposure to flowing water. The peak on the left has a maximum wavelength near but shorter than that of fluorescein. The peak on the right has a maximum wavelength near that of rhodamine-WT. This signature is lost as water flows over the activated carbon.

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RESULTS OF THE STUDY

The dye recoveries are listed by dye receptor exchange round, date, and by receptor location in Table 4. Recoveries of eosine, the injected dye, and fluorescein are shown. The sulphorhodamine-B which was observed in the background rounds was not tabulated. It was never observed at high concentrations, it appeared only briefly, and only in Clear Creek. None of the monitored springs showed eosine.

Fluorescein

A variable background of fluorescein was seen in Clear Creek throughout the study. It was also observed consistently in all of the monitored monitoring wells on the CSX Site with the exception of MW-5D, MW-13, MW-17D, MW-17S, and MW-20S. Fluorescein was observed in Watercress Spring (Location 6), Bedding Plane Tube Spring (Location 10), CVS Spring (location 17), Gasoline Spring (Location18), and briefly in Pinewood Spring (location 19).

Eosine

This dye is subject to degradation which causes a shift in its fluorescence wavelength from the normal value in alkaline eluent of 542nm to a degraded value of 532nm and as short as 522nm. Some wells near the injection site showed eosine with typical 542nm +/- 2nm fluorescence, and later, as the dye concentration waned, increasingly degraded fluorescence wavelengths appeared. Other, more distant wells showed highly degraded eosine initially, but as time passed, less degraded dye gradually appeared. Our experience suggests that this phenomenon manifests chiefly where organic contaminants are present in the aquifer.

Since the work of Magdefessel (1990) it has been clear that the rhodamine family of dyes can undergo de-aminoalkylation which progressively alters the dye fluorescence to a wavelength very near that of fluorescein, a transformation of about 40nm. The agency of this transformation is unknown, but it is suspected to be biological. This process can occur quickly, but it often takes many months (Idstein and Ewers, 2002). The transformations of eosine are similar to rhodamine and their causes are similarly unclear.

Table 4 indicates the transformation of eosine with a "D" indicating the degraded form. A double "DD" indicates the most degraded form. All of these degraded eosine recoveries occurred subsequent to the injection of the eosine, and were not observed during the background analysis. Thus we have confidence that these recoveries were truly degraded eosine.

Eosine Recoveries

It is important to note that the sampling interval during the tracer investigation was never less than one week. Initially, dye receptors were exchanged approximately

weekly beginning after the injection on 5/16/08. A two-week interval began on 6/20/08, and after 11/19/08 exchanges occurred primarily at longer intervals.

Monitoring Well Recoveries - On the first receptor exchange, ten days after the eosine tracer injection, eosine was recovered in MW-12 approximately 80 feet south-southwest of injection well MW-14. It was also recovered in MW-20D, a deep well, 300 feet also to the south-southeast. The adjacent shallow well, MW-20S, did not show the dye until the third receptor exchange, 31 days after injection. The rapid appearance of the dye in MW-20D almost certainly indicates flow in a conduit in the vicinity of the screened interval of the deep wells. These observations also argue against dye movement to MW-20D in the point bar deposits, as it would likely have taken longer to arrive. It was also likely, but not certain, that dye would also have appeared in the adjacent shallow well MW-20S if it had moved in the sediments.

Beginning in sampling round 5, 62 days after injection, dye was recovered in MW-21D, 415 feet to the south southwest. This well was fitted with two dye receptors, because of the long well screen. Only the lower receptor showed the dye initially. In the following round, Round 6, 84 days after injection the upper receptor was also positive for eosine. Dye has been recovered at this location since Round 5.

The receptor in MW-23, 640 feet south of the injection well first showed eosine in Round 6, 84 days after injection. At that point in time, MW-22, located roughly midway between two wells showing eosine, MW-21 and MW-23, did not show eosine definitively and consistently until Round 12, 197 days after injection. The apparent dye velocities to each well, assuming a straight line distance from the injection well, were calculated (Table 5). These velocities range from 2.5 to 30 feet/day, and only six wells, of the 13 which were monitored from the beginning of the test, received the dye. These statistics were a testament to the heterogenous and anisotropic nature of this aquifer and karst aquifers generally.

Results From Recently Drilled Wells - These wells did not have benefit of background monitoring as they were drilled after the study was in progress. New Well Group 1 was added to the dye monitoring scheme on 8/19/08. MW-24A and MW-27A showed eosine at the first sampling with activated carbon receptors on 9/1/08, and the dye has been present through the remainder of the study. A water sample obtained from MW-24A on 8/19/08 showed eosine. Both wells were drilled on a resistivity anomaly and were heavily impacted by creosote. MW-27A was notable because it was on the east side of Clear Creek, the opposite side from the CSX Site.

New Well Group 2 was added on 3/13/09, including MW-28A, B, and C, and MW-29A and B. These were sampled on 4/15/09 and 5/13/09. MW-28A and B and MW-29B showed eosine. The deep wells completed in the Borden Formation at both of these locations, MW-28A and MW29A, exhibited water levels that were equivalent to the lower level of the neoprene well closure, and several feet above ground level.

During the period the wells were left open prior to sampling, approximately 10 minutes, there was no apparent level change, suggesting that recharge to these wells was very slow. It is improbable in the extreme that the "stick-up" at both locations were cut exactly 1.25 inches above the formation head, and that the formation head remained identical on two dates a month apart.

The eosine in MW-28A is perplexing. The obvious upward gradient in the Borden Formation argues against dye reaching this deep level from the shallower, demonstrably dye laden, Ramp Creek Formation. It also suggests that well construction characteristics allowing dye to enter the well from the Ramp Creek is also unlikely. Water would, in all probability, leak from the well into the upper formation, not the reverse. The well was open from 1/6/09 until at least 1/12/09, and various tests were performed and equipment lowered and raised through the well bore. It is certainly possible that dye from the upper zone was spread through its length during this time and the positive results in the sampling on 4/15/09 and 5/13/09 are an artifact of these operations.

Sump Recoveries - The eosine tracer was recovered in the on-site sump on the third exchange, 31 days after injection. This location was recharged from the soil via infiltration tubes located at the soil bedrock interface. The eosine appeared first in an only slightly degraded form, but as the test progressed the dye became increasingly more degraded. Eosine remained detectible at this location with varying concentration throughout the remainder of the testing. This indicated that some dye movement in the overburden probably occurred.

Table 5
Apparent Dye Velocity
To Each Well Where It Was Recovered

Well Number	Distance From Injection Well	Days to First Dye Arrival, Maximum	Apparent Velocity Feet/Day
MW-12	80	10 5-16-08	8
MW-20D	300	10 5-16-08	30
MW-21	415	62 July 7, 2008	6.7
MW-22	500	197 NOV 19, 08	2.5
MW-23	640	84 July 28, 08	8
MW-20S	300	31 Jun 6, 08	9.7

Stream Recoveries - Eosine was recovered in Clear Creek with exchanges 5, 6, 8, and 12, these exchanges were 62, 119, and 197 days respectively after injection. The first appearance lasted through one additional round of receptor exchange. In each of these instances the dye appeared immediately upstream and downstream of the liner that had been installed in the creek bed adjacent to the presumed main creosote release area. The location showing the highest dye concentration was Location 3 immediately downstream from the liner at Country Club Drive. The dye also appeared weakly in dye receptors deployed down stream from the site, in two instances as far as That Road, 1.6 miles distant. At no time was eosine evident at the background sampling location, sampling Location 1, upstream from the site. Unfortunately the dye resurgences into Clear Creek have not been sufficiently persistent and sufficiently above minimum detection levels to identify specific locations where the dye entered.

Eosine was briefly recovered at high concentrations in receptors deployed in the unnamed tributary of Clear Creek, Location 15. This stream is informally known as the West Fork of Clear Creek. The dye was recovered in Rounds 13-15. We have concluded from our investigations that eosine was being employed as a tracer by other workers. This work was related to potential groundwater impacts of a proposed interstate highway interchange south and west of our study area (personal communication, 3/17/09, Jim Peyton, Michael Baker Inc., Crown Point, IN). Sampling at Bailey Spring (Location 25, Map 1), approximately 1 mile above the confluence with Clear Creek, showed that this spring was the point of dye resurgence. While we await the details of the interstate highway study, we are confident that this appearance of eosine was unrelated to our investigations at the CSX Site.

THE SITE HYDROGEOLOGY
A Preliminary Characterization of the Aquifer Beneath The CSX Site

The data provided by the tracer investigations and other observations provide a picture of the characteristics of the aquifer beneath the site, the nature of its recharge, its relationship to the local base-level, and the movement of the water it contains and transports. The two statements below follow directly from the present study.

1- The permeability structure of the aquifer was demonstrably karstic.

The borings that have been made on site have intersected numerous voids partly or completely filled with clastic sediment. The Ramp Creek carbonates which underlie the site exhibited significant karstic conduit porosity in nearby outcrops along Clear Creek. The predominantly observed features were bedding plane anastomoses (Bretz, 1942; Ewers, 1982)

2- Autogenic recharge was the principal water source for the aquifer.

Recharge to the aquifer beneath the site could come from three possible sources; A- from contiguous carbonates which extend westward along the upland where karst features were clearly visible in quarries and along road cuts, B- from back-flooding and overland flooding from the Clear Creek during storm events, or through-flowing water from the creek via losing and gaining reaches, C- from autogenic recharge, rainfall infiltrating through the soil cover at the site, as detailed below.

A- Recharge from the upland - The carbonates of the Ramp Creek and Harrodsburg Formations extend beneath the upland, and dip gently west-southwestward away from the site. Infiltrating precipitation on the upland above the site appeared to be intercepted primarily by springs such as Watercress Spring, Bedding Plane Tube Spring and other springs both up and downstream from the site. The lack of tracer dye in these springs indicated that they do not drain the site. Springs typically drain expanding catchments toward the upstream basin boundary. This scenario is not unlike the basins of surface streams. The intervening areas between springs along and near a discharge boundary are normally drained by tiny springs and seeps with limited catchments. Thus, recharge from the upland could have been a source for the aquifer beneath the CSX Site, but only from portions close-by, of the order of a few hundred feet.

B- Recharge from Clear Creek - Fluctuations in the stage of Clear Creek would be expected to produce synchronous fluctuations in karst conduits that are directly connected to the stream. Unfortunately we had no records of stage that were of sufficiently fine intervals to assess these sorts of connections. However, the rate at which injection water can be introduced into wells in the vicinity of the injection well suggests, but does not conclusively show, that the conduit porosity was likely sediment-filled. If this was the case, it was unlikely that through-flowing water from losing and gaining reaches of the creek pass through the aquifer beneath the site. The lack of large inputs of dye laden water into Clear Creek also argues against this sort of recharge. However, a small amount of bank storage, in response to creek level fluctuations may occur.

C- Autogenic recharge, infiltrating through the soil cover at the site - Several swampy areas existed on the site that persisted well into the summer. These were likely due to the fine low permeability flood plain sediments in the uppermost layer of the overburden. Most exposures of recently eroded bank materials along Clear Creek exhibit the typical flood plain character, cross-bedded higher permeability point bar deposits, with overlying low permeability flood deposits. The fine flood deposits almost certainly reduce, but do not eliminate, the contribution of rainfall and flood waters to groundwater beneath the site. Once the infiltrating water reaches the point bar deposits it should move more readily into the bedrock, and at times, directly through these deposits to the stream.

A PRELIMINARY MODEL FOR THE AQUIFER

The low permeability sediments on the floodplain surface, and the probable lack of significant distant inputs from the upland to the west, likely restricts recharge to the area under the CSX Site. The tracer tests demonstrate a slow and very limited groundwater movement directly eastward to Clear Creek, probably through the overburden.

Similarly, there was a demonstrated movement of the tracer south and southeastward to monitoring wells south of Country Club Drive. This movement was apparently faster than the movement directly to the creek. Apparent minimum velocities of 2.5 to 30 feet per day were demonstrated by the tracers (Table 5). However, the sampling interval was such that the highest velocity could be as much as twice this value. The wide range of apparent velocities and their high values were consistent with the existence of a complex, partly sediment filled, epikarst in the bedrock beneath the site. The permeability structure of that epikarst would likely be composed of bedding plane anastomoses and solution widened fractures.

The apparent velocity values in Table 5 are within the low range of those expected for karst aquifers. The restricted recharge and low headloss were likely responsible, at least in part, for the relatively low velocities. The readily available sediment in flood plain settings was another potential factor. These sediments and the restricted ability to purge them from the karst conduits due to a lack of quick-flow recharge is a recipe for sluggish karst flow.

Well MW-27A, of the New Well Group 1 series and MW-28B of the Group 2 series, have clearly demonstrated that Clear Creek was not a boundary to groundwater flow in the karst aquifer. Indeed, there are numerous examples of karst flow passing beneath perennial streams normal to the direction of stream flow. The present course of Clear Creek is a temporary one, and it's flood plain was an artifact of the stream's continual lateral migration. The conduits in a karst aquifer form in a complex interplay between headloss and the permeability structure formed by bedding planes and other fractures. Bedding planes being the dominant fractures in horizontal groundwater movement, it is not surprising that karst flow often passes beneath streams.

REFERENCES CITED

Bretz, J.H. 1942, Vadose and phreatic features of limesone caverns, J. of Geol., 50 (6): pp.675-811.

Ewers, R.O., Cavern development in the dimensions of length and breadth, Ph.D. Dissertation, McMaster University, Hamilton, Ontario, Canada.

Field, M.S., et al, 1995. An assessment of the potential for adverse properties of fluorescent tracer dyes used for groundwater tracing. Environmental Monitoring and Assessment. 38:75-95.

Kass, W., 1998. Tracing Technique in Geohydrology. A.A. Balkema, Rotterdam, 579 p. (see p. 34)

Magdefessel, J. 1990. Zum Fliesverhalten von Tracern Schadstoffen im Porengrundwasser. Diplomarb., 109 p. Freiburg i. Br.

Quinlan, J.F. and Ewers, R.O., 1985. Groundwater flow in limestone terranes: strategy, rationale and procedure for reliable, efficient monitoring of groundwater in karst areas, Proceedings of the Fifth National Symposium on Aquifer Restoration and Groundwater Monitoring, pp. 197- 234.

Smart, P.L. 1984. A review of the toxicity of twelve fluorescent dyes used for water tracing. National Speleological Society, Bulletin. 46:21-33.

Smart, P.L., and Laidlaw, I.M.S. 1977. An evaluation of some fluorescent dyes for water tracing. Water Resources Research. 13:15-33.

Smart, P.L., 1972. A laboratory evaluation of the use of activated carbon for the detection of the tracer dye Rhodamine-WT; M.S. Thesis, Dept. of Geography, Univ. Alberta, 118p.

APPENDIX A
Dye Receptor List

CSX Bloomington Site, Spring and Stream Dye Receptor List

Name-	Location Notes-
0- Trench Sump	In Manhole alongside Clear Creek above Country Club Dr.
1-Clear Creek Upstream	Clear Creek at a convenient point upstream of the CSX Site.
2-Clear Creek Liner Upstream	Clear Creek above the lined portion of the stream. Set among trees up-stream.
3-Clear Ck @ Country Club Dr.	At the Country Club Dr. bridge across from the input from 4 and below lined portion of Clear Creek.
4-Beaver Pond Discharge	The stream entering Clear Creek from the beaver pond/swamp.
5-Unnamed Trib. above WC Sp.	The west unnamed tributary at Watercress Spring. Set attached to fence.
6-Watercress Spring	Watercress Spring. Set attached to fence.
7 -Clear Creek above WC Sp.	Clear creek above confluence with Watercress Spring.
8-Single Culvert Spring	Between RR ROW just below Watercress Sp.
9-"G's" Double Culvert Sp.	Between RR ROW below 8, set in double culvert.
10- BP Tube Spring	The bedding plane tube spring. Set in culvert at spring.
11-Clear Ck above BP Tube Sp	Clear creek near Tube Sp. Across from old monitoring wells at Diamond Rock on gravel road.
12-Unnamed Trib @ Tube Sp	West tributary near BP Tube Sp, in PVC culvert between RR ROW
13-Clear Creek @ Gordon Pike	At the Gordon Pike Bridge on upstream side.
14-Clear Creek @ That Road	At That Rd. Bridge on upstream side.

CSX Bloomington Site, Spring and Stream Dye Receptor List Continued

15-Unnamed Trib @ CC Rd	Large west tributary at Clear Creek Road, informally called West Fork of Clear Creek.
16-Clear Ck @ Clear Creek Rd	Suspended from Clear Creek Road bridge.
17 -CVS Culvert	East tributary entering Clear Creek south of Country Club Drive, near CVS, set at culvert discharge.
18-"Gasoline Spring"	At 5510 Old State Route 37 driveway, north side.
19-Pinewood Spring	A large Spring at Pinewood Road on East side of Clear Creek.
20-CVS Spring	A modest size spring just south of Country Club Rd. on the east side of Clear Creek.
21-Box Culvert	A box culvert draining possible springs and swamps in the PCB site/landfill on east side of Clear Creek.
22-Ellington Spring	A spring on the west side of Clear Creek north of That Road.
22A-Ellington Spring East	A spring on the west side of Clear Creek north of That Road.
23-Clear Creek @ MW-21D	Clear Creek below gravel bar near MW-21D.
24- Lewis Spring	A modest spring on the north side of the West Fork of Clear Creek. This spring was added to the monitoring list after the appearance of eosine at the West Fork confluence with Clear Creek.
25-Baily Spring	A large spring and historic spring-house on the south side of the West Fork of Clear Creek. This spring was added to the monitoring list after the appearance of eosine at the West Fork confluence with Clear Creek.

APPENDIX B
Field Procedures and QA/QC

Field Procedures and Quality Assurance/Quality Control

Dye Receptors

Dye receptors are constructed of vinyl coated fiberglass screen cloth. The cloth is folded and stitched with water resistant white thread creating two enclosures, one for a swatch of cotton cloth, the other for a ten gram mass of granular activated carbon (Fig.2). The enclosures are sealed by heat sealing. The cloth, which contains no dyes or optical brighteners, absorbs FB-28 and DY-96 from the groundwater passing over it. The activated carbon absorbs R-WT, AR-87, AR-52, AY-73, among others. Dye receptors are prepared in advance in a dye-free environment, individually packaged in sealable polyethylene bags, and pre-marked for their intended site of utilization. When optical brighteners are not of interest dye receptors are constructed without cotton cloth.

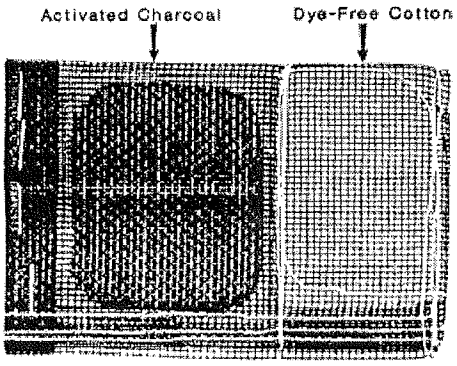
Receptor Deployment, Springs and Streams

Receptors are normally suspended in the water flow utilizing weighted wire stands which are tethered well above water level to a fixed object. The design of the stands is after Quinlan and Ewers (1981) (Fig. 3). The receptors are attached to the stands by means of stainless steel clips. Disposable gloves are routinely worn when inserting and replacing receptors. Gloves are worn when there is the possibility of significant levels of hazardous contaminants in the spring or stream.

When a receptor is to be exchanged the stand is first retrieved from the water by means of the tether, and the fresh receptor is removed from its pre-labeled sealable polyethylene bag. The recovered receptor is released from the stand and clip, agitated in the spring or creek water to remove accumulated sediment if necessary, excess water is shaken from it, and it is placed in the pre-labeled sealable bag. The fresh receptor is attached to the clip and stand and returned to a position in the water where it will be exposed to as strong a water flow as possible. The bag containing the recovered receptor is dated and placed in a cooler at ambient temperature.

When wading is necessary to recover a receptor rubber boots are worn and the receptor location is approached from down stream. Boots which have been potentially exposed to low levels of dye are thoroughly decontaminated.

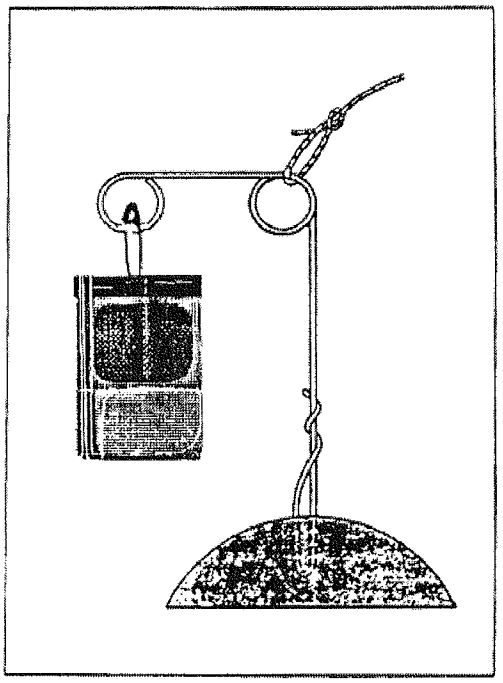
Figure 2 - Dye Receptor



Shown at 75% actual size

Figure 3 - Dye Receptor Stand

After Quinlan and Ewers (1981)



Receptor Deployment, Production Wells

Receptors are normally placed in the well discharge utilizing canisters which are attached by plastic hose to a tap on the well. A second hose conveys the water discharged from the canister to an appropriate disposal site. During an exchange of these receptors, the water flow is halted, the canister opened, and the receptor is removed and replaced with a fresh unit. The canister is then closed and the water flow

is restarted. Typically, a flow rate of less than one gallon per minute is used, depending upon well capacity.

Receptor Deployment, Monitoring Wells

Monitoring wells can be used by suspending a dye receptor at the suspected water input depth, or by suspending a series of receptors at intervals through the screened portion of the well.

Receptor Transport

Dyes absorbed onto charcoal are extremely stable. Only bacterial action is believed to compromise these samples, and this appears to be very slow. Under normal circumstances, receptors are stored and transported in coolers at ambient temperature. If more than 48 hours will elapse before the samples are sent to the laboratory, they are refrigerated to retard this bacterial action.

Chain of Custody

EWC employs EPA-acceptable chain-of-custody and QA/QC protocols throughout the receptor exchanges. In conventional practice, dye receptors are left hidden and unattended in the field because it is impractical to maintain a chain of custody on each of the receptors. Tampering, theft, sabotage, and acts of nature, leading to loss or impairment of samples, are possible but not likely. Grab samples of the water are used to improve the chain-of-custody when these considerations are of special importance. When dye receptors are placed in high traffic areas, a second passive receptor is sometimes utilized to preclude loss by theft. The second receptor is exchanged during each round but only one receptor is analyzed. Duplicate dye receptors are deployed at 20% of the monitoring locations. A water sample is collected wherever and whenever a charcoal receptor is missing.

Field Blanks

EWC recommends a field blank for each batch of receptors taken to the field. This pre-moistened receptor is opened and handled in the field by the personnel involved in the receptor exchange. This is done at the beginning and the end of each sampling round, and at least once additionally for every 20 receptors that are exchanged. Field blanks are returned with the other receptors to the laboratory for analysis.

Dye Preparation and Transport

Those tracer dyes which are supplied in powdered form are dissolved in appropriate quantities of water at a location remote from the site of testing before being transported to the injection site. Personnel associated with the dye preparation utilize protective clothing, boots, and gloves, and observe thorough decontamination procedures before engaging in other activities.

The dye solutions are transported in leak resistant polypropylene containers. The containers are placed, with a pad of absorbent material, inside a heavy polyethylene bag, and then inside a waterproof shipping drum with a latching seal. When a larger amount of dye solution is required, it is prepared in a 55 gallon drum, sealed, and transported by trailer to the injection site.

Dye Injection

Personnel associated with the dye injection utilize protective clothing, boots, and gloves, and observe thorough decontamination procedures before engaging in other activities.

Stream Injections - The tracers are injected directly into sinking streams when adequate water flow exists. The dye container is carefully removed from its protective over-packing and the solution is carefully poured from its container into the flowing water as quickly as possible without splashing. The empty container is returned to the over-packing. The gloves and any potentially contaminated protective gear are also placed in the over-packing and sealed.

Sinkhole Injections - These sites are first prepared by injection of appropriate quantities of potable water. This insures that the sinkhole will conduct the dye into the aquifer and saturates any sediments which would otherwise absorb the tracer. One thousand gallons of potable water is a minimum quantity for this purpose.

The dye container is carefully removed from its protective over-packing, additional potable water is introduced into the sinkhole, and the dye solution is carefully poured from its container into this flowing water as quickly as possible without splashing. The flow of water into the sinkhole is maintained after the dye has been released until a minimum of 1000 gallons is added. The empty dye container is returned to the over-packing. The gloves and any potentially contaminated protective gear are also placed in the over-packing and sealed.

Trench Injections - A trench in the overburden is dug, preferably to bedrock, with the aid of a backhoe or trackhoe. The trench is then tested by injection of appropriate quantities of potable water to insure that it has good connection with the aquifer. The dye is introduced into the trench with additional potable water. The flow of water into the trench is maintained after the dye has been released until a minimum of 1000 gallons or a lesser practical amount is added. The empty dye container is returned to the over-packing. The gloves and any potentially contaminated protective gear are also placed in the over-packing and sealed.

Well Injections - These sites are first tested by injection of appropriate quantities of potable water to insure that the well is connected to the solution porosity in the carbonate bedrock and will conduct the dye into the aquifer. A few hundred gallons of potable water is an appropriate quantity for this purpose.

An injection device, consisting of a hose, a vacuum/pressure gauge, and valves, is connected to the well. The injection device allows the dye to be released at the bottom of the standing water in the well. This also permits the level of the water in the well to be monitored during the injection process, and avoids foaming problems associated with the dye solutions. Foaming and well overflow during dye injection can cause severe dye contamination problems around the well and to equipment and personnel.

The dye container is carefully removed from its protective over-packing, potable water is introduced into the well through the injection device, and the dye solution is aspirated from its container into the well. The flow of water into the well is maintained after the dye has been released until a minimum of 1000 gallons or a lesser practical amount is added. The empty dye container is returned to the over-packing and sealed. The injection device, gloves, and any potentially contaminated protective gear are placed, with a pad of absorbent material, inside a heavy polyethylene bag, and then inside a waterproof shipping drum.

Decontamination of Equipment

Non-disposable field equipment is decontaminated by washing to remove all clay and thoroughly rinsed at a location remote from the site of testing. Rubber boots exposed to moderate levels of dye are decontaminated by washing with 1% sodium hypochlorite solution, and then thoroughly rinsed. Non-disposable injection equipment is thoroughly flushed at a location remote from the site of testing. Non-disposable clothing is machine washed with detergent and sodium hypochlorite bleach. Disposable equipment and clothing, gloves, absorbent pads, bags, and contaminated shipping drums present no toxic hazards and are disposed of with municipal solid waste at a location remote from the site of testing.

APPENDIX C
Laboratory Procedures and QA/QC

Laboratory Procedures and Quality Assurance/Quality Control

Collection and Shipping

EWC returns activated charcoal dye receptors and cotton dye receptors to the laboratory in individually labeled, heavy duty, polyethylene, re-closable bags. They are sent by express courier or carried by EWC personnel at ambient temperature in crush proof shipping containers. The charcoal often arrives in a badly crushed condition if soft shipping containers are used. In this condition the charcoal does not survive the necessary washing process.

There is no indication that refrigeration is required during collection or transport of dye receptors or water samples, and much evidence to the contrary. More harm than good is done to charcoal receptors by the weight of ice and frozen gel containers. No containerized frozen gels with any sort of color are ever used. Some contain fluorescent dyes and they frequently leak with the possibility of contamination. When sample holding times exceed 48 hours, samples are stored under refrigeration until shipping. Once received by the laboratory the receptors are refrigerated in their original packing until they are prepared for analysis.

No packing materials with color are ever used. Polystyrene "peanuts" with pale red and green color and other colored plastic foam wraps sometimes contain fluorescent dyes. Labeling is done with black permanent markers on the exterior of the re-sealable plastic bags. Colored markers are never used. Black "Sharpie®" markers are known to be safe from potentially contaminating fluorescent compounds. Cotton dye receptors are treated in the same manner as charcoal dye receptors. EWC supplies activated charcoal receptors and cotton receptors prepared with certified dye-free charcoal and certified dye-free unbleached cotton.

Water samples for dye analysis are somewhat more delicate. The most important precaution is to preserve them from exposure to light, especially strong sunlight. Many fluorescent tracer dyes are subject to photo-decay, particularly eosine and fluorescein. Foil wraps or opaque coolers are best for collection and shipping purposes. EWC specifies collection in 13mm x 75mm screw top vials with clear polypropylene screw caps such as Fisher 14 962 26D. These vials can be used directly in the spectrofluorometer. They are labeled on the white labeling surface of the vial, never on the lower portion of the vial. Labeling is done with black permanent markers. Containers with black "Bakelite" screw caps should be avoided. These are sometimes manufactured with a mold-release compound containing fluorescent dye, usually one of the rhodamines. Water samples for dye analysis are sent by express or hand delivered to the laboratory at ambient temperature in opaque crush proof containers. No packing

materials with color are used. **EWC** supplies certified dye-free sample vials for water samples.

EWC suggests that field duplicates and trip blanks be submitted for analysis. At least one trip blank should be prepared for each batch of samples, and at least 20% field duplicates should be collected.

Receipt

Upon receipt, sample containers are checked for seals and their status is recorded. The number, type, and identity of the samples are checked against the chain of custody forms supplied by the field personnel.

Storage

Prior to analysis, samples are stored in a locked refrigerator or sample cabinet under the sole control of the analyst or other appropriate laboratory personnel who's signatures appear on the custody transfer record.

Records

The samples and sample groups or batches are assigned a laboratory number and a copy of the custody transfer record is added to the laboratory custody log. Paper documentation generated by the analytical instruments is added to the Laboratory custody log.

Instrumentation

A Shimadzu spectro-fluoro-photometer (spectrofluorometer) is used for dye analyses. This instrument is used in accordance with the manufacturer's instructions. Samples are equilibrated to ambient laboratory temperature, and analyzed at that temperature.

Cuvets

Disposable cuvets of glass or plastic are used for routine dye determinations. Each batch of cuvets is tested for the presence of dye by filling two randomly selected cuvets with eluent and analyzing spectrofluorometrically. EWC has never encountered a case of dye contamination in cuvets. When necessary, non disposable cuvets are used. These are cleaned by brushing in "Sparkleen®" solution, followed by a tap water rinse, a distilled water rinse for 10 minutes and a final distilled deionized water rinse.

Dye Identification

Dye identification is performed by synchronous excitation-emission scanning. An excitation-emission interval of 18nm is used for rhodamine WT, sulphorhodamine B, eosine, and fluorescein. A scan range of 470nm to 600nm excitation is normally used.

Fluorescence wavelength standards are prepared from the most recently available samples of dye from the EWC suppliers. The wavelength of maximum emission for most dyes is sensitive to the chemical characteristics of the matrix in which it is dissolved. The standards for analysis of water samples are prepared in de-chlorinated activated carbon filtered laboratory tap water. This is a consistent bicarbonate water. Standards for analysis of eluent from charcoal receptor packets are prepared in the eluent appropriate for the dye. Wavelength standards are analyzed immediately before and after each batch of samples.

Dye Quantification

Quantitative dye analyses are affected by three principal sources of fluorescence: 1) the general level of fluorescence in the sample (background fluorescence) produced by fluorescence of the water itself and the many compounds it may contain, 2) the amount of the dye of interest which is unrelated to that which is purposely injected as part of the tracing program (dye background), and 3) the dye purposely injected. Simple measurements of fluorescence at the maximum emission wavelength for a dye are complicated by the variable level of background fluorescence (Fig. 4, A). Spectro-fluorometric scans of a sample show an emission peak when the dye is present (shaded area, Fig. 4, B). The amplitude of the peak can be separated from the background fluorescence by the three point method. This involves extending a line between two points on the emission curve on either side of the emission peak. The peak amplitude (the relative concentration) is measured parallel to the emission (y) axis from the line to the dye peak (Fig. 4, B). Computer assisted methods are used for this process.

Dye concentration standards are prepared from the most recently available samples of dye from the **EWC** suppliers. Appropriate concentrations are obtained by serial dilution in de-chlorinated activated carbon filtered bicarbonate water or in eluent as required. Standards are analyzed immediately before and after each batch of samples.

Rhodamine-WT concentration in the dye sample used for standard preparation is assumed to be 20%. AY-73 concentration in the dye sample used for standard preparation is assumed to be the percentage given by the dye manufacturer. Concentration of the dye is normally reported as pp(n) of dyestuff supplied by the manufacturer, not as pp(n) of fluorescent ingredient.

Sample Order

Standards and samples are customarily run in the following order:

1- Laboratory water samples,
2- Eluents, if used (Reagent blanks)
3- Standards,
4- Blanks,

5- Samples of presumed low concentration, and duplicates,
6- Samples of presumed high concentration, and duplicates.

All positive analyses of water samples near the practical detection limit are verified with additional analyses in clean cuvets.

Water Samples

A 3 ml sample of water is introduced into a clean cuvet and analyzed spectrofluorometrically. When the sample possesses noticeable turbidity the cuvet is centrifuged to remove the suspended solids to the bottom of the cuvet. When samples are collected in vials they are analyzed without being transferred to cuvets. The outside of the vial is carefully cleaned with a laboratory wipe.

Charcoal Dye Receptors

Activated charcoal dye receptor packets are treated in the following way:

1- Vigorous rinse with de-chlorinated activated carbon filtered potable water,
2- Remove excess water by manual centrifugal extraction,
3- Dry the receptors in a temperature controlled, filtered forced air, dye-free drying cabinet,
4- Withdraw 3g of the activated charcoal into a disposable pre-labeled plastic container,
5- Elute the dye with 6 ml of Smart solution (Smart, 1972) or other appropriate eluent for 1 hour, covered,
6- Decant the eluent into a clean cuvet,
7- Analyze spectrofluorometrically.

The reserved charcoal is archived in labeled re-sealable "Zip Lock" bags for later analysis, if required.

The analysis of eluent from dye receptor packets is at best semi-quantitative relative to the amount of dye contained in the water passing over the receptor. The quantity of dye adsorbed by a receptor is a function of the temperature and velocity of the water passing over the receptor, the duration of contact with the water containing dye, the quantity and species of molecules competing with the dye for the charcoal acceptor sites, the turbidity of the water, and the dye concentration in the water. The amount of dye recovered from the charcoal is a function of the amount of charcoal that is eluted, the amount of eluent that is used, and the duration of the elution process. Only the laboratory procedures can be standardized. The dye concentration in eluent is normally reported in the following manner with the abbreviations listed:

ABBREVIATIONS

Dye

-	Negative
?	Peak wavelength or peak shape questionable
+	Positive
++	Very Positive
+++	Very Positive
++++	Spectacularly Positive
+++++	Spectacularly Positive Requiring Dilution
WS	Water Sample
NR	Sample **N**ot **R**ecovered

Laboratory Reagent Blanks (Eluent Blanks)

Eluent used during the preparation of charcoal packets is analyzed spectrofluorometrically prior to its use on the charcoal packets. One reagent blank determination is made for each batch of charcoal samples analyzed. Additional blank determinations are made whenever different batches or formulations of eluent are employed.

A sample from each batch of activated charcoal is analyzed before its initial use in the manner proscribed for charcoal receptors. The charcoal is also batch tested to insure that it possesses appropriate dye sorption characteristics.

Method Blanks

For water samples, dye-free water is used as a method blank and analyzed as for water samples. For Charcoal samples, pre-labeled plastic containers are filled with 3g of washed charcoal and 6ml of eluent and analyzed as for charcoal samples. One method blank is prepared for each sample batch.

Laboratory Duplicates

One identical sized split of charcoal is eluted and analyzed for each 20 samples analyzed. A duplicate water sample is analyzed for each 20 samples analyzed. When water samples are supplied in vials, one in 20 is removed from the spectrofluorometer shaken and re-analyzed. EWC suggests one field duplicate with each batch of 20 vial samples.

Certified Dye-Free Charcoal and Certified Dye-Free Cotton

EWC supplies charcoal and cotton dye receptors with activated charcoal and cotton that is batch tested for dye content and for its sorption capacity.

Most activated charcoal contains small quantities of substances which exhibit a weak fluorescence near the emission maximum of fluorescein and rhodamine-WT. These substances are removed from the charcoal when it is subjected to flowing water

for a few hours. Eluent from charcoal dye receptors placed in still water for periods of as much as a week may exhibit these false fluorescein and false rhodamine peaks. EWC can supply pre-washed charcoal receptors for use in wells or other locations where groundwater flow is minimal.

Criteria for Determination of Positive Dye Recovery

Positive dye recovery is normally based upon the following five factors.

1- A spectro-fluorometric emission scan must show a peak at the appropriate wavelength for the dye and the sample matrix. The matrix pH is the principal determinant of that wavelength. A deviation of ±2 nm. from the ideal wavelength is normally considered acceptable.

2- The spectro-fluorometric emission scan must reveal a peak with the appropriate shape, one similar to that observed in the scans of the standards.

3- The dye must be present only in the samples taken after injection, or the peak amplitude of post injection dye fluorescence must exceed the dye background peak amplitude fluorescence by an appropriate factor. A value of 4x is acceptable. A value of 10x is often employed.

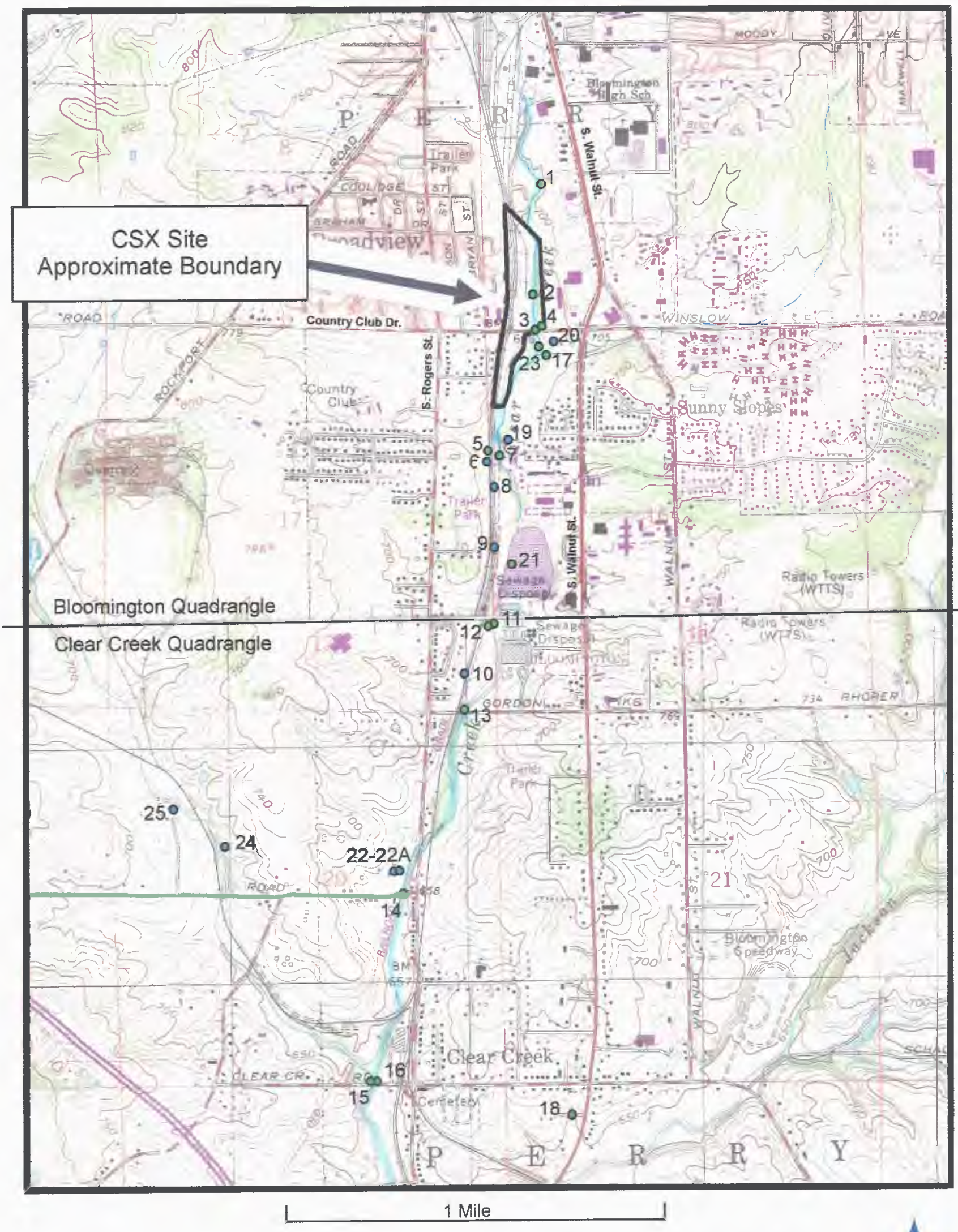
4- The dye should appear in a series of samples, not in a single sample. The peak amplitude of the dye fluorescence in successive samples from a sampling location should quickly reach a maximum value and decay gradually in successive samples.

5- Should one of the foregoing criteria be subject to serious question, the trace must be shown to be repeatable.

Detection Limits

Detection limits for fluorescent dyes are strongly matrix dependant. Most groundwater samples contain a host of compounds which impart background fluorescence to the sample. There is often considerable seasonal variability in this background. In laboratory preparations a part per trillion of fluorescein and eosine can be routinely detected, while a 10 parts per trillion of rhodamine-WT can be observed. In complex groundwater during the fall, the practical limit may be 0.1 ppb for fluorescein.

Spring And Stream Monitoring Locations, CSX Bloomington Site

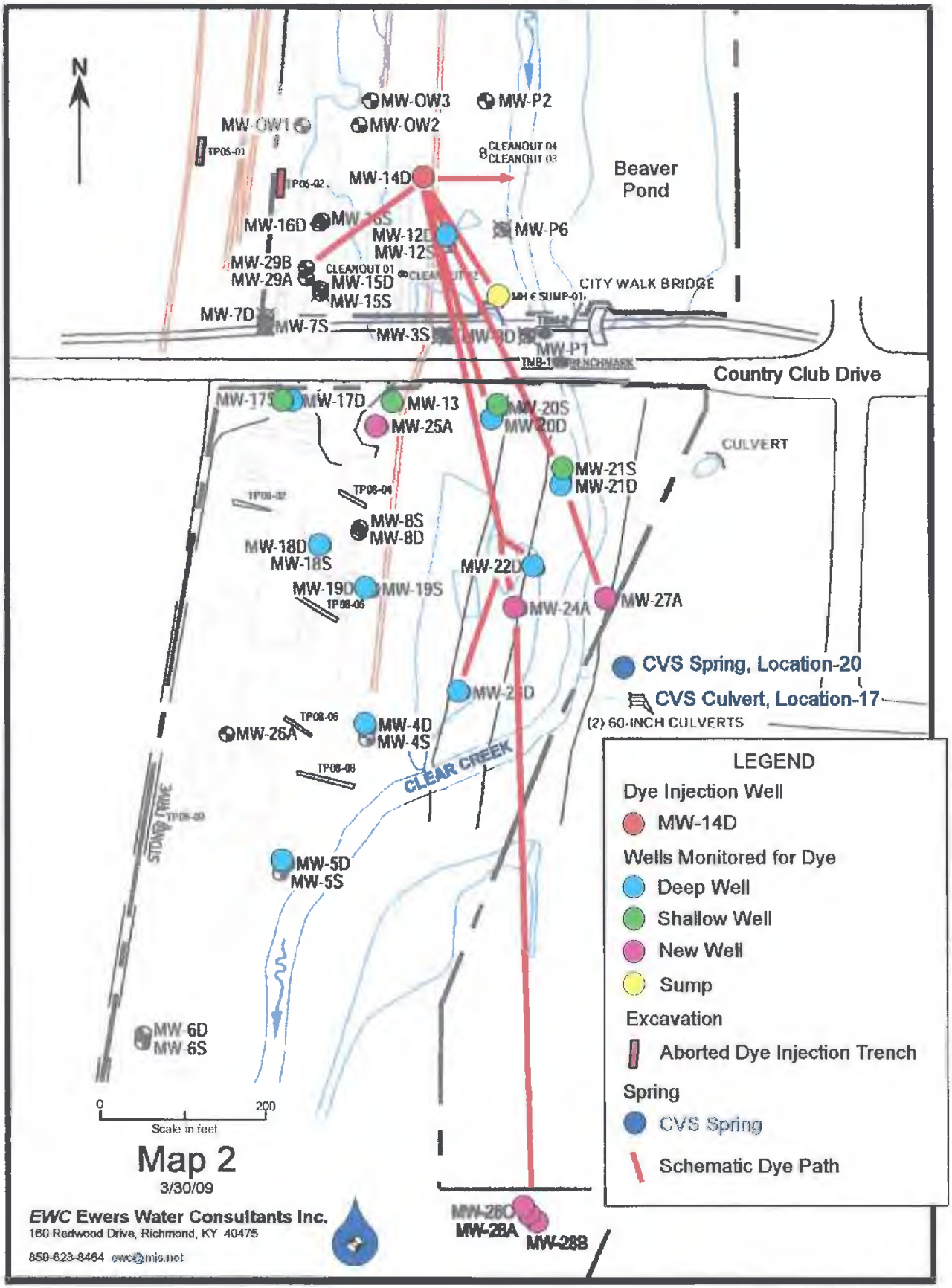


Map 1

- Spring Location
- Stream Monitoring Location

***EWC* Ewers Water Consultants Inc.**
160 Redwood Drive, Richmond, KY 40475
859-623-8464 ewc@mis.net 3/30/09

Well Monitoring Locations, CSX Bloomington Site



Base Map Courtesy of ARCADIS U.S. Inc.

Table 4 Explanation

KEY

-	Negative
+	Positive
++	Positive x 10
+++	Positive x 100
++++	Positive x 1000
+++++	Positive x 10,000
++++++	Positive x 100,000

MODIFIERS

(+)	Positive, exact peak wavelength unknown due to presence of larger adjacent peak
N	Not Recovered
NS	Not Set (Deployed)
?	Indicates uncertainty - Peak wavelength out of limits or peak shape questionable
D	Degraded Eosine
DD	Very Degraded Eosine
LF	Low Flow signature, indicates the well is dry

ABBREVIATIONS

CC	Clear Creek
UT	Unnamed Tributary
Fluor	Fluorescein
MW-12D	Deep Well
MW-12DU	Upper dye receptor
MW-12DL	Lower dye receptor
MW-17S	Shallow well

EWC Ewers Water Consultants Inc.

	Sample Round - Date ->	B1 4/21/08		B2 4/28/08		B3 5/06/08		M1 5/16/08		M2 5/23/08		M3 6/06/08		M4 6/20/08		M5 7/07/08		M6 7/29/08		M7 8/19/08	
	Days Post Injection ->	-15 Days		-7 Days		Dye Injection		10 Days		17 Days		31 Days		45 Days		62 Days		84 Days		105 Days	
ID	Name	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine
Sump	Trench Sump	++	-	++	-	++	-	+++	-	?	-	++D	++	++	+++D	++	+++D	++	++++D	?	+++DD
1	CC Upstream	N	N	N	N	N	N	++++	-	++++	-	++++	-	+++	-	+++	-	+++	-	+++	-
2	CC Above liner	++++	-	++++	-	++++	N	++++	-	++++	-	++++	-	+++	-	+++	+	+++	-	+++	-
3	CC @ Country Club Dr	++++	-	++++	-	++++	-	++++	-	++++	-	++++	-	+++	-	+++	+	+++	+	+++	-
4	Beaver Pond Dish.	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	-	-	-	-	-	-	-	-
5	UT @ Watercress Spring	-	-	-	-	-	-	+++	-	++++	-	++++	-	++++	-	-	-	-	-	-	-
6	Watercress Spring	-	-	-	-	-	-	+++	-	+++	-	++++	-	+++	-	+++	-	++++	-	++++	-
7	CC above Watercress Sp	++++	-	++++	-	+++	-	++++	-	++++	-	++++	-	+++	-	+++	-	+++	-	+++	-
8	Single Culvert Spring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	G's" Double Culvert Spring	-	-	-	-	-	-	-	-	-	-	N	N	-	-	-	-	-	-	-	-
10	Bedding PlaneTube Spring	N	-	-	-	-	-	-	-	-	-	+++	-	-	-	+++	-	+++	-	+++	-
11	CC above Tube Spring	+++	-	+++	-	++++	-	++++	-	++++	-	++++	-	+++	-	+++	+	+++	+	++++	-
12	UT @ Tube Spring	-	-	-	-	-	-	?	-	-	-	-	-	-	-	-	-	-	-	-	-
13	CC @ Gordon Pike	++++	-	+++	-	+++	-	++++	-	+++	-	++++	-	+++	-	+++	+	+++	?	+++	-
14	CC @ That Rd	N	N	N	N	+++	-	++++	-	++++	-	++++	-	+++	-	+++	?	+++	?	+++	-
15	UT @ Clear Creek Rd	-	-	-	-	-	-	N	N	++	-	N	N	-	-	-	-	-	-	-	-
16	CC @ Clear Creek Rd	+++	-	N	N	N	-	++++	-	+++	-	N	N	+++	-	+++	-	+++	-	+++	-
17	CVS Culvert	+++	-	+++	-	-	-	++++	-	+?	-	N	N	N	N	+?	-	+?	-	-	-
18	Gasoline Spring	++++	-	++++	-	++++	-	++++	-	++++	-	++++	-	N	N	+++	-	++++	-	++++	-
19	Pinewoods Spring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	CVS Spring	-	-	-	-	-	-	-	-	-	-	+?	-	-	-	-	-	-	-	+++	-
21	Box Culvert	+++	-	++++	-	+++	-	++++	-	+++	-	++++	-	++++	-	++++	-	++++	-	++++	-
22	Ellington Spring	NS	-	NS	-	NS	-	-	-		-	-	-	-	-	-	-	-	-	-	-
22	Ellington Spring A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	CC @ MW-21D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	++++	-
MW-4D		+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-
MW-5D		-	-	+++	-	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-12DU		+++	-	++++	-	+++	-	(+)	++++	(+)	++++	(+)	++++	++++	(+)	++++	(+)	++++	(+)	++++	(+)
MW-12DL		-	-	++++	-	-	-	(+)	++++	(+)	++++	++++	++++	++++	++++	++++	(+)	++++	++++	++++	++++
MW-14D		+++	-	+++	-	+++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-17D		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-18D		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-19D		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-20DU		+++	-	+++	-	+++	-	(+)	+++DD	(+)	++++D	(+)	+++++D	(+)	+++++D	(+)	+++++	(+)	++++	(+)	++++
MW-20DL		+++	-	+++	-	+++	-	(+)	+++DD	(+)	++++D	(+)	++++D	(+)	+++++D	(+)	++++	(+)	++++	(+)	++++
MW-21DU		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	++DD	-	++DD
MW-21DL		++	-	++	-	++	-	++	-	++	-	++	-	++	-	(+)	++D	(+)	+++DD	(+)	+++DD
MW-22D		++	-	++	-	++	-	++	-	++	-	++	-	++	-	++	-	++		++	-
MW-23D		+++	-	+++	-	+++	-	+++	-	+++	-	++	-	+++	-	++	-	-	+++DD	-	++++DD
MW-13		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-17S		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-20S		-	-	-	-	-	-	-	-	-	-	-	++	-	++	-	++	-	+++	-	++D
MW-24A	New Well Group 1																		NS	-	(+)
MW-25A																			NS	Dye Receptors Deployed	
MW-27A																			NS		
MW-27AU																			NS		
MW-28 A	New Well Group 2																				
MW-28 B																					
MW-28 C																					
MW-29 A																					
MW-29 B																					

Table 4

EWC Ewers Water Consultants Inc.

160 Redwood Drive, Richmond, KY 40475 ewc@mis.net 10/10/09

WATER SAMPLE

	Sample Round - Date ->	M8 9/01/08		M9 9/16/08		M10 10/01/08		M11 10/15/08		M12 11/19/08		M13 12/18/08		M14 1/12/09		M15 3/13/09		M 16 4/15/09		M 17 5/13/09	
	Days Post Injection ->	119 Days		133 Days		148 Days		162 Days		197 Days		226 Days		251 Days		313 Days		346 Days		374 Days	
ID	Name	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine	Fluor	Eosine
Sump	Trench Sump	?	+++DD	?	+++dd	?	++++DD	?	++++DD	?	++++DD	?	++++DD	-	+DD	+	+++D	?	+++D	N	N
1	CC Upstream	+++	?	++++	-	+++	-	+++	-	+++	-	+++	-	+++	-	++++	-	+++	-	N	N
2	CC Above liner	+++	+	++++	-	++++	-	+++	-	+++	+	+++	-	+++	-	++++	-	+++?	-	N	N
3	CC @ Country Club Dr.	+++	+	++++	-	++++	?	+++	?	+++	+++D	+++	?	N	N	++++	?	+++?	-	N	N
4	Beaver Pond Dish.	-	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++?	-	-	-	N	N
5	UT @ Watercress Spring	-	-	-	-	-	-	-	-	?	-	-	-	-	-	-	-	-	-	-	-
6	Watercress Spring	-	-	+++	-	-	-	-	-	-	-	+++	-	-	-	-	-	-	-	-	-
7	CC above Watercress Sp	+++	?	++++	-	++++	-	+++	-	+++	+	+++	-	+++	-	++++	-	+++	-	+++	-
8	Single Culvert Spring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	G's" Double Culvert Spring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Bedding PlaneTube Spring	+++	-	-	-	-	-	-	-	+++	-	+++	-	+++	-	++++	-	+++?	-	+++?	-
11	CC above Tube Spring	+++	+	++++	-	+++	-	+++	-	+++	?	+++	-	+++	-	++++	-	+++?	-	N	N
12	UT @ Tube Spring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	CC @ Gordon Pike	+++	?	++++	-	+++	-	+++	-	+++	?	+++	-	+++	-	++++	-	+++	-	+++?	-
14	CC @ That Rd	+++	+	++++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++?	-	N	N
15	UT @ Clear Creek Rd	-	-	++++	-	-	-	-	-	-	-	-	++++	-	?	+++	(+)	N	N	N	N
16	CC @ Clear Creek Rd	?	-	++++	-	+++	-	+++	-	+++	?	+++	-	+++	-	+++	-	+++?	-	N	N
17	CVS Culvert	-	-	-	-	-	-	-	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-
18	Gasoline Spring	++++	-	++++	-	+++	-	+++	-	++++	-	++++	-	++++	-	++++	-	++	-	-	-
19	Pinewoods Spring	-	-	+++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	CVS Spring	++++	-	++++	-	+++	-	++	-	?	+??DD	++++	-	++++	-	++++	-	++++	-	+++?	-
21	Box Culvert	+++	-	++++	-	++++	-	++++	-	++++	-	++++	-	++++	-	++++	-	++++	-	N	N
22	Ellington Spring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Ellington Spring A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	-	-	N	N
23	CC @ MW-21D	+++	+	N	N	++++	-	+++	-	+++	+	+++	-	++++	-	++++	-	+++	-	N	N
MW-4D		+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-	+++	-
MW-5D		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-12DU		++++	(+)	(+)	++++	(+)	++++	(+)	++++	(+)	++++	(+)	++++	(+)	++++	(+)	++++	(+)	+++	(+)	+++
MW-12DL		(+)	++++	(+)	+++++	(+)	++++	(+)?	+++++	(+)	+++++	(+)	++++	(+)	+++++	(+)	++++	(+)	+++	(+)	+++
MW-14D		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-17D		-	-	-	-	-	-	-	-	-	-	-	-	(++)	-	++	-	-	-	-	-
MW-18D		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
MW-19D		-	-	-	-	-	-	-	-	-	-	-	-	+++*	-	+++	-	+++	-	+++	-
MW-20DU		(+)	+++++	(+)	+++++	(+)	++++	(+)	+++++	(+)	++++++	(+)	++++++	(+)	++++++	(+)	++++++	(+)	++++++	(+)	++++++
MW-20DL		(+)	++++	(+)	+++++	(+)	++++	(+)	+++++	(+)	+++++	(+)	+++++	(+)	+++++++	(+)	++++++	(+)	++++++	(+)	++++++
MW-21DU		-	(+)	-	++DD	-	++DD	-	++DD	-	++DD	-	+++DD	-	++++DD	N	N	-	++DD	-	++DD
MW-21DL		(+)	+++DD	(+)	++DD	-	++DD	-	++DD	-	++DD	-	+++DD	-	+++DD	N	N	-	++DD	-	++DD
MW-22D		++	-	-	++DD?	+++	-	+++	-	(+)	+++	(+)	++	++	++	++	(+)	+	-	+	-
MW-23D		-	++++DD	-	++++DD	-	++++DD	(+)	++++DD	(+)	++++D	(+)	+++++D	(+)	+++++D	(+)	+++++D	(+)	+++++D	(+)	++++D
MW-13		-	-	-	-	-	-	-	-	-	-	-	-	+?	-	++?	-	++	-	++	-
MW-17S		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-20S		LF	LF	-	++?	LF	LF	LF	LF	-	++D	-	+++D	-	+++D	-	++D	-	++D	-	++D
MW-24A		N	N	-	++DD	++++	(+)	++++	(+)	++++	(+)	++++	(+)	++++	(+)	++++	(+)	++++	(+)	++++	(+)
MW-25A		++	-	++	-	++	-	++	-	++	-	++	-	++	-	++	-	++	-	++	-
MW-27A		-	++DD	N	N	-	++++DD	-	++++DD	++++	-	-	++++	-	++++D	N	N	-	++++DD	-	+++DD
MW-27AU		NS	NS	NS	NS	-	++++DD	++++	(+)	++++	(+)	++++	(+)	++++	(+)	++++	(+)	+++	-	+++	-
MW-28 A																Dye Receptors Deployed		-	+++DD	-	+++DD
MW-28 B																		-	+++DD	-	+++DD
MW-28 C																		-	-	-	-
MW-29 A																		-	-	-	-
MW-29 B																		-	+++DD	-	+++DD

Table 4, Continued

EWC *Ewers Water Consultants Inc.*

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Phase 2, Final Report
DYE TRACING STUDY
Former CSX Wood Treating Facility
Bloomington, Indiana

Ralph O. Ewers Ph.D.

March 21, 2011

EWERS WATER CONSULTANTS, INC.
30 YEARS
1981-2011

EXECUTIVE SUMMARY

Ewers Water Consultants (EWC) Conducted a second dye tracing study in conjunction with ARCADIS U.S. Inc. at the former CSX wood treating facility in Bloomington Indiana. The purpose of the study was to investigate groundwater flow from the western perimeter of the principal contaminant release area and on the eastern margin of the site, in order to understand the fate and transport of creosote constituents in the groundwater.

Fluorescent tracer dyes were injected at two locations and dye receptors were placed in springs and wells and along Clear Creek. The receptors were exchanged and analyzed six times over a period of 9 weeks following the dye injection.

The tracer introduced on the western perimeter showed that groundwater on the west margin of the principal contaminant release area was gathered by conduit porosity in the form of solution enlarged fractures and bedding plane tubes and delivered to several minor springs and seeps downstream along Clear Creek. The groundwater velocity in these conduits was of the order of tens of feet per minute. There was no obvious free product visible at these seeps and springs. The creosote, primarily a sinker, appears to have been accumulated and sequestered in deep solution enlarged fractures. A small but poorly quantified amount of dissolved creosote constituents emerged at these minor springs. A conceptual model for creosote movement and storage is presented.

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INTRODUCTION

A second phase of dye tracing studies were conducted by Ewers Water Consultants (EWC) in conjunction with ARCADIS-US Inc. to evaluate the potential fate and transport of creosote constituents in groundwater beneath the former CSX wood treating facility in Bloomington, Indiana (CSX Site). The study was begun on 4/19/10 with collection of remaining dye receptors from the previous study and a dye background analysis. Dye receptors were deployed in an array of spring and stream sites to identify the groundwater discharge point or points for groundwater flow from the site. Other dye receptors were suspended in selected monitoring wells to further elucidate the dye movement in the aquifer. Fluorescent tracer dyes were injected at two locations

Location

The site was located in southern Bloomington, Indiana, between South Rogers Street on the west and South Walnut Street/Old State Rt. 37 on the east. Country Club Drive divided the site into north and south sections. The site was situated on a narrow flood plain along the west side of Clear Creek (Map 1, rear pocket).

Geology / Hydrology

The hydro-stratigraphic unit of interest was the Ramp Creek Formation, a dolostone and limestone unit, which underlies the site. This formation exhibits wide spread anastomoses tubes dissolved along bedding planes, both in situ and on detached slabs along Clear Creek. Thus, it has great potential to form a karst aquifer. The Ramp Creek Formation also exhibits jointing with significant enlargement by dissolution. This formation is overlain by the Harrodsburg Formation, and underlain by the less soluble Borden Group. The flood plain beneath the site had fine flood deposits of clay and silt overlying coarser point bar deposits of gravel sand and clay, which covered the Ramp Creek carbonates.

Normally, the upper few tens of feet of most soluble carbonate rocks become dissolved into a complex sponge-work of conduits usually mantled by a soil cover and partly in-filled with sediment. This zone is referred to as an epikarst. The prevalent anastomoses and solution widened joints seen in outcrops, and shallow voids encountered in drilling, indicate that the Ramp Creek beneath the site possesses such an epikarst. Because the site is located on an active flood plain, the epikarst was likely to be at least partly filled with various sediments.

The site is adjacent to Clear Creek, which forms the local base level. Shallow wells and trenches indicated that the flood and point bar deposits overlying the carbonate rocks were at least partially saturated throughout the year, and the potentiometric surface lay within these sediments.

THE TRACER INVESTIGATION

Fluorescent dyes have a proven record of effectiveness for investigations of groundwater flow in karst aquifers (Quinlan and Ewers, 1985; Kass, 1998). They appear to be well understood in terms of their lack of toxicity and lack of mutagenic effects (Smart & Laidlaw, 1977; Smart, 1984; Field, et al 1995). In this study dye was released into monitoring wells, one west of the region of the aquifer known to be affected by creosote constituents, and a second on the eastern margin of the site on the east side of Clear Creek. Groundwater discharge features, including springs, wells and streams, were monitored for the dyes, using activated carbon receptors (see ***Field Procedures*** and ***Laboratory Procedures,*** Appendix C and D). Table 1 lists some of the fluorescent dyes commonly employed for tracing in karst aquifers.

Table 1
Groundwater Tracing Dyes

Dye Name	Colour Index
Fluorescein	Acid Yellow 73
Rhodamine WT	Acid Red 388
Sulphorhodamine B	Acid red 52
Eosine	Acid Red 87
Pyranine	Drug & Cosmetic Green #8
Optical Brightener	F. B. 28
Direct Yellow	Direct Yellow 96

Reconnaissance and Dye Receptor Deployment

A thorough reconnaissance was conducted by EWC during the first phase of tracing in April of 2008. This included examination of Clear Creek, for springs and surface water inputs. The stream reconnaissance was conducted from 0.25 mi above monitoring location 1, to monitoring point 16 (Map-1). During the second phase of tracing, dye receptors were deployed at all of the spring and stream monitoring locations shown on Map-1 and monitoring was maintained throughout the study with regular receptor exchanges. In addition to Clear Creek, its tributaries and springs, dye receptors were also deployed in selected monitoring wells on the CSX Site including newly drilled wells that were not extant during the first phase of tracing.

Springs - Eight springs were identified. These are shown on Map 1 and they are listed in Appendix A. Pertinent attributes of these springs are listed in Table 2. Springs in karst terranes are frequently observed to discharge water from the side of a stream opposite from the spring's location. For this reason, springs on both the east and west

sides of Clear Creek were included in the monitoring plan for both the initial tracing and the present investigation.

Table 2
Monitored Springs at the Bloomington, Indiana CSX Site

Location Number Map 1	Spring Name	Location E or W of Creek	Typical Discharge CFS	Notes
6	Watercress	W	2	Emerges from Harrodsburg Formation*
8	Single Culvert	W	0.1	Rises between RR rights of way
9	Double Culvert	W	0.1	Rises between RR rights of way
10	Bedding Plane Tube	W	0.25	Rises between RR rights of way
18	Gasoline	W	0.2	Site of past petroleum remediation
19	Pinewood	E	0.75	Rises in a large swamp Directly south of MW-28A, B, C
20	CVS	E	0.1	Original rise was likely beneath an existing commercial building Immediately south of MW-27
22	Ellington	W	?	Discharge was difficult to estimate

* Personal Communication Michael Cobb, ARCADIS

Streams - Clear Creek formed the local base level and flowed along the east side of the site. This fast-flowing stream, indeed any stream, can readily hide many groundwater discharge locations including large springs. For this reason, tracer studies customarily include monitoring at frequent intervals along streams at locations that are lower than the elevation of the site of concern, and that could reasonably be expected to discharge groundwater passing beneath the site. Clear Creek and its tributaries were monitored for the tracer dyes at 15 locations along its length (Map-1 and Appendix A).

Clear Creek was monitored at nine locations (1, 2, 3, 7, 11, 13, 14, 16, and 23) and six tributary streams (4, 5, 12, 15, 17, and 21) were monitored above their confluences with Clear Creek.

Clear Creek left its established channel at a point south of stream monitoring point 11 due to an immense log-jam. At that location it flowed westward across the flood plain and reentered the channel near spring monitoring point 10. Beaver activity formed and maintained a shallow impoundment across the flood plain at this location.

Monitoring Wells - Selected monitoring wells on and adjacent to the CSX Site were monitored for the tracer. Wells that had encountered a recognized void or had a record of contamination were used at the beginning of the first phase of tracing. As new monitoring wells were drilled during that phase, they were added to the monitoring plan. All of the wells used in the first phase of tracing were used in the second phase, as were newly drilled monitoring wells. Dye receptors were suspended in the vicinity of voids or centered in the screened interval. Wells with longer screens were monitored with a pair of dye receptors which were located at 1/3 and 2/3 of the screened interval depth. Monitored well locations are shown on Map-2 (rear pocket), and positions of the dye receptors are shown on Table 3.

DYE TESTING

Background Monitoring

Because there was a hiatus in the dye monitoring between the initial tracing and the present Phase 2 tracing, dye receptors were collected on 4/26/10 and 5/10/10. These receptors were analyzed for all of the commonly used fluorescent tracer dyes prior to dye injection. The results of these analyses are shown on Table 4 (rear pocket). Eosine and fluorescein were detected at locations that were consistent with the results of the previous tracing. Fluorescein is a constituent in many commercial products and is often found in waters in urban settings. The background levels of this dye were sufficiently well understood that it could be considered for use in the Phase 2 investigation.

Dye Injection

Injection Location Selection - On the basis of initial well testing of newly drilled wells, MW-35B and MW-38 were chosen for dye injection (Map-2). These wells appeared to be well connected to the surrounding aquifer as evidenced by the lack of a significant drop in water level with pumping (Personal communication, M. Cobb, ARCADIS).

Injection 1- On 5/11/10, 2.5 pounds of 50% fluorescein solution was injected into MW-35B. Flush water from the Bloomington potable supply was obtained from the nearby flooring distributor because the scheduled ARCADIS contractor's water truck proved inoperable on arrival at the site.

Table 3
Monitored Wells at the Bloomington, Indiana CSX Site

Well Number	Screened Interval, Ft. BGS	Comments	Depth of Dye Receptor, Ft.	Well Group
MW-4D	11-16		13.5	Deep Well
MW-5D	15-20		17.5	"
MW-12D	7.5-18.5	usually cannot bail dry	11 & 15	"
MW-17D	10.5-16.5		16	"
MW-18D	11.5-16.5		12.5	"
MW-19D	11.5-16.5		12	"
MW-20D	8-23		10 & 19.5	"
MW-21D	8-23	usually cannot bail dry	9 & 18	"
MW-22D	18-23	cannot bail dry	20	"
MW-23D	16-21		17.5	"
MW-13	These wells were occasionally dry. The depth for the dye receptors in these wells was adjusted in the field to place them just off the existing well bottom.			Shallow Well
MW-17S				"
MW-20S				"
MW-24A	17-22	2nd shallow monitoring point set in the field to avoid free product	Upper &19	New Well Group 1
MW-25A	8.5-18.5		13	"
MW-27A	19-29		24	"
MW-28A	47-62		52, 57	New Well Group 2
MW-28B	17.7-22.7		20	"
MW-28C	25.7-35.7		31	"

Continued on Page 6

Table 3 - Continued
Monitored Wells at the Bloomington, Indiana CSX Site

Well Number	Screened interval Ft BGS	Comments	Depth of Dye Receptor, Ft.	Well Group
MW-29A	57-72		64	New well Group 2
MW-29B	29-39		34	“
MW-32A				New Well Group 3
MW-34A	17-27		22	“
MW-35A	16-26		21	“
MW-35B	24-27		31	“
MW=36A	19.5-24.5		25	“
MW-36C				“
MW-37A	12-17		15	“
MW-38A	25-30		28	“
MW-40C	8.5-13.5		11	“

Injection 2- on 5/25/10 2.5 pounds of standard 20% rhodamine-WT solution was introduced into MW-38. Flush water from a nearby fire hydrant was used for the injection. Approximately 2000 gallons of water was introduced at a rate of 5 gallons per minute

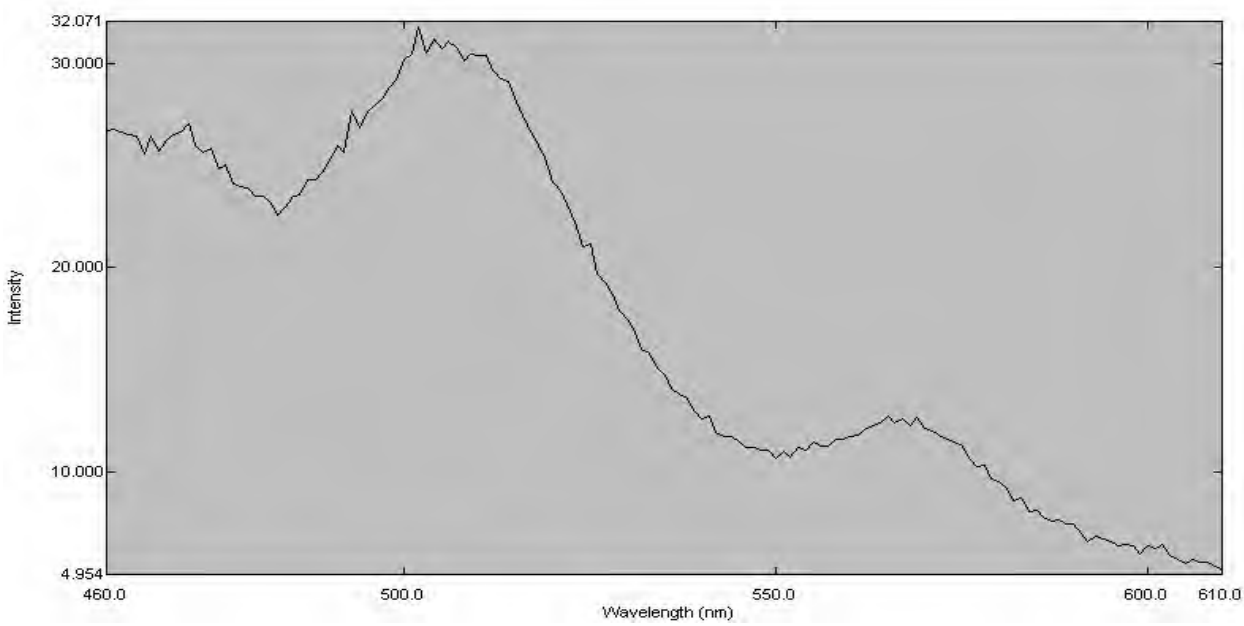
The Problem of Dye Quantification in Activated Carbon Receptors Deployed in Wells

Figure 1 shows a spectrofluorometric scan of eluent from a dye receptor retrieved from a monitoring well where all of the common fluorescent dyes commonly used in groundwater tracing were judged to be absent. This scan shows two broad ragged peaks above the general fluorescence background near wavelengths 512 nm. and 569 nm. These peaks are the result of substances in activated carbon which gradually disperse into water flowing through the dye receptor. The presence of these peaks in eluent from a dye receptor is referred to as a low-flow signature. Because of the minimal groundwater movement through most monitoring wells, these substances disperse very slowly and their associated fluorescence remains in the dye receptor.

Both the low-flow signature peaks and the level of general background fluorescence must be subtracted from the peak height or the area under the curve to accurately quantify dye present in the eluent. Both of these values have some degree of variability, but fortunately that variability is relatively small for well samples. When duplicate elutions are prepared from dye receptors by ordinary means, the variability can be as high as +/-20%. The elution techniques employed by EWC involving drying of the activated carbon and weighing a consistent amount to be eluted reduces this variability at least by half. Thus, the error in the quantification of dye present in a well receptor must be expressed with a +/-10% variance.

The amount of dye sorbed from the water in which a receptor is placed depends not only on the concentration of the dye in the water, but on the velocity and turbulence of the water, the ambient temperature which controls diffusion, and the presence and the nature of competing molecules which can attach to the receptor sites on the activated carbon. It is for these reasons that we ordinarily report order of magnitude values for the concentration of a dye present in the elutant from activated carbon dye receptors. Doing otherwise implies a greater precision than is warranted by the data.

Figure 1
Spectrofluorometric Scan From an Activated Carbon Receptor Exposed in a Monitoring Well



This scan of dye receptor eluent shows a low-flow signature typical of activated carbon that has had minimal exposure to flowing water. The peak on the left has a maximum wavelength near but shorter than that of fluorescein. The peak on the right has a maximum wavelength near that of rhodamine-WT. This signature is lost as water flows over the activated carbon.

RESULTS OF THE STUDY

Results from the 4/19/10 Receptor Exchange

At the beginning of the present study the dye receptors were replaced 0n 4/19/10 in order to prepare for the new study and initiate a brief dye background assessment. Many of the receptors that had been in place since the conclusion of the previous testing 10 months earlier were recovered and analyzed.

The stream receptor at location 11 gave a strong indication of eosine dye from the Phase 1 testing (Map 1). Receptors both up and down stream from this point showed lesser eosine peaks. Figure 2 shows the spectrofluormetric scan from this receptor. The fluorescein peak complicates the eosine quantification and the assessment of its peak wavelength. However, past experience at this site and others leaves little doubt that the prominent “shoulder” on the fluoresceine peak represents degraded eosine. Figure 3 shows the scan from the receptor at location 3 (bridge at Country Club Drive) just down-stream from the creek liner and recovered on 11/19/08. That receptor was missing on 4/19/10. However, the receptor at Location 20, between locations 3 and 11, showed only a trace of eosine. There had been three prior tentative indications of a trace of eosine at location 11 on 9/2/08, 7/29/08, and 7/7/08, sampling rounds 8, 6, and 5 respectively. There have been no other detection of eosine in Clear Creek that are as strong as the detection 4/19/10 and 11/19/08.

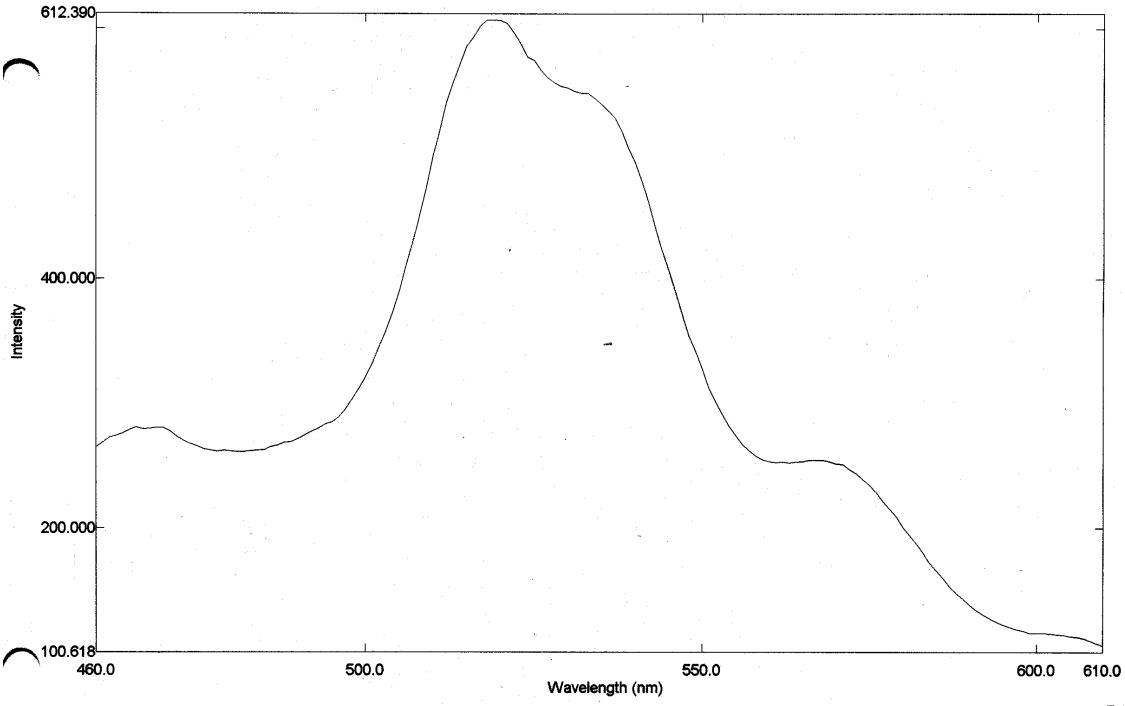
Figure 4 shows the scan from the on-site sump (location 0) recovered on 4/19/10. There is no clear indication of eosine here, although the fluorescein peak is asymmetrical, suggesting that a trace of eosine could be present. Eosine has been present here previously. Figure 5 shows a scan from a receptor recovered on 12/18/08 (round 13), showing a clear degraded eosine peak at 538 nanometers. This peak has a “shoulder” on the left side indicating the presence of fluorescein, the reverse of the present situation. Non-degraded eosine fluoresces at 542 nm

It would appear from these data that there is a bedrock route for eosine to reach Clear Creek, and that it may be located up-stream from monitoring location 11, but down-stream of location 7. The prior eosine trace is summarized in Appendix B.

Results from the Fluorescein Injection on 5/11/10

After the dye was inserted in MW- 35B and the flush water injection had stabilized, regular visual inspections for visible dye were made at the sump, location 0, and the section of clear creek from Location 1 through 3. None was seen. About three and one half hours after the injection began an inspection of Clear Creek downstream of Countryclub Road, downstream of location 3, was undertaken. Dye was observed in

Figure 2
Spectrofluorometric Scan
Eluant From Location 11 Dye Receptor
4/19/10



Peak Pick
File Name: C01S11
11 CC ABOVE TUBE SPRING

Created: 17:39 04/23/10
Data: Original

Instrument: RF-5301
Spectrum Type: SYNC
Scan Range: 460.0nm to 610.0nm
EX Wavelength: 442.0nm
Sample Pitch: 1.0
Slit Width: EX:5.0nm EM:5.0nm
Scan Speed: Medium
Sensitivity: High
Response Time: Auto
Shutter: Manual, Open

EWERS WATER CONSULTANTS INC.
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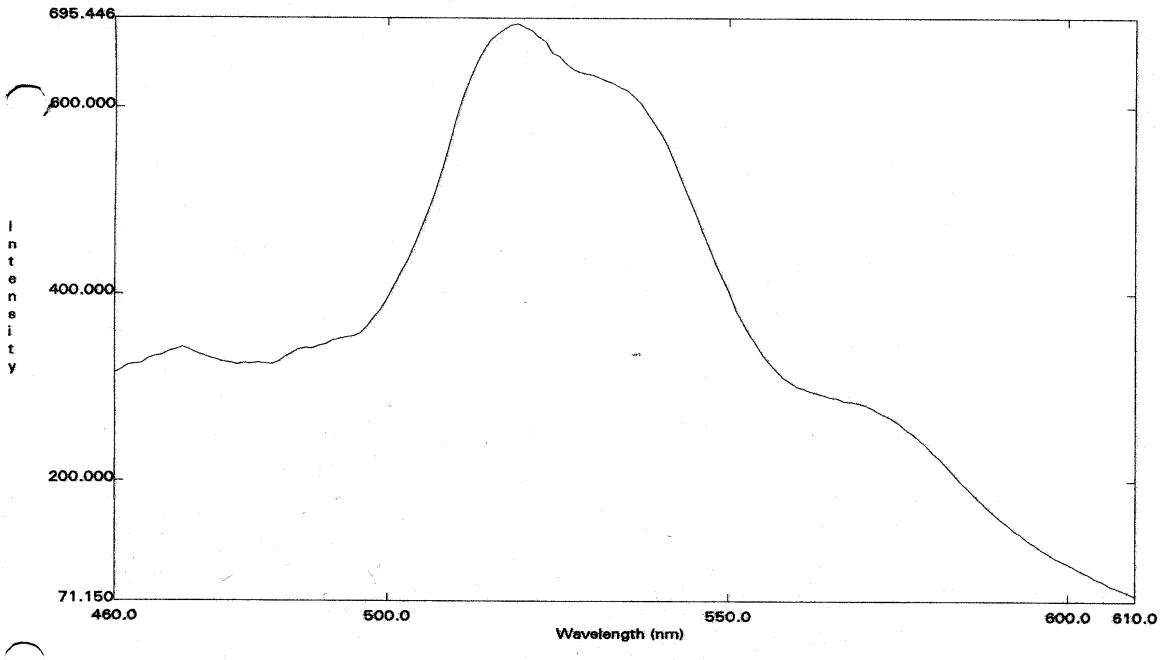
Collection Date: 4/19/10
Julian day: 109
Analysis Date: 4/23/10
Analyst: ROE/GG
Project: CSX-BLOOMINGTON
ARCADIS
Type of Sample: CHARCOAL
Field Crew: ROE, GG
Lab Batch Number: CSX10910
Contract: ARCADIS
Comments: PHASE 2 10 MONTH EXP RECEPTORS

No.	Wavelength (nm)	Intensity
1	466.0	280.303
2	519.0	607.373

Figure 3
Spectrofluorometric Scan
Eluant From Location 3 Dye Receptor
11/19/08



Peak Pick
File Name: M12-3
CC @ CC DRIVE

Created: 13:31 11/24/08
Data: Original

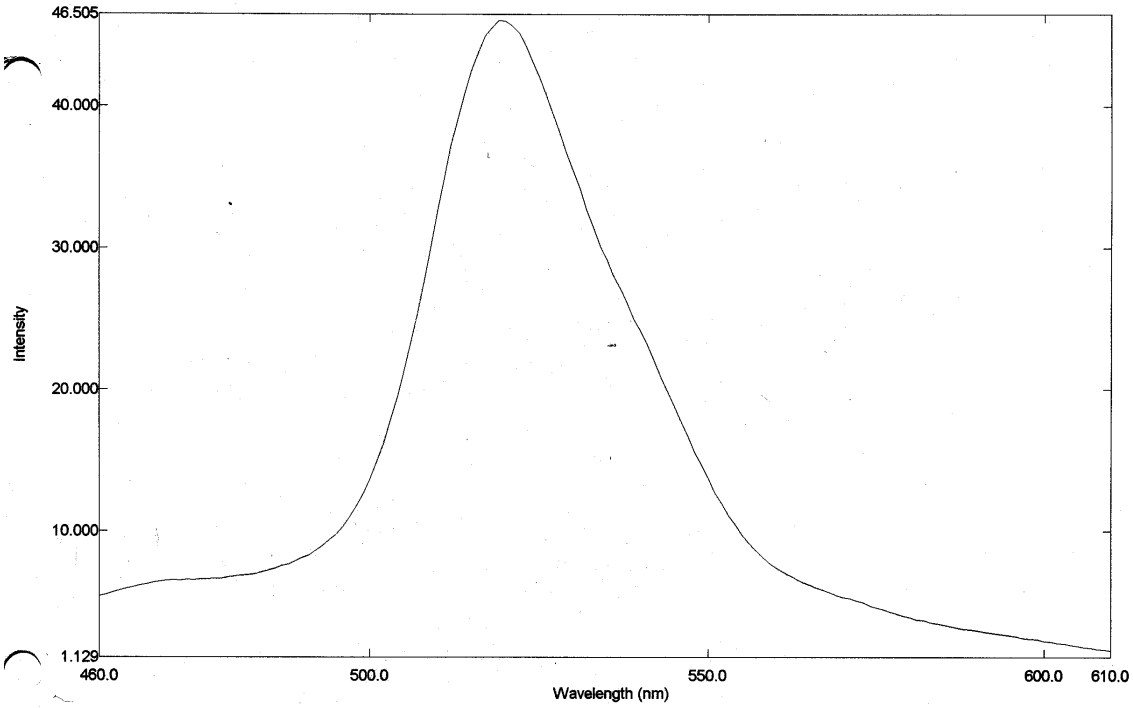
Instrument: RF-5301
Spectrum Type: SYNC
Scan Range: 460.0nm to 610.0nm
EX Wavelength: 442.0nm
Sample Pitch: 1.0
Slit Width: EX:5.0nm EM:5.0nm
Scan Speed: Medium
Sensitivity: High
Response Time: Auto
Shutter: Manual, Open

EWERS WATER CONSULTANTS INC.
160 REDWOOD DRIVE
RICHMOND, KY 40475
(859) 623-8464

Collection Date: 11/19/08
Julian day: 324 LY ADDED
Analysis Date: 11/24/08
Analyst: ROE/GG
Project: CSX-BLOOMINGTON ARCADIS
Type of Sample: CHARCOAL
Field Crew: ROE, GG
Lab Batch Number: CSX32408M
Contract:
Comments: MONITORING ROUND 12

No.	Wavelength (nm)	Intensity
1	470.0	343.063
2	519.0	689.325

Figure 4
Spectrofluorometric Scan
Eluant From Location 0 Dye Receptor
4/19/10



Peak Pick
File Name: C01S00
00 SUMP

Created: 17:23 04/23/10
Data: Original

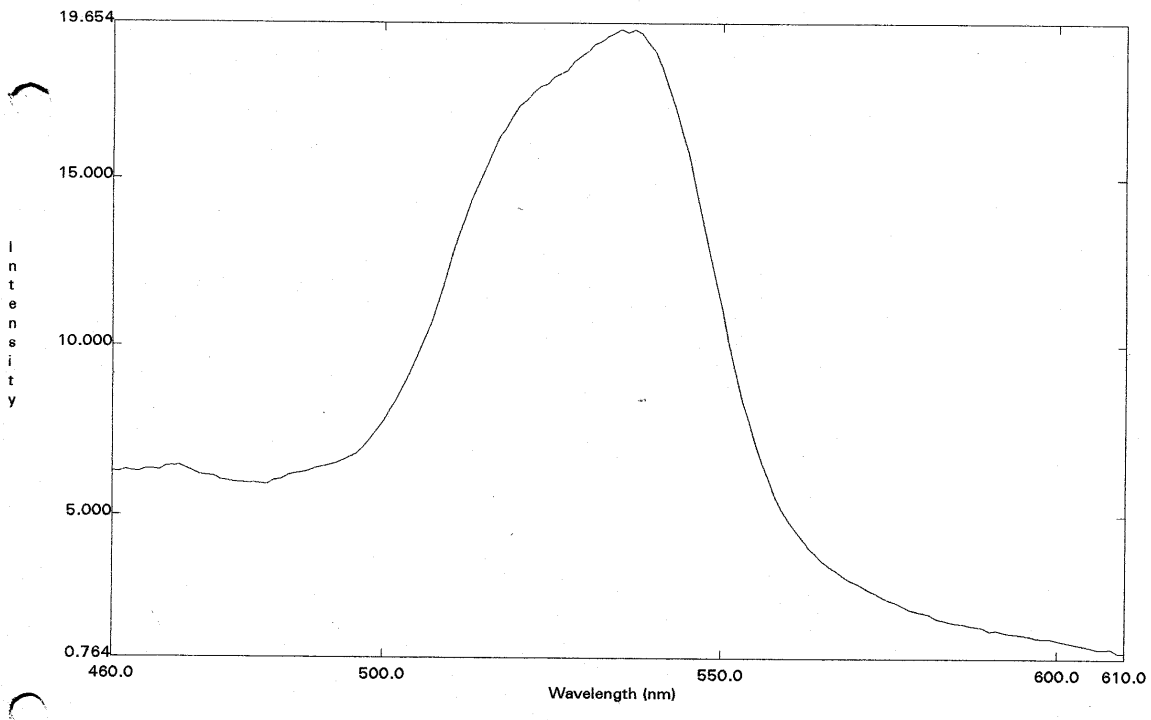
Instrument: RF-5301
Spectrum Type: SYNC
Scan Range: 460.0nm to 610.0nm
EX Wavelength: 442.0nm
Sample Pitch: 1.0
Slit Width: EX:5.0nm EM:5.0nm
Scan Speed: Medium
Sensitivity: Low
Response Time: Auto
Shutter: Manual, Open

EWERS WATER CONSULTANTS INC.
160 REDWOOD DRIVE
RICHMOND, KY 40475
(859) 623-8464

Collection Date: 4/19/10
Julian day: 109
Analysis Date: 4/23/10
Analyst: ROE/GG
Project: CSX-BLOOMINGTON
ARCADIS
Type of Sample: CHARCOAL
Field Crew: ROE, GG
Lab Batch Number: CSX10910
Contract: ARCADIS
Comments: PHASE 2 10 MONTH EXP RECEPTORS

No.	Wavelength (nm)	Intensity
1	519.0	46.060

Figure 5
Spectrofluorometric Scan
Eluant From Location 0 Dye Receptor
12/18/10



Peak Pick
File Name: M13345
SUMP, LOCATION 0

Created: 19:00 12/20/08
Data: Original

Instrument: RF-5301
Spectrum Type: SYNC
Scan Range: 460.0nm to 610.0nm
EX Wavelength: 442.0nm
Sample Pitch: 1.0
Slit Width: EX:5.0nm EM:5.0nm
Scan Speed: Medium
Sensitivity: Low
Response Time: Auto
Shutter: Manual, Open

EWERS WATER CONSULTANTS INC.
160 REDWOOD DRIVE
RICHMOND, KY 40475
(859) 623-8464

Collection Date: 12/18/08
Julian day: 353 LY ADDED
Analysis Date: 12/20/08
Analyst: ROE/GG
Project: CSX-BLOOMINGTON ARCADIS
Type of Sample: CHARCOAL
Field Crew: ROE, GG
Lab Batch Number: CSX35308M
Contract: ARCADIS
Comments: MONITORING ROUND 13

No.	Wavelength (nm)	Intensity
1	535.0	19.469

the stream near MW-5, but no clear point of dye entry into the stream could be seen (Photo 1). Another dye resurgence was apparent on the opposite bank an estimated 30 feet further down stream (Photo 2). The stream was quickly scanned on foot as far as MW-34A. Near that well dye could be clearly seen streaming from a very small spring in high concentration on the west bank (Photo 3). The flush water was turned off at this point and the stream was observed at all accessible points down stream as far as That Road, location 14. No additional dye resurgences could be seen, but a faint tint characteristic of fluorescein was observed along the stream as far as location 13 at Gordon Pike. This coloration of Clear creek indicates that dye was likely entering the creek at MW-5 and MW-34A well before it was first observed.

Clear Creek was in recession during the period of the dye introduction, and at the time dye was observed in the flow of the minor spring at MW-34A the water level was an estimated 8 inches above the normal base flow at this location. On 6/24/10 a very small spring was found and sampled about 15 feet down-stream from the dye laden spring that was observed on 5/11/10. This spring had been covered by the stream when the dye was visually present. A water sample taken from this spring on 6/24/10 showed a strong fluorescein fluorescence signature. A sampler deployed that day and recovered 24 hours later on 6/25/10 also showed a very strong fluorescein fluorescence. There is every reason to believe that this spring was discharging dye on 5/11/10 but was hidden by the stream and dye plume from the nearby up-stream resurgence. This spring appears to be at the end of a 3 inch diameter bedding plane tube, probably part of a bedding plane anastomoisis. No visually observable dye was seen in Clear Creek by EWC personnel on the day following the injection, nor on any subsequent visit to the site.

Activated carbon dye samplers were placed just upstream and downstream at the three locations where dye had been observed entering the stream. These six receptors were given location numbers 31 through 36. Table 6 lists the dye receptors along Clear Creek, and Map 2 shows their locations, including the six new receptor sites. The table also shows relative dye concentration numbers from activated carbon samplers exchanged on 6/2/10 and 6/12/10. Because these are values from activated carbon samplers, the numbers are probably within +/- 10% of an average value for a number of duplicates placed at the same location. A sampler heavily impacted by sediment may be 20% lower than the average non-impacted sampler value.

Monitoring Well Results

Fluorescein was observed in five monitoring wells and the sump Location 0. These results are shown in Table 5. All of these positive results occurred after the spectacular visual results in Clear Creek. This indicates that the wells do not penetrate the conduit pathways that carried the dye to the minor springs.

Table 5
Fluorescein Recoveries in Monitoring Wells
Dye Injection Date 5/11/10

Well ID	First Recovery	Maximum Recovery Date	Maximum Relative Dye Intensity
Sump	6/12/10	6/25/10	21
MW-5D	6/25/10	6/25/10	4.2
MW-20D Upper	7/8/10	7/8/10	350
MW-20 Shallow	6/2/10	6/25/10	680
MW-34A	Background Present	6/2510	450
MW-35A	5/25/10	5/25/10	100,000

Fluorescein was recovered weakly in MW-5D beginning between 32 and 45 days after the dye was released and had appeared in the nearby minor spring. The dye concentration in the spring was an estimated four orders of magnitude greater.

Fluorescein appeared very strongly in MW-34A in background samples and in subsequent dye receptor exchanges following the dye injection. Fluorescein peaked in this well on 6/25/10, 45 days after dye injection. Unfortunately this well was not sampled immediately after the dye appeared visually in the nearby minor spring, but it is unlikely that the spring and well are directly connected.

Fluorescein appeared visually In MW-35A. This well is approximately 20 feet from the injection well.

PHOTO 1
Dye Resurgence on West Bank of Clear Creek Near MW-5

PHOTO 2
Dye Resurgence on East Bank of Clear Creek 30 Ft. Downstream of Photo 1

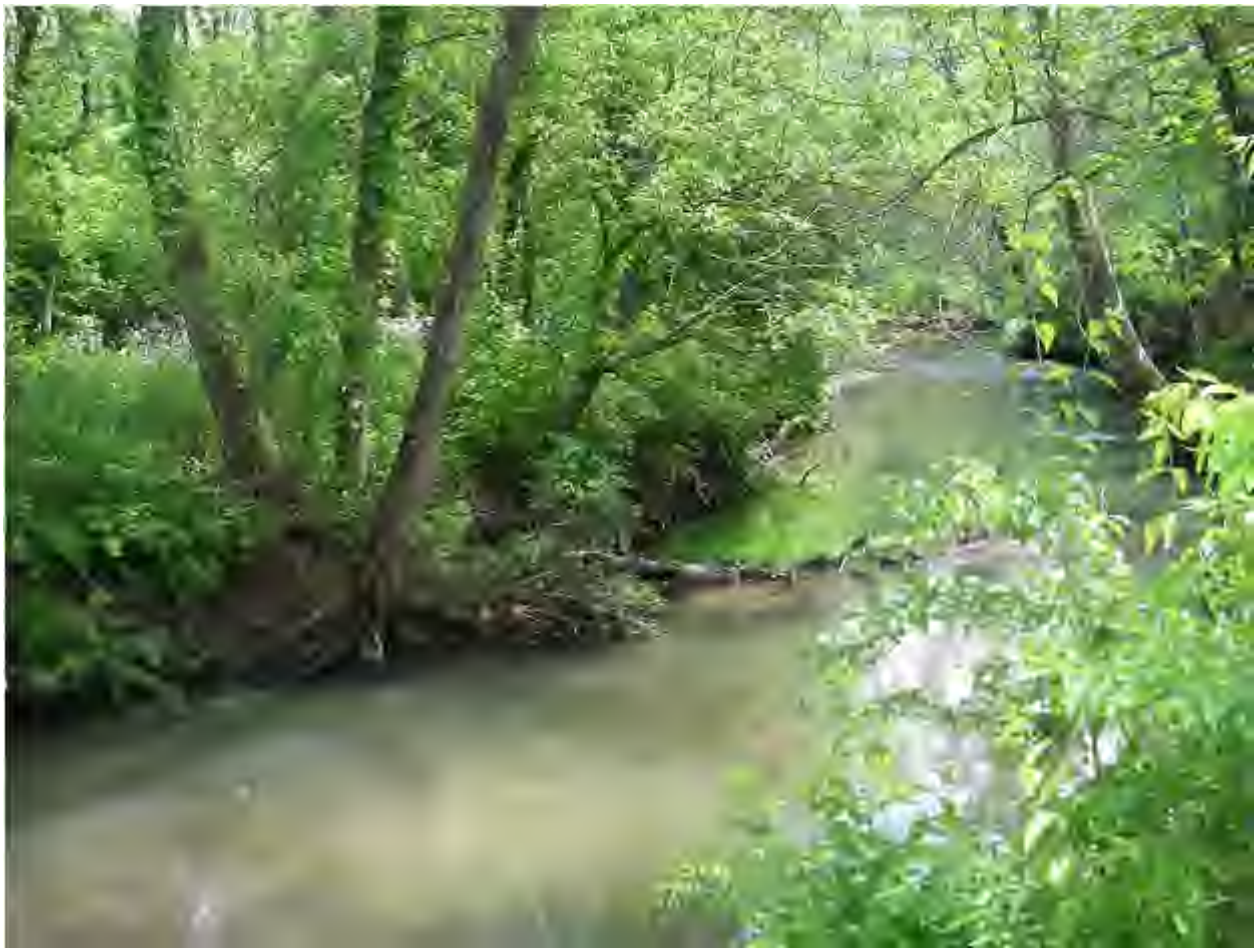


PHOTO 3
Dye Resurgence on East Bank of Clear Creek Near MW-34A

Late Recoveries in Clear Creek

Dye was recovered along Clear Creek above (north) Country Club Road at locations 1, 2, and 3. These recoveries were mirrored at location 23 a few hundred feet downstream. All of these recoveries began between 32 and 45 days after the dye injection. The exact location of the dye laden groundwater discharge is difficult to determine. Dye may be in part by diffuse flow in the flood plain deposits and by fracture flow. The creek flows on fractured bedrock along this section.

Dye first appeared in the trench sump between 22 and 32 days after the dye injection. This sump receives water from the sediments along the west side of Clear Creek in the vicinity of the creek infiltration barrier.

RHODAMINE RECOVERIES

The rhodamine dye injected in MW-38 on the east side of Clear Creek, opposite from the areas of creosote release, has not been conclusively observed in the springs, monitoring wells, or the creek. This is in spite of the fact that MW-38 is well connected to the aquifer's permeability structure. This connection is evidenced by the fact that the well took 2000 gallons of flush water at 5 gallons per minute. This indicates that there is very little advective movement in this area of the aquifer, the more distant recharge being adequately handled by two nearby springs, CVS spring and Pinewood Spring.

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DISCUSSION

Table 6 provides the essential analytical data from activated carbon dye receptors for this discussion. These receptors are listed in order of their position in Clear Creek. Map-1 shows the locations of the long-term stream monitoring points. The monitoring locations established near the minor springs are shown on Map 2. When assessing the data in Table 6, two important factors must be kept in mind. First, the quantity of dye released from the activated carbon into the eluant solution that is applied, exceeds the concentration in the ambient water to which it was exposed by a factor of 400 to 1000 (Kass, 1998). Second, the concentration in the water emerging from the minor spring near MW-34A on 5/11/10 was of the order of 20,000 fluorescence units. That exceeds by more that 20,000 times the highest concentration seen in the nearby monitoring well and in the minor springs during the period following the visual observations of dye.

Fluorescein Background in Clear Creek

The background concentration values for locations 1, 3, and 23 are 1, 1.5, and 3.6 respectively (not shown on Table 6). These are not significantly different, but they give a reasonable value for the total background fluorescence in Clear Creek at the wavelength of fluorescein emission maximum. This includes the fluorescence of fluorescein background in the creek and the general background fluorescence. The values at these 3 locations listed on Table 6 strongly suggest input of dye laden groundwater associated with this trace as discussed previously.

Fluorescein Discharge Upstream From Minor Springs at MW-5

The samplers at location 31 were just upstream from the dye suggest that there is some fluorescein entering Clear Creek from our injection somewhere upstream of the observed dye resurgence near MW-5, but possibly not very far upstream. Scans of the stream with an infrared thermocam on 5/25/10 revealed the known minor springs, but none upstream of MW-5. Many springs, particularly small ones related to bedding plane anastomoses, have multiple outlets. Anastomoses are commonly seen on overturned rock slabs along clear creek and they are likely responsible for some of the small springs in this area. The minor spring responsible for the dye that appeared upstream of location 31 must be intermittent and was apparently not flowing significantly during the thermocam scan.

Fluorescein Discharge From the Minor Spring at MW-5

Sampling location 32 was placed where the down stream portion of the dye cloud was observed during the dye injection. The fluorescein value from these samplers

Table 6

Relative Dye Concentrations at Selected Locations

Listed in order of position along Clear Creek

LOC	NAME	RELATIVE CONCENTRATION (values corrected to low sensitivity)			
	DATE	6/2/10	6/12/10	6/25/10	7/8-9/10
0	Sump	0	10	21	15
1	Clear Creek Upstream	6	2.5	2.5	64
3	Clear Creek at Country Club Drive	8	3	3	17
23	Clear Creek near MW-21	10	10	Missing	58
31	MW-5 Spring up-stream	119	40	17	57
32	MW-5 Spring down-stream	695	450	100	57
33	MW-5 Spring East up-stream	375	25	690	45
34	MW-5 Spring East down-stream	1238	400	328	486
35	MW-34A Spring up-stream	128	45	33	81
36	MW-34A Spring down-stream	1165	480	205	325
37	Spring down-stream fm MW-34A			500* 0.6**	212
7	Clear Creek above Watercress Sp.	55	30	17	42
11	Clear Creek above BP Tube Spring	128	50	29	67
13	Clear Creek at Gordon Pike	48	42	12	15
14	Clear Creek at That Road	48	20	13	22
16	Clear Creek at Clear Creek Road	29	8	12	14

*Overnight (18 hour) exposure, activated carbon sampler
** Water Sample

Monitoring Wells

	4/26/10 Background	5/10/10 Background	5/25/10 Post injection 1	6/2/10 Post injection 2	6/12/10 Post injection 3	6/25/10 Post injection 4	7/8-9/10 Post injection 5
MW-5D	0	0	0	0	0	4.25	23
MW-34A	110	290	180	72	340	450	312

shows the strong but non-visual dye resurgence at this minor spring. Fluorescein values at location 33 indicate that there is dilution and incomplete mixing of the dye from the west side of the creek, across the stream width. This site is about 25 feet downstream and on the opposite side of Clear Creek from the strongest visual dye source near MW-5.

The sampler at location 34 was placed in the center of the area of strongest fluorescein observed on the east side of Clear Creek on 5/11/10. This sampler is likely very close to the spring flow responsible for the visual plume.

Fluorescein Discharge From the Minor Spring at MW-34A

The dye in the sampler at location 35 gave fluorescein values consistent with dispersion of the dye from the known upstream sources at and above MW-5. The sampler at location 36 indicates a strong source between 35 and 36. The location 36 sampler was placed about two feet downstream from the observed dye resurgence.

Downstream Sampling Locations

The samplers further downstream from the minor springs showed decreasing amounts of dye. The likely causes of this decrease are photo-degradation, dilution, and sorption. Fluorescein is subject to rapid degradation in sunlight. The samplers at locations 7 and 13 do not reflect the overall dye concentration trend. These receptors are often swept against the bank and sometimes overwhelmed with sediment, and thus their fluorescein values are less reliable.

Post Injection Field Observations

There was no directly visible dye in the water at the minor spring locations on 5/26/10 and 6/2/10. No visible flow was observed from the locations where dye was seen entering the creek on 5/12. Indeed, a layer of fine sediment was deposited over locations 34 and 36. A reading glass focusing the sun into the water also did not reveal dye. Fluorescein can be detected at concentrations well below ordinary visual levels in this manner.

Sources for the Dye Observed in Post Injection Samplers

There are at least three sources for the dye captured by the samplers deployed after the injection. One is minor spring discharge during the rains that occurred following their deployment. Second, seepage that is not visible to the eye, and the third, desorption of the dye from bedrock surfaces and sediments that were subjected to the

high concentrations on 5/11/10. The latter include sediments and surfaces in the anastomosis conduits as well as in the streams. All three sources are likely contributors.

JOINTING IN THE RAMP CREEK FORMATION

The orientation of prominent joints in the Ramp Creek Formation were measured in order to better understand the permeability structure of the bedrock beneath the site. Sections of Clear Creek, some hundreds of feet in length, flow directly on Ramp Creek bedrock. These areas gave clear views of the jointing unobstructed by sediment. All joints exceeding three feet in length in the traversed sections of the creek south of Countryclub Drive were measured.

Forty three joint orientation measurements were taken. The predominant direction was East, 5 degrees North, roughly normal to the direction of stream flow (Fig. 6). Those with this orientation proved to be exceptionally well widened by dissolution, some exceeding 18 inches in width. The widened joints extended across the width of the stream and appeared to continue beneath floodplain sediments (Photo 4). All showed a filling of pebble-sized particles and finer material. At several locations the enlarged joints were integral with solution tube networks on bedding planes visible on

Figure 6

Joint Rose For Clear Creek Bedrock Exposures

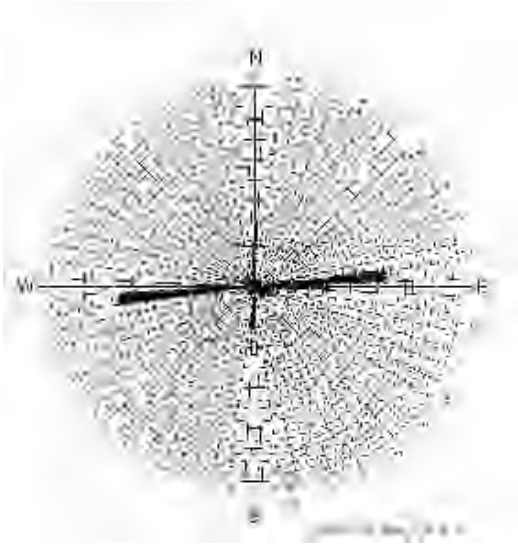
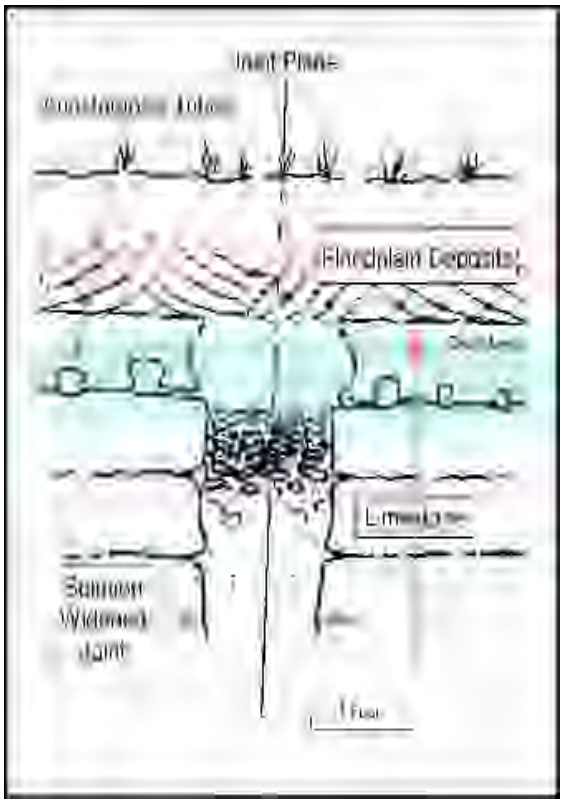


Photo 4
Solution Widened Joint in Clear Creek

Figure 7
Joint & Bedding Plane Anastomoses



the stream bank (Fig. 7). These networks are known as bedding plane anastomoses (Bretz, 1942; Ewers, 1977; Ewers, 1982). A secondary joint orientation, nearly North-South, was also evident (Fig 6).

The depth of the enlarged sections of these joints is unknown as is their lateral extent beyond the exposures in the creek. It is possible that they extend across the meander belt and floodplain, wherever the stream has meandered in the past.

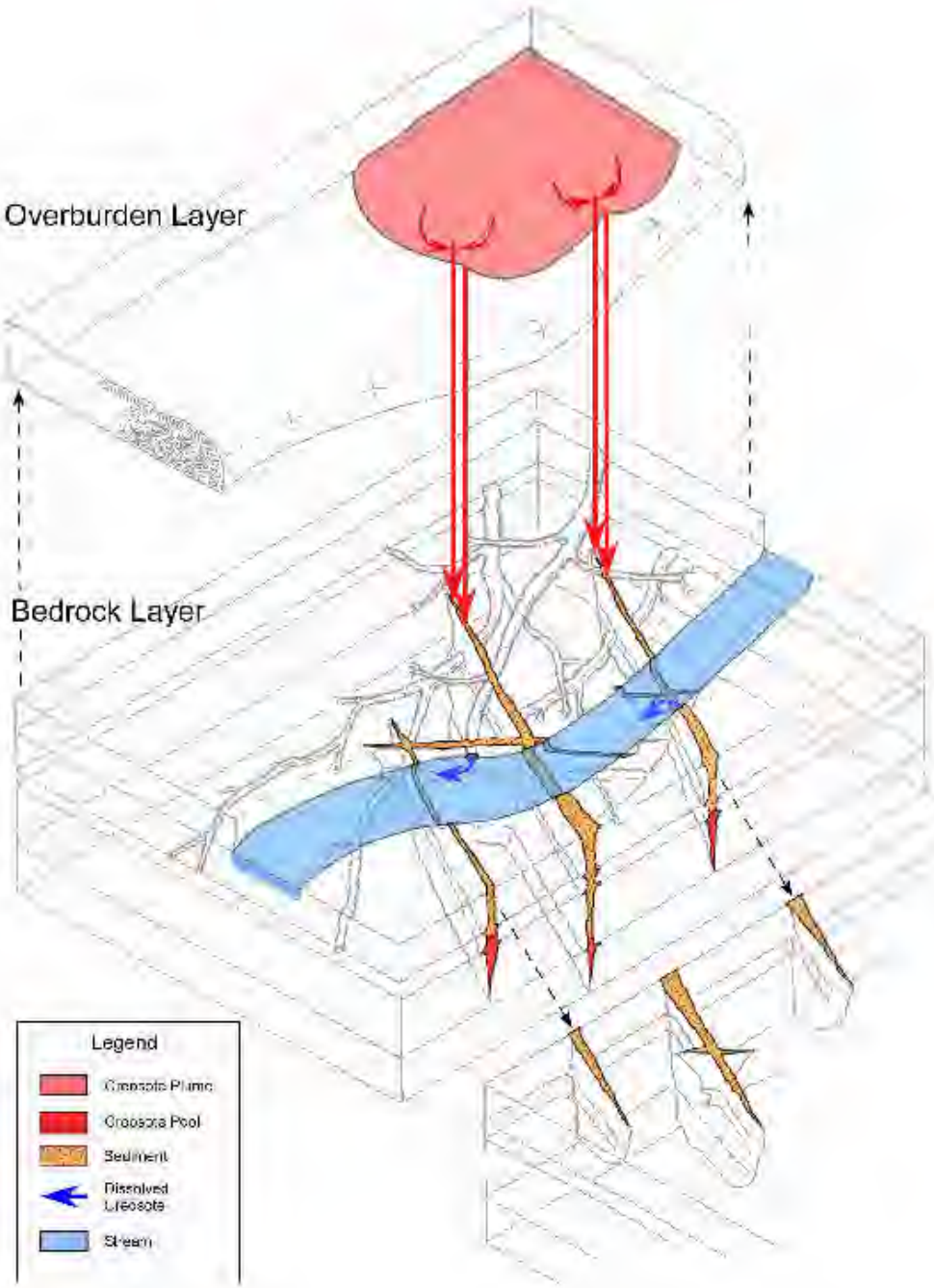
A CONCEPTUAL MODEL FOR CREOSOTE MIGRATION AND STORAGE

The dye traces, bedrock fracture measurements, and creosote observations in monitoring wells support a model for the capture and sequestration of liquid creosote at the site. The creosote appears to have moved initially in the point bar deposits on the flood plain of Clear Creek by gravity controlled flow. When this free DNAPL plume encountered a solution widened fracture (grike) it drained through the sediment filling and accumulated along the lower portions of the grike bottoms (Fig. 8). Dissolved creosote apparently moves from the fracture fillings by diffusion and advection to bedding plane conduits, discharging at the minor ephemeral springs along the creek or directly from the sediment filled fractures where they intersect the creek. The flux of dissolved creosote from the springs is unmeasured as of this writing, but appears to be small on the basis of minimal to undetectable creosote odor.

Evidence for the creosote capture can be seen in the fact that fluorescein dye from MW-35B and eosine dye from MW-14D have moved to the creek from the area where creosote saturates the point bar deposits without the appearance of creosote. This is most notably observed at the sump, just east of the two dye introduction points. Lateral collector drains installed at the bedrock surface connect to this sump. Both dyes have appeared here, but no creosote has been collected. Both dyes have also been observed nearby in the creek. Liquid creosote has clearly moved southward and southeastward, but apparently only at depth in the aquifer permeability structure. It is evident in MW-27A, 600 feet distant on the opposite (East) side of Clear Creek from the release area, and in MW-36C over 700 feet southward.

The bedding plane conduits (anastomoses) apparently associated with the minor springs are highly transmissive. Under the influence of the continuous 3 gallon per minute potable water flow into the dye injection well, MW-35B, fluorescein dye traveled 1000 feet to minor springs on the west bank of Clear Creek near MW-34A at a speed that could not be less than 4 feet per minute. When dye was first observed at these springs it had already traveled down-stream in the surface flow to Gordon Pike three quarters of a mile away, suggesting that the dye had emerged from the springs much earlier. Typical velocities in these conduits are likely much less most of the time. This was evidenced by two facts. First, the flow of dye laden water was observed to decrease noticeably after the flush water was turned off in the dye injection well; and second, dye remained detectable at the minor spring locations 81 days after the injection when the last sampling occurred. The minor spring east of MW-34A appears to flow only when there has been significant rainfall. The minor spring 15 feet south continues to flow but reverts to a seep in dry weather.

Figure 8
A Conceptual Model for Creosote Migration and Storage



The bedrock fractures at the site are predominantly E-W oriented and at right angles to the valley axis. A secondary set is oriented N-S. These two fracture sets are almost certainly solution modified where they lie immediately beneath the floodplain, as they are observed to be in the creek bed. Groundwater from beyond the floodplain apparently has little interaction with the fracture system or the bedding plane tube system and its minor springs. This distant water appears to discharge from the several larger perennial springs. This is evidenced by the fact that none of the tracer dyes were observed in the perennial springs. This lack of interaction limits creosote movement to gravity draining and likely precludes advective transport. It is interesting to note that two of the monitoring wells most heavily impacted by creosote MW-27A and MW-24A lie along the vector East 5 degrees North, the same as the principal solution enlarged fracture vector.

REFERENCES CITED

Bretz, J.H. 1942, Vadose and phreatic features of limestone caverns, J. of Geol., 50 (6): pp.675-811.

Ewers, R.O., Cavern development in the dimensions of length and breadth, Ph.D. Dissertation, McMaster University, Hamilton, Ontario, Canada.

Field, M.S., et al, 1995. An assessment of the potential for adverse properties of fluorescent tracer dyes used for groundwater tracing. Environmental Monitoring and Assessment. 38:75-95.

Kass, W., 1998. Tracing Technique in Geohydrology. A.A. Balkema, Rotterdam, 579 p. (see p. 34)

Magdefessel, J. 1990. Zum Fliesverhalten von Tracern Schadstoffen im Porengrundwasser. Diplomarb., 109 p. Freiburg I. Br.

Quinlan, J.F. and Ewers, R.O., 1985. Groundwater flow in limestone terranes: strategy, rationale and procedure for reliable, efficient monitoring of groundwater in karst areas, Proceedings of the Fifth National Symposium on Aquifer Restoration and Groundwater Monitoring, pp. 197- 234.

Smart, P.L. 1984. A review of the toxicity of twelve fluorescent dyes used for water tracing. National Speleological Society, Bulletin. 46:21-33.

Smart, P.L., and Laidlaw, I.M.S. 1977. An evaluation of some fluorescent dyes for water tracing. Water Resources Research. 13:15-33.

Smart, P.L., 1972. A laboratory evaluation of the use of activated carbon for the detection of the tracer dye Rhodamine-WT; M.S. Thesis, Dept. of Geography, Univ. Alberta, 118p.

APPENDIX A
Dye Receptor List

CSX Bloomington Site, Spring and Stream Dye Receptor List

Name-	Location Notes-
0- Trench Sump	In Manhole alongside Clear Creek above Country Club Dr.
1-Clear Creek Upstream	Clear Creek at a convenient point upstream of the CSX Site.
2-Clear Creek Liner Upstream	Clear Creek above the lined portion of the stream. Set among trees up-stream.
3-Clear Ck @ Country Club Dr.	At the Country Club Dr. bridge across from the input from 4 and below lined portion of Clear Creek.
4-Beaver Pond Discharge	The stream entering Clear Creek from the beaver pond/swamp.
5-Unnamed Trib. above WC Sp.	The west unnamed tributary at Watercress Spring. Set attached to fence.
6-Watercress Spring	A 12' x 20' spring pool adjacent to the RR ROW on the West. Set attached to fence at property line.
7 -Clear Creek above WC Sp.	Clear creek above confluence with Watercress Spring.
8-Single Culvert Spring	Between RR ROW just below Watercress Sp.
9-"G's" Double Culvert Sp.	Between RR ROW below 8, set in double culvert.
10- BP Tube Spring	The bedding plane tube spring. Set in culvert at spring.
11-Clear Ck above BP Tube Sp	Clear creek near Tube Sp. Across from old monitoring wells at Diamond Rock on gravel road.
12-Unnamed Trib @ Tube Sp	West tributary near BP Tube Sp, in PVC culvert between RR ROW

13-Clear Creek @ Gordon Pike	At the Gordon Pike Bridge on upstream side.
14-Clear Creek @ That Road	At That Rd. Bridge on upstream side.
15-Unnamed Trib @ CC Rd	Large west tributary at Clear Creek Road, informally called West Fork of Clear Creek.
16-Clear Ck @ Clear Creek Rd	Suspended from Clear Creek Road bridge.
17 -CVS Culvert	East tributary entering Clear Creek south of Country Club Drive, near CVS, set at culvert discharge.
18-"Gasoline Spring"	At 5510 Old State Route 37 driveway, north side.
19-Pinewood Spring	A large Spring at Pinewood Road on East side of Clear Creek.
20-CVS Spring	A modest size spring just south of Country Club Rd. on the east side of Clear Creek.
21-Box Culvert	A box culvert draining possible springs and swamps in the PCB site/landfill on east side of Clear Creek.
22-Ellington Spring	A spring on the west side of Clear Creek north of That Road.
22A-Ellington Spring East	A spring on the west side of Clear Creek north of That Road.
23-Clear Creek @ MW-21D	Clear Creek below gravel bar near MW-21D.
24- Lewis Spring	A modest spring on the north side of the West Fork of Clear Creek. This spring was added to the monitoring list after the appearance of eosine at the West Fork confluence with Clear Creek.

25-Baily Spring	A large spring and historic spring-house on the south side of the West Fork of Clear Creek. This spring was added to the monitoring list after the appearance of eosine at the West Fork confluence with Clear Creek.

CSX Bloomington Monitored Well List

MW-4D		MW-32A
MW-5 D		MW-34A
MW-12D	Upper Receptor	MW-35A
MW-12D	Lower Receptor	MW-36A
MW-13S		MW-36C
MW-17D		MW-37A
MW-17S		MW-40C
MW-18D		
MW-19D		(34) Monitor Well Receptors
MW-20S		
MW-20D	Upper Receptor	
MW-20D	Lower Receptor	
MW-21D	Upper Receptor	
MW-21D	Lower Receptor	
MW-22D		
MW-23D		
MW-24A		
MW-25A		
MW-27A	Upper Receptor	
MW-27A	Lower Receptor	
MW-28A		
MW-28B		
MW-28C		
MW-29A		
MW-29B		

APPENDIX B
Summary of Phase 1 Investigation

Summary of Phase 1 Investigation

Eosine Characteristics

This dye is subject to degradation which causes a shift in its fluorescence wavelength from the normal value in alkaline eluent of 542nm to a degraded value of 532nm and as short as 522nm. Some wells near the injection site showed eosine with typical 542nm +/- 2nm fluorescence, and later, as the dye concentration waned, increasingly degraded fluorescence wavelengths appeared. Other, more distant wells showed highly degraded eosine initially, but as time passed, less degraded dye gradually appeared. Our experience suggests that this phenomenon manifests chiefly where organic contaminants are present in the aquifer.

Since the work of Magdefessel (1990) it has been clear that the rhodamine family of dyes can undergo de-aminoalkylation which progressively alters the dye fluorescence to a wavelength very near that of fluorescein, a transformation of about 40nm. The agency of this transformation is unknown, but it is suspected to be biological. This process can occur quickly, but it often takes many months (Idstein and Ewers, 2002). The transformations of eosine are similar to rhodamine and their causes are similarly unclear.

Table 4 indicates the transformation of eosine with a “D” indicating the degraded form. A double “DD” indicates the most degraded form. All of these degraded eosine recoveries occurred subsequent to the injection of the eosine, and were not observed during the background analysis. Thus we have confidence that these recoveries were truly degraded eosine.

Eosine Recoveries

It is important to note that the sampling interval during the tracer investigation was never less than one week. Initially, dye receptors were exchanged approximately weekly beginning after the injection on 5/16/08. A two-week interval began on 6/20/08, and after 11/19/08 exchanges occurred primarily at longer intervals.

Monitoring Well Recoveries - On the first receptor exchange, ten days after the eosine tracer injection, eosine was recovered in MW-12 approximately 80 feet south- southwest of injection well MW-14. It was also recovered in MW-20D, a deep well, 300 feet also to the south-southeast. The adjacent shallow well, MW-20S, did not show the dye until the third receptor exchange, 31 days after injection. The rapid appearance of the dye in MW-20D almost certainly indicates flow in a conduit in the vicinity of the screened interval of the deep wells. These observations also argue against dye movement to MW-20D in the point bar deposits, as it would likely have taken longer to arrive. It was also likely, but not certain, that dye would also have appeared in the adjacent shallow well MW-20S if it had moved in the sediments.

Beginning in sampling round 5, 62 days after injection, dye was recovered in MW-21D, 415 feet to the south southwest. This well was fitted with two dye receptors, because of the long well screen. Only the lower receptor showed the dye initially. In the following round, Round 6, 84 days after injection the upper receptor was also positive for eosine. Dye has been recovered at this location since Round 5.

The receptor in MW-23, 640 feet south of the injection well first showed eosine in Round 6, 84 days after injection. At that point in time, MW-22, located roughly midway between two wells showing eosine, MW-21 and MW-23, did not show eosine definitively and consistently until Round 12, 197 days after injection. The apparent dye velocities to each well, assuming a straight line distance from the injection well, were calculated (Table 5). These velocities range from 2.5 to 30 feet/day, and only six wells, of the 13 which were monitored from the beginning of the test, received the dye. These statistics were a testament to the heterogenous and anisotropic nature of this aquifer and karst aquifers generally.

Results From Recently Drilled Wells - These wells did not have benefit of background monitoring as they were drilled after the study was in progress. New Well Group 1 was added to the dye monitoring scheme on 8/19/08. MW-24A and MW-27A showed eosine at the first sampling with activated carbon receptors on 9/1/08, and the dye has been present through the remainder of the study. A water sample obtained from MW-24A on 8/19/08 showed eosine. Both wells were drilled on a resistivity anomaly and were heavily impacted by creosote. MW-27A was notable because it was on the east side of Clear Creek, the opposite side from the CSX Site.

New Well Group 2 was added on 3/13/09, including MW-28A, B, and C, and MW-29A and B. These were sampled on 4/15/09 and 5/13/09. MW-28A and B and MW-29B showed eosine. The deep wells completed in the Borden Formation at both of these locations, MW-28A and MW29A, exhibited water levels that were equivalent to the lower level of the neoprene well closure, and several feet above ground level. During the period the wells were left open prior to sampling, approximately 10 minutes, there was no apparent level change, suggesting that recharge to these wells was very slow. It is improbable in the extreme that the “stick-up” at both locations were cut exactly 1.25 inches above the formation head, and that the formation head remained identical on two dates a month apart.

The eosine in MW-28A is perplexing. The obvious upward gradient in the Borden Formation argues against dye reaching this deep level from the shallower, demonstrably dye laden, Ramp Creek Formation. It also suggests that well construction characteristics allowing dye to enter the well from the Ramp Creek is also unlikely. Water would, in all probability, leak from the well into the upper formation, not the reverse. The well was open from 1/6/09 until at least 1/12/09, and various tests were performed and equipment lowered and raised through the well bore. It is certainly possible that dye from the upper zone was spread through its length during this time and the positive results in the sampling on 4/15/09 and 5/13/09 are an artifact of these operations.

Sump Recoveries - The eosine tracer was recovered in the on-site sump on the third exchange, 31 days after injection. This location was recharged from the soil via infiltration tubes located at the soil bedrock interface. The eosine appeared first in an only slightly degraded form, but as the test progressed the dye became increasingly more degraded. Eosine remained detectible at this location with varying concentration throughout the remainder of the testing. This indicated that some dye movement in the overburden probably occurred.

Table 5

Apparent Dye Velocity

To Each Well Where It Was Recovered

Well Number	Distance From Injection Well	Days to First Dye Arrival, Maximum	Apparent Velocity Feet/Day
MW-12	80	10	8
MW-20D	300	10	30
MW-21	415	62	6.7
MW-22	500	197	2.5
MW-23	640	84	8
MW-20S	300	31	9.7

Stream Recoveries - Eosine was recovered in Clear Creek with exchanges 5, 6, 8, and 12, these exchanges were 62, 119, and 197 days respectively after injection. The first appearance lasted through one additional round of receptor exchange. In each of these instances the dye appeared immediately upstream and downstream of the liner that had been installed in the creek bed adjacent to the presumed main creosote release area. The location showing the highest dye concentration was Location 3 immediately downstream from the liner at Country Club Drive. The dye also appeared weakly in dye receptors deployed down stream from the site, in two instances as far as That Road, 1.6 miles distant. At no time was eosine evident at the background sampling location, sampling Location 1, upstream from the site. Unfortunately the dye resurgences into Clear Creek have not been sufficiently persistent and sufficiently above minimum detection levels to identify specific locations where the dye entered.

Eosine was briefly recovered at high concentrations in receptors deployed in the unnamed tributary of Clear Creek, Location 15. This stream is informally known as the West Fork of Clear Creek. The dye was recovered in Rounds 13-15. We have concluded from our investigations that eosine was being employed as a tracer by other workers. This work was related to potential groundwater impacts of a proposed interstate highway interchange south and west of our study area (personal communication, 3/17/09, Jim Peyton, Michael Baker Inc., Crown Point, IN). Sampling at Bailey Spring (Location 25, Map 1), approximately 1 mile above the confluence with Clear Creek, showed that this spring was the point of dye resurgence. While we await the details of the interstate highway study, we are confident that this appearance of eosine was unrelated to our investigations at the CSX Site.

THE SITE HYDROGEOLOGY

A Preliminary Characterization of the Aquifer Beneath The CSX Site

The data provided by the tracer investigations and other observations provide a picture of the characteristics of the aquifer beneath the site, the nature of its recharge, its relationship to the local base-level, and the movement of the water it contains and transports. The two statements below follow directly from the present study.

1- The permeability structure of the aquifer was demonstrably karstic.

The borings that have been made on site have intersected numerous voids partly or completely filled with clastic sediment. The Ramp Creek carbonates which underlie the site exhibited significant karstic conduit porosity in nearby outcrops along Clear Creek. The predominantly observed features were bedding plane anastomoses (Bretz, 1942; Ewers, 1982)

2- Autogenic recharge was the principal water source for the aquifer.

Recharge to the aquifer beneath the site could come from three possible sources; A- from contiguous carbonates which extend westward along the upland where karst features were clearly visible in quarries and along road cuts, B- from back-flooding and overland flooding from the Clear Creek during storm events, or through-flowing water from the creek via losing and gaining reaches, C- from autogenic recharge, rainfall infiltrating through the soil cover at the site, as detailed below.

A- Recharge from the upland - The carbonates of the Ramp Creek and Harrodsburg Formations extend beneath the upland, and dip gently west-southwestward away from the site. Infiltrating precipitation on the upland above the site appeared to be intercepted primarily by springs such as Watercress Spring, Bedding Plane Tube Spring and other springs both up and downstream from the site. The lack of tracer dye in these springs indicated that they do not drain the site. Springs typically drain expanding catchments toward the upstream basin boundary. This scenario is not unlike the basins of surface streams. The intervening areas between springs along and near a discharge boundary are normally drained by tiny springs and seeps with limited catchments. Thus, recharge from the upland could have been a source for

the aquifer beneath the CSX Site, but only from portions close-by, of the order of a few hundred feet.

B- Recharge from Clear Creek - Fluctuations in the stage of Clear Creek would be expected to produce synchronous fluctuations in karst conduits that are directly connected to the stream. Unfortunately we had no records of stage that were of sufficiently fine intervals to assess these sorts of connections. However, the rate at which injection water can be introduced into wells in the vicinity of the injection well suggests, but does not conclusively show, that the conduit porosity was likely sediment-filled. If this was the case, it was unlikely that through-flowing water from losing and gaining reaches of the creek pass through the aquifer beneath the site. The lack of large inputs of dye laden water into Clear Creek also argues against this sort of recharge. However, a small amount of bank storage, in response to creek level fluctuations may occur.

C- Autogenic recharge, infiltrating through the soil cover at the site - Several swampy areas existed on the site that persisted well into the summer. These were likely due to the fine low permeability flood plain sediments in the uppermost layer of the overburden. Most exposures of recently eroded bank materials along Clear Creek exhibit the typical flood plain character, cross-bedded higher permeability point bar deposits, with overlying low permeability flood deposits. The fine flood deposits almost certainly reduce, but do not eliminate, the contribution of rainfall and flood waters to groundwater beneath the site. Once the infiltrating water reaches the point bar deposits it should move more readily into the bedrock, and at times, directly through these deposits to the stream.

A PRELIMINARY MODEL FOR THE AQUIFER

The low permeability sediments on the floodplain surface, and the probable lack of significant distant inputs from the upland to the west, likely restricts recharge to the area under the CSX Site. The tracer tests demonstrate a slow and very limited groundwater movement directly eastward to Clear Creek, probably through the overburden.

Similarly, there was a demonstrated movement of the tracer south and southeastward to monitoring wells south of Country Club Drive. This movement was apparently faster than the movement directly to the creek. Apparent minimum velocities of 2.5 to 30 feet per day were demonstrated by the tracers (Table 5). However, the sampling interval was such that the highest velocity could be as much as twice this value. The wide range of apparent velocities and their high values were consistent with the existence of a complex, partly sediment filled, epikarst in the bedrock beneath the site. The permeability structure of that epikarst would likely be composed of bedding plane anastomoses and solution widened fractures.

The apparent velocity values in Table 5 are within the low range of those expected for karst aquifers. The restricted recharge and low headloss were likely responsible, at least in part, for the relatively low velocities. The readily available sediment in flood plain settings was another potential factor. These sediments and the restricted ability to purge them from the karst conduits due to a lack of quick-flow recharge is a recipe for sluggish karst flow.

Well MW-27A, of the New Well Group 1 series and MW-28B of the Group 2 series, have clearly demonstrated that Clear Creek was not a boundary to groundwater flow in the karst aquifer. Indeed, there are numerous examples of karst flow passing beneath perennial streams normal to the direction of stream flow. The present course of Clear Creek is a temporary one, and it's flood plain was an artifact of the stream's continual lateral migration. The conduits in a karst aquifer form in a complex interplay between headloss and the permeability structure formed by bedding planes and other fractures. Bedding planes being the dominant fractures in horizontal groundwater movement, it is not surprising that karst flow often passes beneath streams.

APPENDIX C
Field Procedures and QA/QC

Field Procedures
and
Quality Assurance/Quality Control

Dye Receptors

Dye receptors are constructed of vinyl coated fiberglass screen cloth. The cloth is folded and stitched with water resistant white thread creating two enclosures, one for a swatch of cotton cloth, the other for a ten gram mass of granular activated carbon (Fig.2). The enclosures are sealed by heat sealing. The cloth, which contains no dyes or optical brighteners, absorbs FB-28 and DY-96 from the groundwater passing over it. The activated carbon absorbs R-WT, AR-87, AR-52, AY-73, among others. Dye receptors are prepared in advance in a dye-free environment, individually packaged in sealable polyethylene bags, and pre-marked for their intended site of utilization. When optical brighteners are not of interest dye receptors are constructed without cotton cloth.

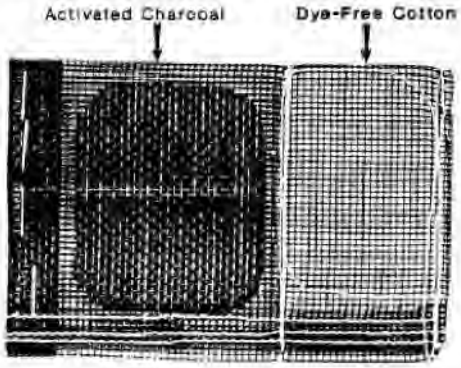
Receptor Deployment, Springs and Streams

Receptors are normally suspended in the water flow utilizing weighted wire stands which are tethered well above water level to a fixed object. The design of the stands is after Quinlan and Ewers (1981) (Fig. 3). The receptors are attached to the stands by means of stainless steel clips. Disposable gloves are routinely worn when inserting and replacing receptors. Gloves are worn when there is the possibility of significant levels of hazardous contaminants in the spring or stream.

When a receptor is to be exchanged the stand is first retrieved from the water by means of the tether, and the fresh receptor is removed from its pre-labeled sealable polyethylene bag. The recovered receptor is released from the stand and clip, agitated in the spring or creek water to remove accumulated sediment if necessary, excess water is shaken from it, and it is placed in the pre-labeled sealable bag. The fresh receptor is attached to the clip and stand and returned to a position in the water where it will be exposed to as strong a water flow as possible. The bag containing the recovered receptor is dated and placed in a cooler at ambient temperature.

When wading is necessary to recover a receptor rubber boots are worn and the receptor location is approached from down stream. Boots which have been potentially exposed to low levels of dye are thoroughly decontaminated.

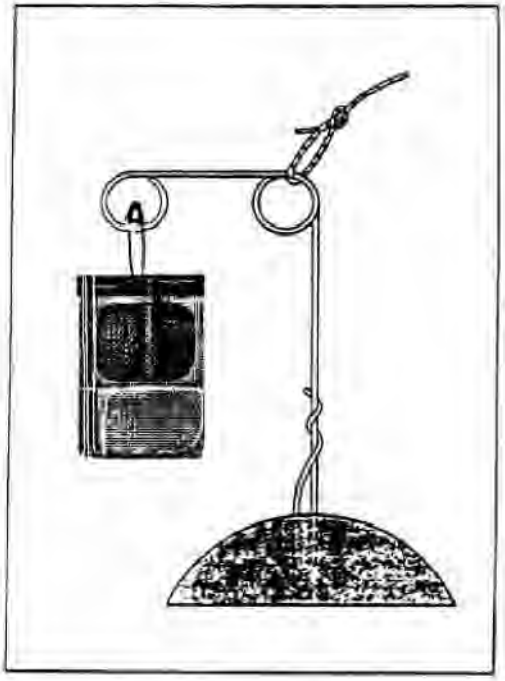
Figure 2 - Dye Receptor



Shown at 75% actual size

Figure 3 - Dye Receptor Stand

After Quinlan and Ewers (1981)



Receptor Deployment, Production Wells

Receptors are normally placed in the well discharge utilizing canisters which are attached by plastic hose to a tap on the well. A second hose conveys the water discharged from the canister to an appropriate disposal site. During an exchange of these receptors, the water flow is halted, the canister opened, and the receptor is removed and replaced with a fresh unit. The canister is then closed and the water flow is restarted. Typically, a flow rate of less than one gallon per minute is used, depending upon well capacity.

Receptor Deployment, Monitoring Wells

Monitoring wells can be used by suspending a dye receptor at the suspected water input depth, or by suspending a series of receptors at intervals through the screened portion of the well.

Receptor Transport

Dyes absorbed onto charcoal are extremely stable. Only bacterial action is believed to compromise these samples, and this appears to be very slow. Under normal circumstances, receptors are stored and transported in coolers at ambient temperature. If more than 48 hours will elapse before the samples are sent to the laboratory, they are refrigerated to retard this bacterial action.

Chain of Custody

EWC employs EPA-acceptable chain-of-custody and QA/QC protocols throughout the receptor exchanges. In conventional practice, dye receptors are left hidden and unattended in the field because it is impractical to maintain a chain of custody on each of the receptors. Tampering, theft, sabotage, and acts of nature, leading to loss or impairment of samples, are possible but not likely. Grab samples of the water are used to improve the chain-of-custody when these considerations are of special importance. When dye receptors are placed in high traffic areas, a second passive receptor is sometimes utilized to preclude loss by theft. The second receptor is exchanged during each round but only one receptor is analyzed. Duplicate dye receptors are deployed at 20% of the monitoring locations. A water sample is collected wherever and whenever a charcoal receptor is missing.

Field Blanks

EWC recommends a field blank for each batch of receptors taken to the field. This pre-moistened receptor is opened and handled in the field by the personnel involved in the receptor exchange. This is done at the beginning and the end of each sampling round, and at least once additionally for every 20 receptors that are exchanged. Field blanks are returned with the other receptors to the laboratory for analysis.

Dye Preparation and Transport

Those tracer dyes which are supplied in powdered form are dissolved in appropriate quantities of water at a location remote from the site of testing before being transported to the injection site. Personnel associated with the dye preparation utilize protective clothing, boots, and gloves, and observe thorough decontamination procedures before engaging in other activities.

The dye solutions are transported in leak resistant polypropylene containers. The containers are placed, with a pad of absorbent material, inside a heavy polyethylene bag, and then inside a waterproof shipping drum with a latching seal. When a larger amount of dye solution is required, it is prepared in a 55 gallon drum, sealed, and transported by trailer to the injection site.

Dye Injection

Personnel associated with the dye injection utilize protective clothing, boots, and gloves, and observe thorough decontamination procedures before engaging in other activities.

Stream Injections - The tracers are injected directly into sinking streams when adequate water flow exists. The dye container is carefully removed from its protective over-packing and the solution is carefully poured from its container into the flowing water as quickly as possible without splashing. The empty container is returned to the over-packing. The gloves and any potentially contaminated protective gear are also placed in the over-packing and sealed.

Sinkhole Injections - These sites are first prepared by injection of appropriate quantities of potable water. This insures that the sinkhole will conduct the dye into the aquifer and saturates any sediments which would otherwise absorb the tracer. One thousand gallons of potable water is a minimum quantity for this purpose.

The dye container is carefully removed from its protective over-packing, additional potable water is introduced into the sinkhole, and the dye solution is carefully poured from its container into this flowing water as quickly as possible without splashing. The flow of water into the sinkhole is maintained after the dye has been released until a minimum of 1000 gallons is added. The empty dye container is returned to the over-packing. The gloves and any potentially contaminated protective gear are also placed in the over-packing and sealed.

Trench Injections - A trench in the overburden is dug, preferably to bedrock, with the aid of a backhoe or trackhoe. The trench is then tested by injection of appropriate quantities of potable water to insure that it has good connection with the aquifer. The dye is introduced into the trench with additional potable water. The flow of water into the

trench is maintained after the dye has been released until a minimum of 1000 gallons or a lesser practical amount is added. The empty dye container is returned to the over-packing. The gloves and any potentially contaminated protective gear are also placed in the over-packing and sealed.

Well Injections - These sites are first tested by injection of appropriate quantities of potable water to insure that the well is connected to the solution porosity in the carbonate bedrock and will conduct the dye into the aquifer. A few hundred gallons of potable water is an appropriate quantity for this purpose.

An injection device, consisting of a hose, a vacuum/pressure gauge, and valves, is connected to the well. The injection device allows the dye to be released at the bottom of the standing water in the well. This also permits the level of the water in the well to be monitored during the injection process, and avoids foaming problems associated with the dye solutions. Foaming and well overflow during dye injection can cause severe dye contamination problems around the well and to equipment and personnel.

The dye container is carefully removed from its protective over-packing, potable water is introduced into the well through the injection device, and the dye solution is aspirated from its container into the well. The flow of water into the well is maintained after the dye has been released until a minimum of 1000 gallons or a lesser practical amount is added. The empty dye container is returned to the over-packing and sealed. The injection device, gloves, and any potentially contaminated protective gear are placed, with a pad of absorbent material, inside a heavy polyethylene bag, and then inside a waterproof shipping drum.

Decontamination of Equipment

Non-disposable field equipment is decontaminated by washing to remove all clay and thoroughly rinsed at a location remote from the site of testing. Rubber boots exposed to moderate levels of dye are decontaminated by washing with 1% sodium hypochlorite solution, and then thoroughly rinsed. Non-disposable injection equipment is thoroughly flushed at a location remote from the site of testing. Non-disposable clothing is machine washed with detergent and sodium hypochlorite bleach. Disposable equipment and clothing, gloves, absorbent pads, bags, and contaminated shipping drums present no toxic hazards and are disposed of with municipal solid waste at a location remote from the site of testing.

APPENDIX D
Laboratory Procedures and QA/QC

Laboratory Procedures and Quality Assurance/Quality Control

Collection and Shipping

EWC returns activated charcoal dye receptors and cotton dye receptors to the laboratory in individually labeled, heavy duty, polyethylene, re-closable bags. They are sent by express courier or carried by EWC personnel at ambient temperature in crush proof shipping containers. The charcoal often arrives in a badly crushed condition if soft shipping containers are used. In this condition the charcoal does not survive the necessary washing process.

There is no indication that refrigeration is required during collection or transport of dye receptors or water samples, and much evidence to the contrary. More harm than good is done to charcoal receptors by the weight of ice and frozen gel containers. No containerized frozen gels with any sort of color are ever used. Some contain fluorescent dyes and they frequently leak with the possibility of contamination. When sample holding times exceed 48 hours, samples are stored under refrigeration until shipping. Once received by the laboratory the receptors are refrigerated in their original packing until they are prepared for analysis.

No packing materials with color are ever used. Polystyrene "peanuts" with pale red and green color and other colored plastic foam wraps sometimes contain fluorescent dyes. Labeling is done with black permanent markers on the exterior of the re-sealable plastic bags. Colored markers are never used. Black "Sharpie®" markers are known to be safe from potentially contaminating fluorescent compounds. Cotton dye receptors are treated in the same manner as charcoal dye receptors. EWC supplies activated charcoal receptors and cotton receptors prepared with certified dye-free charcoal and certified dye-free unbleached cotton.

Water samples for dye analysis are somewhat more delicate. The most important precaution is to preserve them from exposure to light, especially strong sunlight. Many fluorescent tracer dyes are subject to photo-decay, particularly eosine and fluorescein. Foil wraps or opaque coolers are best for collection and shipping purposes. EWC specifies collection in 13mm x 75mm screw top vials with clear polypropylene screw caps such as Fisher 14 962 26D. These vials can be used directly in the spectrofluorometer. They are labeled on the white labeling surface of the vial, never on the lower portion of the vial. Labeling is done with black permanent markers. Containers with black "Bakelite" screw caps should be avoided. These are sometimes manufactured with a mold-release compound containing fluorescent dye, usually one of the rhodamines. Water samples for dye analysis are sent by express or hand delivered

to the laboratory at ambient temperature in opaque crush proof containers. No packing materials with color are used. **EWC** supplies certified dye-free sample vials for water samples.

EWC suggests that field duplicates and trip blanks be submitted for analysis. At least one trip blank should be prepared for each batch of samples, and at least 20% field duplicates should be collected.

Receipt

Upon receipt, sample containers are checked for seals and their status is recorded. The number, type, and identity of the samples are checked against the chain of custody forms supplied by the field personnel.

Storage

Prior to analysis, samples are stored in a locked refrigerator or sample cabinet under the sole control of the analyst or other appropriate laboratory personnel who's signatures appear on the custody transfer record.

Records

The samples and sample groups or batches are assigned a laboratory number and a copy of the custody transfer record is added to the laboratory custody log. Paper documentation generated by the analytical instruments is added to the Laboratory custody log.

Instrumentation

A Shimadzu spectro-fluoro-photometer (spectrofluorometer) is used for dye analyses. This instrument is used in accordance with the manufacturer's instructions. Samples are equilibrated to ambient laboratory temperature, and analyzed at that temperature.

Cuvets

Disposable cuvets of glass or plastic are used for routine dye determinations. Each batch of cuvets is tested for the presence of dye by filling two randomly selected cuvets with eluent and analyzing spectrofluorometrically. EWC has never encountered a case of dye contamination in cuvets. When necessary, non disposable cuvets are used. These are cleaned by brushing in "Sparkleen®" solution, followed by a tap water rinse, a distilled water rinse for 10 minutes and a final distilled deionized water rinse.

Dye Identification

Dye identification is performed by synchronous excitation-emission scanning. An

excitation-emission interval of 18nm is used for rhodamine WT, sulphorhodamine B, eosine, and fluorescein. A scan range of 470nm to 600nm excitation is normally used.

Fluorescence wavelength standards are prepared from the most recently available samples of dye from the EWC suppliers. The wavelength of maximum emission for most dyes is sensitive to the chemical characteristics of the matrix in which it is dissolved. The standards for analysis of water samples are prepared in de-chlorinated activated carbon filtered laboratory tap water. This is a consistent bicarbonate water. Standards for analysis of eluent from charcoal receptor packets are prepared in the eluent appropriate for the dye. Wavelength standards are analyzed immediately before and after each batch of samples.

Dye Quantification

Quantitative dye analyses are affected by three principal sources of fluorescence: 1) the general level of fluorescence in the sample (background fluorescence) produced by fluorescence of the water itself and the many compounds it may contain, 2) the amount of the dye of interest which is unrelated to that which is purposely injected as part of the tracing program (dye background), and 3) the dye purposely injected. Simple measurements of fluorescence at the maximum emission wavelength for a dye are complicated by the variable level of background fluorescence (Fig. 4, A). Spectro-fluorometric scans of a sample show an emission peak when the dye is present (shaded area, Fig. 4, B). The amplitude of the peak can be separated from the background fluorescence by the three point method. This involves extending a line between two points on the emission curve on either side of the emission peak. The peak amplitude (the relative concentration) is measured parallel to the emission (y) axis from the line to the dye peak (Fig. 4, B). Computer assisted methods are used for this process.

Dye concentration standards are prepared from the most recently available samples of dye from the **EWC** suppliers. Appropriate concentrations are obtained by serial dilution in de-chlorinated activated carbon filtered bicarbonate water or in eluent as required. Standards are analyzed immediately before and after each batch of samples.

Rhodamine-WT concentration in the dye sample used for standard preparation is assumed to be 20%. AY-73 concentration in the dye sample used for standard preparation is assumed to be the percentage given by the dye manufacturer. Concentration of the dye is normally reported as pp(n) of dyestuff supplied by the manufacturer, not as pp(n) of fluorescent ingredient.

Sample Order

Standards and samples are customarily run in the following order:

1- Laboratory water samples,
2- Eluents, if used (Reagent blanks)
3- Standards,
4- Blanks,
5- Samples of presumed low concentration, and duplicates,
6- Samples of presumed high concentration, and duplicates.

All positive analyses of water samples near the practical detection limit are verified with additional analyses in clean cuvets.

Water Samples

A 3 ml sample of water is introduced into a clean cuvet and analyzed spectrofluorometrically. When the sample possesses noticeable turbidity the cuvet is centrifuged to remove the suspended solids to the bottom of the cuvet. When samples are collected in vials they are analyzed without being transferred to cuvets. The outside of the vial is carefully cleaned with a laboratory wipe.

Charcoal Dye Receptors

Activated charcoal dye receptor packets are treated in the following way:

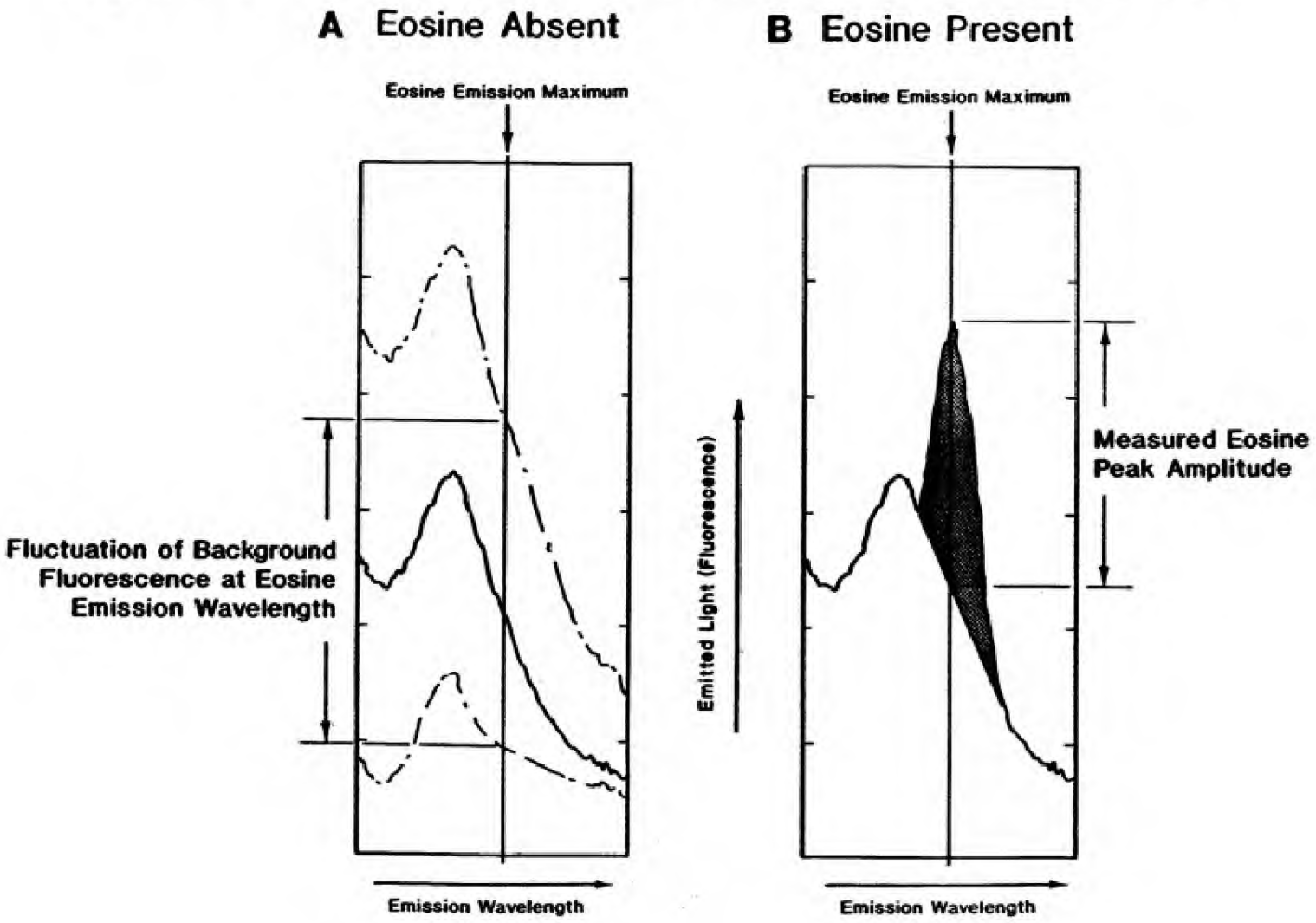
1- Vigorous rinse with de-chlorinated activated carbon filtered potable water,
2- Remove excess water by manual centrifugal extraction,
3- Dry the receptors in a temperature controlled, filtered forced air, dye-free drying cabinet,
4- Withdraw 3g of the activated charcoal into a disposable pre-labeled plastic container,
5- Elute the dye with 6 ml of Smart solution (Smart, 1972) or other appropriate eluent for 1 hour, covered,
6- Decant the eluent into a clean cuvet,
7- Analyze spectrofluorometrically.

The reserved charcoal is archived in labeled re-sealable "Zip Lock" bags for later analysis, if required.

The analysis of eluent from dye receptor packets is at best semi-quantitative relative to the amount of dye contained in the water passing over the receptor. The quantity of dye adsorbed by a receptor is a function of the temperature and velocity of the water passing over the receptor, the duration of contact with the water containing dye, the quantity and species of molecules competing with the dye for the charcoal

acceptor sites, the turbidity of the water, and the dye concentration in the water. The amount of dye recovered from the charcoal is a function of the amount of charcoal that is eluted, the amount of eluent that is used, and the duration of the elution process. Only the laboratory procedures can be standardized. The dye concentration in eluent is normally reported in the following manner with the abbreviations listed:

Figure 4 - Detection and Quantification of Eosine



ABBREVIATIONS

Dye

-	Negative
?	Peak wavelength or peak shape questionable
+	Positive
++	Very Positive
+++	Very Very Positive
++++	Spectacularly Positive
+++++	Spectacularly Positive Requiring Dilution
WS	Water Sample
NR	Sample **N**ot **R**ecovered

Laboratory Reagent Blanks (Eluent Blanks)

Eluent used during the preparation of charcoal packets is analyzed spectrofluorometrically prior to its use on the charcoal packets. One reagent blank determination is made for each batch of charcoal samples analyzed. Additional blank determinations are made whenever different batches or formulations of eluent are employed.

A sample from each batch of activated charcoal is analyzed before its initial use in the manner proscribed for charcoal receptors. The charcoal is also batch tested to insure that it possesses appropriate dye sorption characteristics.

Method Blanks

For water samples, dye-free water is used as a method blank and analyzed as for water samples. For Charcoal samples, pre-labeled plastic containers are filled with 3g of washed charcoal and 6ml of eluent and analyzed as for charcoal samples. One method blank is prepared for each sample batch.

Laboratory Duplicates

One identical sized split of charcoal is eluted and analyzed for each 20 samples analyzed. A duplicate water sample is analyzed for each 20 samples analyzed. When water samples are supplied in vials, one in 20 is removed from the spectrofluorometer shaken and re-analyzed. EWC suggests one field duplicate with each batch of 20 vial samples.

Certified Dye-Free Charcoal and Certified Dye-Free Cotton

EWC supplies charcoal and cotton dye receptors with activated charcoal and

cotton that is batch tested for dye content and for its sorption capacity.

Most activated charcoal contains small quantities of substances which exhibit a weak fluorescence near the emission maximum of fluorescein and rhodamine-WT. These substances are removed from the charcoal when it is subjected to flowing water for a few hours. Eluent from charcoal dye receptors placed in still water for periods of as much as a week may exhibit these false fluorescein and false rhodamine peaks. EWC can supply pre-washed charcoal receptors for use in wells or other locations where groundwater flow is minimal.

Criteria for Determination of Positive Dye Recovery

Positive dye recovery is normally based upon the following five factors.

1- A spectro-fluorometric emission scan must show a peak at the appropriate wavelength for the dye and the sample matrix. The matrix pH is the principal determinant of that wavelength. A deviation of ± 2 nm. from the ideal wavelength is normally considered acceptable.

2- The spectro-fluorometric emission scan must reveal a peak with the appropriate shape, one similar to that observed in the scans of the standards.

3- The dye must be present only in the samples taken after injection, or the peak amplitude of post injection dye fluorescence must exceed the dye background peak amplitude fluorescence by an appropriate factor. A value of 4x is acceptable. A value of 10x is often employed.

4- The dye should appear in a series of samples, not in a single sample. The peak amplitude of the dye fluorescence in successive samples from a sampling location should quickly reach a maximum value and decay gradually in successive samples.

5- Should one of the foregoing criteria be subject to serious question, the trace must be shown to be repeatable.

Detection Limits

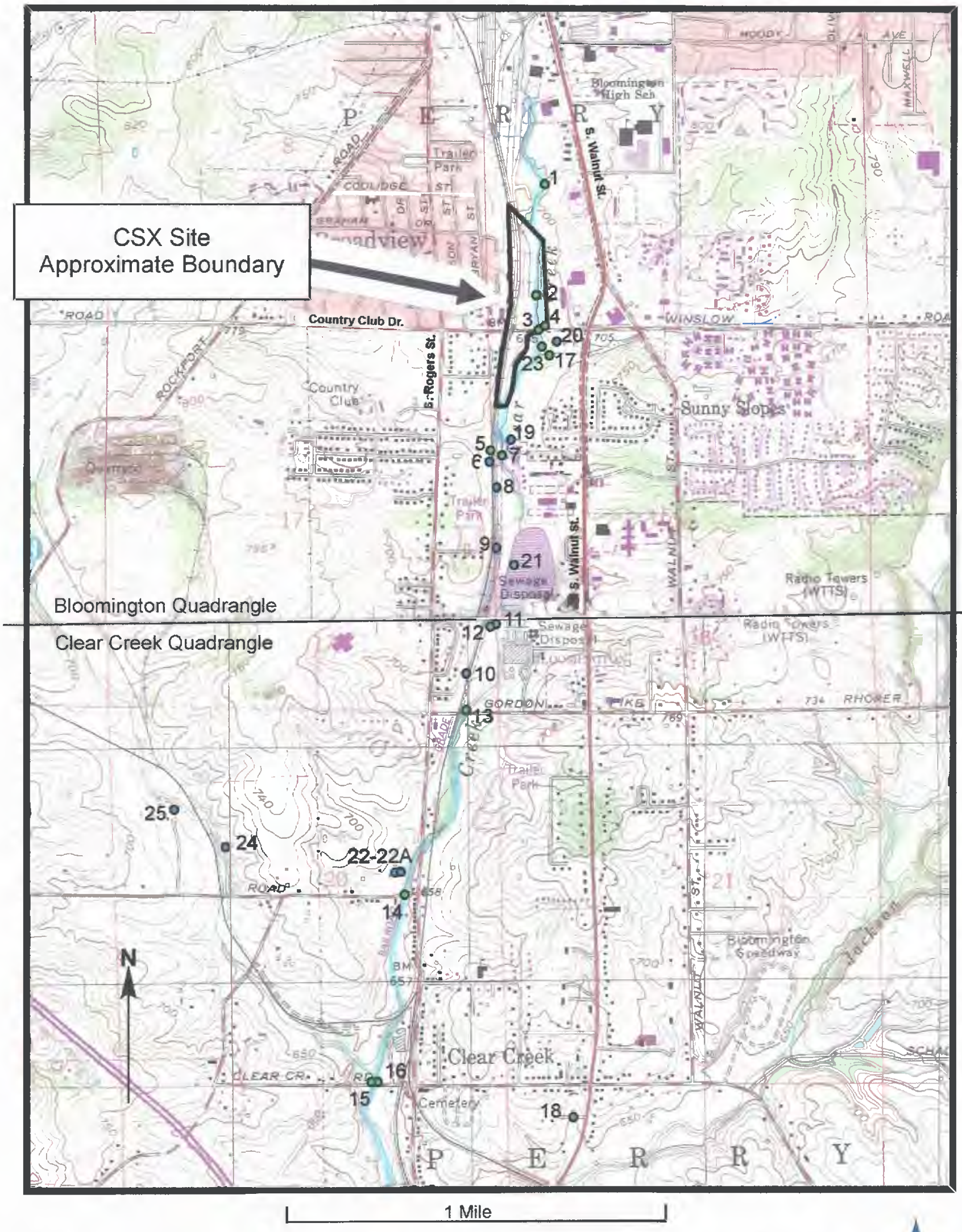
Detection limits for fluorescent dyes are strongly matrix dependant. Most groundwater samples contain a host of compounds which impart background fluorescence to the sample. There is often considerable seasonal variability in this background. In laboratory preparations a part per trillion of fluorescein and eosine can be routinely detected, while a 10 parts per trillion of rhodamine-WT can be observed. In complex groundwater during the fall, the practical limit may be 0.1 ppb for fluorescein.

	Sample Round ->	Background	Injection	1	2	3	4	5	6
	Sample Date ->	4/26/2010	5/10/2010	5/25/2010	6/2/2010	6/12/2010	6/25/2011	7/8/2010	7/23/2010
	Days Post Injection ->		0	14	22	32	45	58	73
ID	Name		Inj. 5/11						
Sump	Trench Sump	-	-	-	-	+++	++++	++++	+++
1	CC Upstream	-	-	-	-	-	+++	+++	+++
2	CC Above liner	-	-	-	-	-	+++	+++	+++
3	CC @ Country Club Dr	-	-	-	-	-	+++	+++	+++
4	Beaver Pond Dish.	-	-	-	-	-	-	-	-
5	UT @ Watercress Spring	-	-	-	-	-	-	-	-
6	Watercress Spring	-	-	++++	+++	+++	+++	+++	+++
7	CC above Watercress Sp	-	-	-	-	-	-	-	-
8	Single Culvert Spring	-	-	-	-	-	-	-	-
9	G's" Double Culvert Spring	-	-	-	-	-	-	-	-
10	Bedding PlaneTube Spring	-	-	-	-	-	-	-	-
11	CC above Tube Spring	-	-	++++	+++	+++	+++	+++	+++
12	UT @ Tube Spring	-	-	-	-	-	-	-	-
13	CC @ Gordon Pike	-	-	++++	+++	+++	+++	+++	+++
14	CC @ That Rd	-	-	++++	+++	NR	+++	+++	+++
15	UT @ Clear Creek Rd	-	-	-	-	-	-	-	-
16	CC @ Clear Creek Rd	-	-	++++	+++	+++	+++	+++	+++
17	CVS Culvert	-	-	-	-	-	-	-	-
18	Gasoline Spring	-	-	-	-	-	-	-	-
19	Pinewoods Spring	-	-	-	-	-	-	-	-
20	CVS Spring	-	-	-	-	-	-	-	-
21	Box Culvert	-	-	-	-	-	-	-	-
22	Ellington Spring	-	-	-	-	-	-	-	-
22	Ellington Spring A	-	-	-	-	-	-	-	-
23	CC @ MW-21D	-	-	-	-	-	NR	+++	+++
31	MW-5 Spring Upstream	NS	NS	NS	++++	++++	++++	+++	+++
32	MW-5 Spring Downstream	NS	NS	NS	++++DD	++++	++++	++++	++++
33	MW-5 East Spring Upstream	NS	NS	NS	++++	++++	++++	++++	++++
34	MW-5 east Spring Downstream	NS	NS	NS	++++DD	++++	++++	++++	++++
35	MW-34 Spring Upstream	NS	NS	NS	++++	++++	++++	++++	++++
36	MW-34 Spring Downstream	NS	NS	NS	++++DD	++++	++++	++++	++++
37	MW-34 New Spring D-S	NS	NS	NS	NS	NS	++++	++++	++++
MW-4D		+	+	+	+	+	+	+	+
MW-5D		-	-	-	-	-	++++	++++	++++
MW-12DU	Upper Receptor	-	-	-	-	-	-	-	-
MW-12DL	Lower Receptor	-	-	-	-	-	-	-	-
MW-14D		-	-	-	-	-	-		-
MW-17D		-	-	-	-	-	-	-	-
MW-18D		-	-	-	-	-	-	-	-
MW-19D		-	-	-	-	-	-	-	-
MW-20DU	Upper Receptor	-	-	-	-	-	-	+++	+?
MW-20DL	Lower Receptor	-	-	-	-	-	-	-	-
MW-21DU	Upper Receptor	-	-	-	-	-	-	-	-
MW-21DL	Lower Receptor	-	-	-	-	-	-	-	-
MW-22D		-	-	-	-	-	-	-	-
MW-23D		-	-	-	-	-	-	-	-
MW-13		-	-	-	-	-	-	-	-
MW-17S		-	-	-	-	-	-	-	-
MW-20S		-	-	-	++	+++	++++	+++?	NS
MW-24A	New Well Group 1	-	-	-	-	-	-	-	-
MW-25A		-	-	-	-	-	-	-	-
MW-27A		-	-	-	-	-	-	-	-
MW-27AU		-	-	-	-	-	-	-	-
MW-28 A	New Well Group 2	-	-	-	-	-	-	-	-
MW-28 B		-	-	-	-	-	-	-	-
MW-28 C		-	-	-	-	-	-	-	-
MW-29 A		-	-	-	-	-	-	-	-
MW-29 B		-	-	-	-	-	-	-	-
MW-32A		-	-	-	-	-	-	-	-
MW-34A		++++	++++	++++	++++	++++	++++	++++	++++
MW-35A		-	-	++++DD	++++DD	++++DD	++++DD	++++DD	++++DD
MW-36A		-	-	-	-	-	-	-	-
MW-36B		-	-	-	-	-	-	-	-
MW-37A		-	-	-	-	-	-	-	-
MW-40C		-	-	-	-	-	-	-	-

	KEY
-	Negative
+?	Wavlength out of range
+	Trace
++	Positive
+++	Very Positive
++++	Spectacularly Positive
++++DD	Requires Dilution
NS	Not Sampled
NR	Not Recoverd - Missing

Table 4 - Dye Recoveries Fluorescein
Former CSX Site, Bloomington, Indiana
EWC Ewers Water Consultants Inc.
160 Redwood Drive, Richmond, KY 40475
ewc@mis.net
3/21/2011

Spring And Stream Monitoring Locations, CSX Bloomington Site



1 Mile

Map 1

- Spring Location
- Stream Monitoring Location

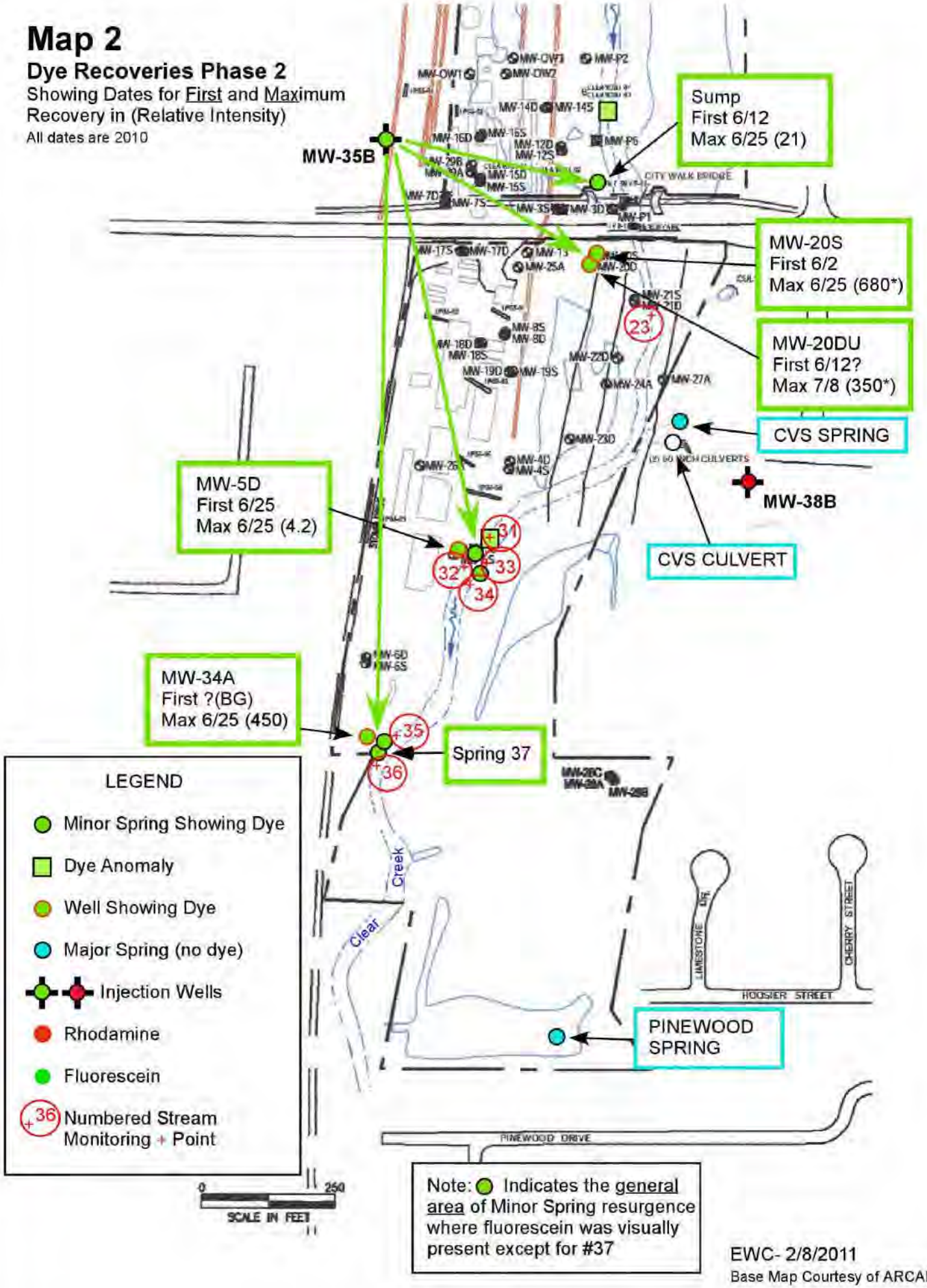
***EWC* Ewers Water Consultants Inc.**
160 Redwood Drive, Richmond, KY 40475
859-623-8464 ewc@mis.net 3/30/09

Map 2

Dye Recoveries Phase 2

Showing Dates for First and Maximum Recovery in (Relative Intensity)

All dates are 2010

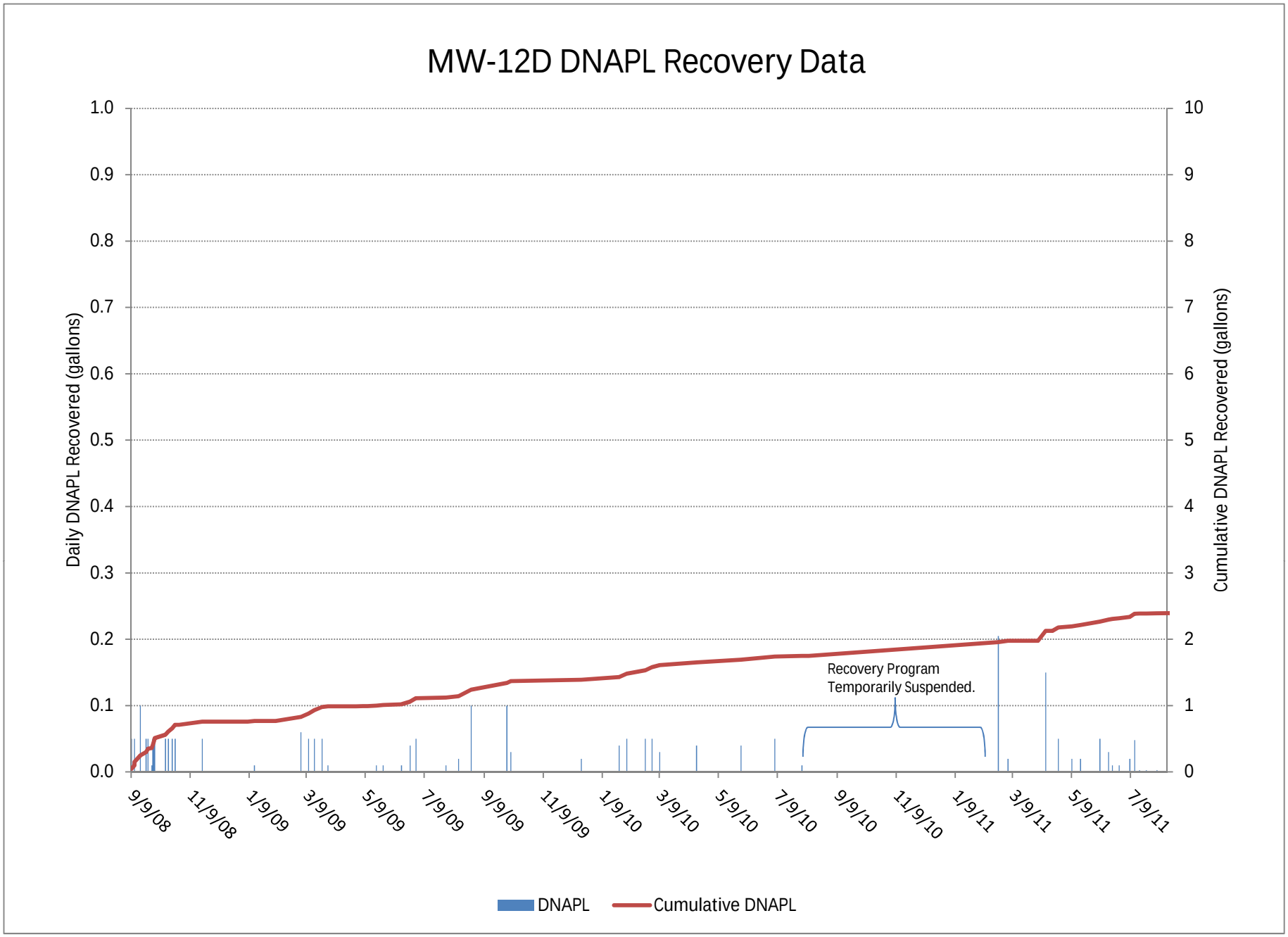


Note: ● Indicates the general area of Minor Spring resurgence where fluorescein was visually present except for #37

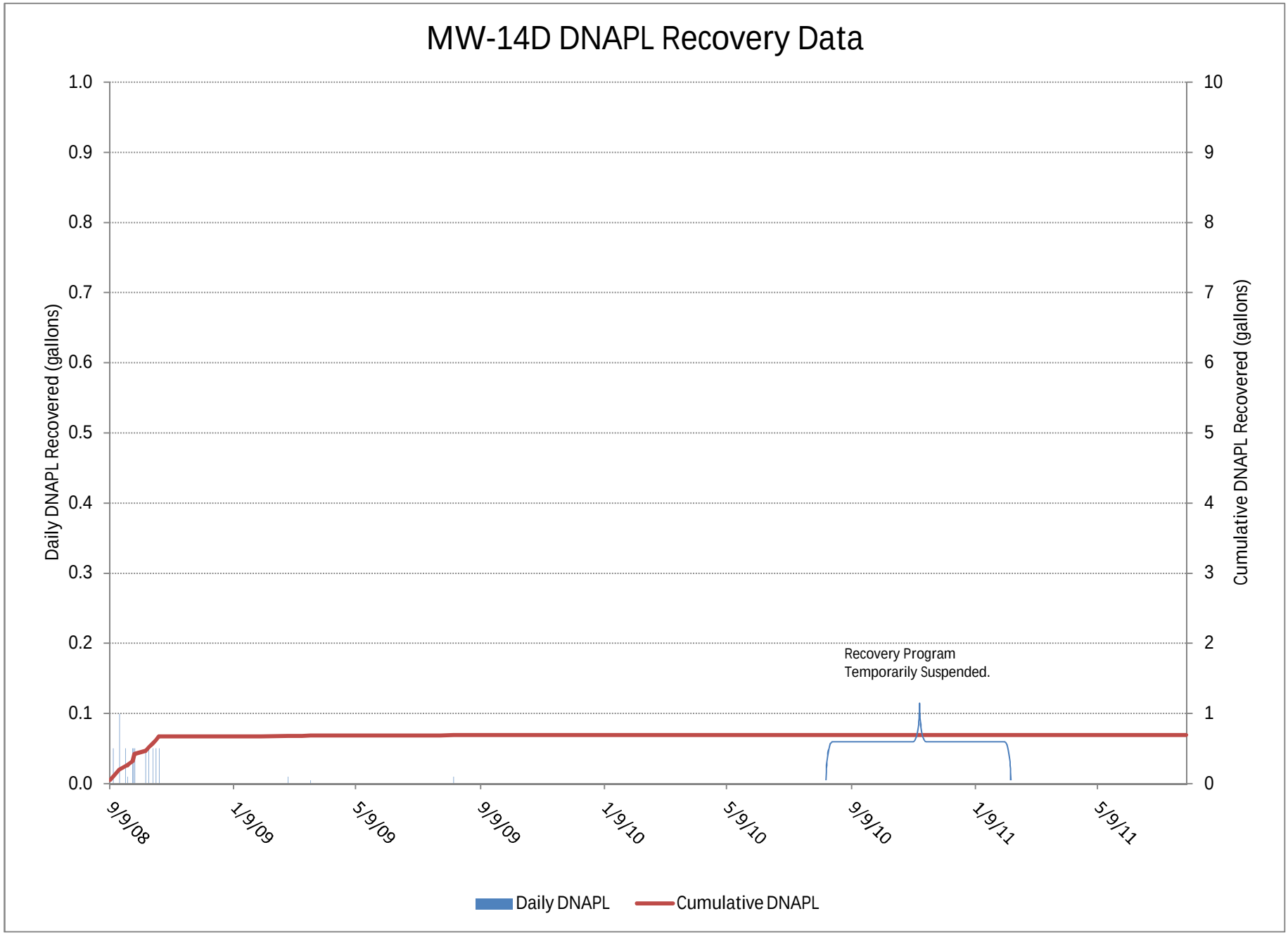
EWC- 2/8/2011

Base Map Courtesy of ARCADIS

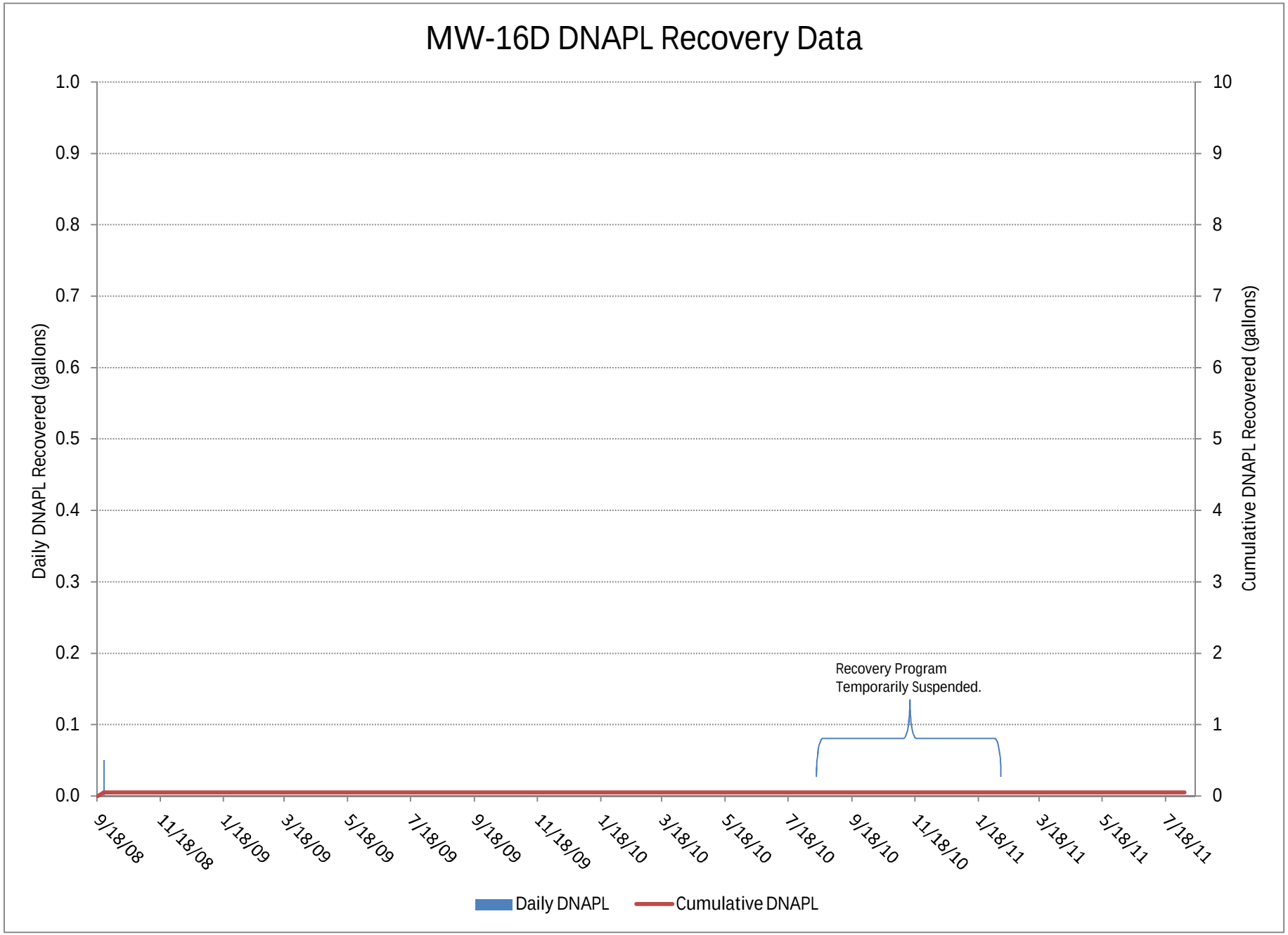
ARCADIS


MW-12D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
Recovery Program
Temporarily Suspended.
9/9/08
11/9/08
1/9/09
3/9/09
5/9/09
7/9/09
9/9/09
11/9/09
1/9/10
3/9/10
5/9/10
7/9/10
9/9/10
11/9/10
1/9/11
3/9/11
5/9/11
7/9/11
DNAPL
Cumulative DNAPL

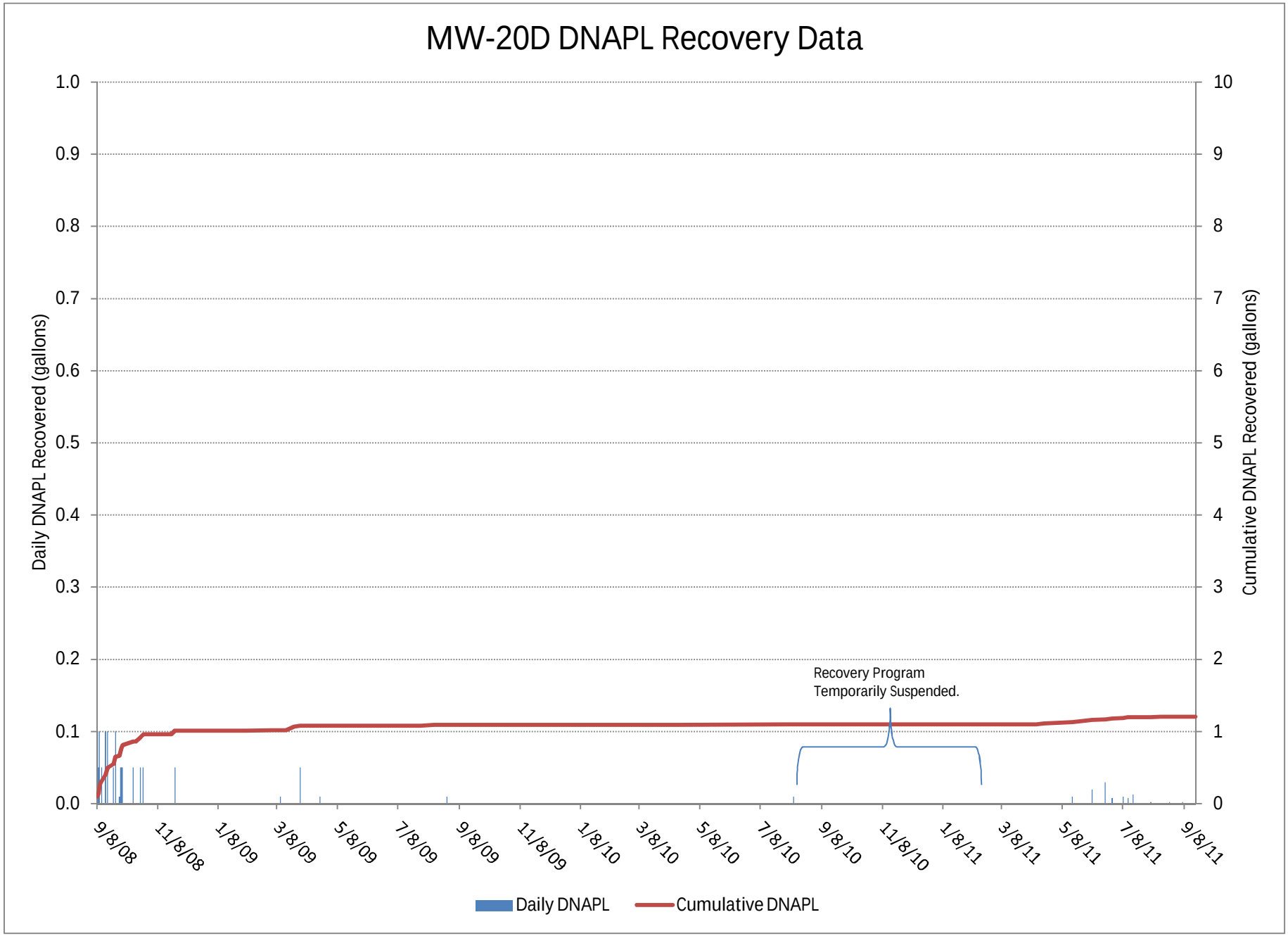
ARCADIS


MW-14D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
Recovery Program
Temporarily Suspended.
9/9/08
1/9/09
5/9/09
9/9/09
1/9/10
5/9/10
9/9/10
1/9/11
5/9/11
Daily DNAPL
Cumulative DNAPL

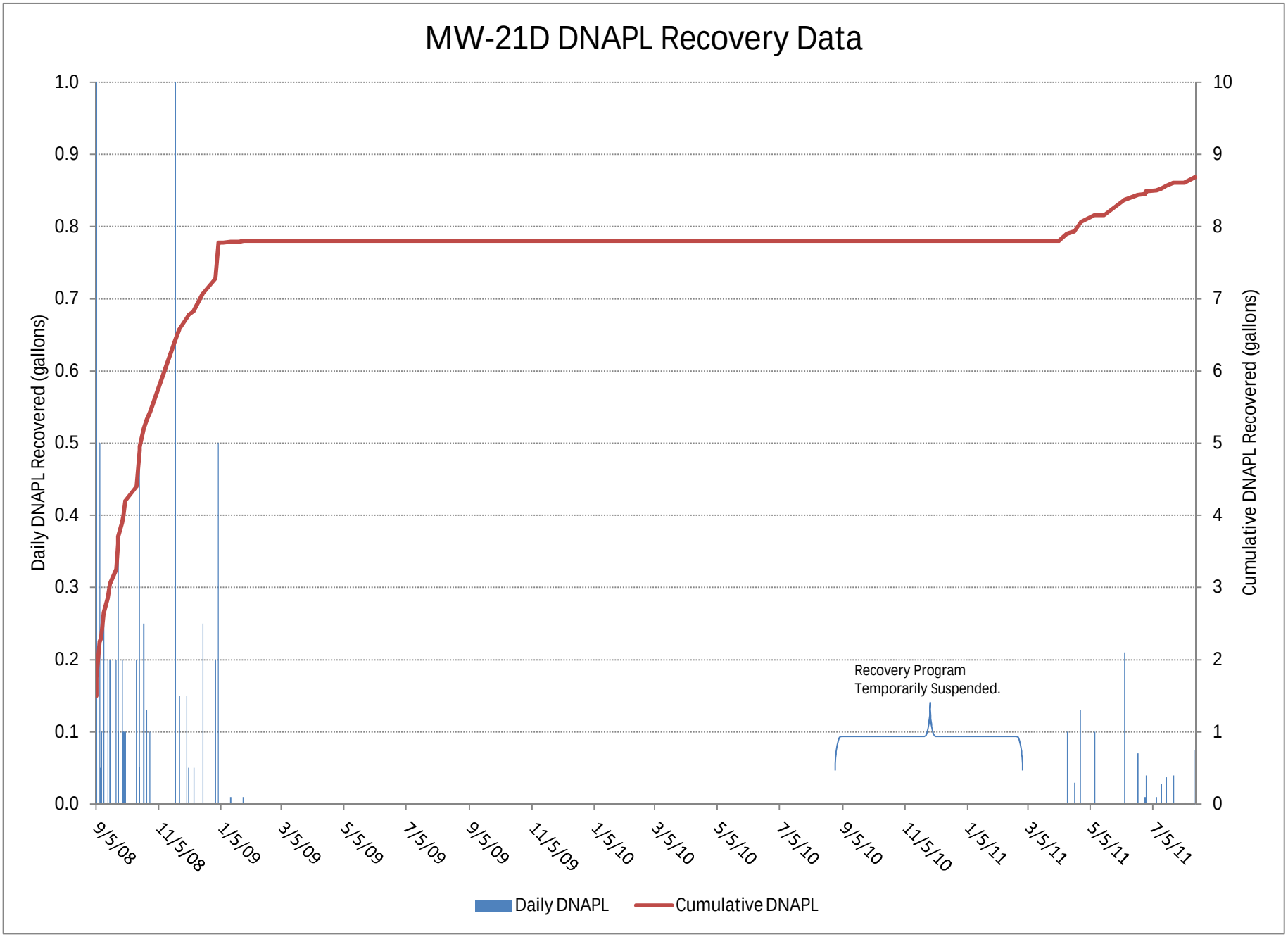
ARCADIS


MW-16D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
Recovery Program
Temporarily Suspended.
9/18/08
11/18/08
1/18/09
3/18/09
5/18/09
7/18/09
9/18/09
11/18/09
1/18/10
3/18/10
5/18/10
7/18/10
9/18/10
11/18/10
1/18/11
3/18/11
5/18/11
7/18/11
Daily DNAPL
Cumulative DNAPL

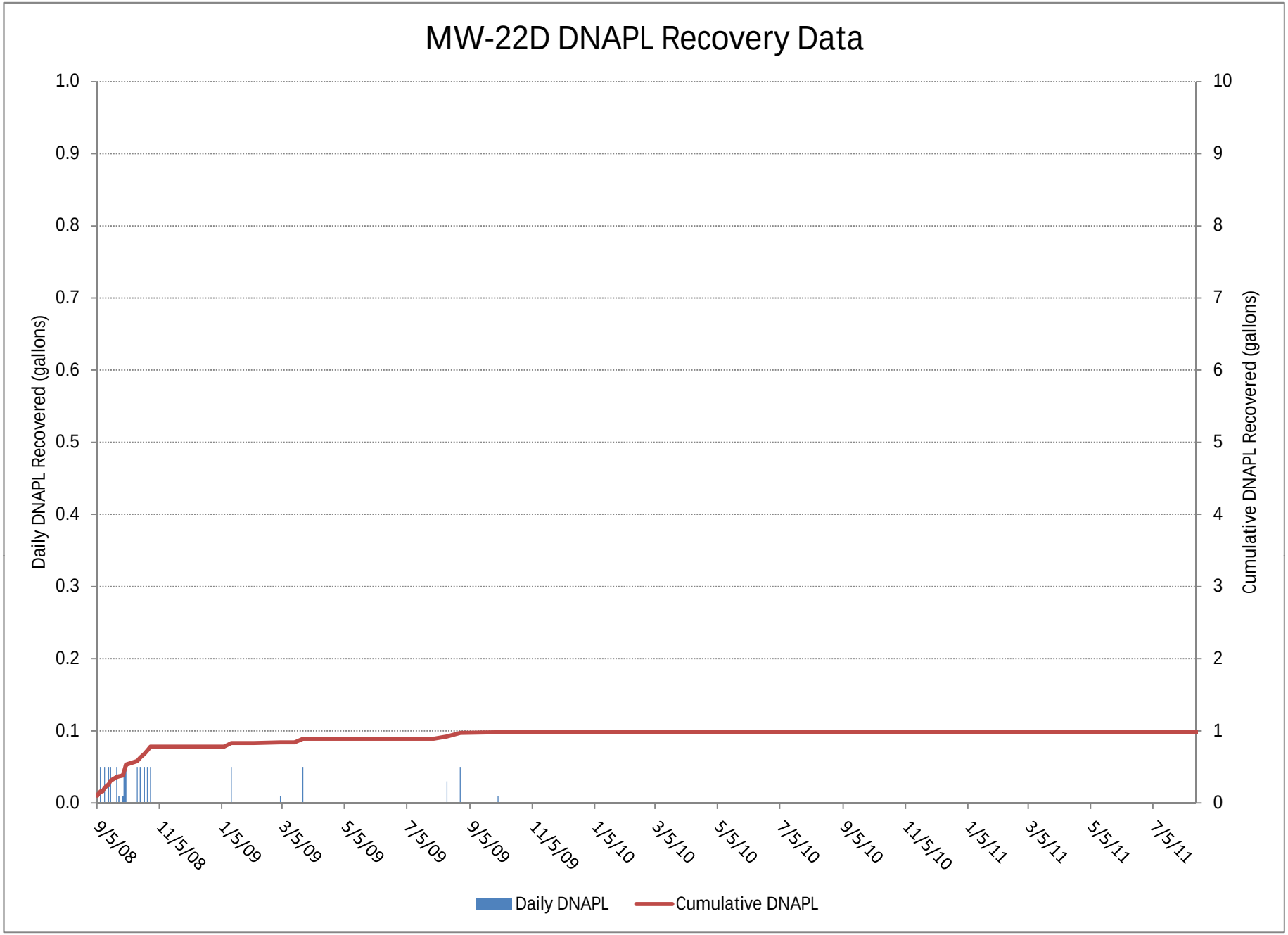
ARCADIS


MW-20D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
Recovery Program
Temporarily Suspended.
9/8/08
11/8/08
1/8/09
3/8/09
5/8/09
7/8/09
9/8/09
11/8/09
1/8/10
3/8/10
5/8/10
7/8/10
9/8/10
11/8/10
1/8/11
3/8/11
5/8/11
7/8/11
9/8/11
Daily DNAPL
Cumulative DNAPL

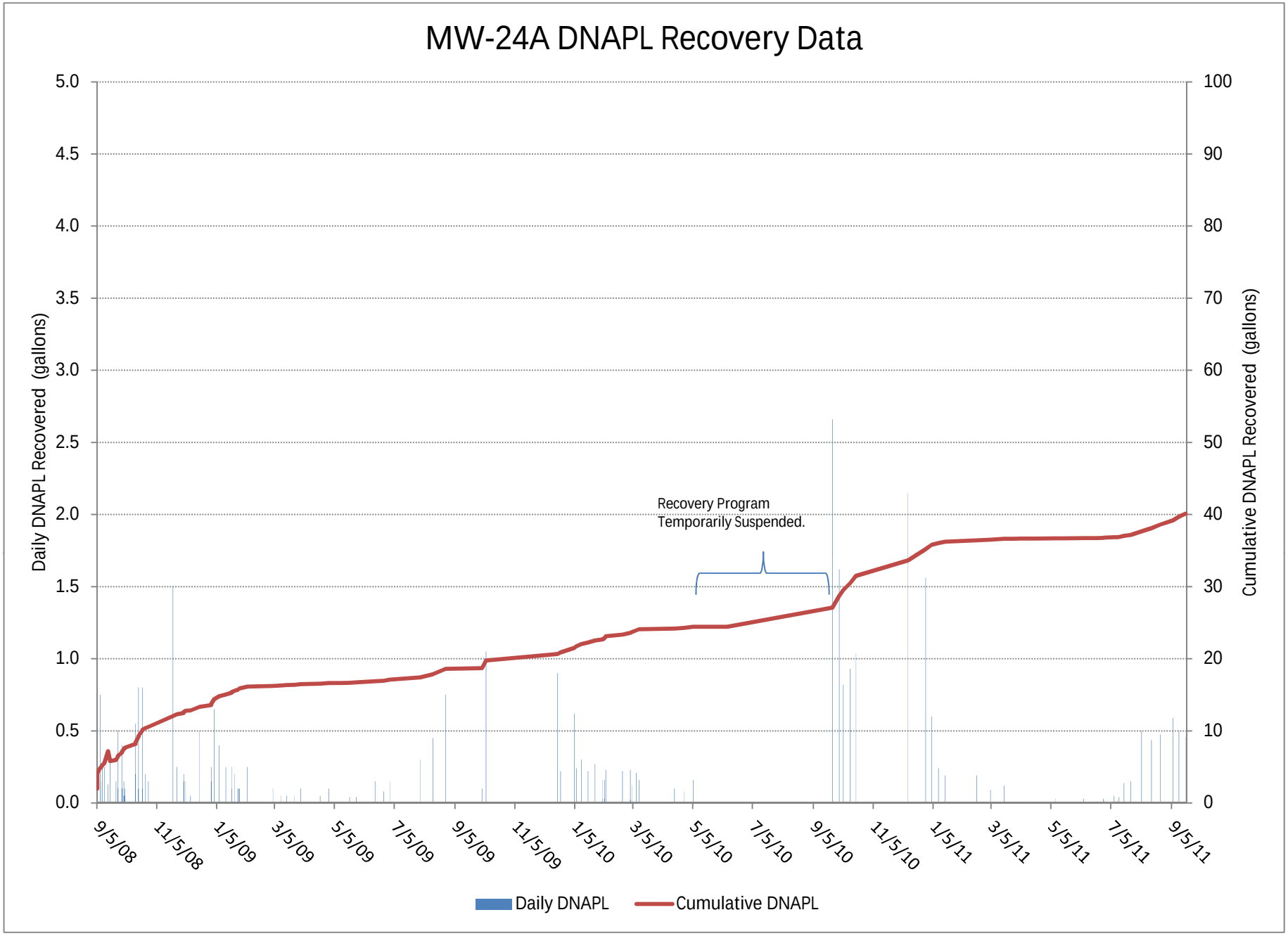
ARCADIS

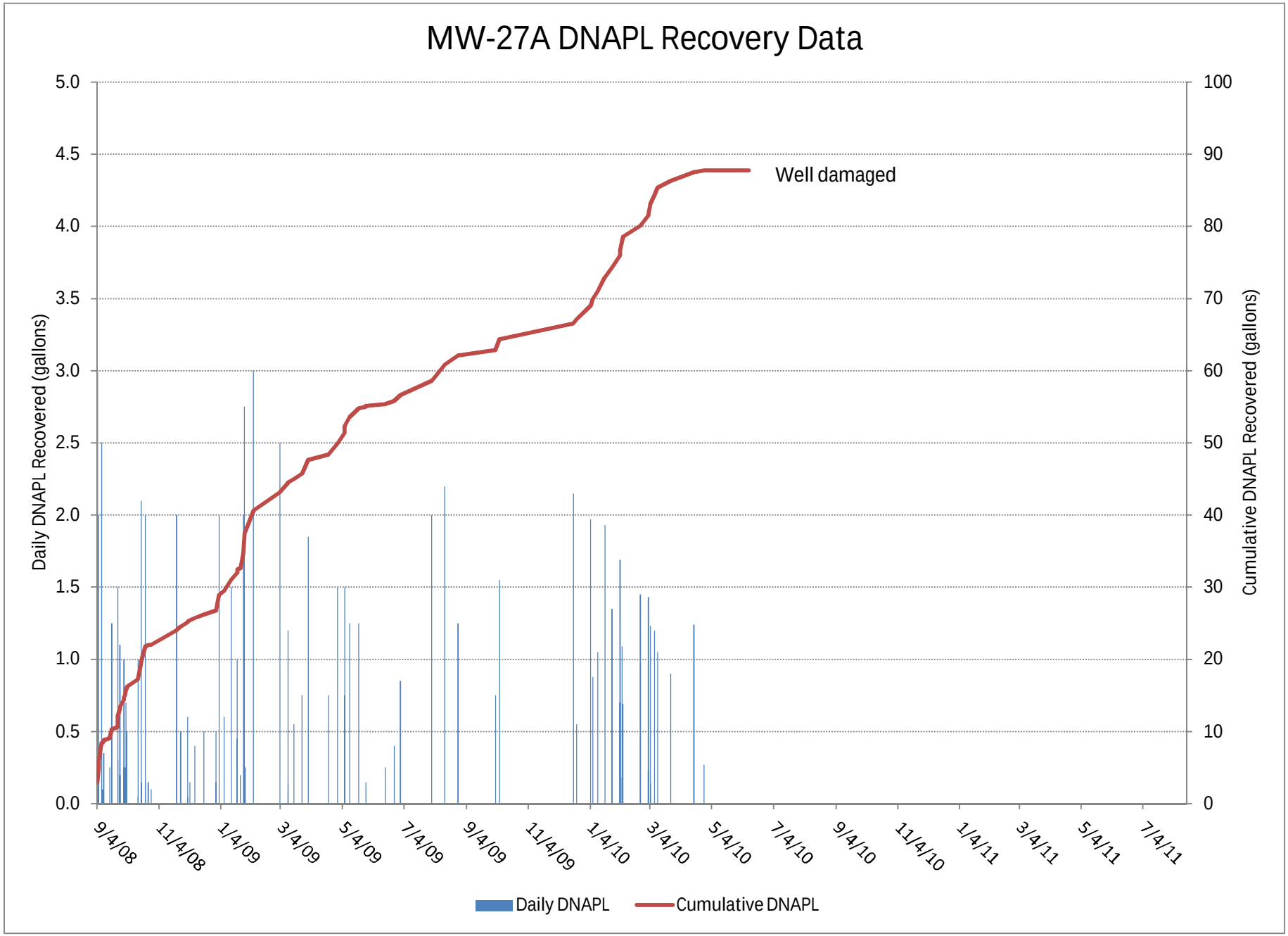

MW-21D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
9/5/08
11/5/08
1/5/09
3/5/09
5/5/09
7/5/09
9/5/09
11/5/09
1/5/10
3/5/10
5/5/10
7/5/10
9/5/10
11/5/10
1/5/11
3/5/11
5/5/11
7/5/11
Recovery Program
Temporarily Suspended.
Daily DNAPL
Cumulative DNAPL

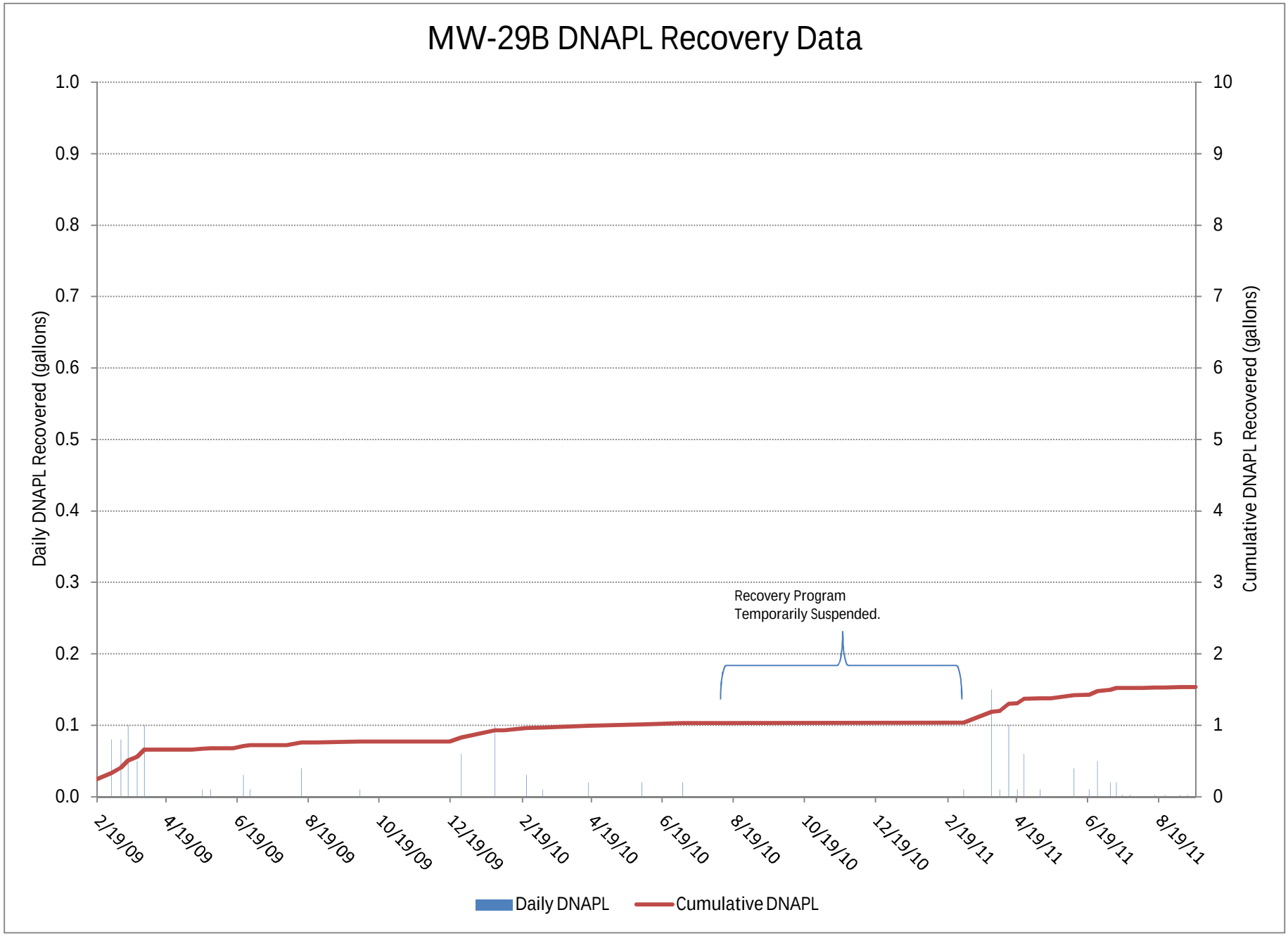
ARCADIS

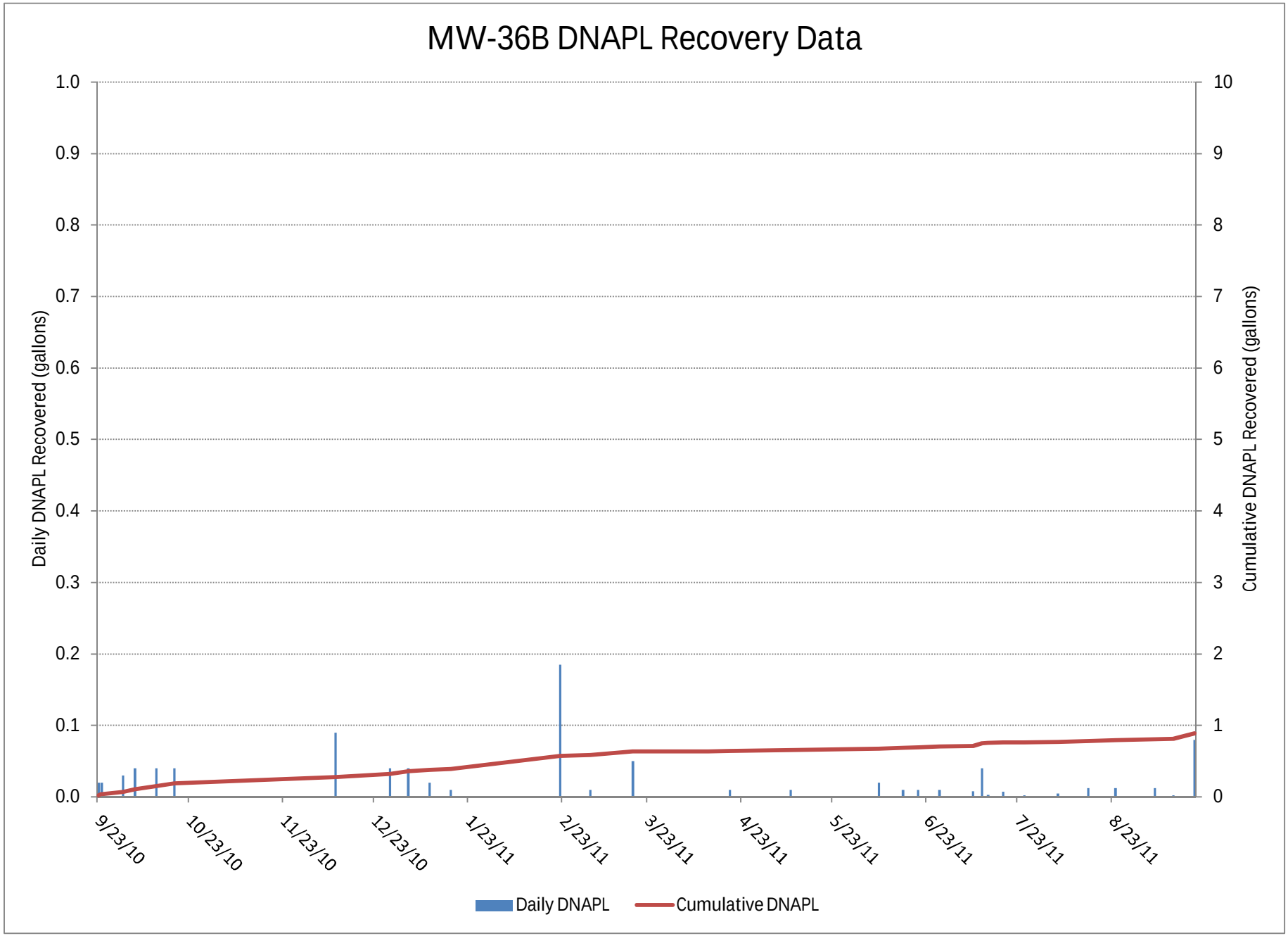

MW-22D DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
9/5/08
11/5/08
1/5/09
3/5/09
5/5/09
7/5/09
9/5/09
11/5/09
1/5/10
3/5/10
5/5/10
7/5/10
9/5/10
11/5/10
1/5/11
3/5/11
5/5/11
7/5/11
Daily DNAPL
Cumulative DNAPL

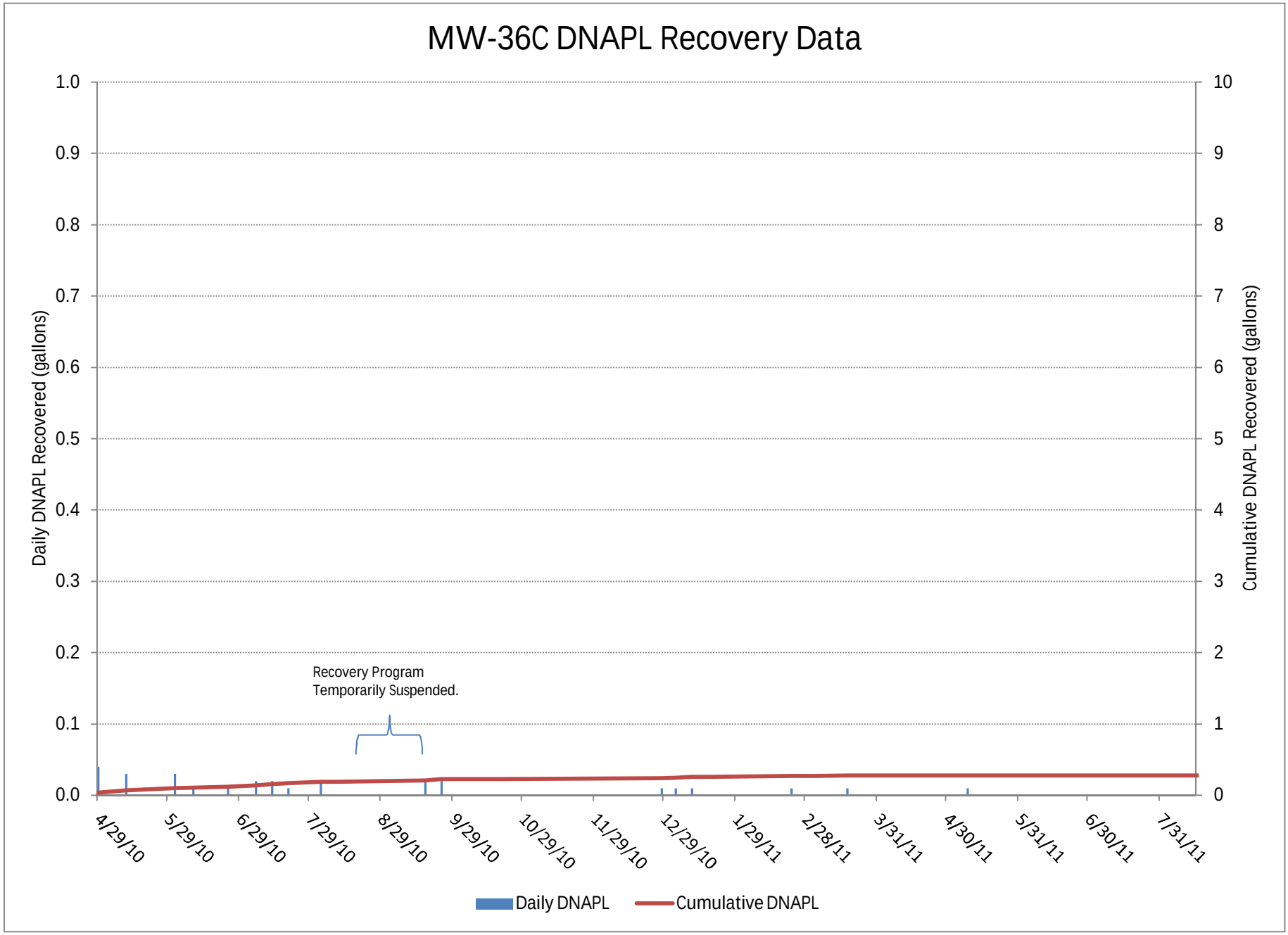
ARCADIS


MW-24A DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
100
90
80
70
60
50
40
30
20
10
0
Recovery Program
Temporarily Suspended.
9/5/08
11/5/08
1/5/09
3/5/09
5/5/09
7/5/09
9/5/09
11/5/09
1/5/10
3/5/10
5/5/10
7/5/10
9/5/10
11/5/10
1/5/11
3/5/11
5/5/11
7/5/11
9/5/11
Daily DNAPL
Cumulative DNAPL

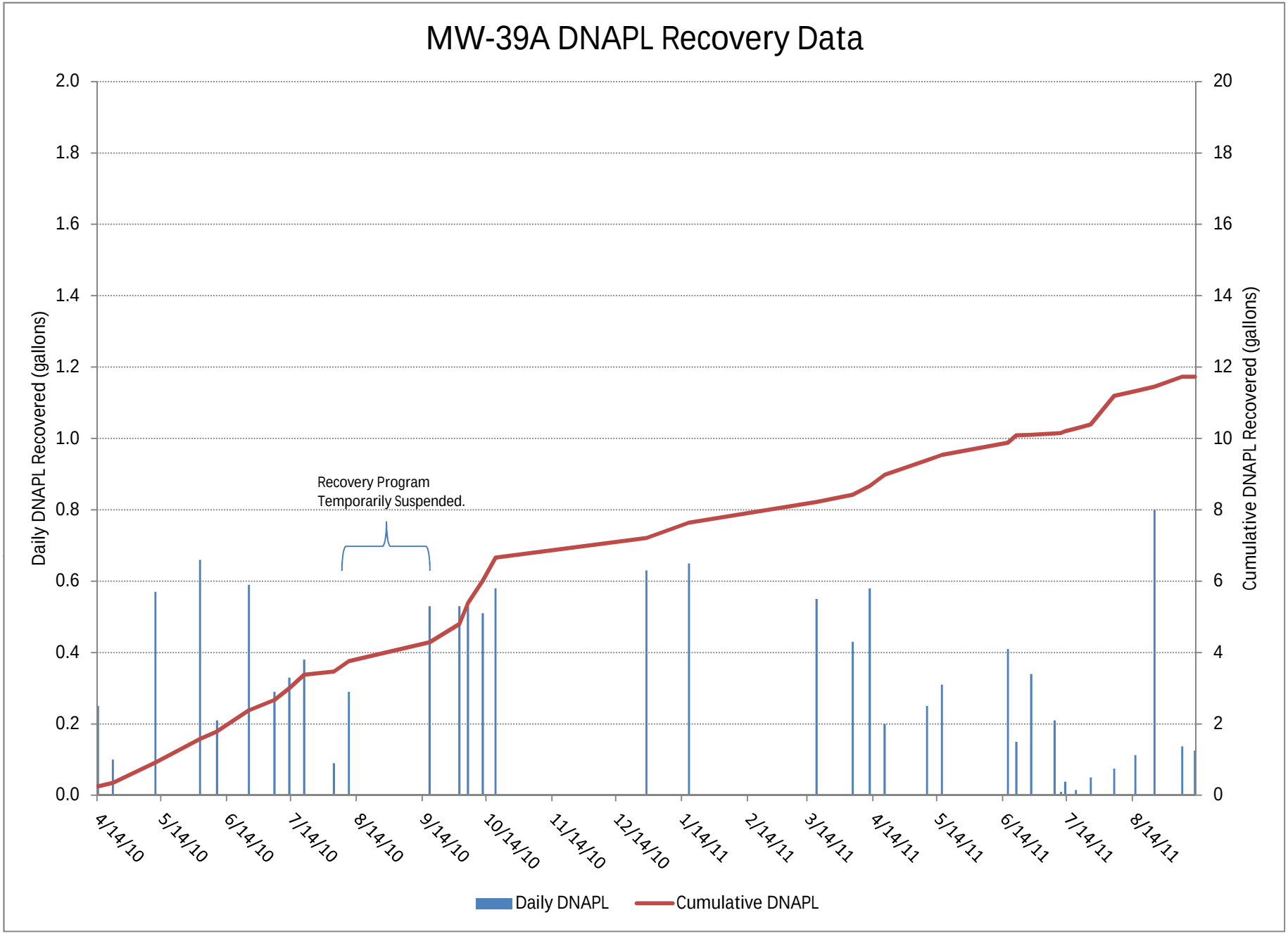

MW-27A DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
100
90
80
70
60
50
40
30
20
10
0
Well damaged
9/4/08
11/4/08
1/4/09
3/4/09
5/4/09
7/4/09
9/4/09
11/4/09
1/4/10
3/4/10
5/4/10
7/4/10
9/4/10
11/4/10
1/4/11
3/4/11
5/4/11
7/4/11
Daily DNAPL
Cumulative DNAPL

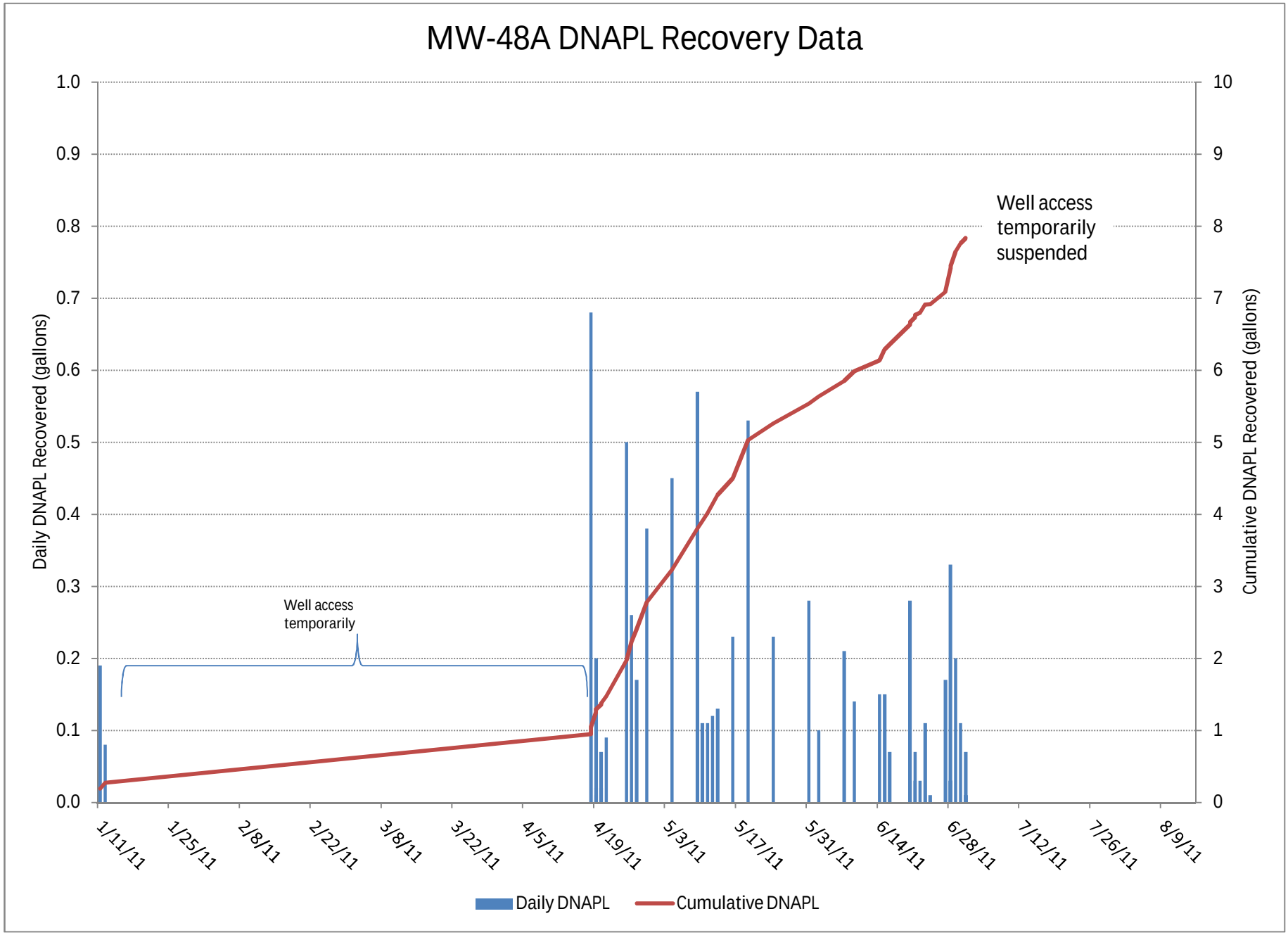

MW-29B DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
Recovery Program
Temporarily Suspended.
2/19/09
4/19/09
6/19/09
8/19/09
10/19/09
12/19/09
2/19/10
4/19/10
6/19/10
8/19/10
10/19/10
12/19/10
2/19/11
4/19/11
6/19/11
8/19/11
Daily DNAPL
Cumulative DNAPL


MW-36B DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
9/23/10
10/23/10
11/23/10
12/23/10
1/23/11
2/23/11
3/23/11
4/23/11
5/23/11
6/23/11
7/23/11
8/23/11
Daily DNAPL
Cumulative DNAPL

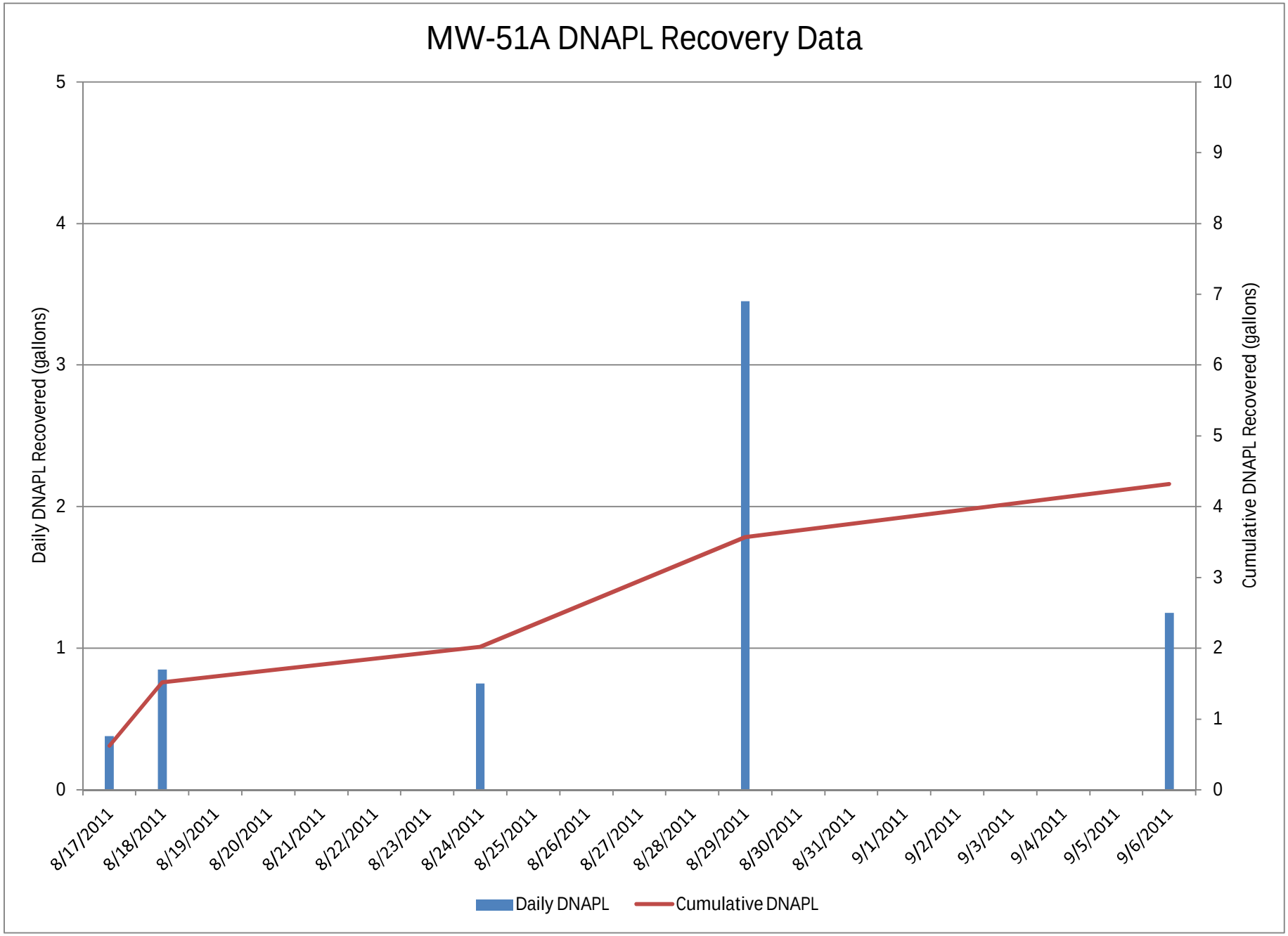

MW-36C DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
Recovery Program
Temporarily Suspended.
4/29/10
5/29/10
6/29/10
7/29/10
8/29/10
9/29/10
10/29/10
11/29/10
12/29/10
1/29/11
2/28/11
3/31/11
4/30/11
5/31/11
6/30/11
7/31/11
Daily DNAPL
Cumulative DNAPL

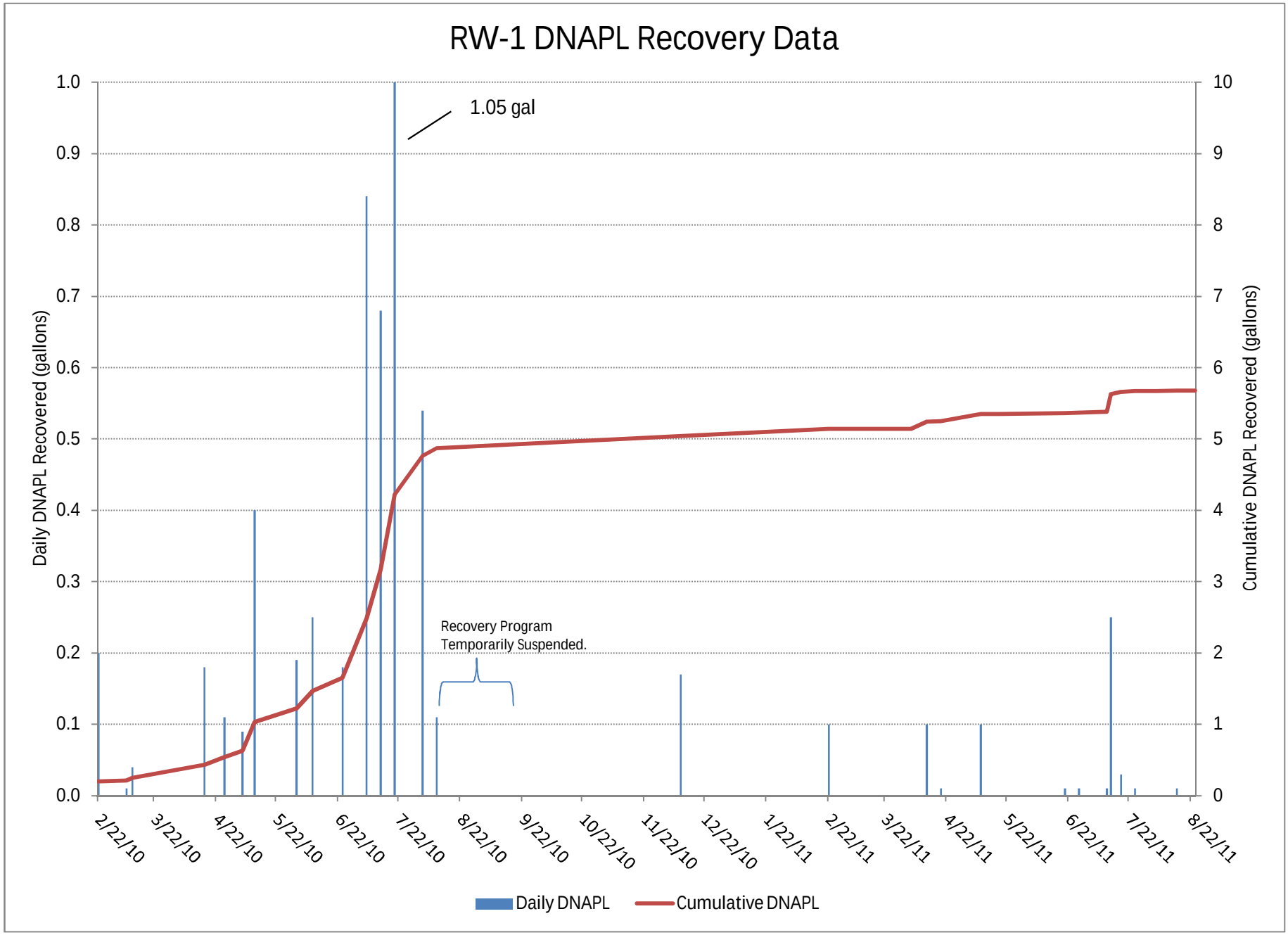
ARCADIS

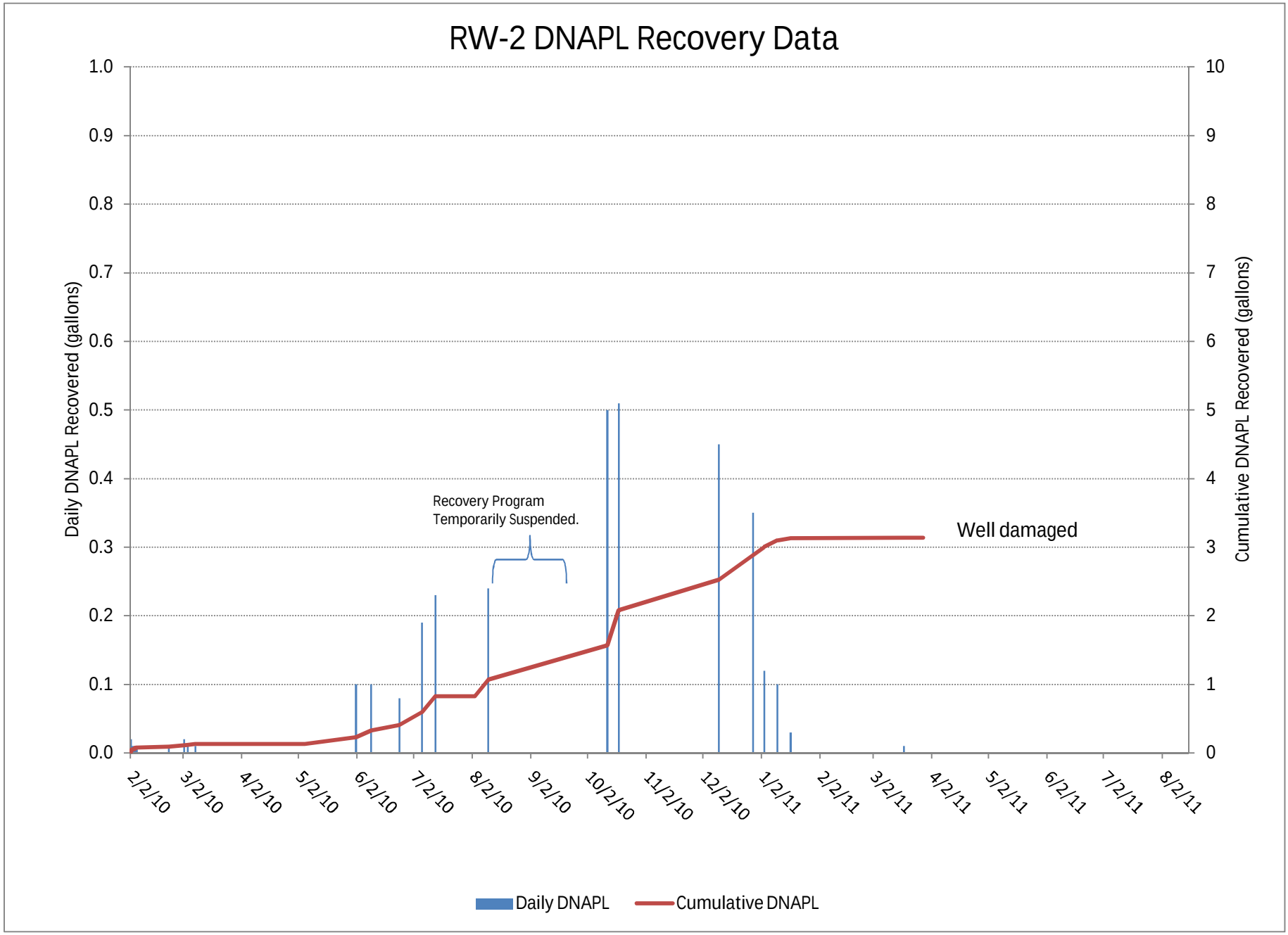

MW-39A DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
20
18
16
14
12
10
8
6
4
2
0
Recovery Program
Temporarily Suspended.
4/14/10
5/14/10
6/14/10
7/14/10
8/14/10
9/14/10
10/14/10
11/14/10
12/14/10
1/14/11
2/14/11
3/14/11
4/14/11
5/14/11
6/14/11
7/14/11
8/14/11
Daily DNAPL
Cumulative DNAPL

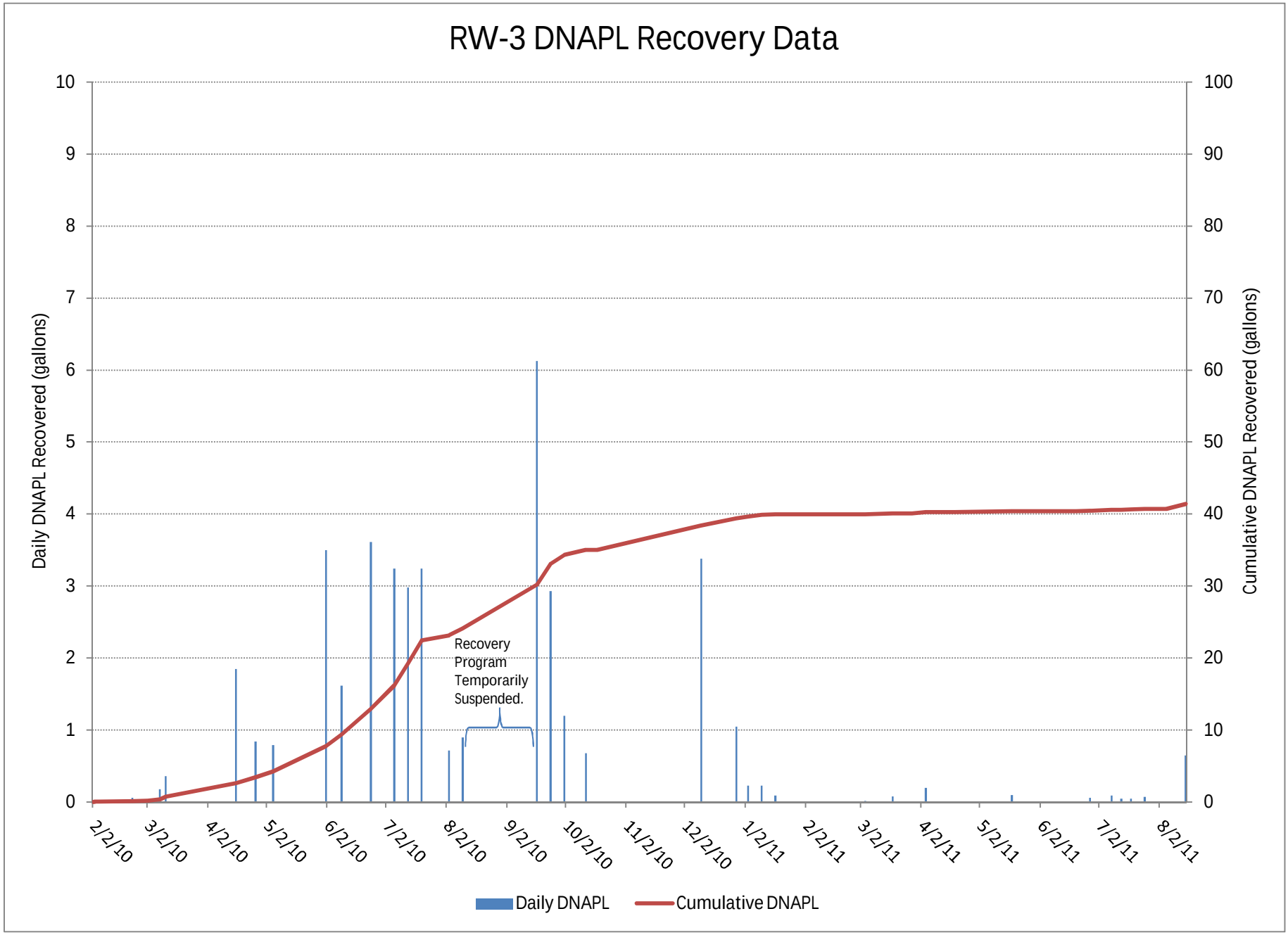

MW-48A DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
Well access temporarily suspended
Well access temporarily
1/11/11
1/25/11
2/8/11
2/22/11
3/8/11
3/22/11
4/5/11
4/19/11
5/3/11
5/17/11
5/31/11
6/14/11
6/28/11
7/12/11
7/26/11
8/9/11
Daily DNAPL
Cumulative DNAPL

ARCADIS

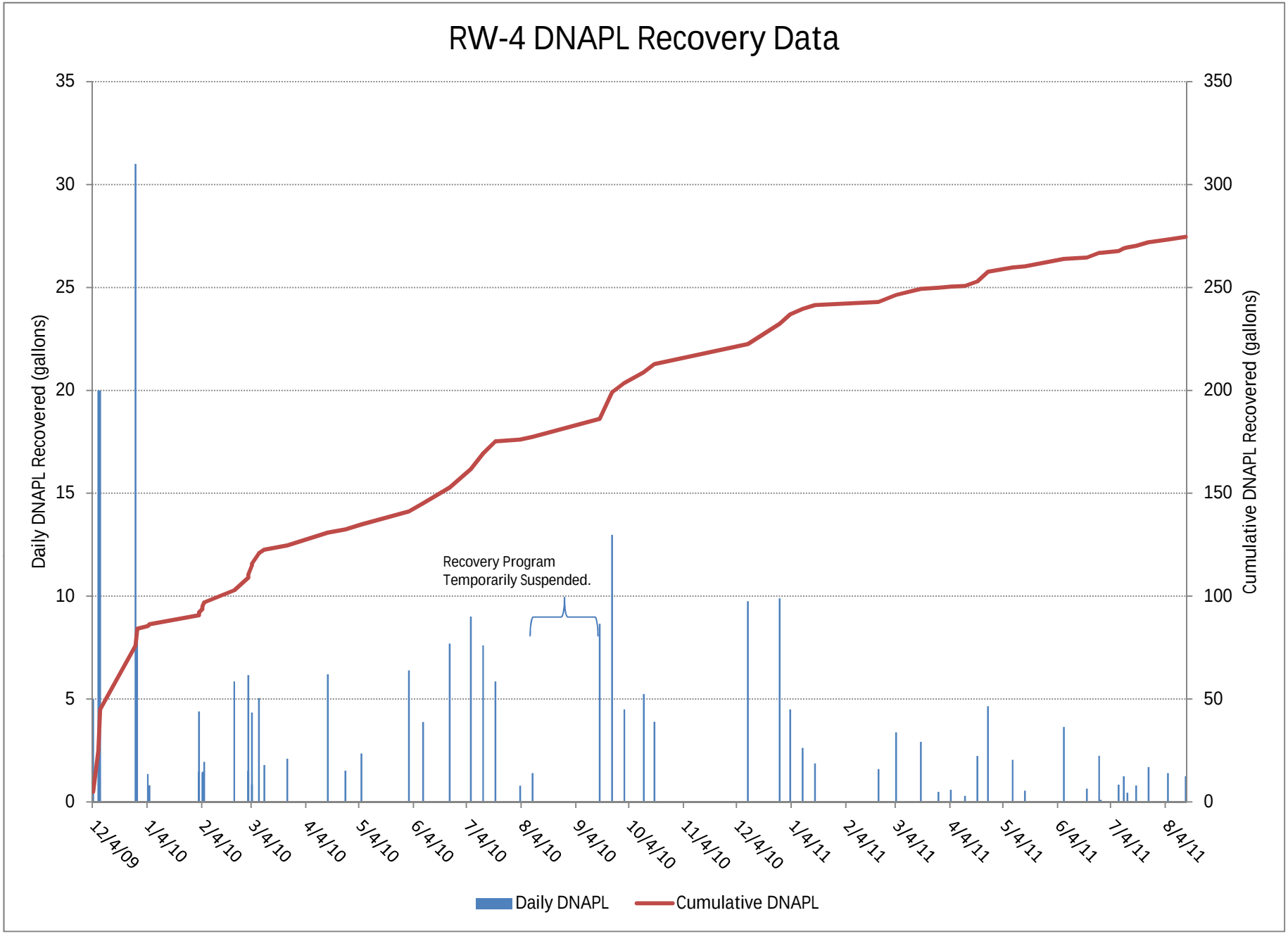

MW-51A DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
0
1
2
3
4
5
0
1
2
3
4
5
6
7
8
9
10
8/17/2011
8/18/2011
8/19/2011
8/20/2011
8/21/2011
8/22/2011
8/23/2011
8/24/2011
8/25/2011
8/26/2011
8/27/2011
8/28/2011
8/29/2011
8/30/2011
8/31/2011
9/1/2011
9/2/2011
9/3/2011
9/4/2011
9/5/2011
9/6/2011
Daily DNAPL
Cumulative DNAPL

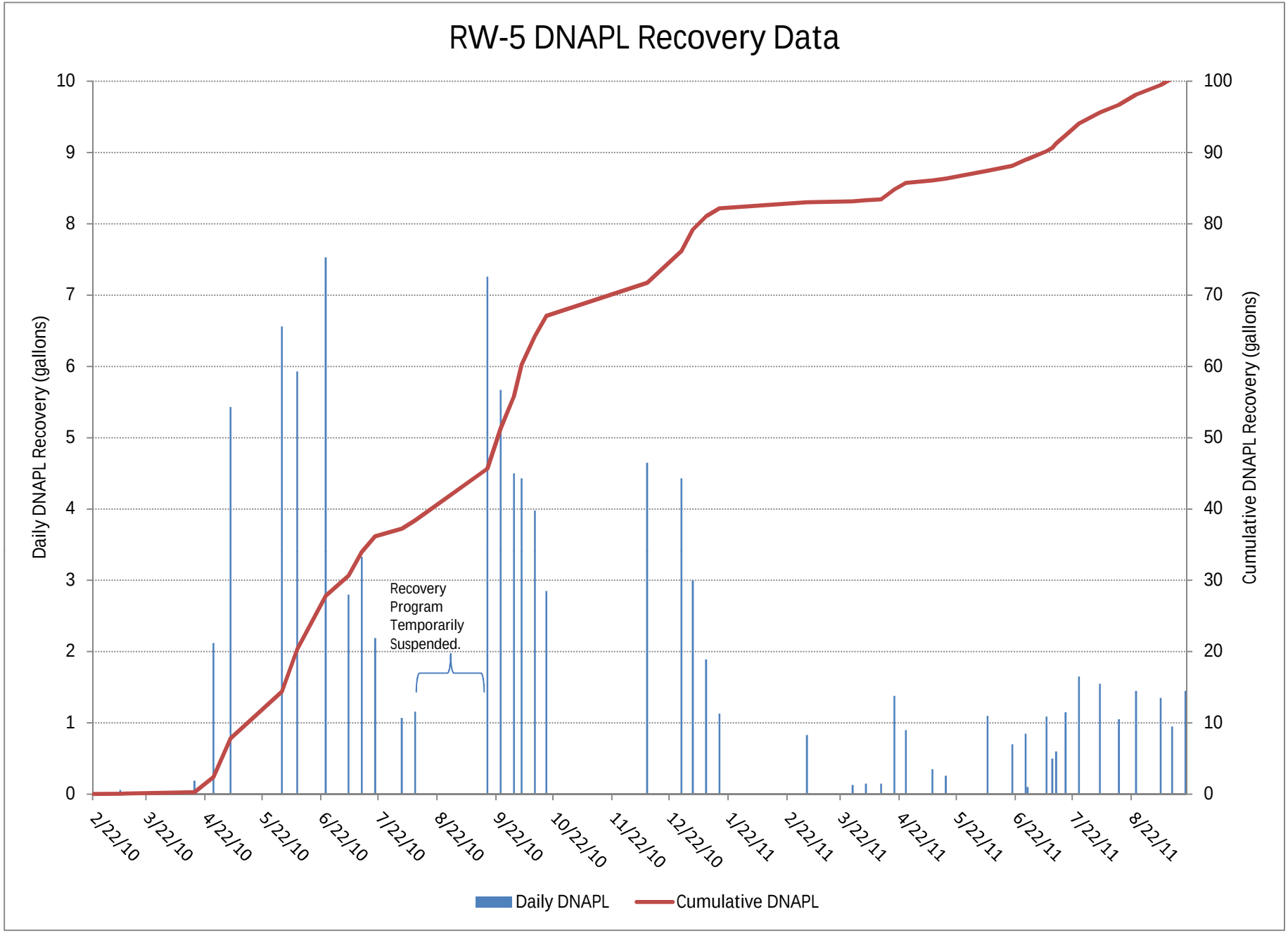

RW-1 DNAPL Recovery Data
1.05 gal
Recovery Program
Temporarily Suspended.
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
2/22/10
3/22/10
4/22/10
5/22/10
6/22/10
7/22/10
8/22/10
9/22/10
10/22/10
11/22/10
12/22/10
1/22/11
2/22/11
3/22/11
4/22/11
5/22/11
6/22/11
7/22/11
8/22/11
Daily DNAPL
Cumulative DNAPL

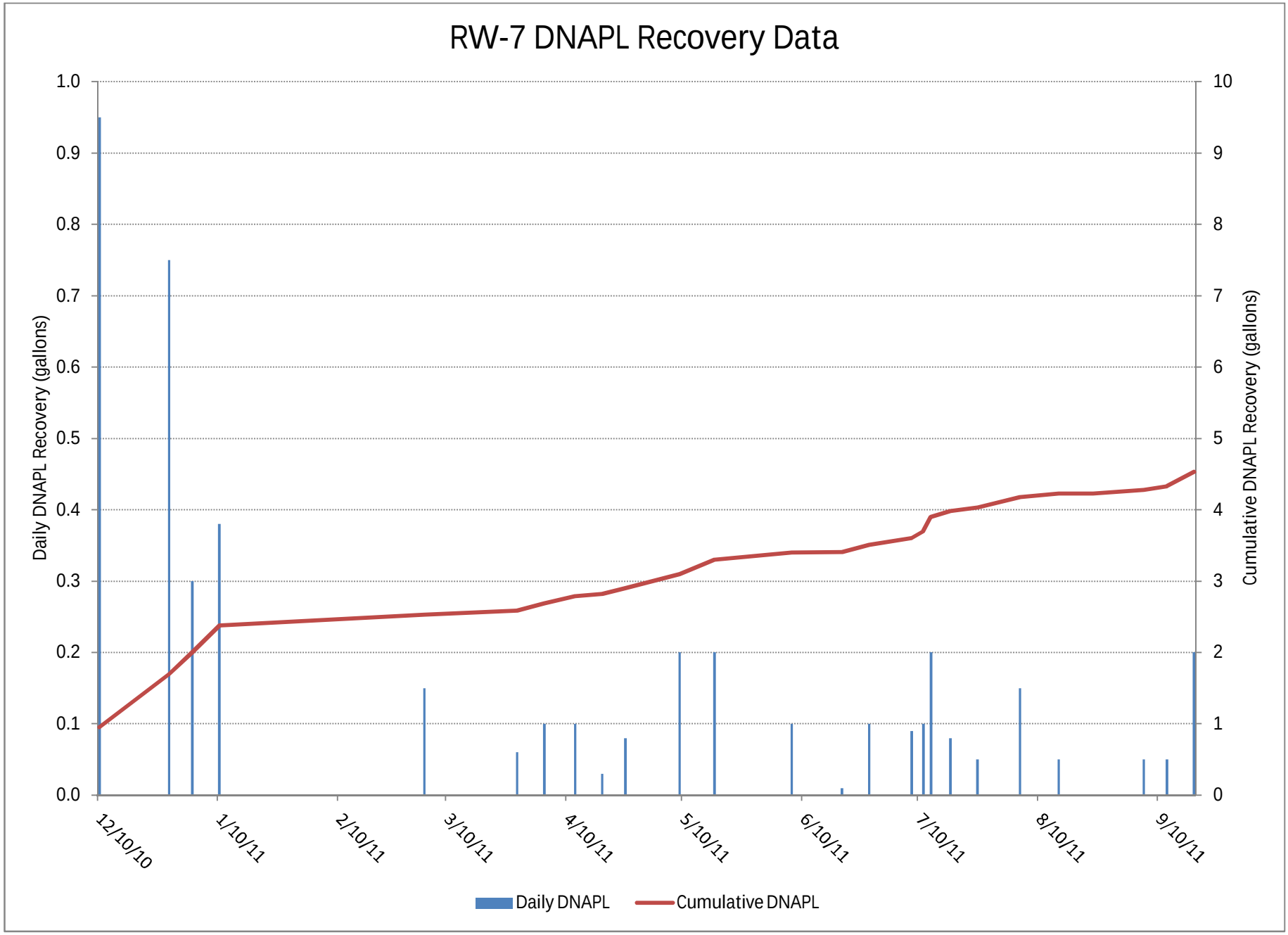

RW-2 DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
Recovery Program
Temporarily Suspended.
Well damaged
2/2/10
3/2/10
4/2/10
5/2/10
6/2/10
7/2/10
8/2/10
9/2/10
10/2/10
11/2/10
12/2/10
1/2/11
2/2/11
3/2/11
4/2/11
5/2/11
6/2/11
7/2/11
8/2/11
Daily DNAPL
Cumulative DNAPL

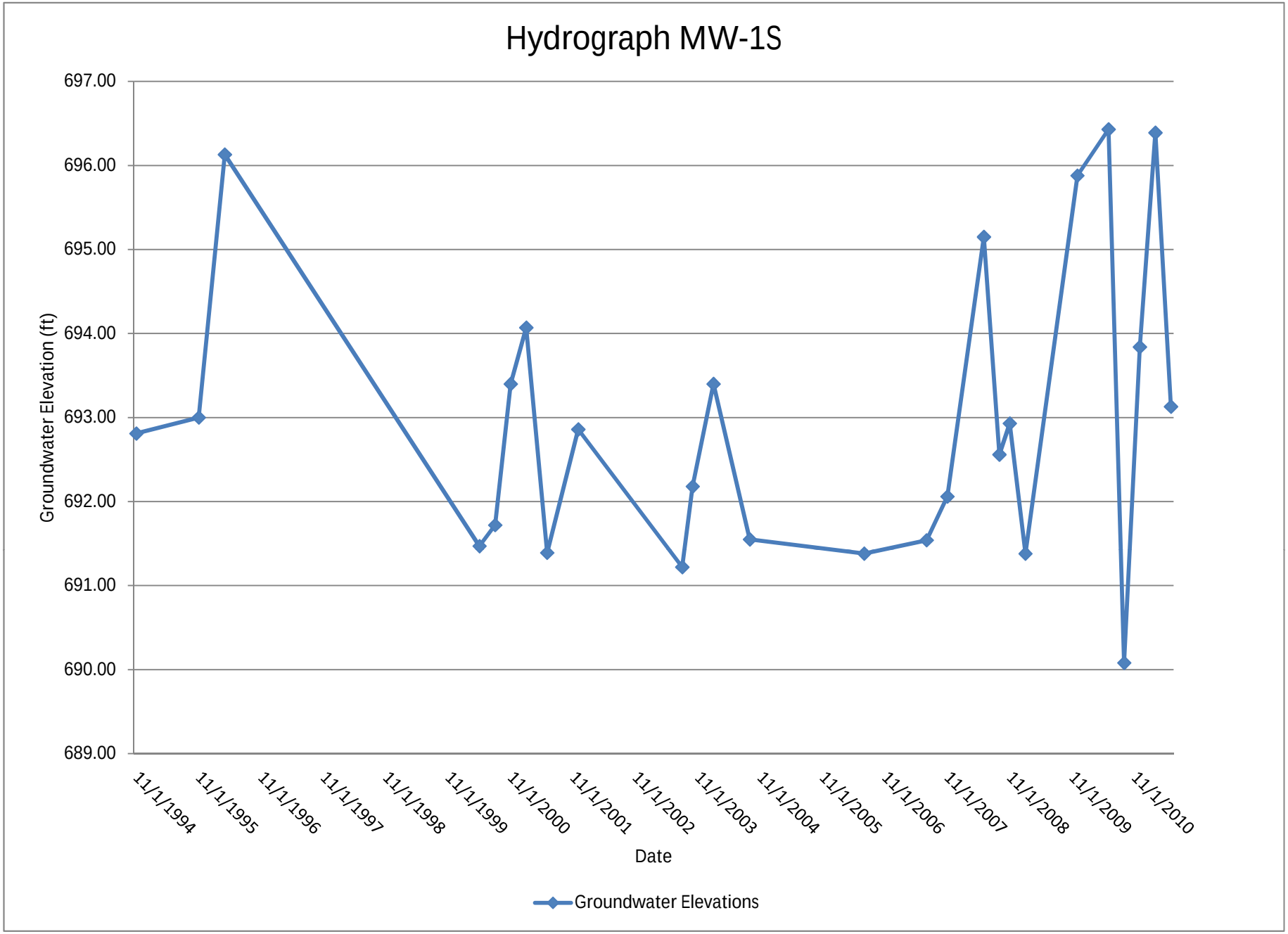

RW-3 DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
0
1
2
3
4
5
6
7
8
9
10
0
10
20
30
40
50
60
70
80
90
100
Recovery Program Temporarily Suspended.
2/2/10
3/2/10
4/2/10
5/2/10
6/2/10
7/2/10
8/2/10
9/2/10
10/2/10
11/2/10
12/2/10
1/2/11
2/2/11
3/2/11
4/2/11
5/2/11
6/2/11
7/2/11
8/2/11
Daily DNAPL
Cumulative DNAPL

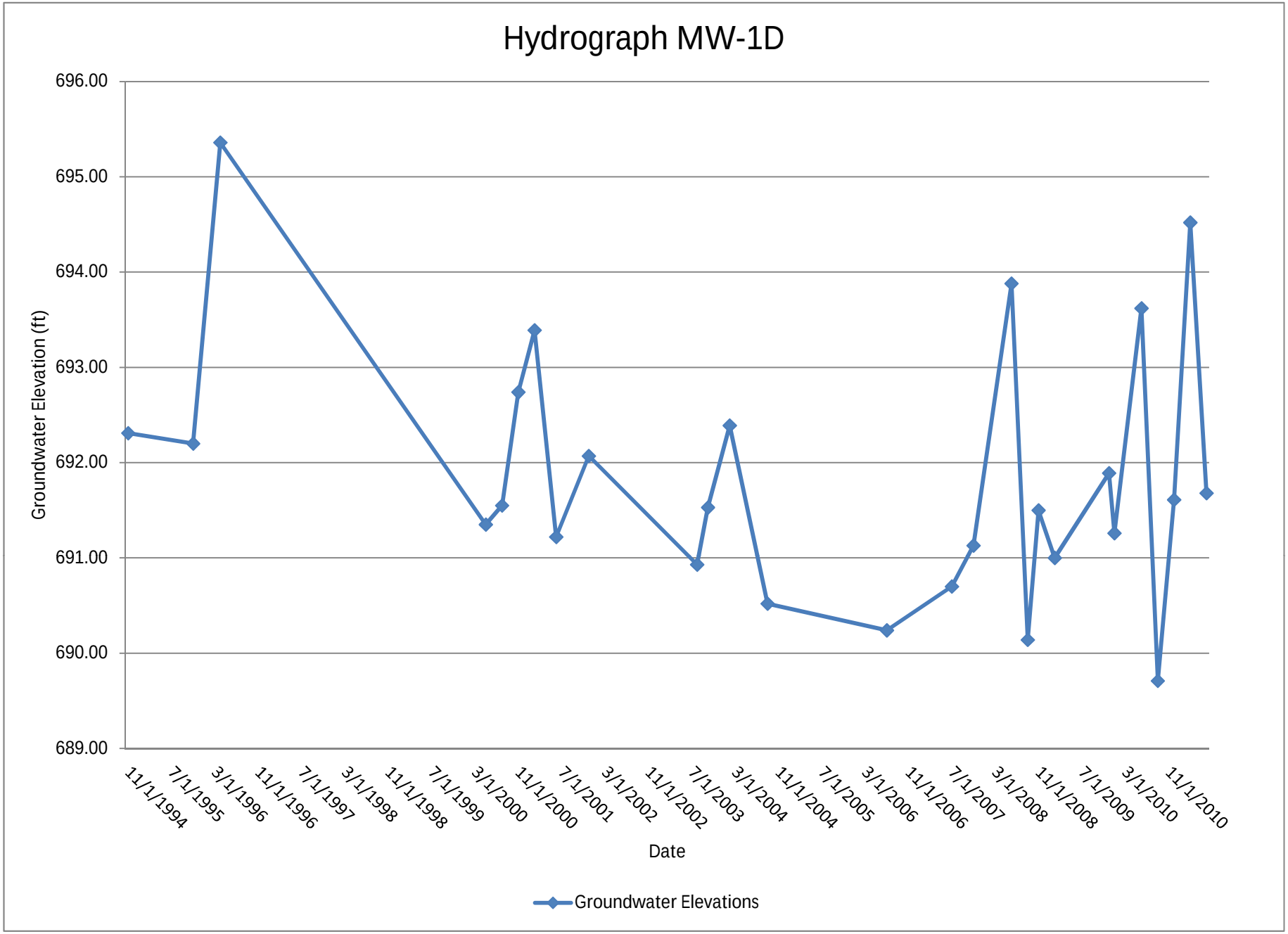
ARCADIS

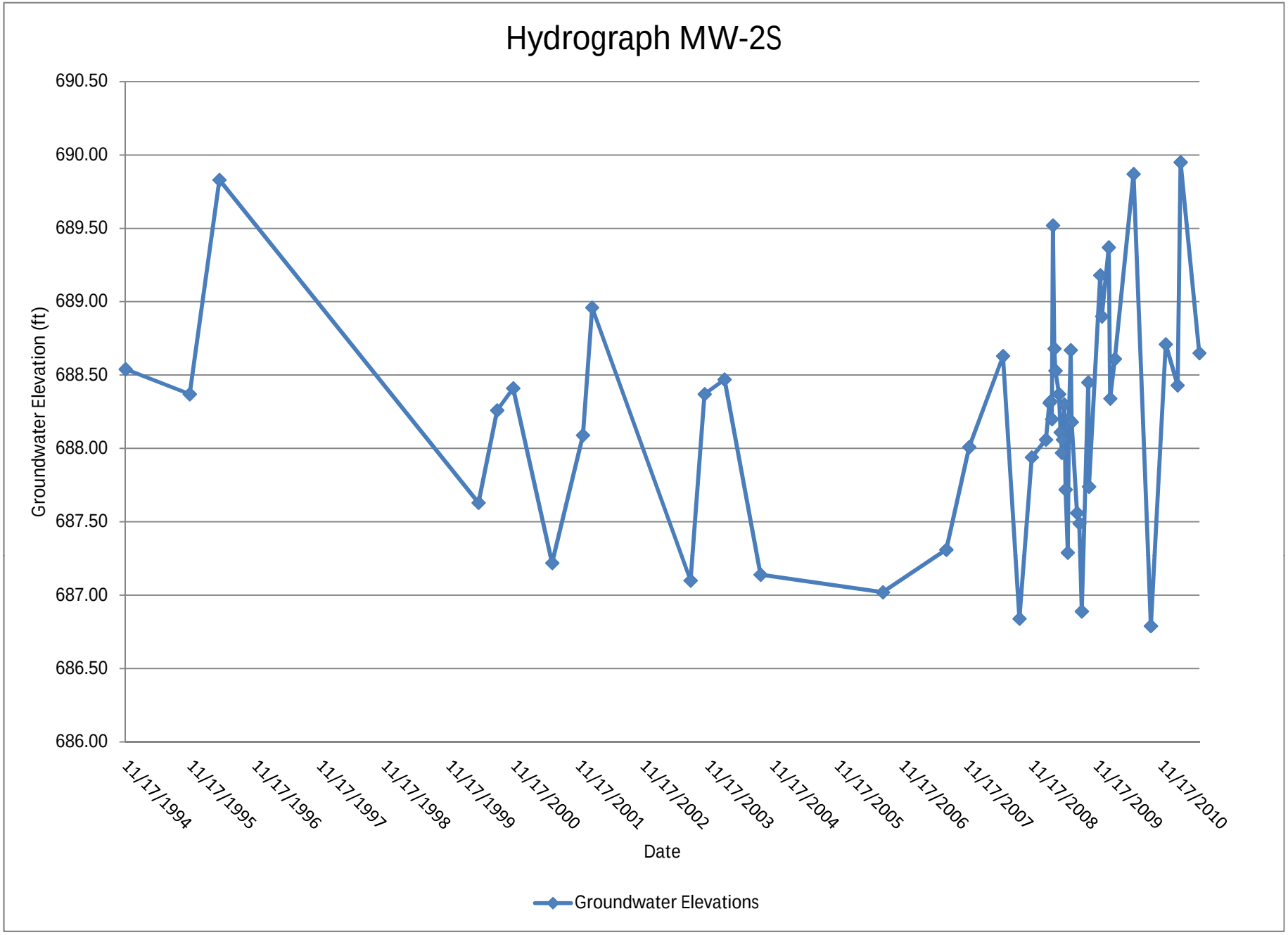

RW-4 DNAPL Recovery Data
Daily DNAPL Recovered (gallons)
Cumulative DNAPL Recovered (gallons)
35
30
25
20
15
10
5
0
350
300
250
200
150
100
50
0
Recovery Program
Temporarily Suspended.
12/4/09
1/4/10
2/4/10
3/4/10
4/4/10
5/4/10
6/4/10
7/4/10
8/4/10
9/4/10
10/4/10
11/4/10
12/4/10
1/4/11
2/4/11
3/4/11
4/4/11
5/4/11
6/4/11
7/4/11
8/4/11
Daily DNAPL
Cumulative DNAPL

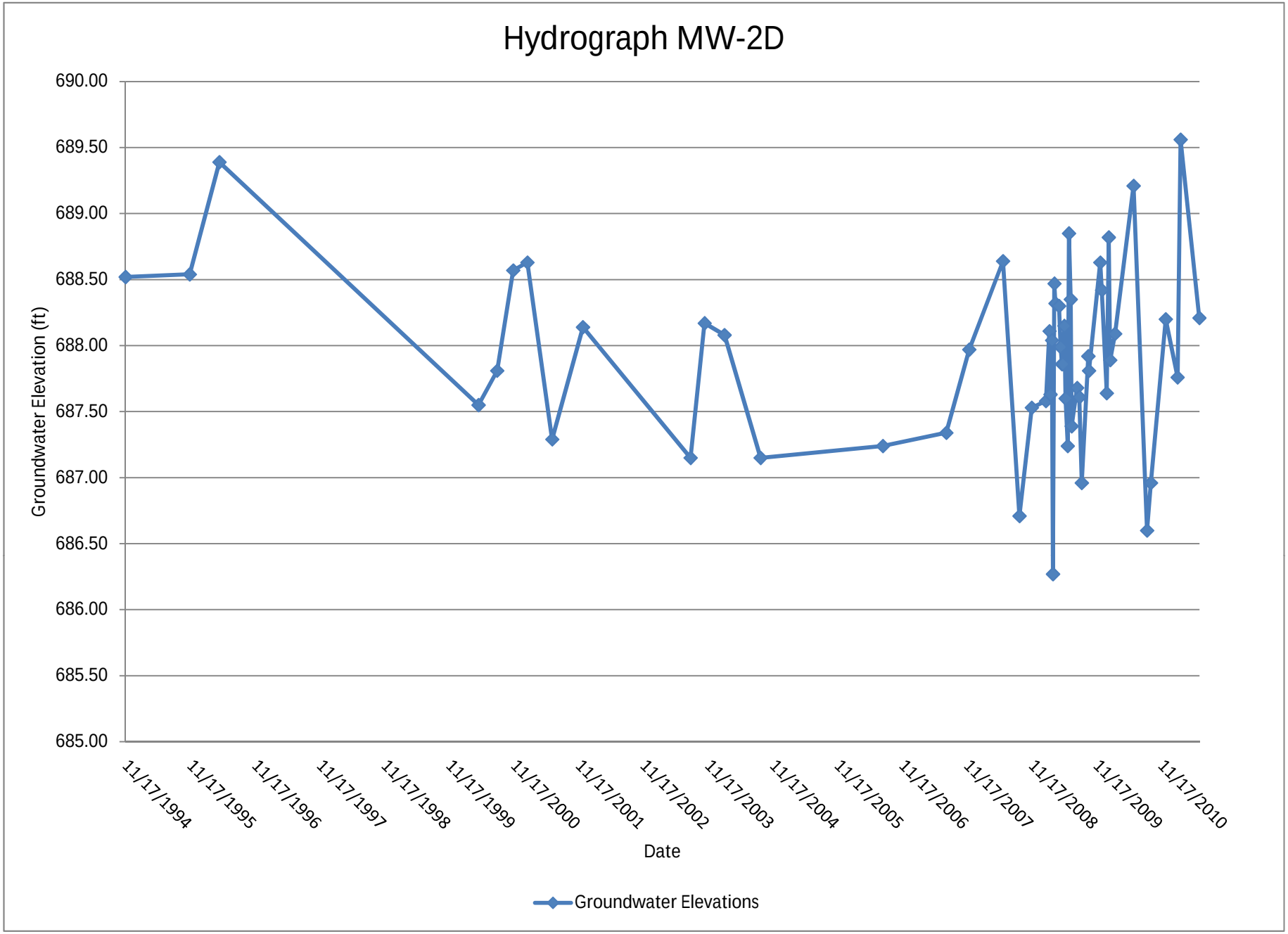

RW-5 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
0
1
2
3
4
5
6
7
8
9
10
0
10
20
30
40
50
60
70
80
90
100
Recovery Program Temporarily Suspended.
2/22/10
3/22/10
4/22/10
5/22/10
6/22/10
7/22/10
8/22/10
9/22/10
10/22/10
11/22/10
12/22/10
1/22/11
2/22/11
3/22/11
4/22/11
5/22/11
6/22/11
7/22/11
8/22/11
Daily DNAPL
Cumulative DNAPL

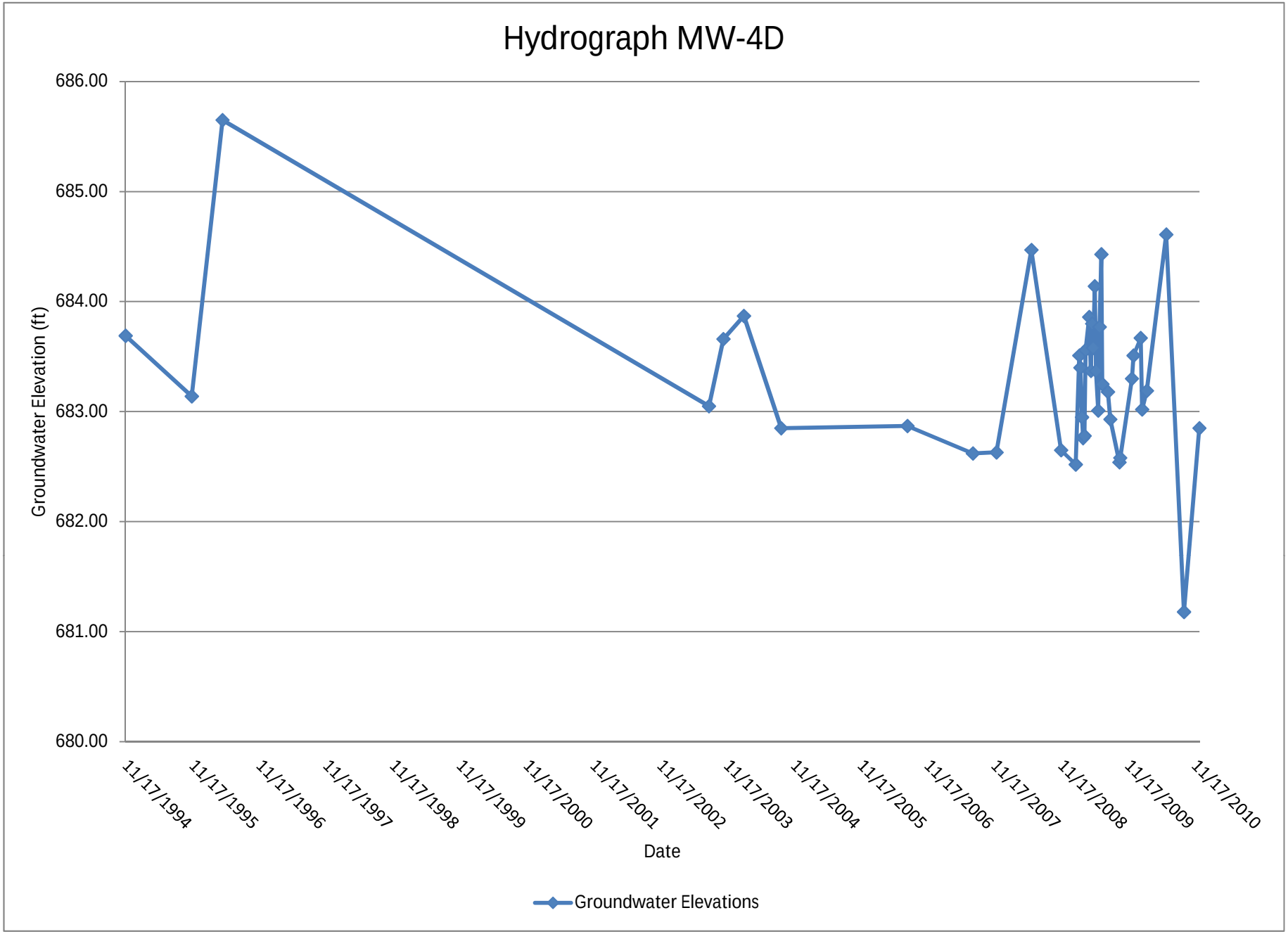

RW-7 DNAPL Recovery Data
Daily DNAPL Recovery (gallons)
Cumulative DNAPL Recovery (gallons)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
10
9
8
7
6
5
4
3
2
1
0
12/10/10
1/10/11
2/10/11
3/10/11
4/10/11
5/10/11
6/10/11
7/10/11
8/10/11
9/10/11
Daily DNAPL
Cumulative DNAPL

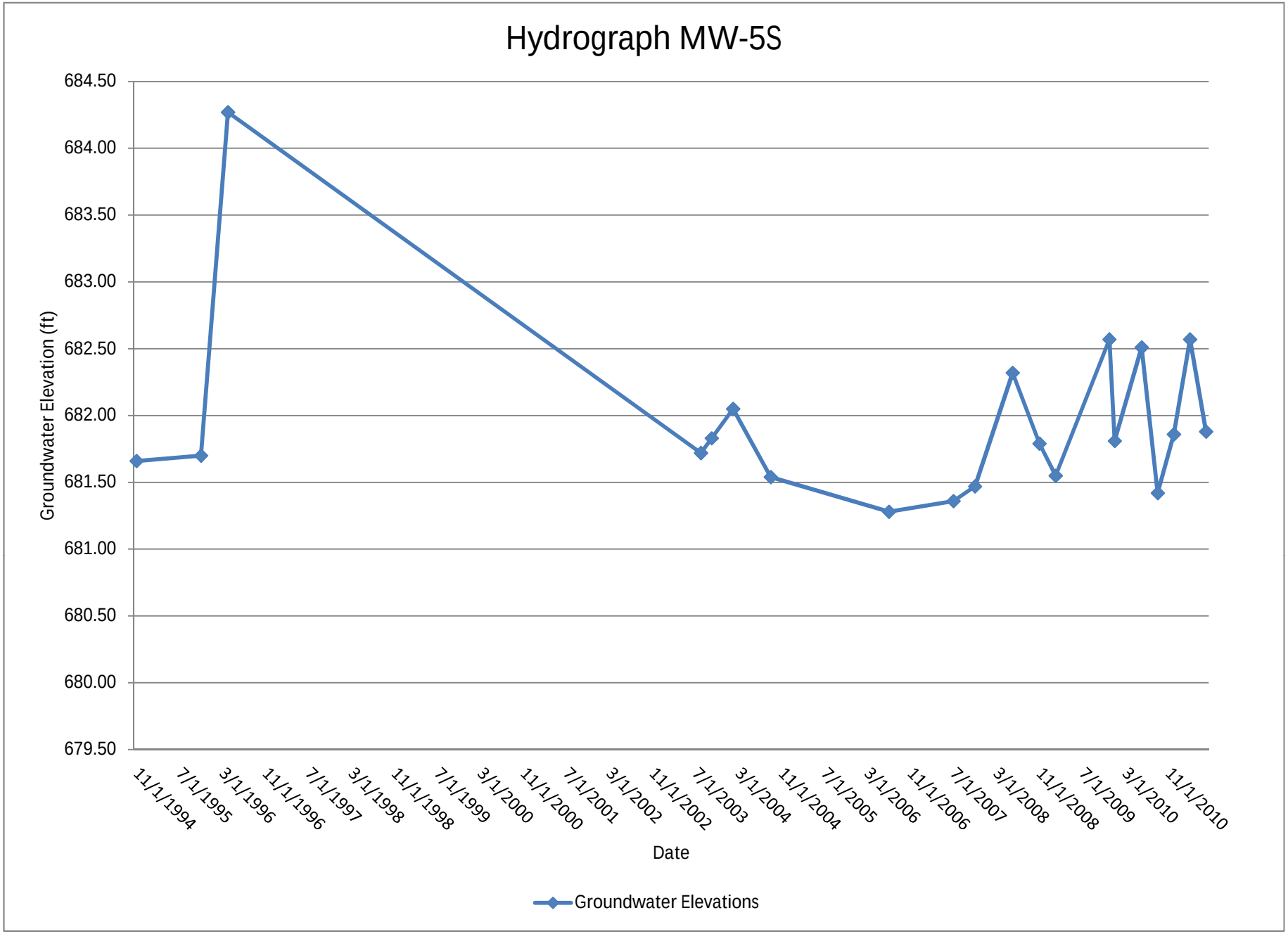

Hydrograph MW-1S
697.00
696.00
695.00
694.00
693.00
692.00
691.00
690.00
689.00
Groundwater Elevation (ft)
11/1/1994
11/1/1995
11/1/1996
11/1/1997
11/1/1998
11/1/1999
11/1/2000
11/1/2001
11/1/2002
11/1/2003
11/1/2004
11/1/2005
11/1/2006
11/1/2007
11/1/2008
11/1/2009
11/1/2010
Date
Groundwater Elevations

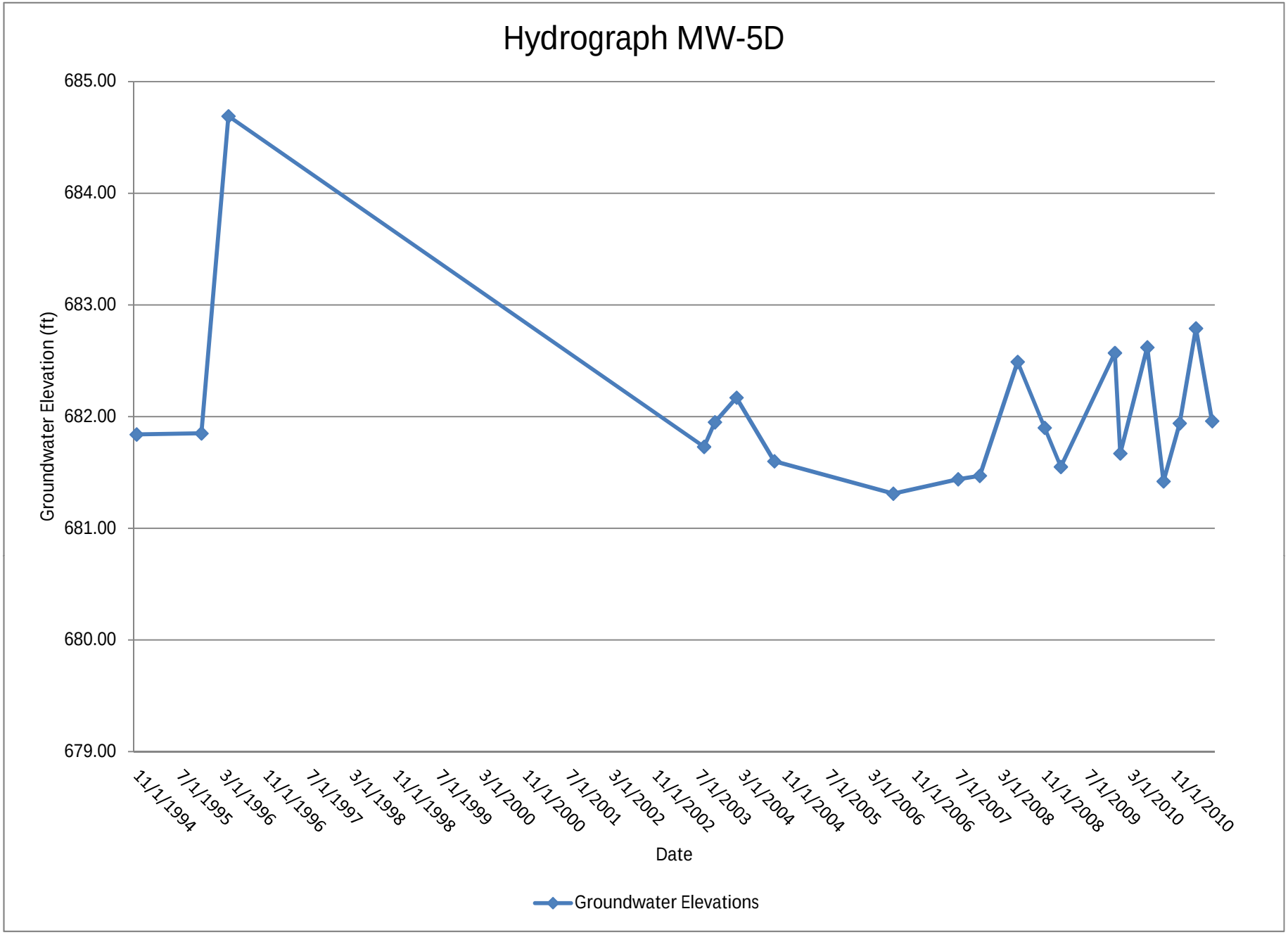

Hydrograph MW-1D
696.00
695.00
694.00
693.00
692.00
691.00
690.00
689.00
Groundwater Elevation (ft)
11/1/1994
7/1/1995
3/1/1996
11/1/1996
7/1/1997
3/1/1998
11/1/1998
7/1/1999
3/1/2000
11/1/2000
7/1/2001
3/1/2002
11/1/2002
7/1/2003
3/1/2004
11/1/2004
7/1/2005
3/1/2006
11/1/2006
7/1/2007
3/1/2008
11/1/2008
7/1/2009
3/1/2010
11/1/2010
Date
Groundwater Elevations

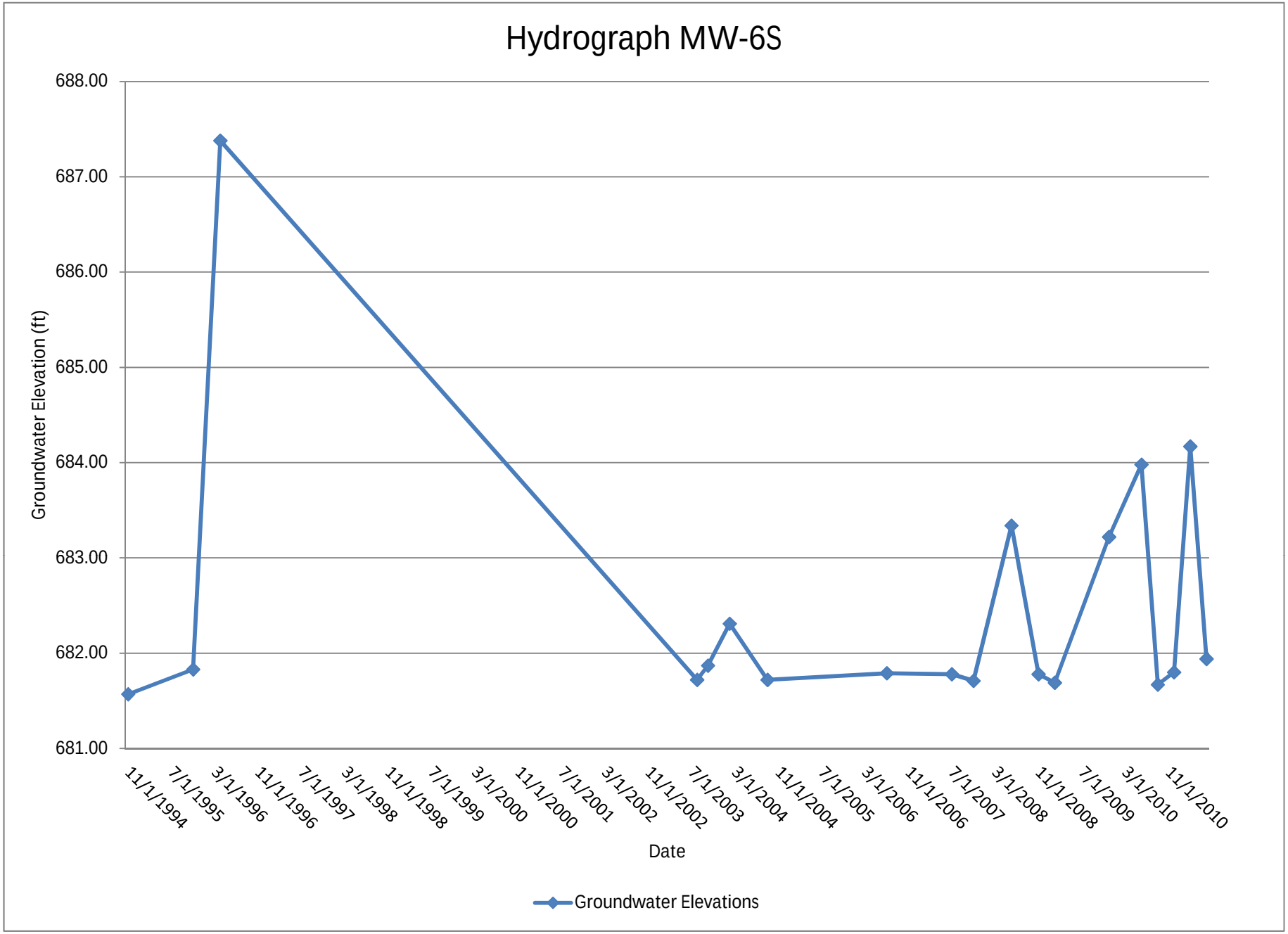

Hydrograph MW-2S
690.50
690.00
689.50
689.00
688.50
688.00
687.50
687.00
686.50
686.00
Groundwater Elevation (ft)
11/17/1994
11/17/1995
11/17/1996
11/17/1997
11/17/1998
11/17/1999
11/17/2000
11/17/2001
11/17/2002
11/17/2003
11/17/2004
11/17/2005
11/17/2006
11/17/2007
11/17/2008
11/17/2009
11/17/2010
Date
Groundwater Elevations

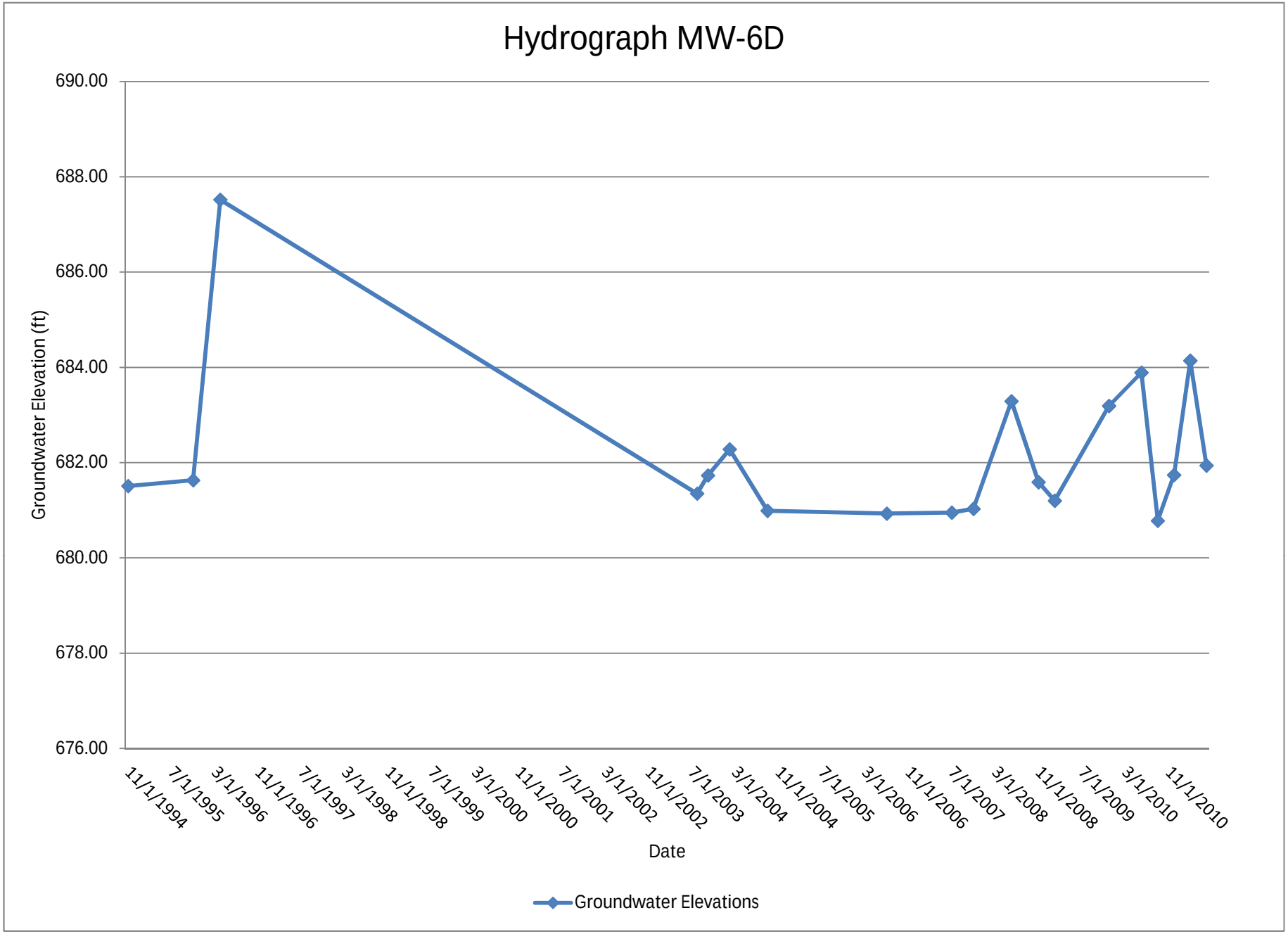

Hydrograph MW-2D
690.00
689.50
689.00
688.50
688.00
687.50
687.00
686.50
686.00
685.50
685.00
Groundwater Elevation (ft)
11/17/1994
11/17/1995
11/17/1996
11/17/1997
11/17/1998
11/17/1999
11/17/2000
11/17/2001
11/17/2002
11/17/2003
11/17/2004
11/17/2005
11/17/2006
11/17/2007
11/17/2008
11/17/2009
11/17/2010
Date
Groundwater Elevations

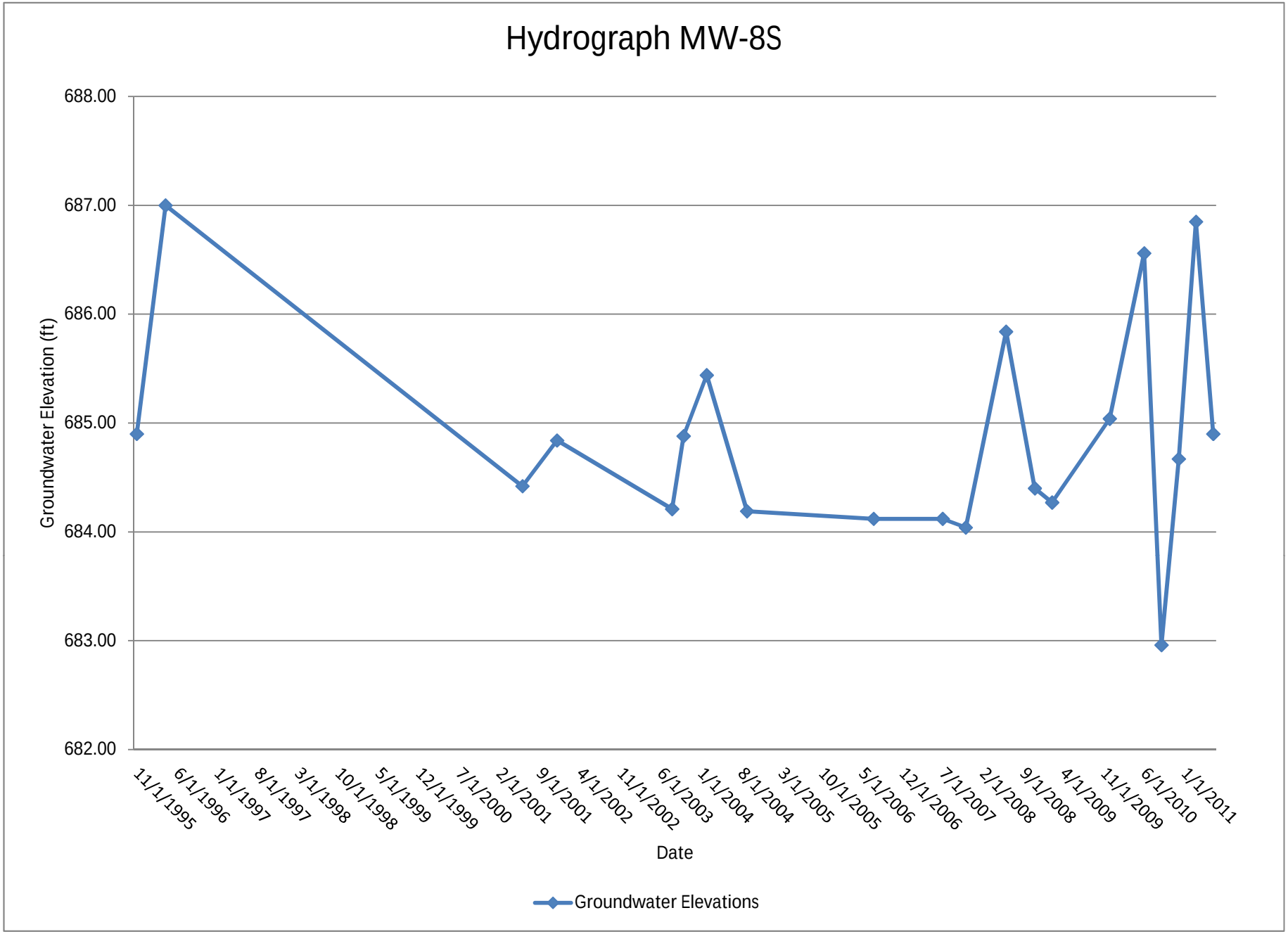

Hydrograph MW-4D
686.00
685.00
684.00
683.00
682.00
681.00
680.00
Groundwater Elevation (ft)
11/17/1994
11/17/1995
11/17/1996
11/17/1997
11/17/1998
11/17/1999
11/17/2000
11/17/2001
11/17/2002
11/17/2003
11/17/2004
11/17/2005
11/17/2006
11/17/2007
11/17/2008
11/17/2009
11/17/2010
Date
Groundwater Elevations

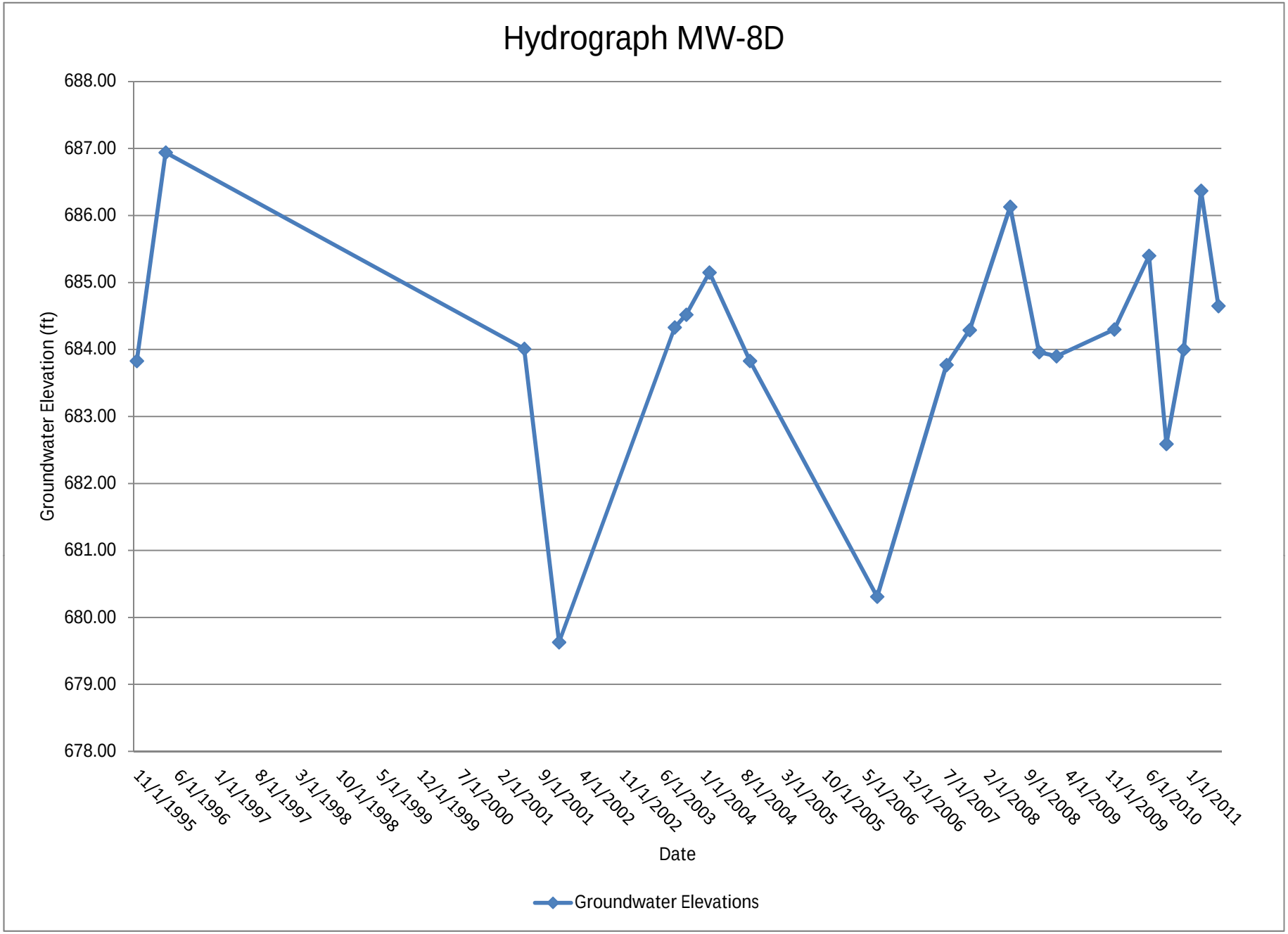

Hydrograph MW-5S
684.50
684.00
683.50
683.00
682.50
682.00
681.50
681.00
680.50
680.00
679.50
Groundwater Elevation (ft)
11/1/1994
7/1/1995
3/1/1996
11/1/1996
7/1/1997
3/1/1998
11/1/1998
7/1/1999
3/1/2000
11/1/2000
7/1/2001
3/1/2002
11/1/2002
7/1/2003
3/1/2004
11/1/2004
7/1/2005
3/1/2006
11/1/2006
7/1/2007
3/1/2008
11/1/2008
7/1/2009
3/1/2010
11/1/2010
Date
Groundwater Elevations

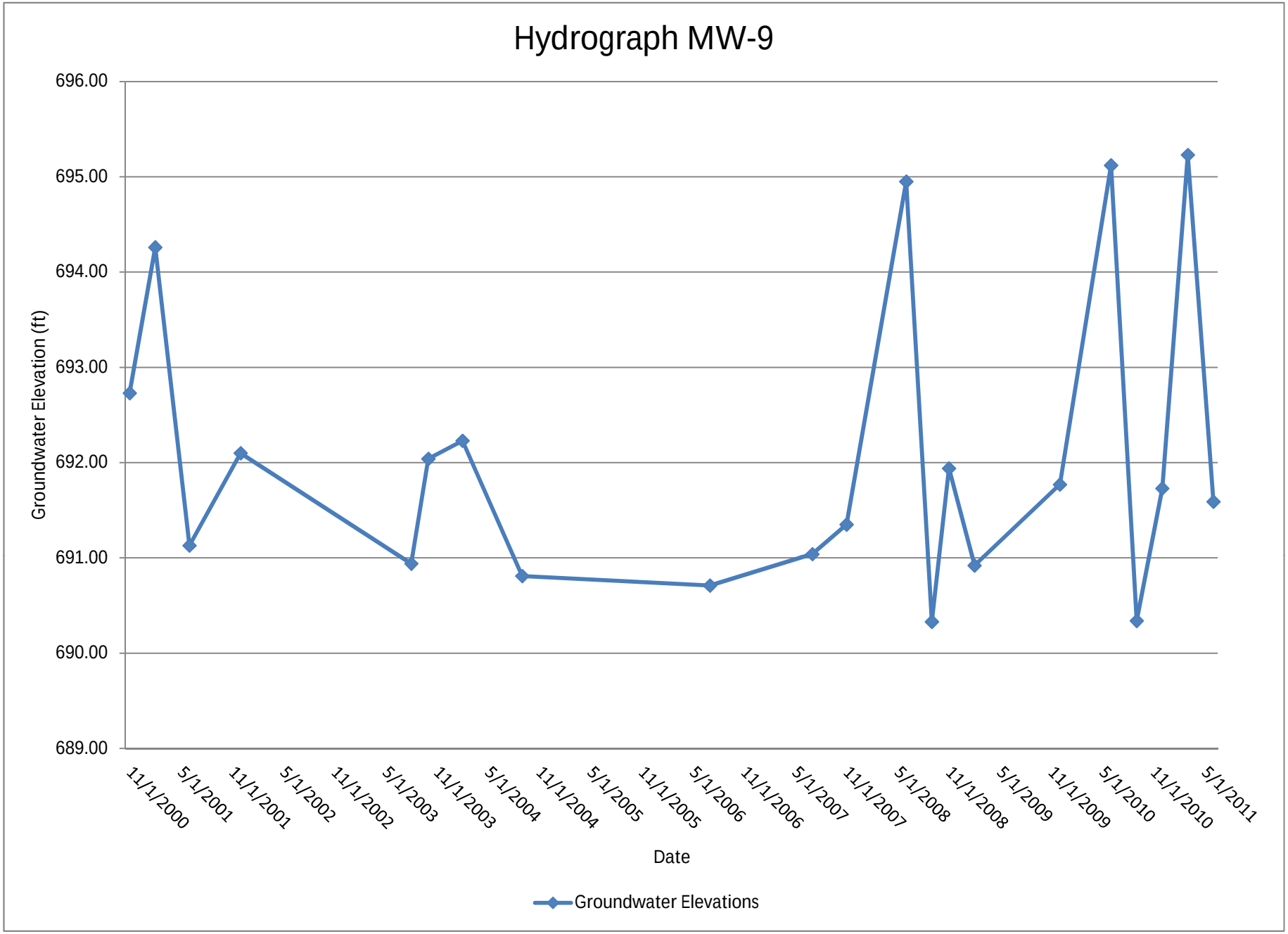

Hydrograph MW-5D
685.00
684.00
683.00
682.00
681.00
680.00
679.00
Groundwater Elevation (ft)
11/1/1994
7/1/1995
3/1/1996
11/1/1996
7/1/1997
3/1/1998
11/1/1998
7/1/1999
3/1/2000
11/1/2000
7/1/2001
3/1/2002
11/1/2002
7/1/2003
3/1/2004
11/1/2004
7/1/2005
3/1/2006
11/1/2006
7/1/2007
3/1/2008
11/1/2008
7/1/2009
3/1/2010
11/1/2010
Date
Groundwater Elevations

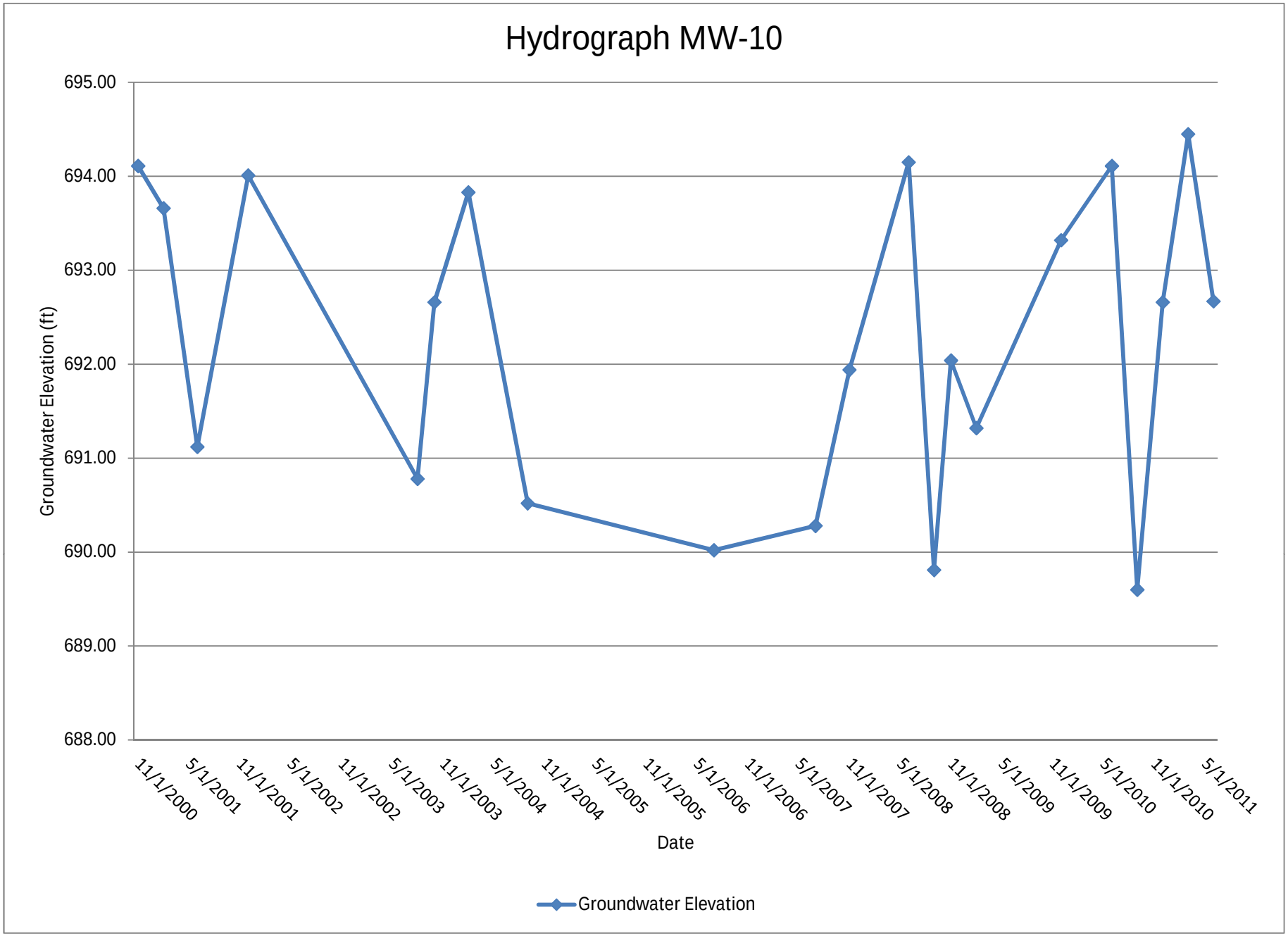

Hydrograph MW-6S
688.00
687.00
686.00
685.00
684.00
683.00
682.00
681.00
Groundwater Elevation (ft)
11/1/1994
7/1/1995
3/1/1996
11/1/1996
7/1/1997
3/1/1998
11/1/1998
7/1/1999
3/1/2000
11/1/2000
7/1/2001
3/1/2002
11/1/2002
7/1/2003
3/1/2004
11/1/2004
7/1/2005
3/1/2006
11/1/2006
7/1/2007
3/1/2008
11/1/2008
7/1/2009
3/1/2010
11/1/2010
Date
Groundwater Elevations

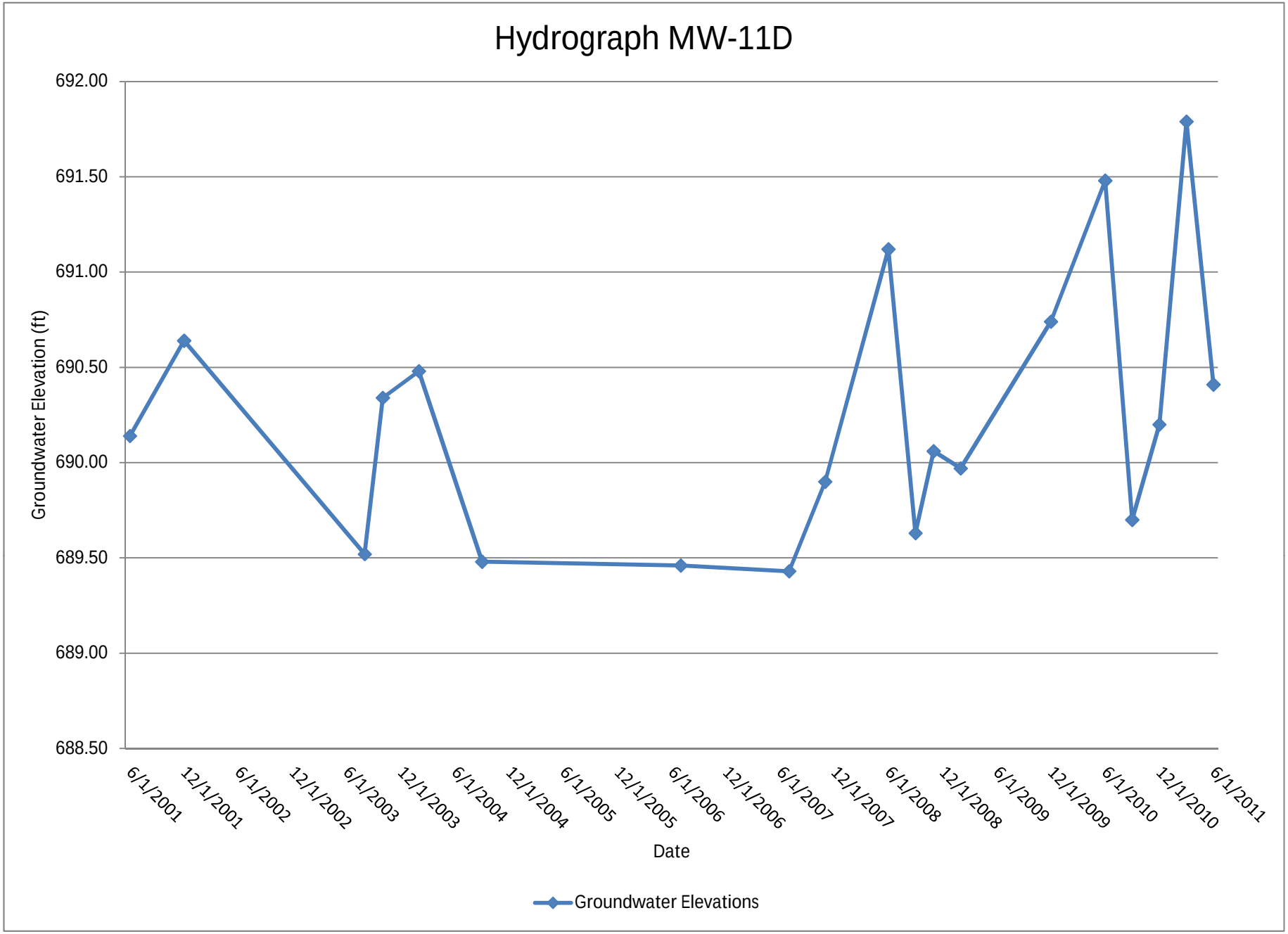

Hydrograph MW-6D
690.00
688.00
686.00
684.00
682.00
680.00
678.00
676.00
Groundwater Elevation (ft)
11/1/1994
7/1/1995
3/1/1996
11/1/1996
7/1/1997
3/1/1998
11/1/1998
7/1/1999
3/1/2000
11/1/2000
7/1/2001
3/1/2002
11/1/2002
7/1/2003
3/1/2004
11/1/2004
7/1/2005
3/1/2006
11/1/2006
7/1/2007
3/1/2008
11/1/2008
7/1/2009
3/1/2010
11/1/2010
Date
Groundwater Elevations

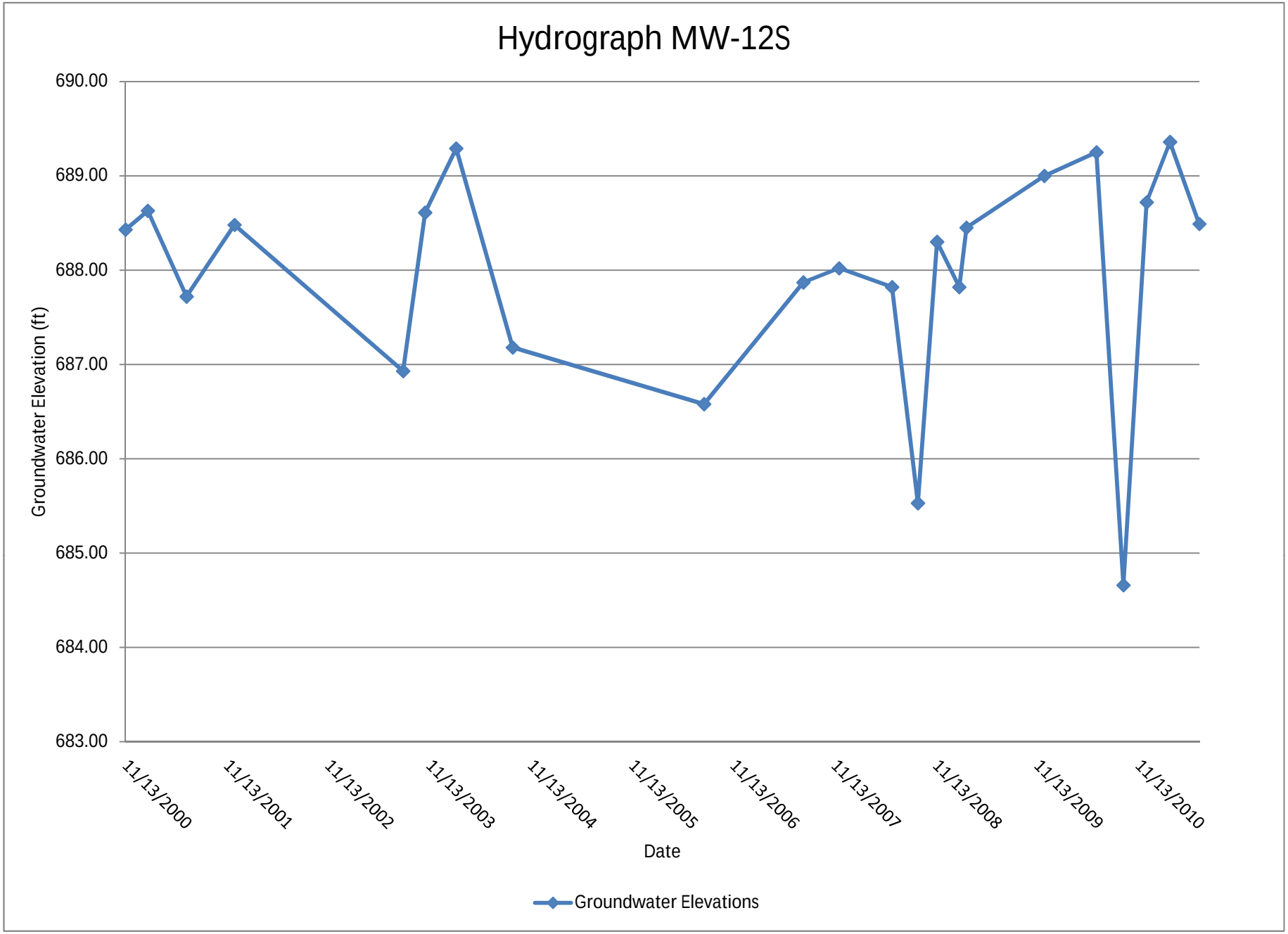

Hydrograph MW-8S
688.00
687.00
686.00
685.00
684.00
683.00
682.00
Groundwater Elevation (ft)
11/1/1995
6/1/1996
1/1/1997
8/1/1997
3/1/1998
10/1/1998
5/1/1999
12/1/1999
7/1/2000
2/1/2001
9/1/2001
4/1/2002
11/1/2002
6/1/2003
1/1/2004
8/1/2004
3/1/2005
10/1/2005
5/1/2006
12/1/2006
7/1/2007
2/1/2008
9/1/2008
4/1/2009
11/1/2009
6/1/2010
1/1/2011
Date
Groundwater Elevations

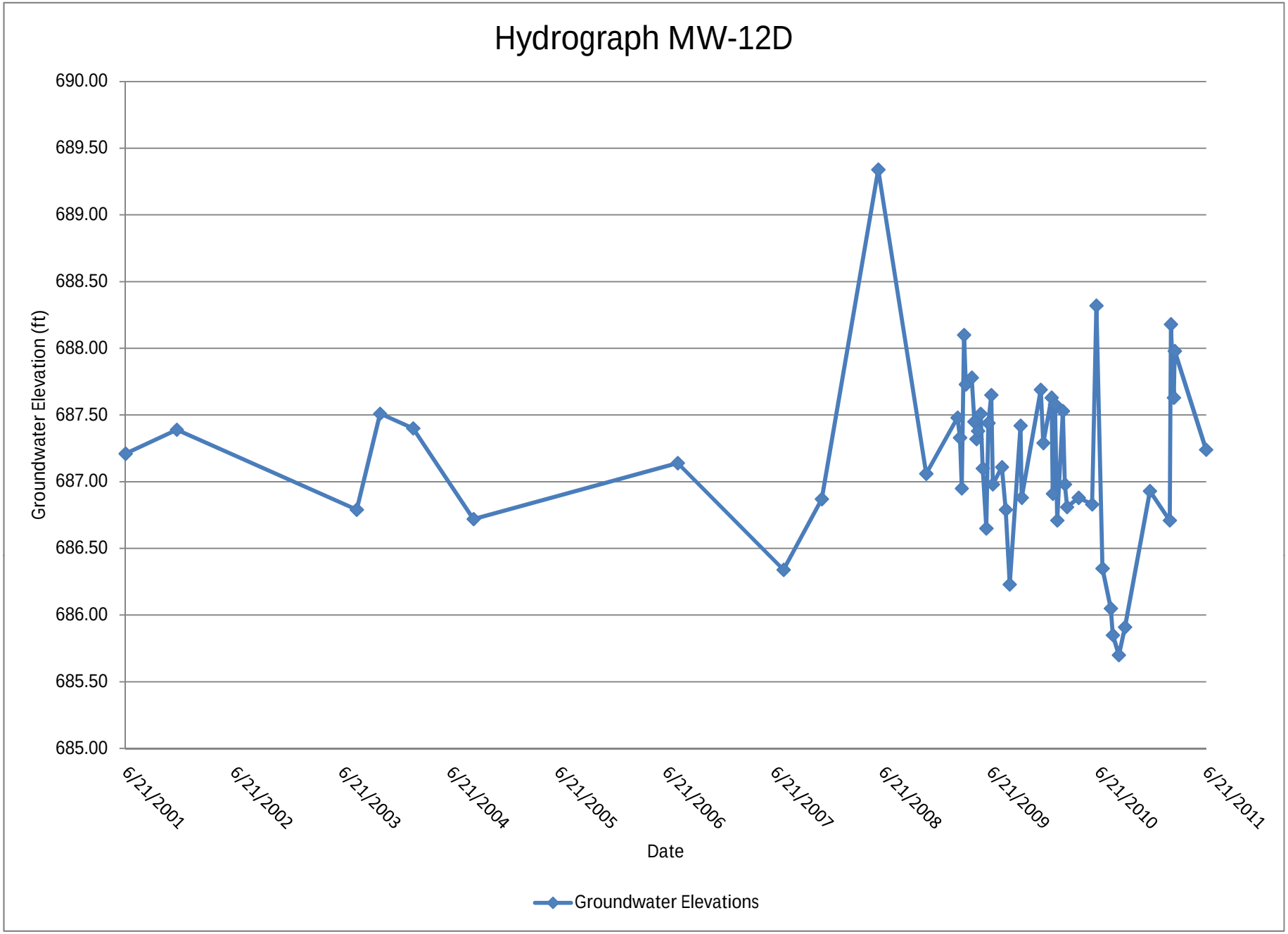

Hydrograph MW-8D
688.00
687.00
686.00
685.00
684.00
683.00
682.00
681.00
680.00
679.00
678.00
Groundwater Elevation (ft)
11/1/1995
6/1/1996
1/1/1997
8/1/1997
3/1/1998
10/1/1998
5/1/1999
12/1/1999
7/1/2000
2/1/2001
9/1/2001
4/1/2002
11/1/2002
6/1/2003
1/1/2004
8/1/2004
3/1/2005
10/1/2005
5/1/2006
12/1/2006
7/1/2007
2/1/2008
9/1/2008
4/1/2009
11/1/2009
6/1/2010
1/1/2011
Date
Groundwater Elevations

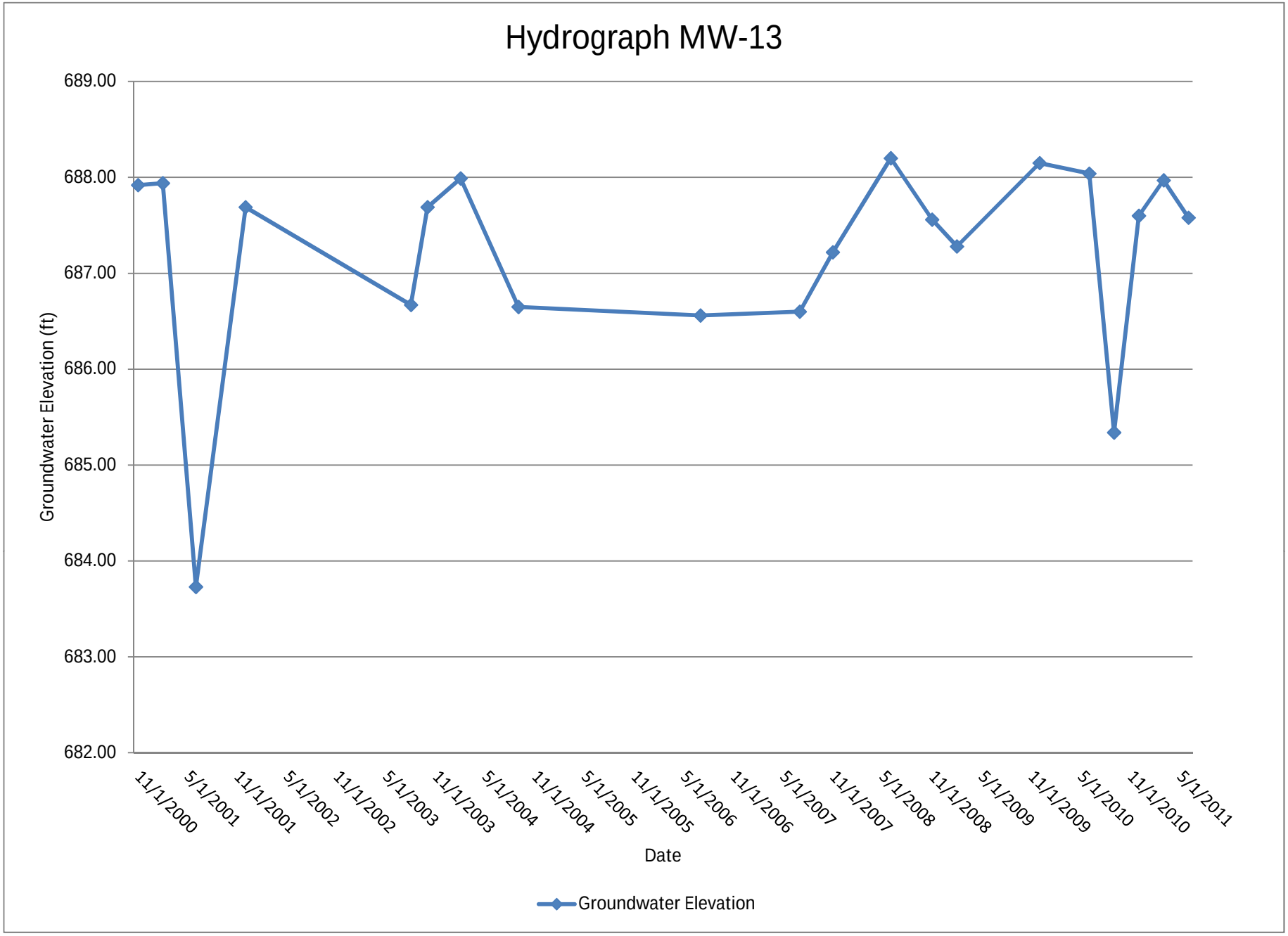

Hydrograph MW-9
696.00
695.00
694.00
693.00
692.00
691.00
690.00
689.00
Groundwater Elevation (ft)
11/1/2000
5/1/2001
11/1/2001
5/1/2002
11/1/2002
5/1/2003
11/1/2003
5/1/2004
11/1/2004
5/1/2005
11/1/2005
5/1/2006
11/1/2006
5/1/2007
11/1/2007
5/1/2008
11/1/2008
5/1/2009
11/1/2009
5/1/2010
11/1/2010
5/1/2011
Date
Groundwater Elevations


Hydrograph MW-10
695.00
694.00
693.00
692.00
691.00
690.00
689.00
688.00
Groundwater Elevation (ft)
11/1/2000
5/1/2001
11/1/2001
5/1/2002
11/1/2002
5/1/2003
11/1/2003
5/1/2004
11/1/2004
5/1/2005
11/1/2005
5/1/2006
11/1/2006
5/1/2007
11/1/2007
5/1/2008
11/1/2008
5/1/2009
11/1/2009
5/1/2010
11/1/2010
5/1/2011
Date
Groundwater Elevation


Hydrograph MW-11D
692.00
691.50
691.00
690.50
690.00
689.50
689.00
688.50
Groundwater Elevation (ft)
6/1/2001
12/1/2001
6/1/2002
12/1/2002
6/1/2003
12/1/2003
6/1/2004
12/1/2004
6/1/2005
12/1/2005
6/1/2006
12/1/2006
6/1/2007
12/1/2007
6/1/2008
12/1/2008
6/1/2009
12/1/2009
6/1/2010
12/1/2010
6/1/2011
Date
Groundwater Elevations


Hydrograph MW-12S
690.00
689.00
688.00
687.00
686.00
685.00
684.00
683.00
Groundwater Elevation (ft)
11/13/2000
11/13/2001
11/13/2002
11/13/2003
11/13/2004
11/13/2005
11/13/2006
11/13/2007
11/13/2008
11/13/2009
11/13/2010
Date
Groundwater Elevations


Hydrograph MW-12D
690.00
689.50
689.00
688.50
688.00
687.50
687.00
686.50
686.00
685.50
685.00
Groundwater Elevation (ft)
6/21/2001
6/21/2002
6/21/2003
6/21/2004
6/21/2005
6/21/2006
6/21/2007
6/21/2008
6/21/2009
6/21/2010
6/21/2011
Date
Groundwater Elevations


Hydrograph MW-13
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Groundwater Elevation (ft)
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5/1/2001
11/1/2001
5/1/2002
11/1/2002
5/1/2003
11/1/2003
5/1/2004
11/1/2004
5/1/2005
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5/1/2007
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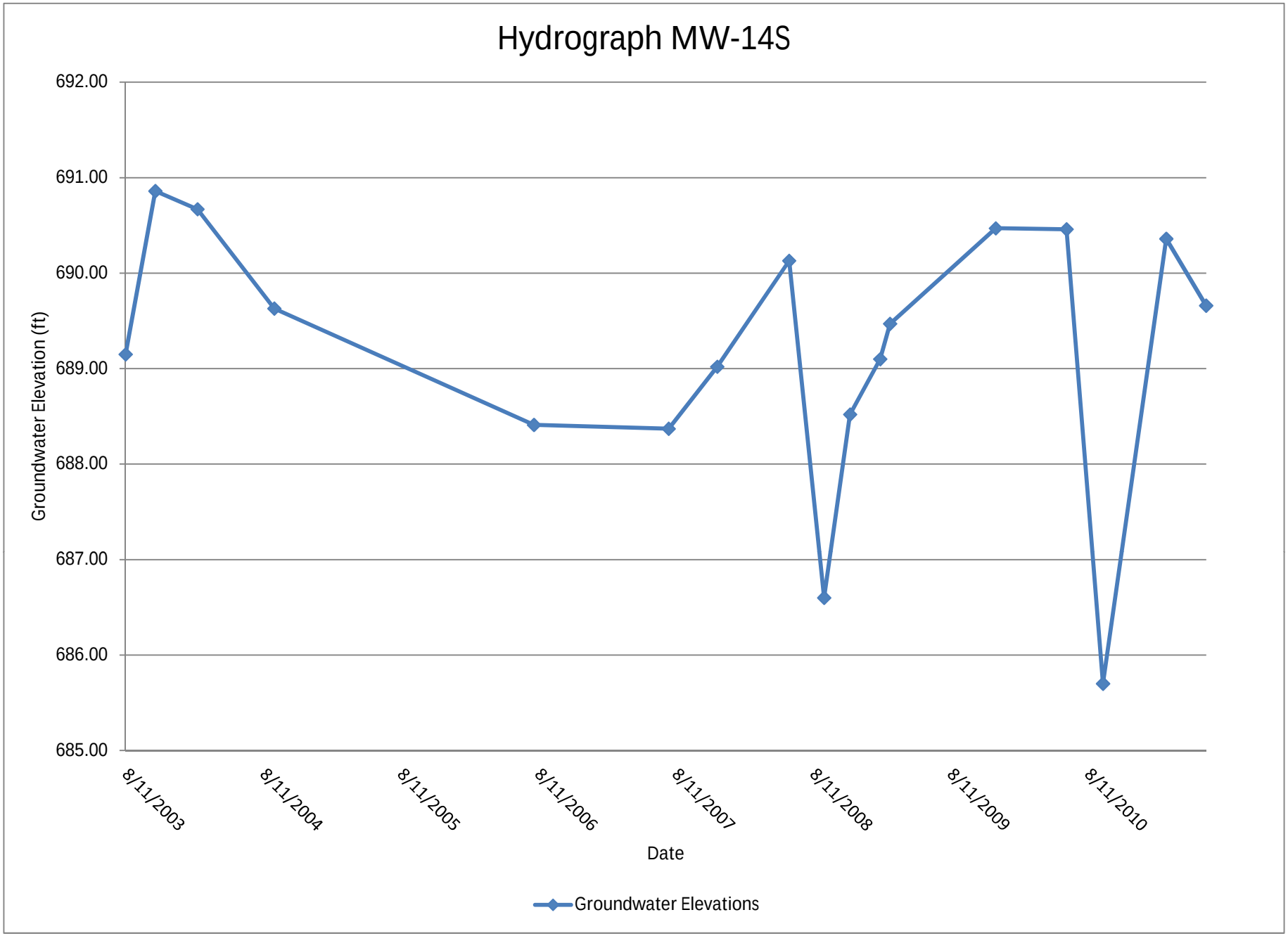
5/1/2011
Date
Groundwater Elevation


Hydrograph MW-14S
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Groundwater Elevation (ft)
8/11/2003
8/11/2004
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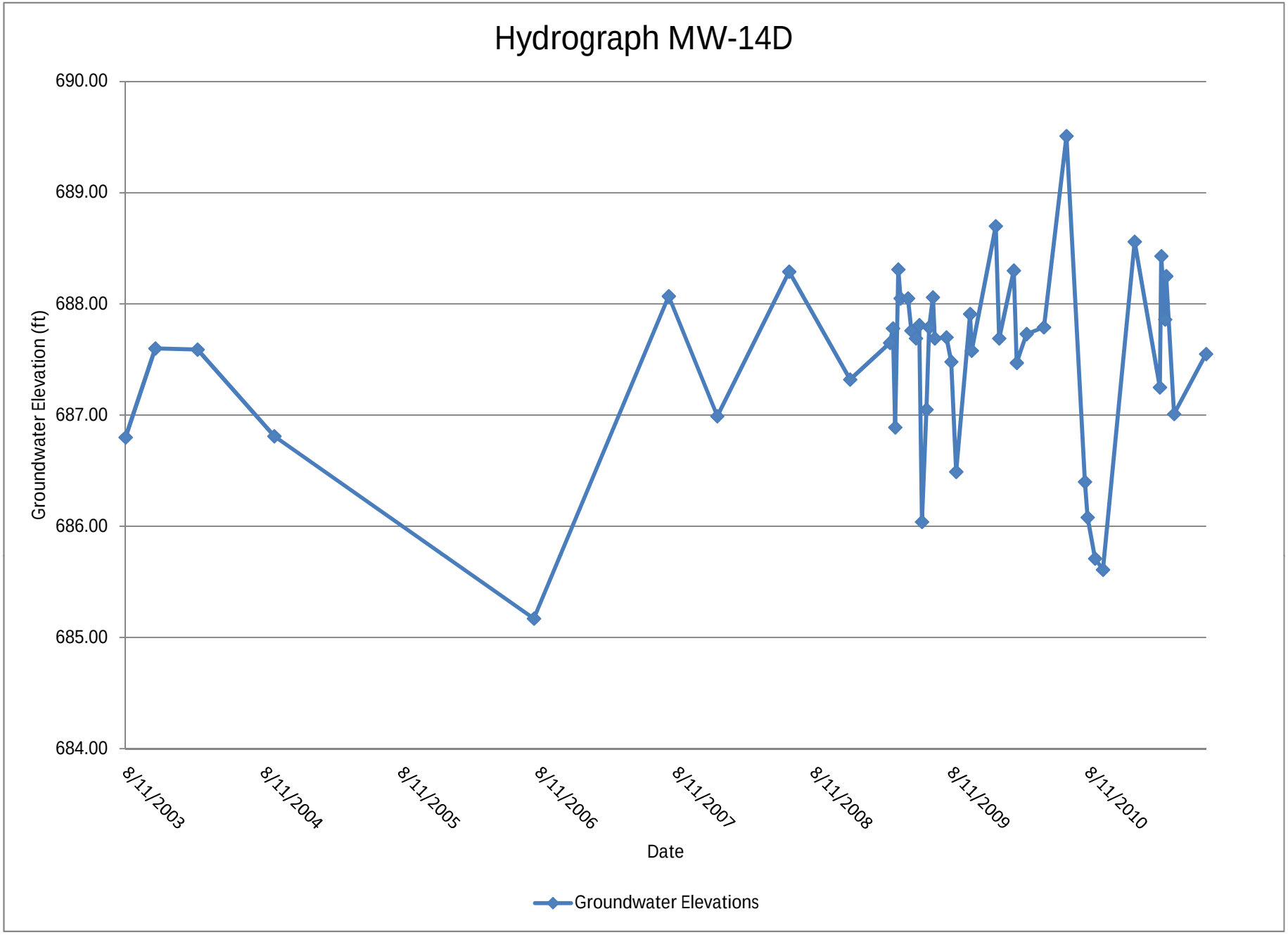
8/11/2006
8/11/2007
8/11/2008
8/11/2009
8/11/2010
Date
Groundwater Elevations


Hydrograph MW-14D
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Groundwater Elevation (ft)
8/11/2003
8/11/2004
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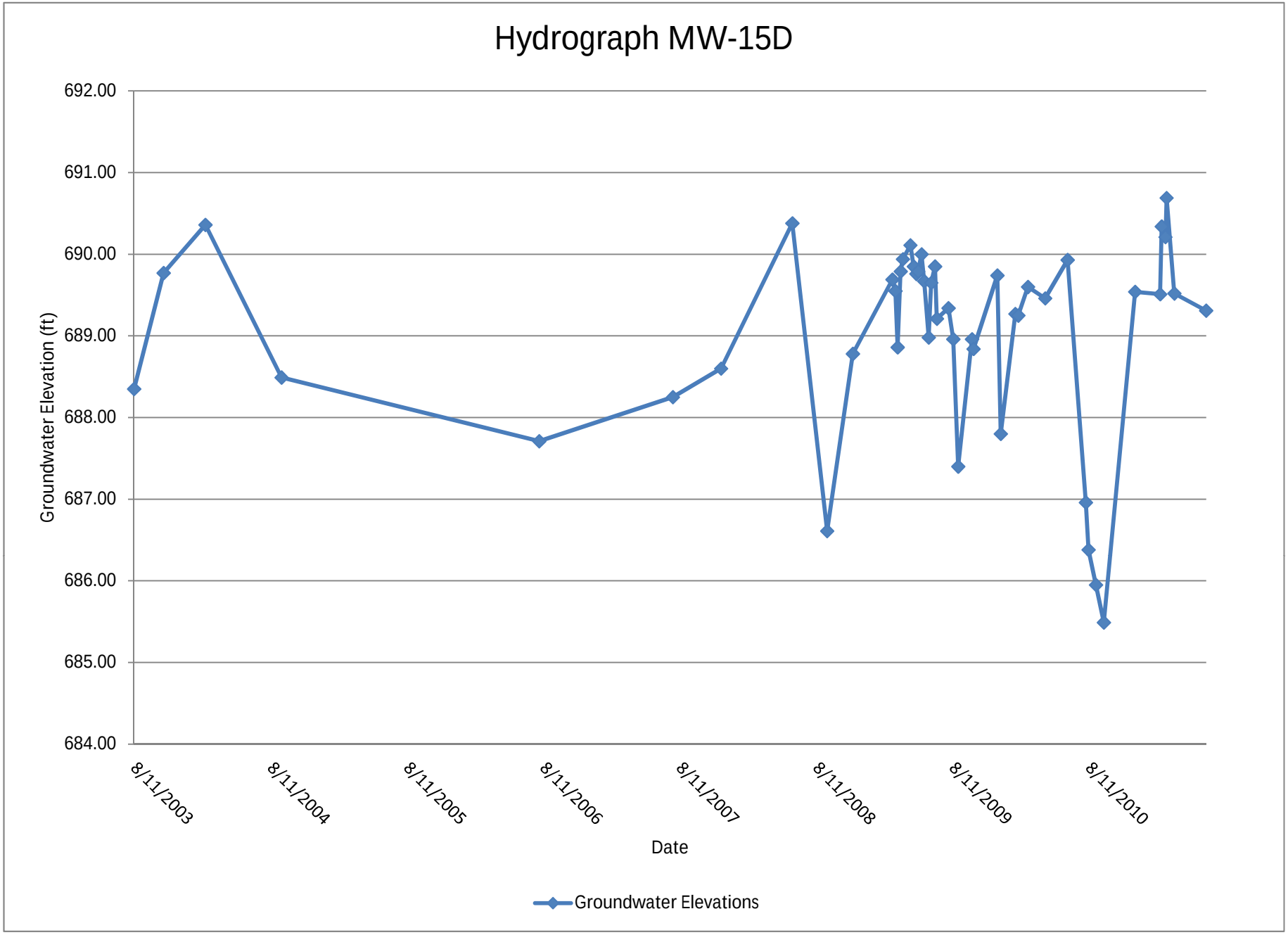
8/11/2006
8/11/2007
8/11/2008
8/11/2009
8/11/2010
Date
Groundwater Elevations


Hydrograph MW-15D
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Groundwater Elevation (ft)
8/11/2003
8/11/2004
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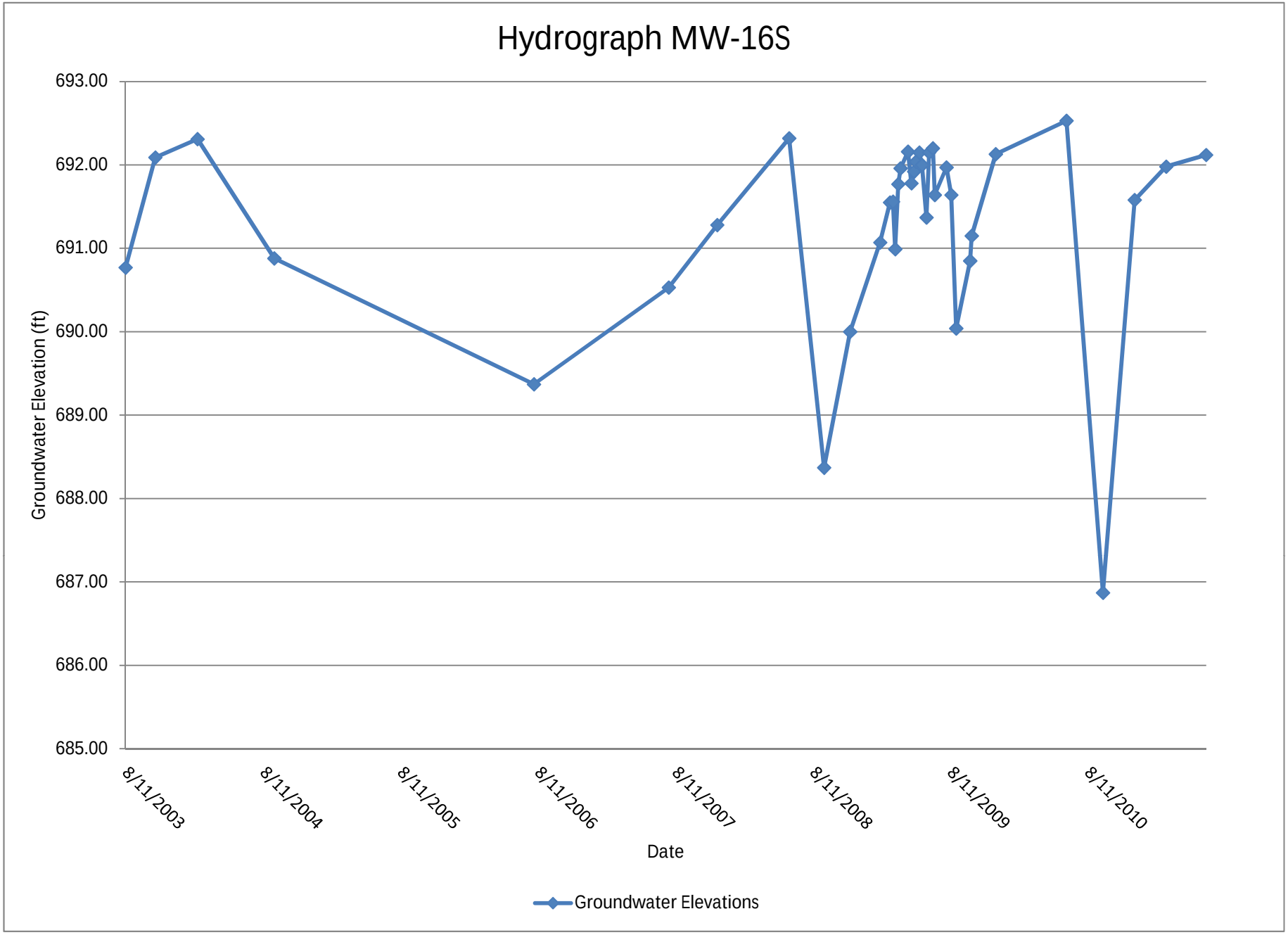
8/11/2006
8/11/2007
8/11/2008
8/11/2009
8/11/2010
Date
Groundwater Elevations


Hydrograph MW-16S
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685.00
Groundwater Elevation (ft)
8/11/2003
8/11/2004
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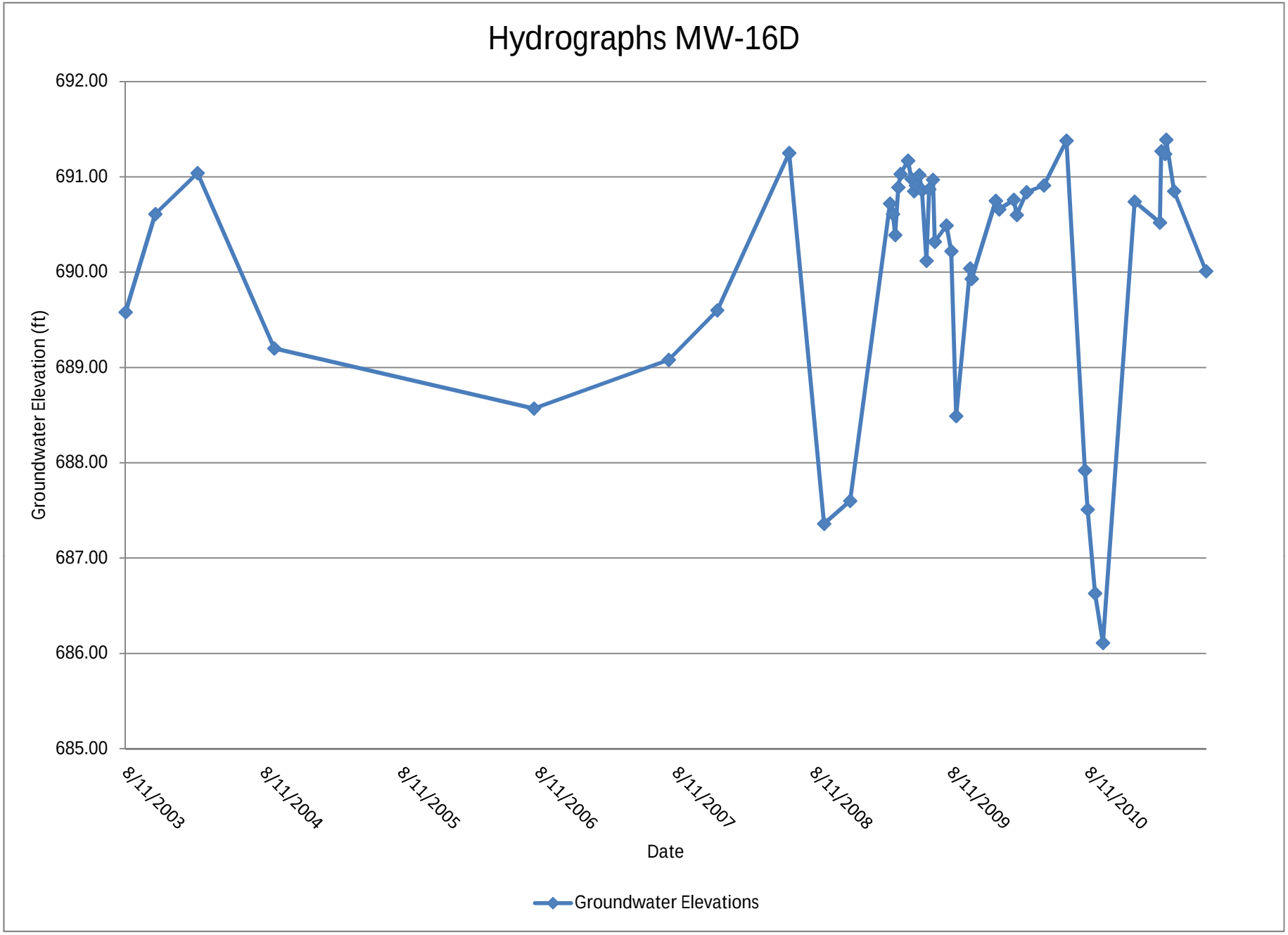
8/11/2006
8/11/2007
8/11/2008
8/11/2009
8/11/2010
Date
Groundwater Elevations


Hydrographs MW-16D
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Groundwater Elevation (ft)
8/11/2003
8/11/2004
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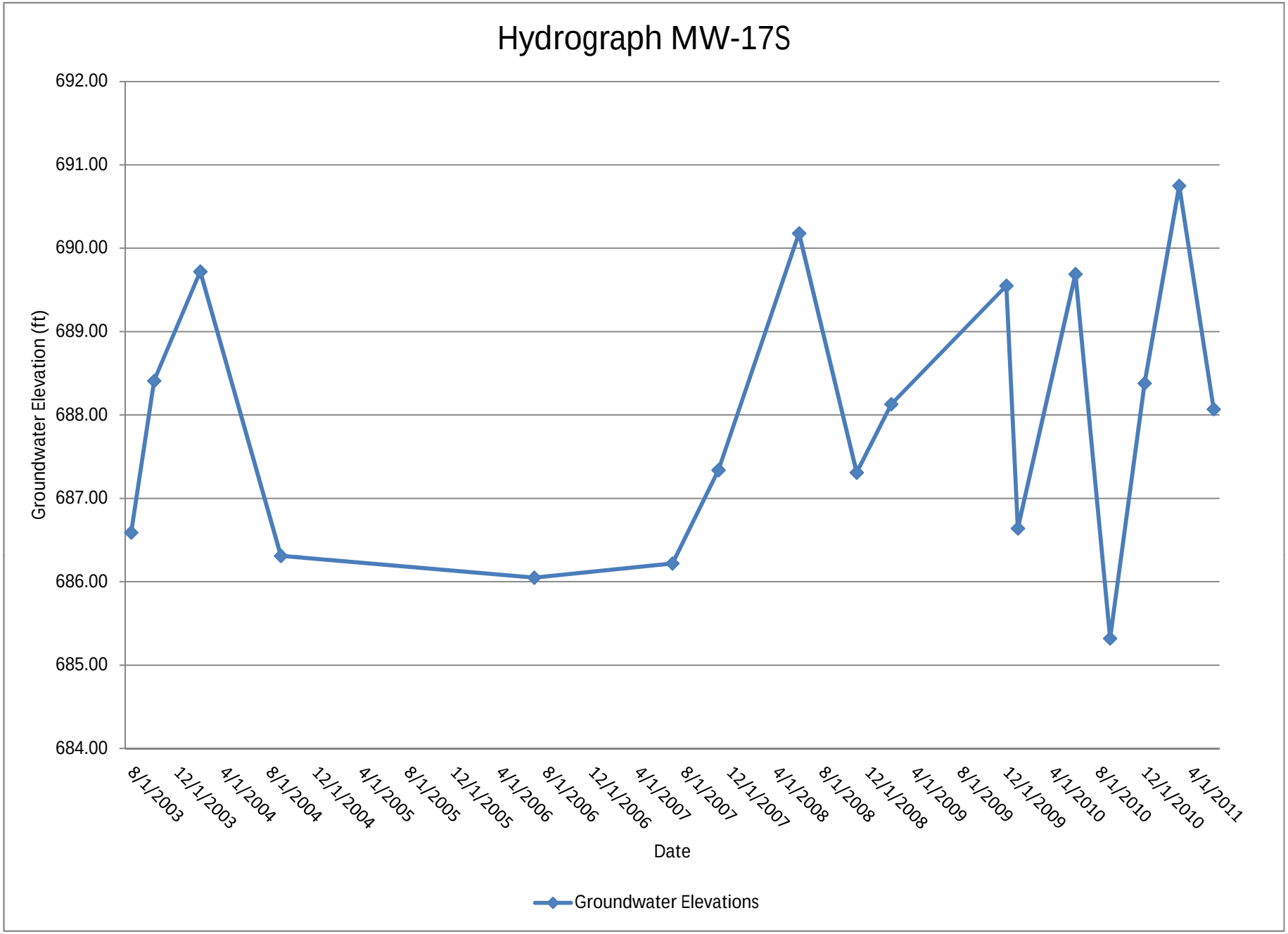
8/11/2006
8/11/2007
8/11/2008
8/11/2009
8/11/2010
Date
Groundwater Elevations


Hydrograph MW-17S
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Groundwater Elevation (ft)
8/1/2003
12/1/2003
4/1/2004
8/1/2004
12/1/2004
4/1/2005
8/1/2005
12/1/2005
4/1/2006
8/1/2006
12/1/2006
4/1/2007
8/1/2007
12/1/2007
4/1/2008
8/1/2008
12/1/2008
4/1/2009
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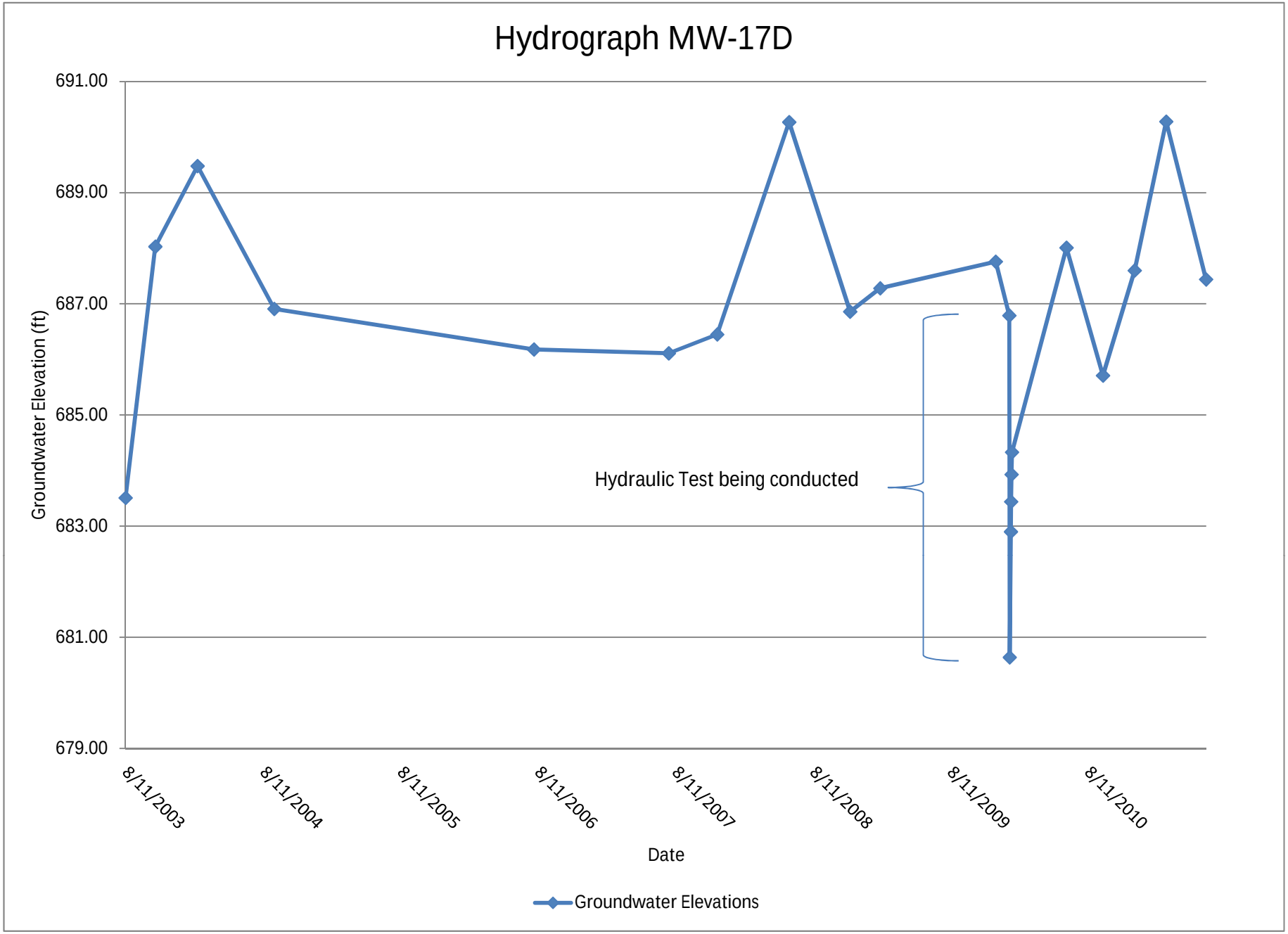
4/1/2010
8/1/2010
12/1/2010
4/1/2011
Date
Groundwater Elevations


Hydrograph MW-17D
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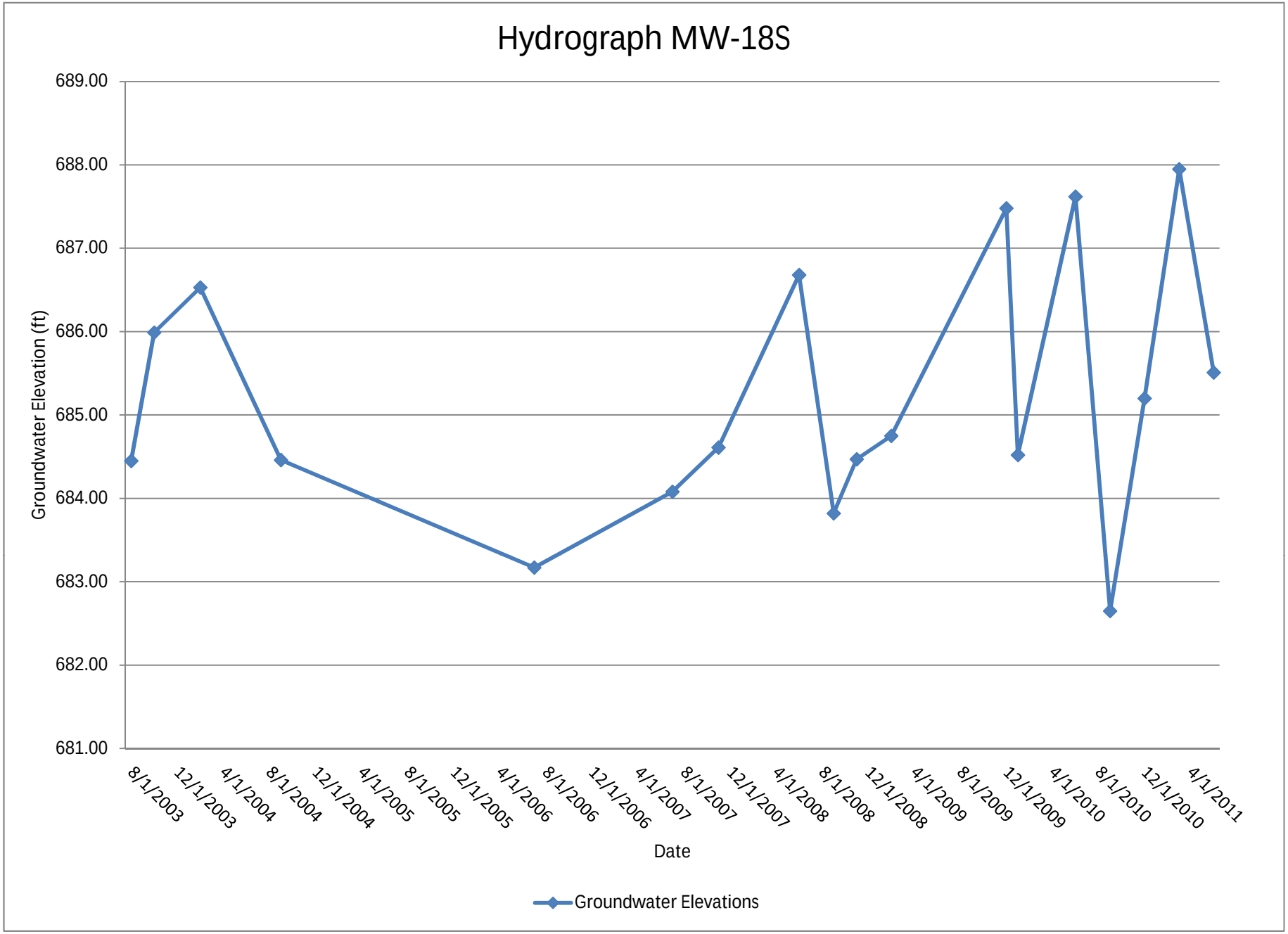
685.00
683.00
681.00
679.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
8/11/2003
8/11/2004
8/11/2005
8/11/2006
8/11/2007
8/11/2008
8/11/2009
8/11/2010
Date
Groundwater Elevations


Hydrograph MW-18S
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684.00
683.00
682.00
681.00
Groundwater Elevation (ft)
8/1/2003
12/1/2003
4/1/2004
8/1/2004
12/1/2004
4/1/2005
8/1/2005
12/1/2005
4/1/2006
8/1/2006
12/1/2006
4/1/2007
8/1/2007
12/1/2007
4/1/2008
8/1/2008
12/1/2008
4/1/2009
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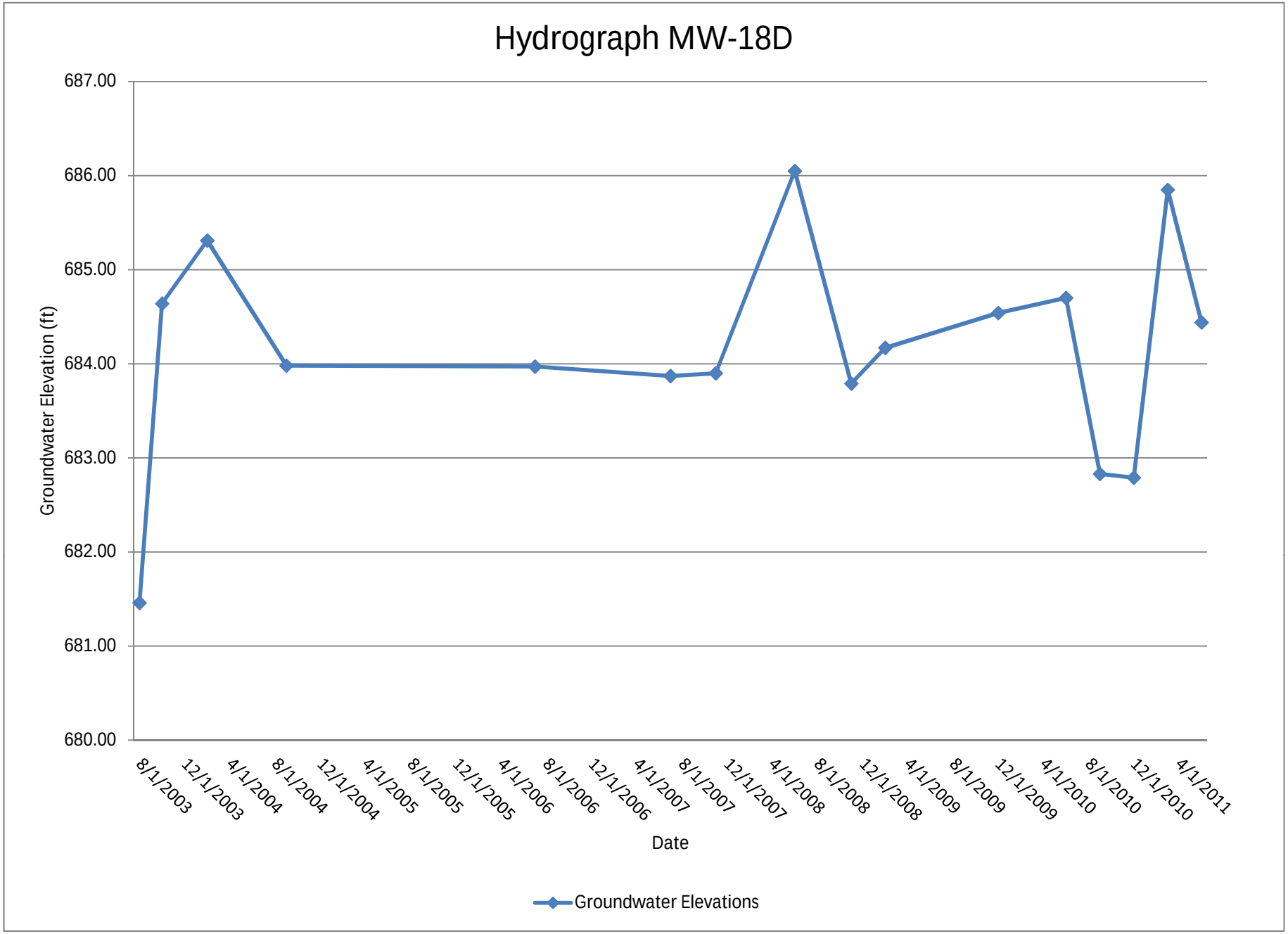
4/1/2010
8/1/2010
12/1/2010
4/1/2011
Date
Groundwater Elevations


Hydrograph MW-18D
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Groundwater Elevation (ft)
8/1/2003
12/1/2003
4/1/2004
8/1/2004
12/1/2004
4/1/2005
8/1/2005
12/1/2005
4/1/2006
8/1/2006
12/1/2006
4/1/2007
8/1/2007
12/1/2007
4/1/2008
8/1/2008
12/1/2008
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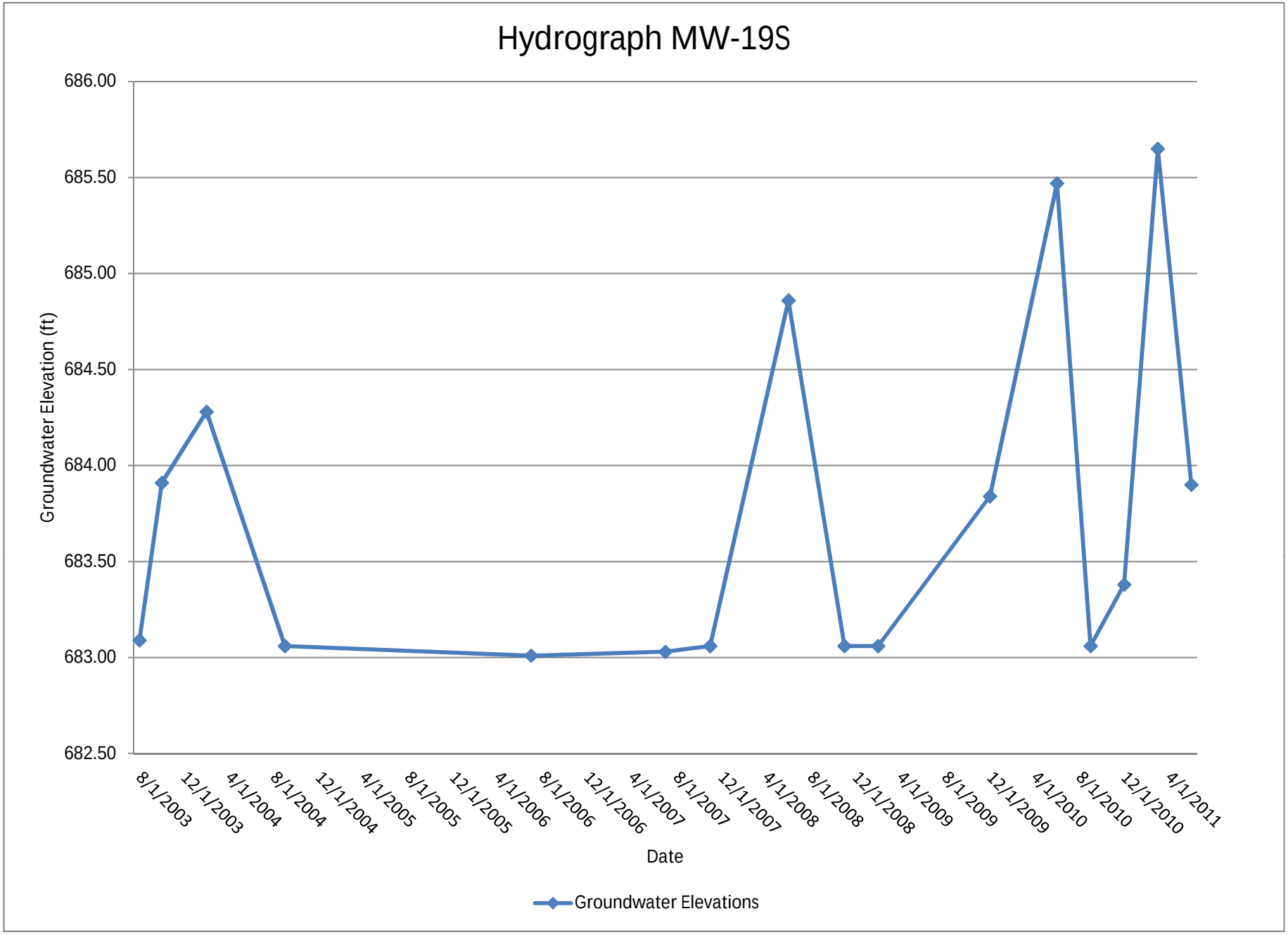
4/1/2010
8/1/2010
12/1/2010
4/1/2011
Date
Groundwater Elevations


Hydrograph MW-19S
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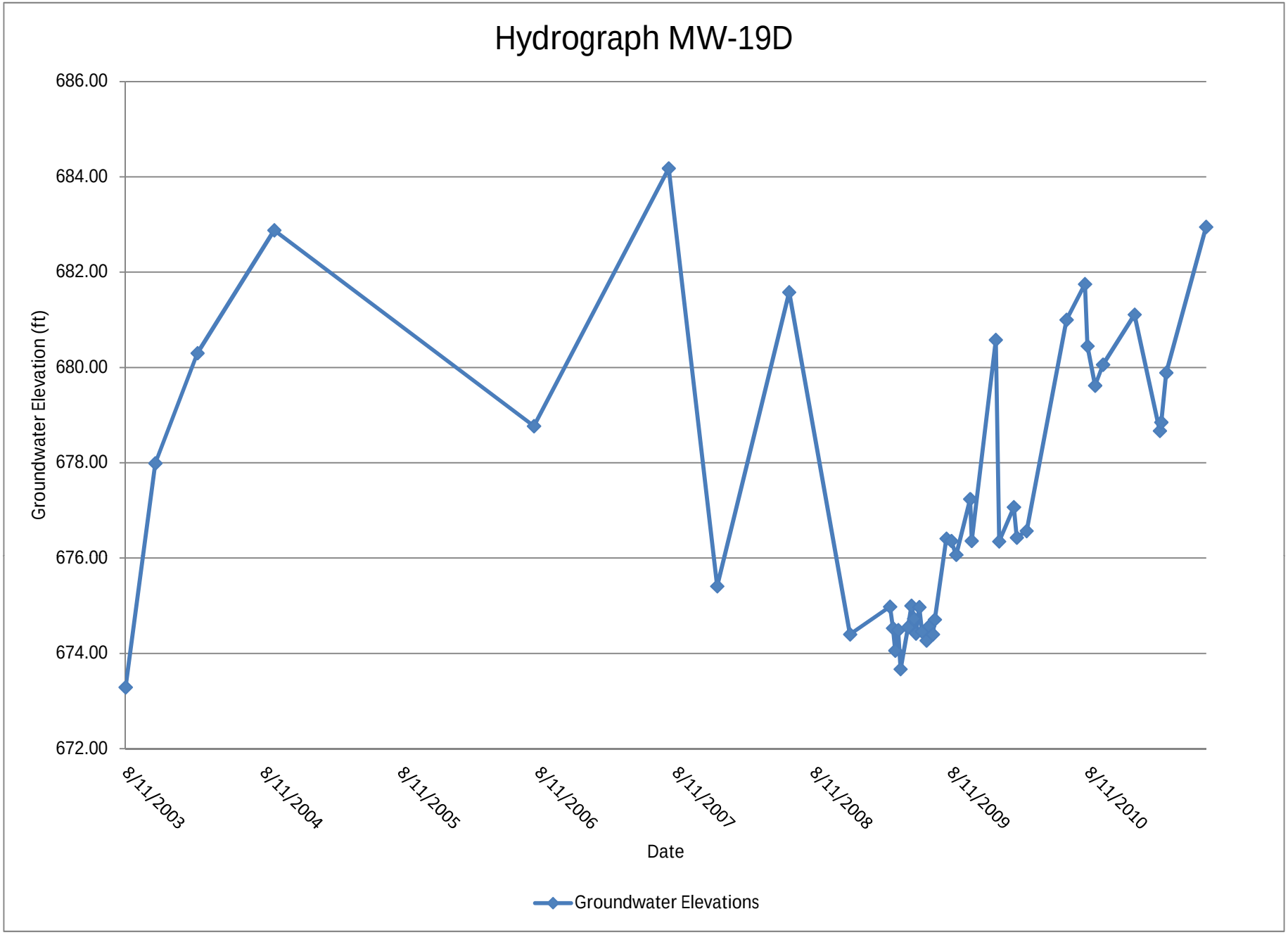
Groundwater Elevation (ft)
8/1/2003
12/1/2003
4/1/2004
8/1/2004
12/1/2004
4/1/2005
8/1/2005
12/1/2005
4/1/2006
8/1/2006
12/1/2006
4/1/2007
8/1/2007
12/1/2007
4/1/2008
8/1/2008
12/1/2008
4/1/2009
8/1/2009
12/1/2009
4/1/2010
8/1/2010
12/1/2010
4/1/2011
Date
Groundwater Elevations


Hydrograph MW-19D
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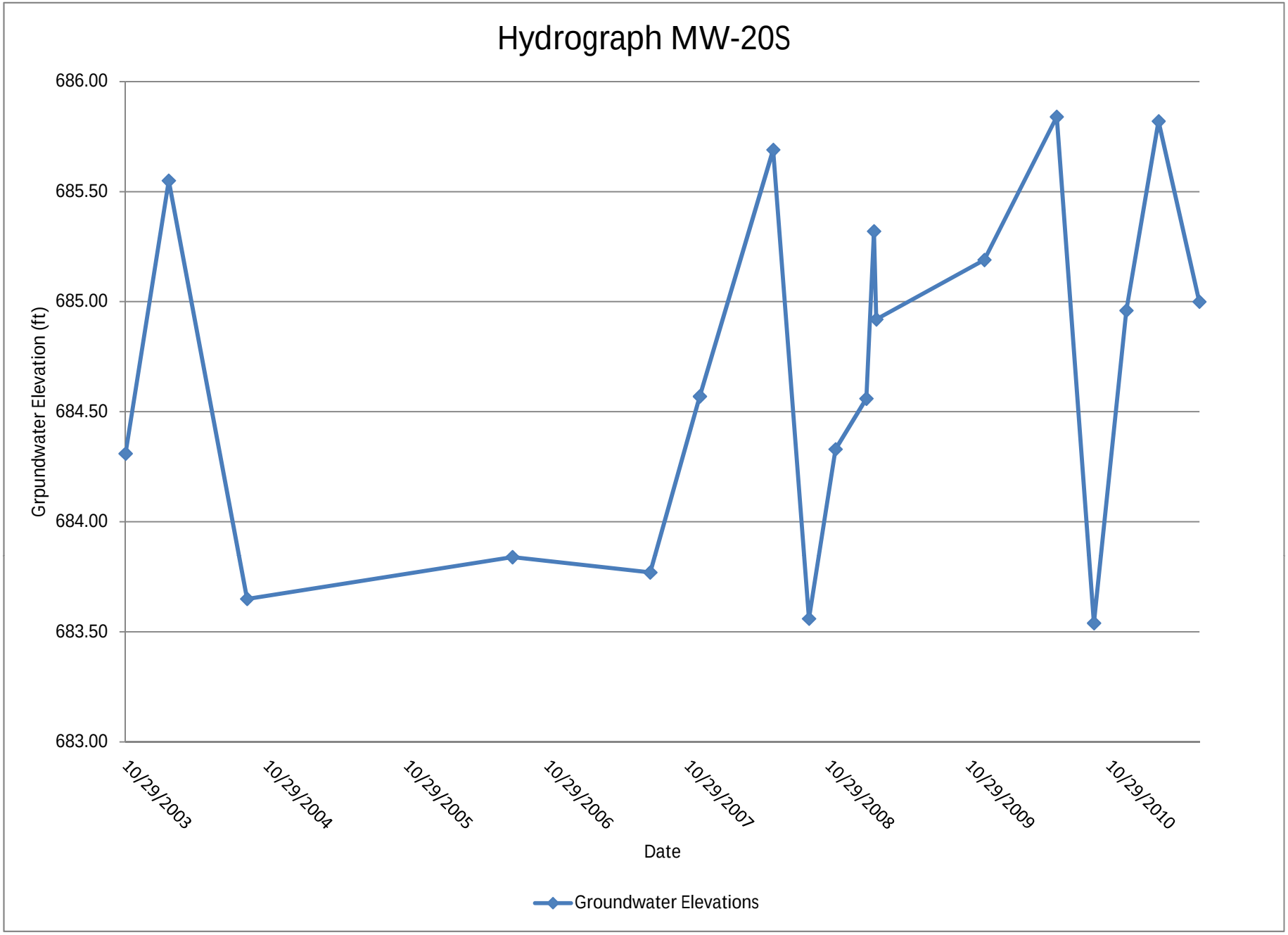
684.00
682.00
680.00
678.00
676.00
674.00
672.00
Groundwater Elevation (ft)
8/11/2003
8/11/2004
8/11/2005
8/11/2006
8/11/2007
8/11/2008
8/11/2009
8/11/2010
Date
Groundwater Elevations


Hydrograph MW-20S
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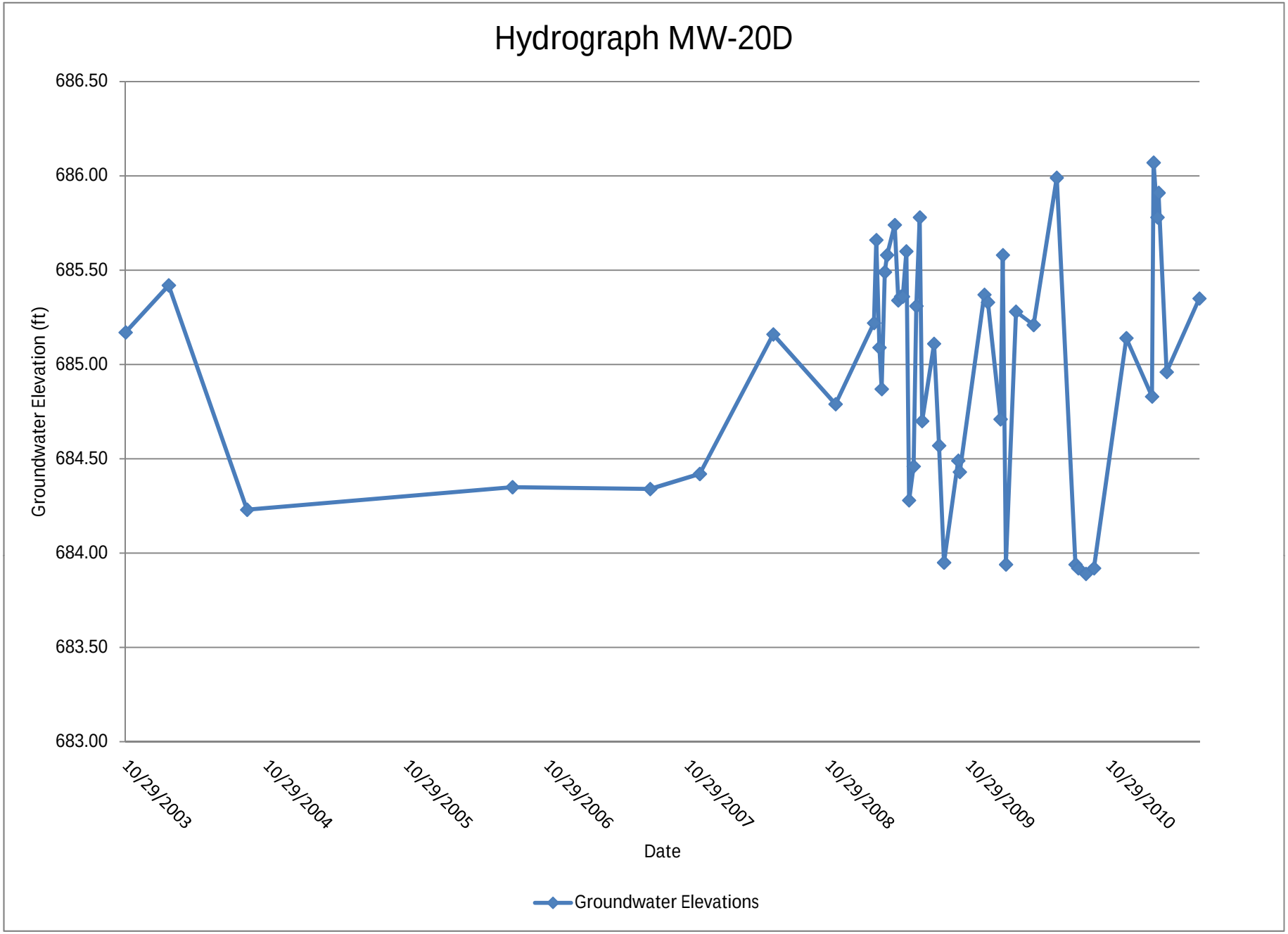
Grpundwater Elevation (ft)
10/29/2003
10/29/2004
10/29/2005
10/29/2006
10/29/2007
10/29/2008
10/29/2009
10/29/2010
Date
Groundwater Elevations


Hydrograph MW-20D
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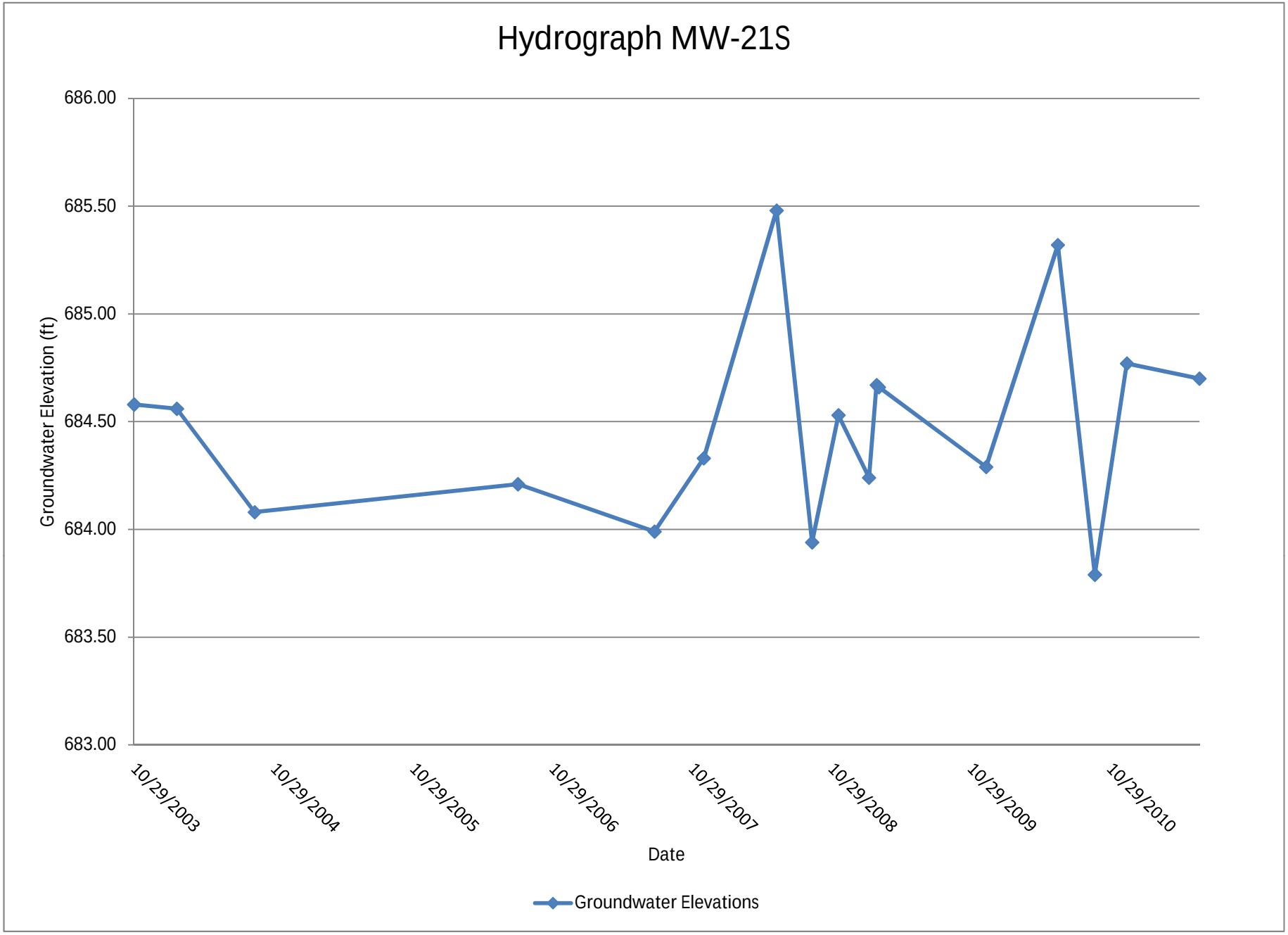
Groundwater Elevation (ft)
10/29/2003
10/29/2004
10/29/2005
10/29/2006
10/29/2007
10/29/2008
10/29/2009
10/29/2010
Date
Groundwater Elevations


Hydrograph MW-21S
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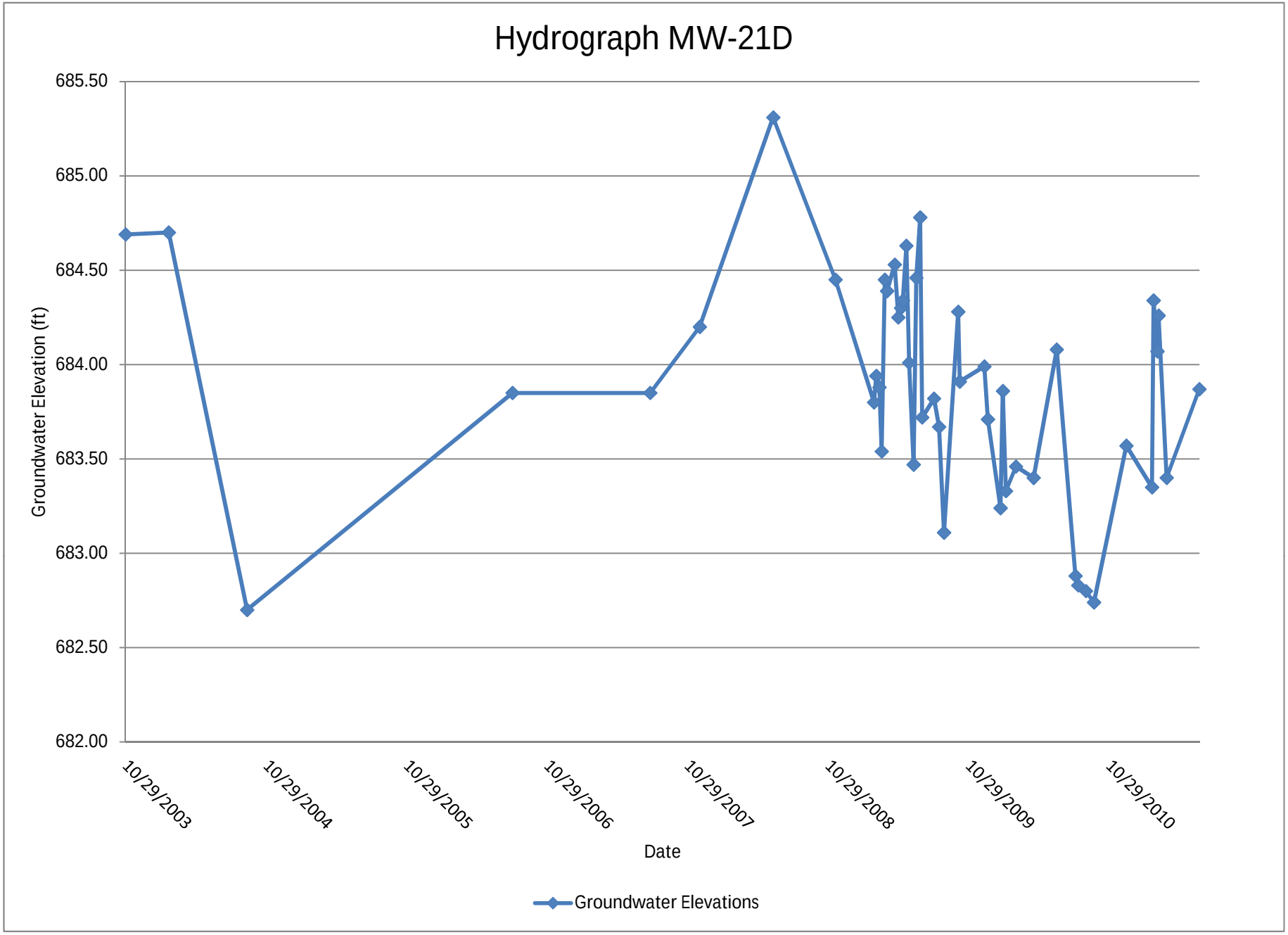
683.50
683.00
Groundwater Elevation (ft)
10/29/2003
10/29/2004
10/29/2005
10/29/2006
10/29/2007
10/29/2008
10/29/2009
10/29/2010
Date
Groundwater Elevations


Hydrograph MW-21D
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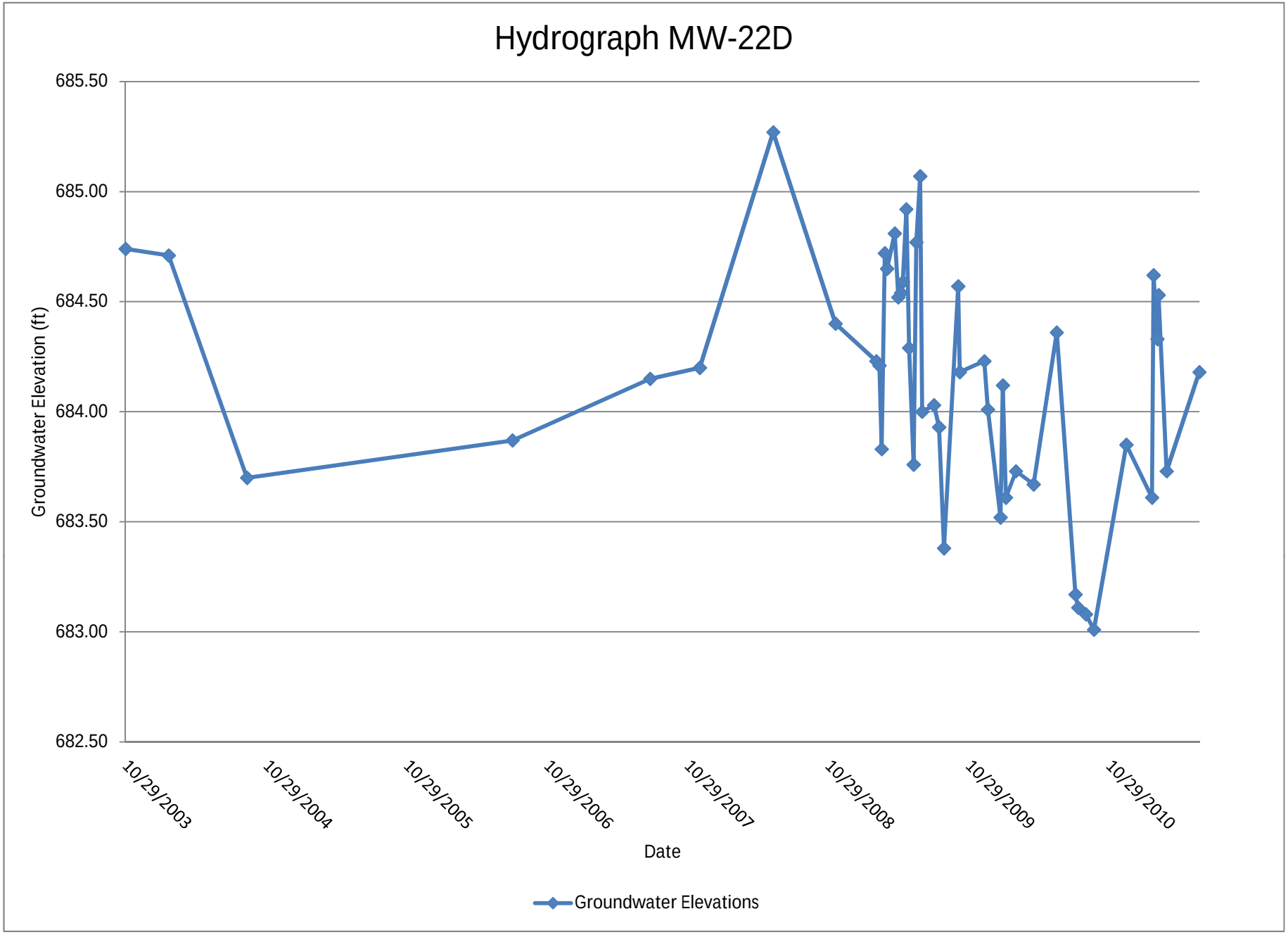
Groundwater Elevation (ft)
10/29/2003
10/29/2004
10/29/2005
10/29/2006
10/29/2007
10/29/2008
10/29/2009
10/29/2010
Date
Groundwater Elevations


Hydrograph MW-22D
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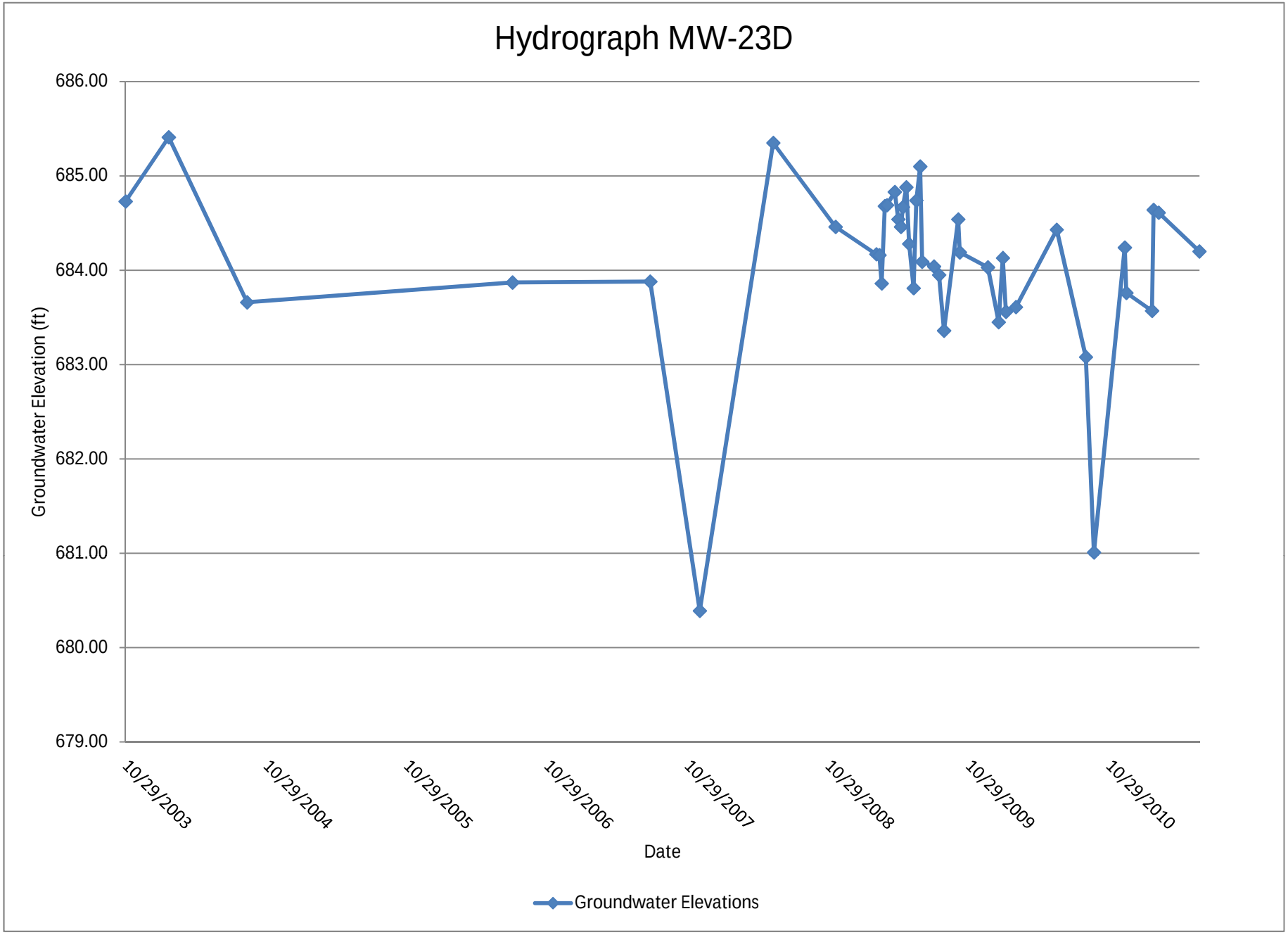
Groundwater Elevation (ft)
10/29/2003
10/29/2004
10/29/2005
10/29/2006
10/29/2007
10/29/2008
10/29/2009
10/29/2010
Date
Groundwater Elevations


Hydrograph MW-23D
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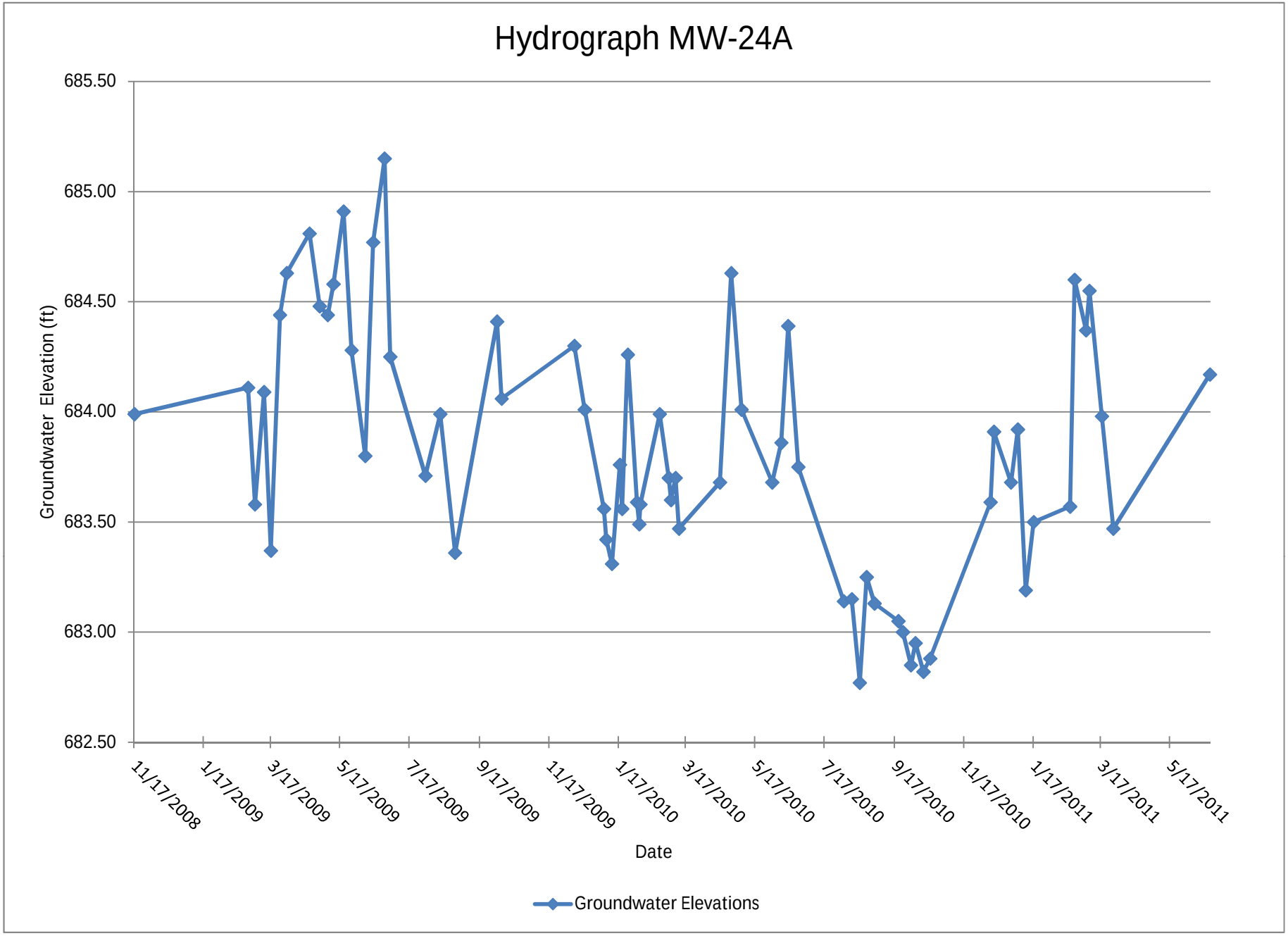
680.00
679.00
Groundwater Elevation (ft)
10/29/2003
10/29/2004
10/29/2005
10/29/2006
10/29/2007
10/29/2008
10/29/2009
10/29/2010
Date
Groundwater Elevations


Hydrograph MW-24A
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683.00
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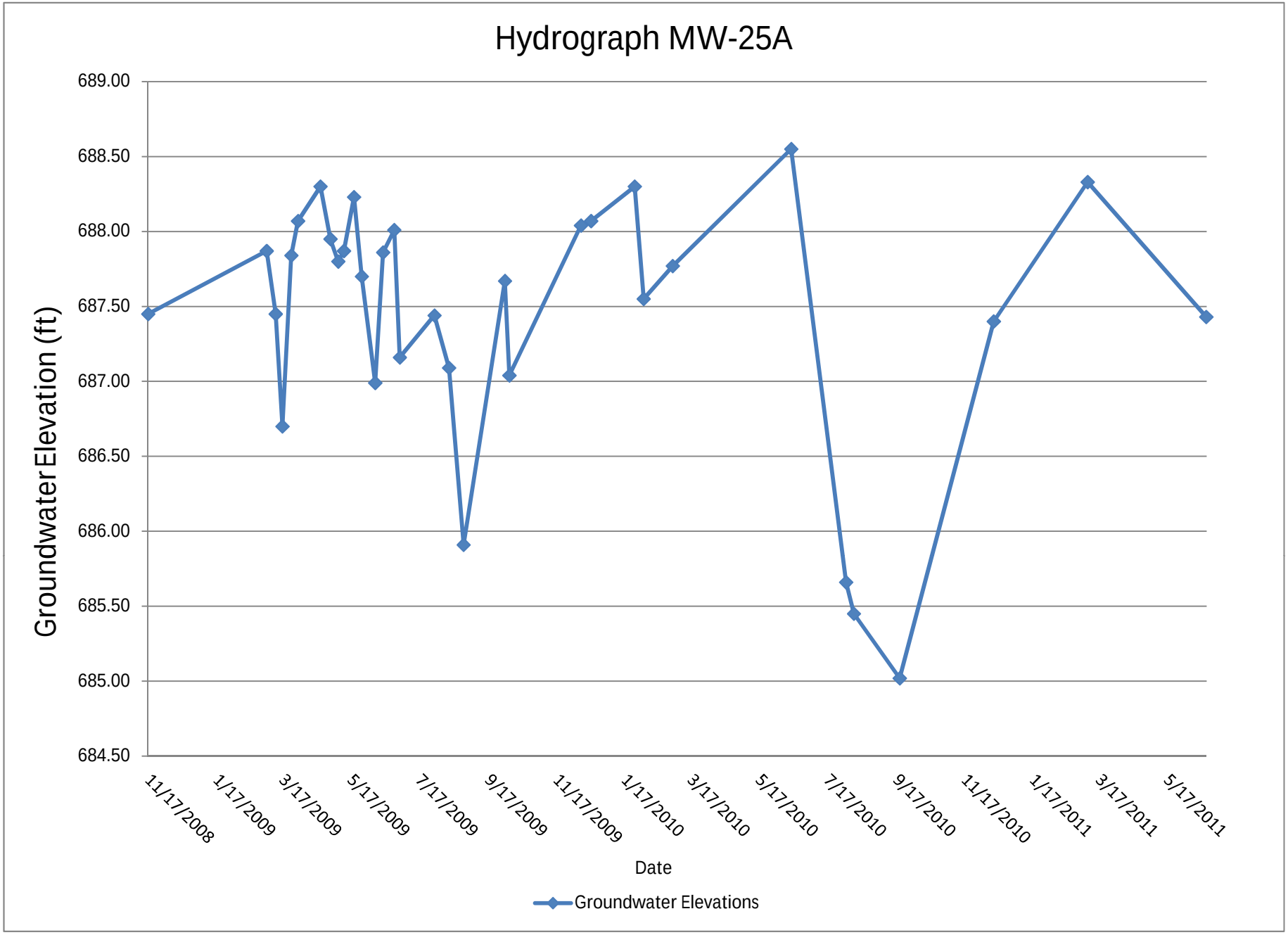
Groundwater Elevation (ft)
11/17/2008
1/17/2009
3/17/2009
5/17/2009
7/17/2009
9/17/2009
11/17/2009
1/17/2010
3/17/2010
5/17/2010
7/17/2010
9/17/2010
11/17/2010
1/17/2011
3/17/2011
5/17/2011
Date
Groundwater Elevations


Hydrograph MW-25A
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684.50
Groundwater Elevation (ft)
11/17/2008
1/17/2009
3/17/2009
5/17/2009
7/17/2009
9/17/2009
11/17/2009
1/17/2010
3/17/2010
5/17/2010
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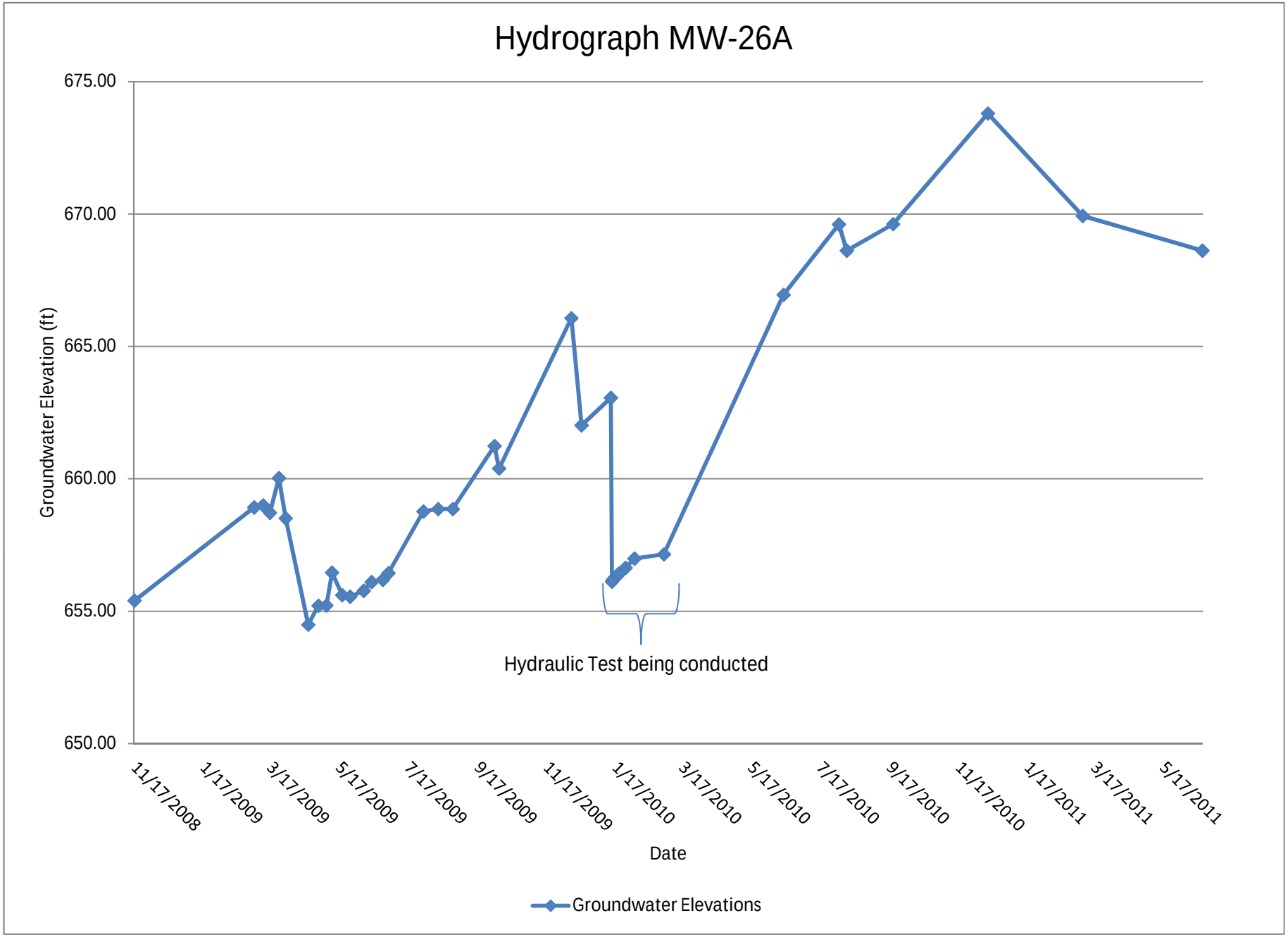
1/17/2011
3/17/2011
5/17/2011
Date
Groundwater Elevations


Hydrograph MW-26A
675.00
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655.00
650.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
11/17/2008
1/17/2009
3/17/2009
5/17/2009
7/17/2009
9/17/2009
11/17/2009
1/17/2010
3/17/2010
5/17/2010
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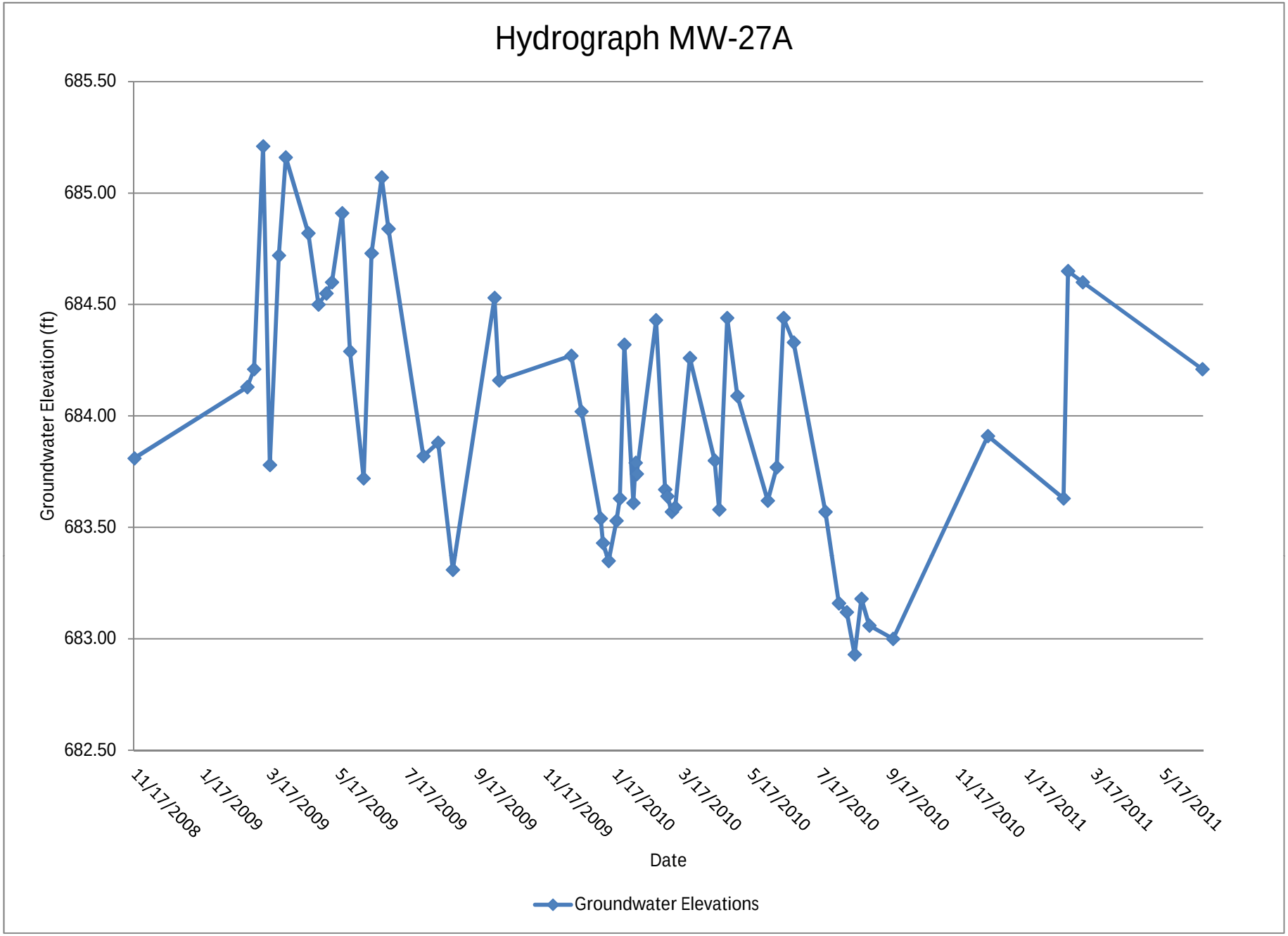
9/17/2010
11/17/2010
1/17/2011
3/17/2011
5/17/2011
Date
Groundwater Elevations


Hydrograph MW-27A
685.50
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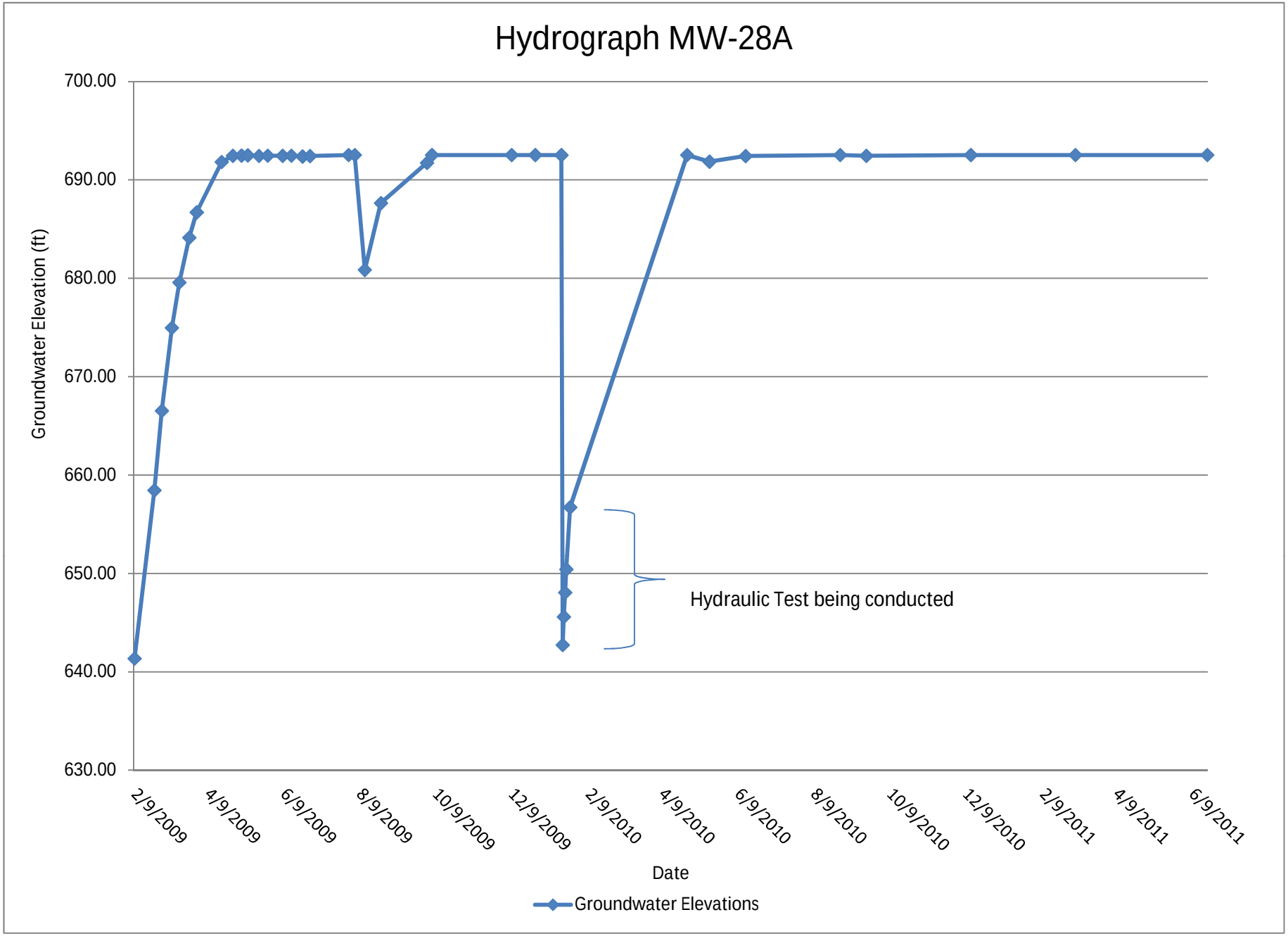
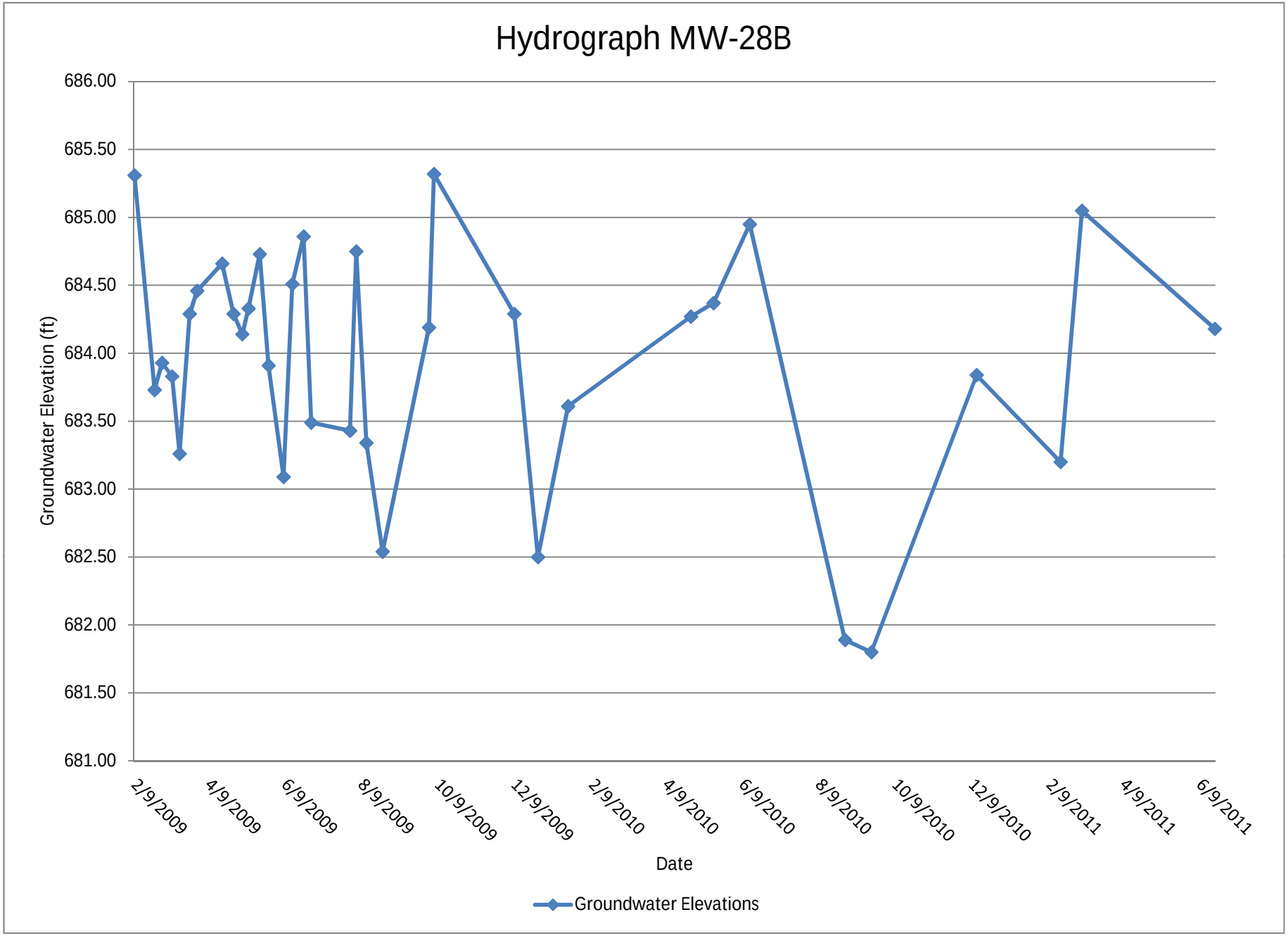
683.00
682.50
Groundwater Elevation (ft)
11/17/2008
1/17/2009
3/17/2009
5/17/2009
7/17/2009
9/17/2009
11/17/2009
1/17/2010
3/17/2010
5/17/2010
7/17/2010
9/17/2010
11/17/2010
1/17/2011
3/17/2011
5/17/2011
Date
Groundwater Elevations


Hydrograph MW-28A
700.00
690.00
680.00
670.00
660.00
650.00
640.00
630.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
2/9/2009
4/9/2009
6/9/2009
8/9/2009
10/9/2009
12/9/2009
2/9/2010
4/9/2010
6/9/2010
8/9/2010
10/9/2010
12/9/2010
2/9/2011
4/9/2011
6/9/2011
Date
Groundwater Elevations


Hydrograph MW-28B
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683.50
683.00
682.50
682.00
681.50
681.00
Groundwater Elevation (ft)
2/9/2009
4/9/2009
6/9/2009
8/9/2009
10/9/2009
12/9/2009
2/9/2010
4/9/2010
6/9/2010
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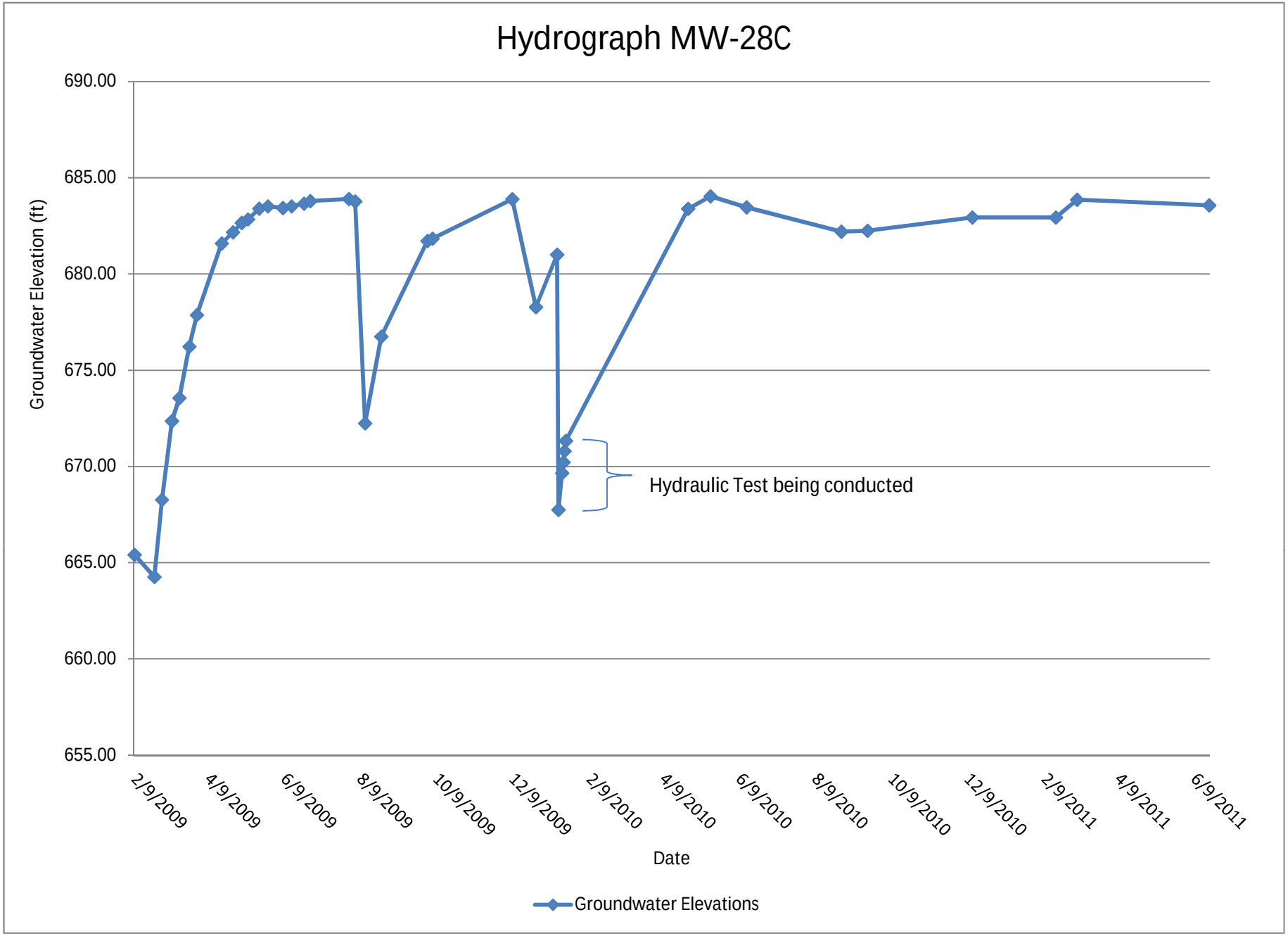
10/9/2010
12/9/2010
2/9/2011
4/9/2011
6/9/2011
Date
Groundwater Elevations


Hydrograph MW-28C
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685.00
680.00
675.00
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665.00
660.00
655.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
2/9/2009
4/9/2009
6/9/2009
8/9/2009
10/9/2009
12/9/2009
2/9/2010
4/9/2010
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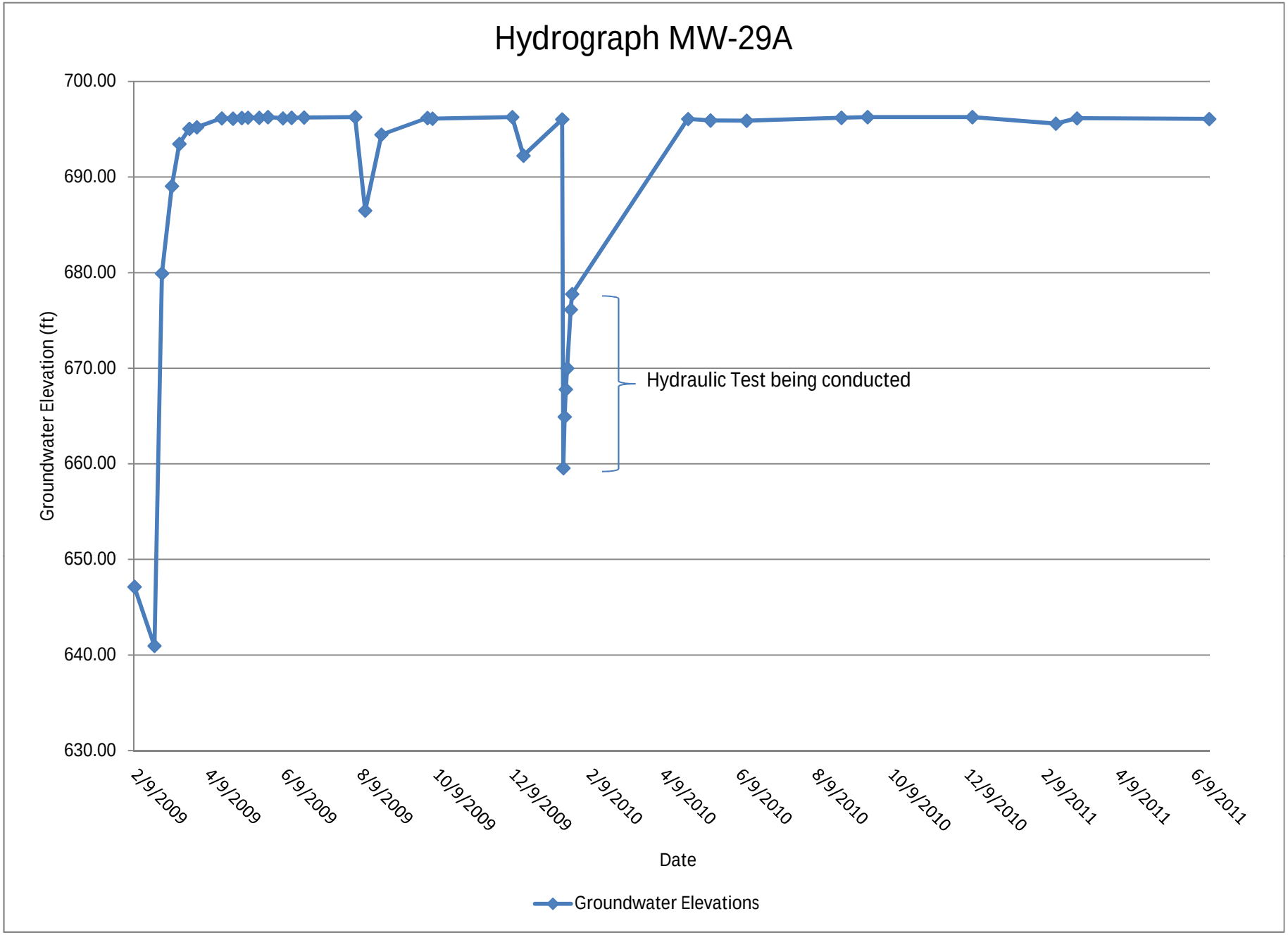
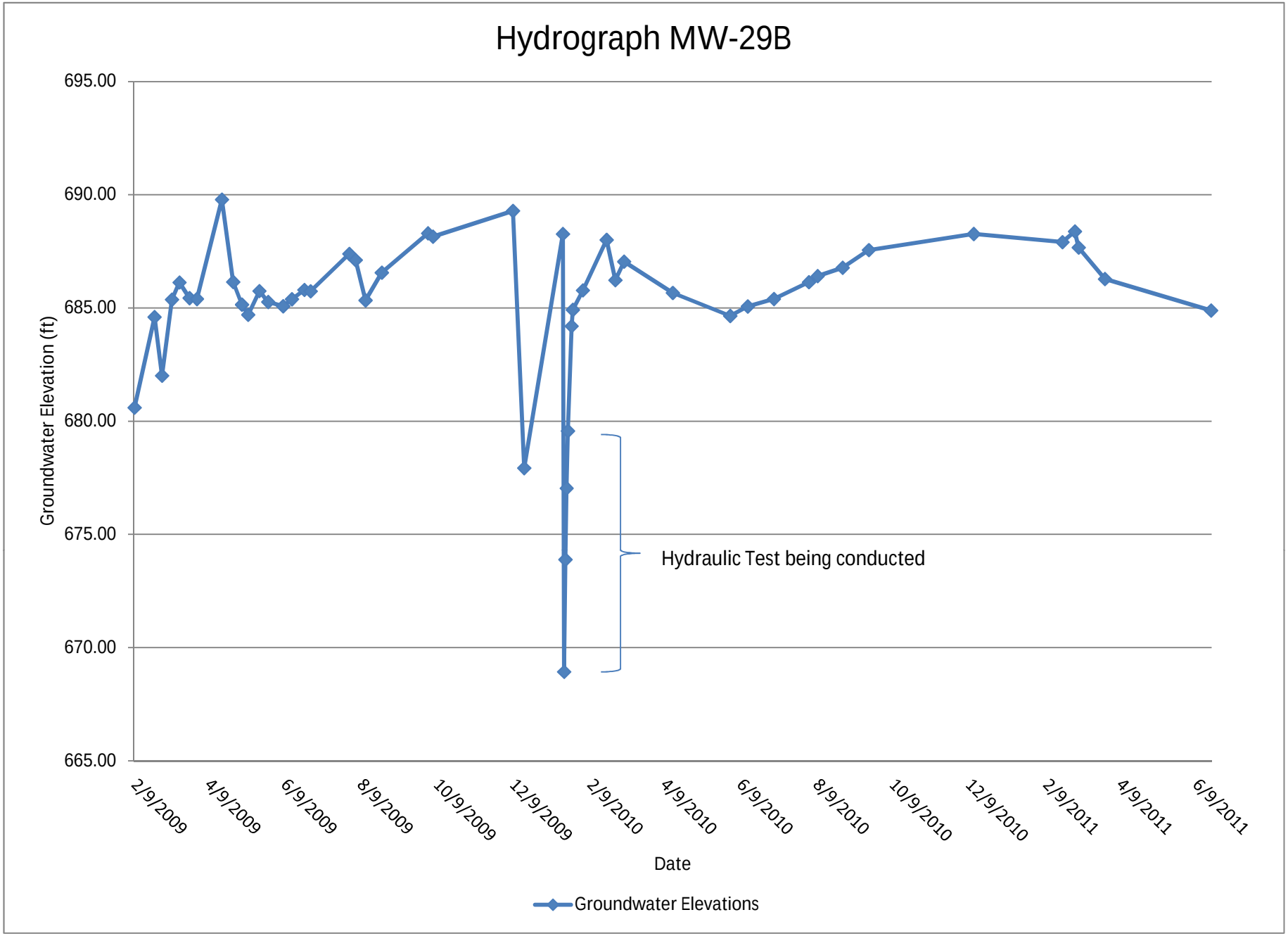
12/9/2010
2/9/2011
4/9/2011
6/9/2011
Date
Groundwater Elevations


Hydrograph MW-29A
700.00
690.00
680.00
670.00
660.00
650.00
640.00
630.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
2/9/2009
4/9/2009
6/9/2009
8/9/2009
10/9/2009
12/9/2009
2/9/2010
4/9/2010
6/9/2010
8/9/2010
10/9/2010
12/9/2010
2/9/2011
4/9/2011
6/9/2011
Date
Groundwater Elevations


Hydrograph MW-29B
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675.00
670.00
665.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
2/9/2009
4/9/2009
6/9/2009
8/9/2009
10/9/2009
12/9/2009
2/9/2010
4/9/2010
6/9/2010
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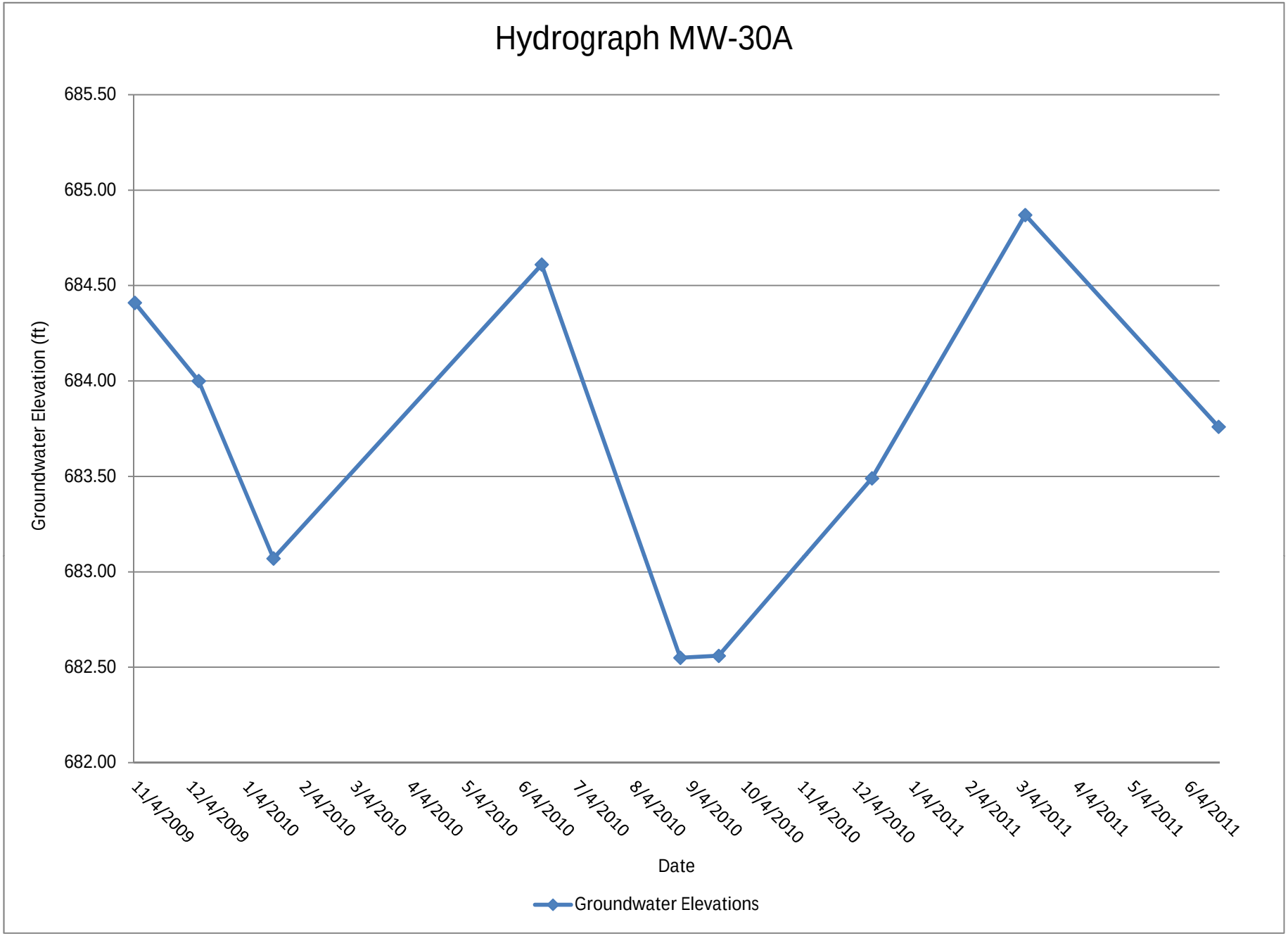
10/9/2010
12/9/2010
2/9/2011
4/9/2011
6/9/2011
Date
Groundwater Elevations


Hydrograph MW-30A
685.50
685.00
684.50
684.00
683.50
683.00
682.50
682.00
Groundwater Elevation (ft)
11/4/2009
12/4/2009
1/4/2010
2/4/2010
3/4/2010
4/4/2010
5/4/2010
6/4/2010
7/4/2010
8/4/2010
9/4/2010
10/4/2010
11/4/2010
12/4/2010
1/4/2011
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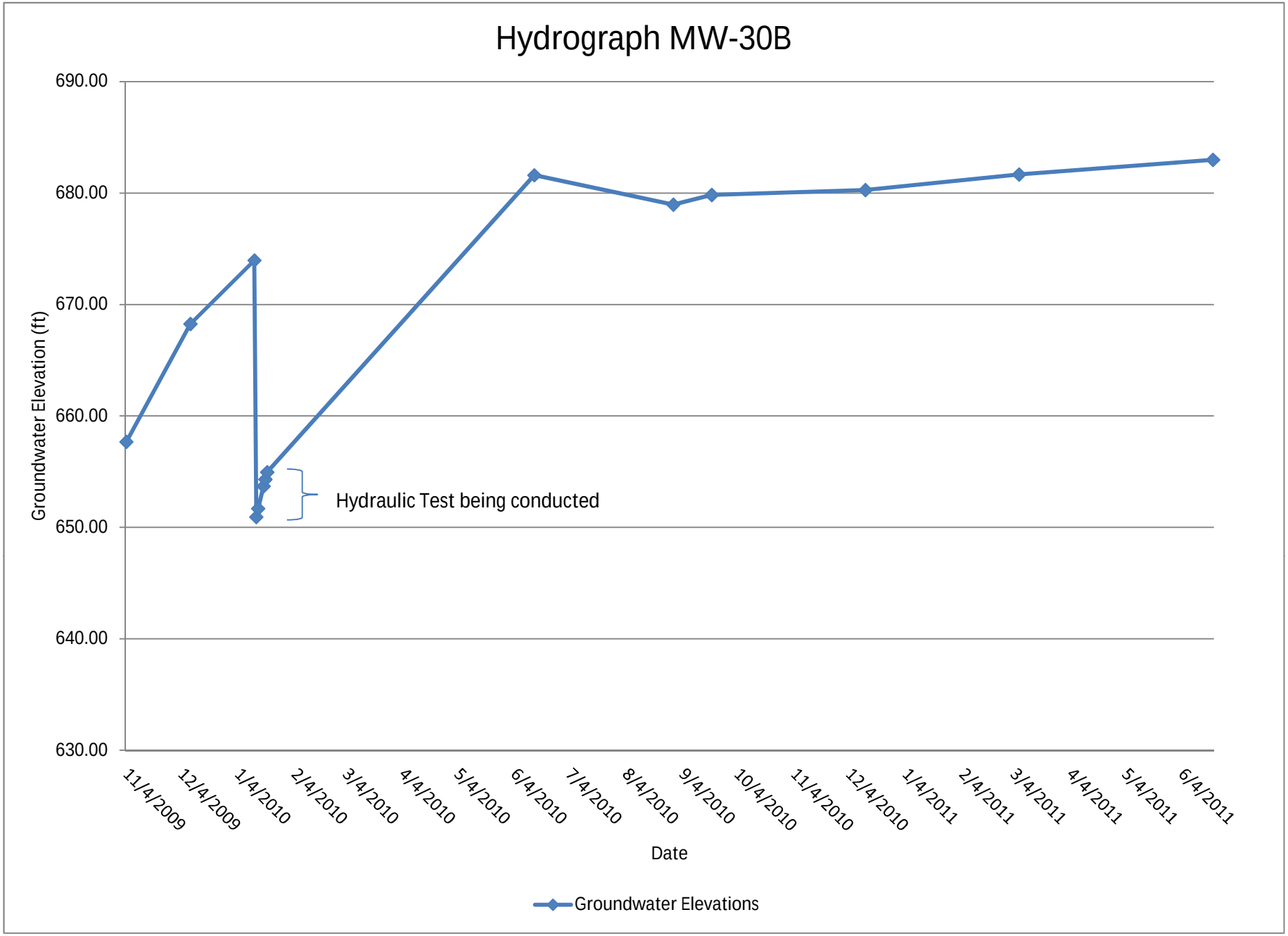
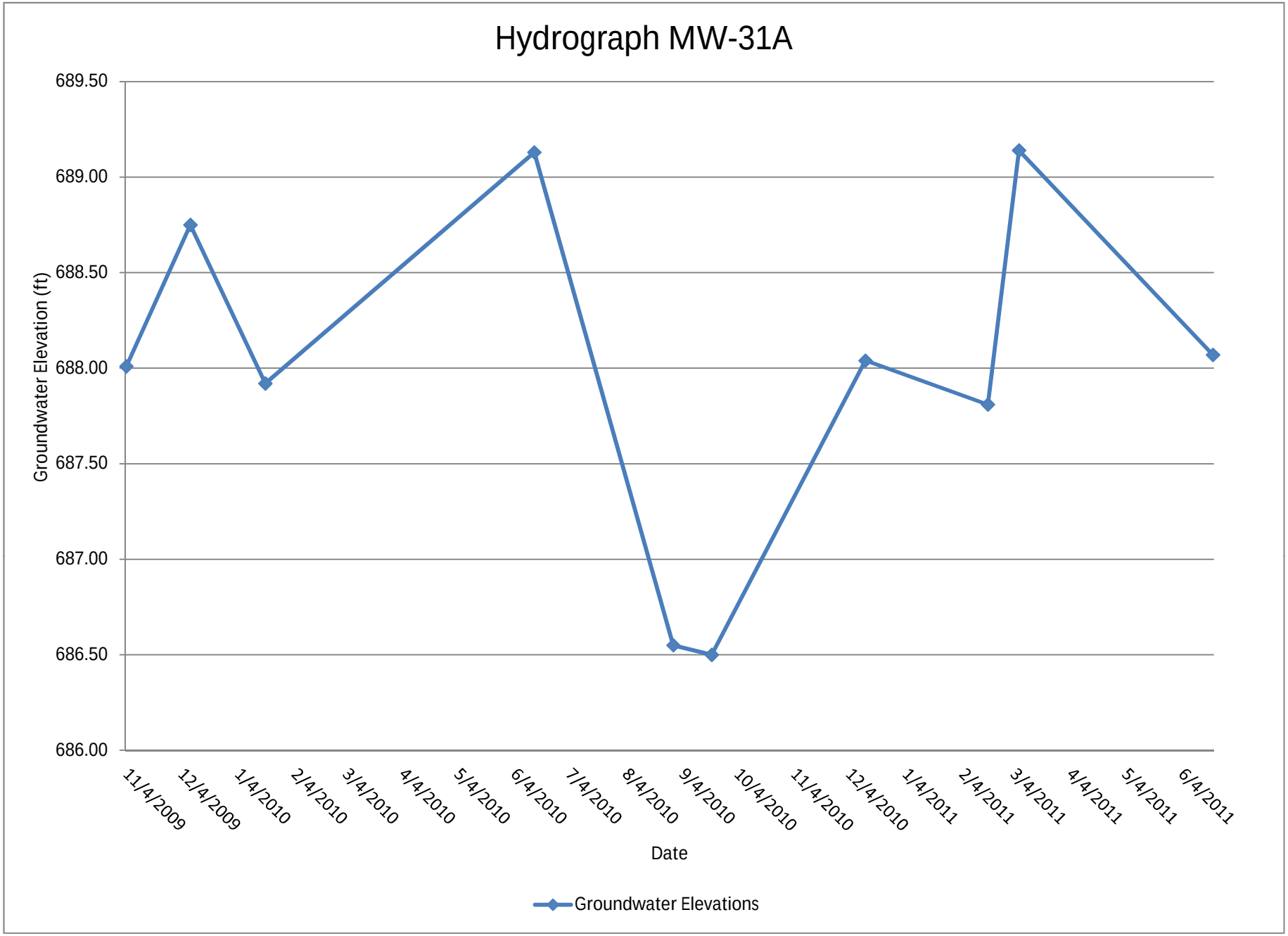
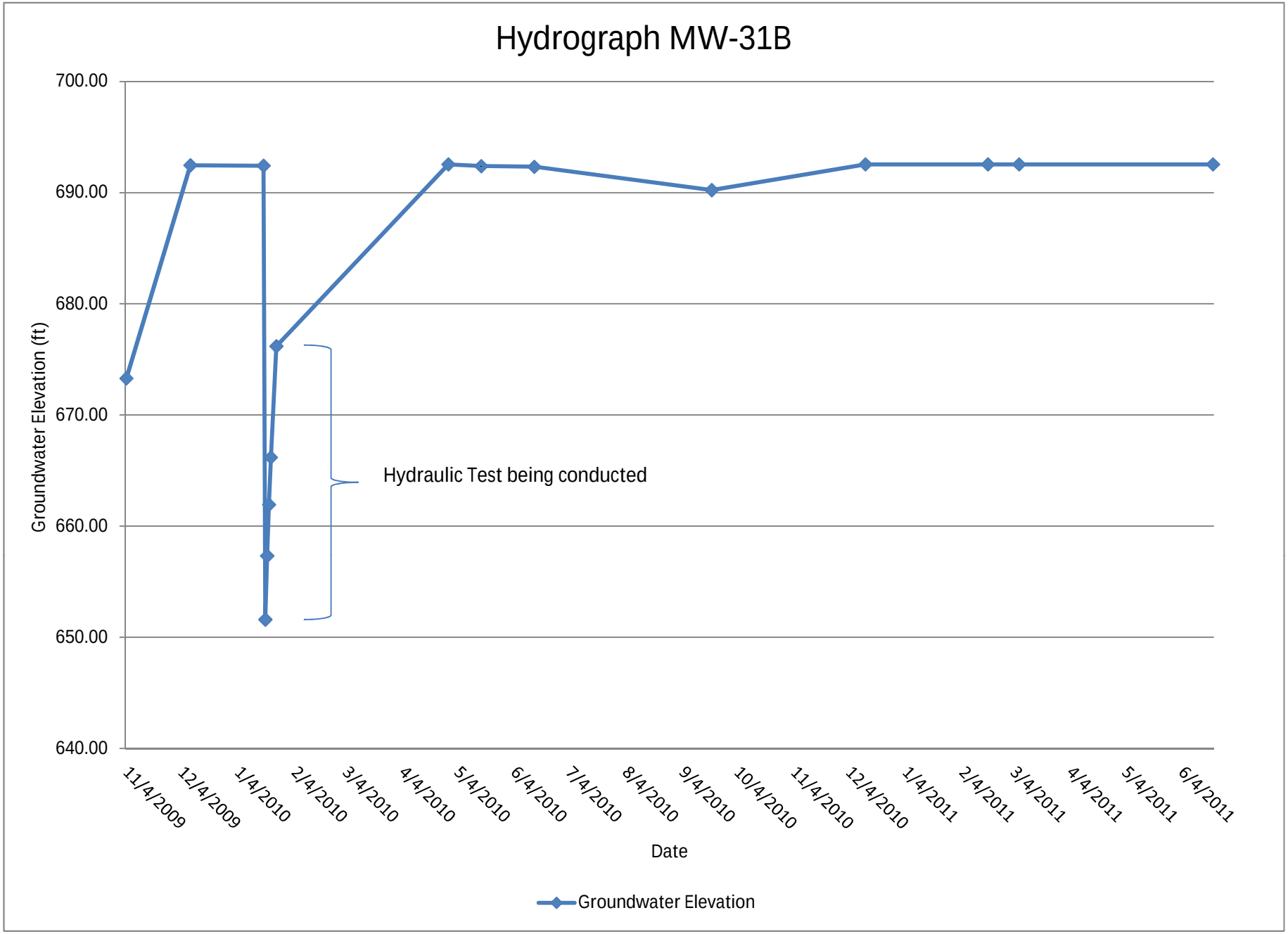
3/4/2011
4/4/2011
5/4/2011
6/4/2011
Date
Groundwater Elevations


Hydrograph MW-30B
690.00
680.00
670.00
660.00
650.00
640.00
630.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
11/4/2009
12/4/2009
1/4/2010
2/4/2010
3/4/2010
4/4/2010
5/4/2010
6/4/2010
7/4/2010
8/4/2010
9/4/2010
10/4/2010
11/4/2010
12/4/2010
1/4/2011
2/4/2011
3/4/2011
4/4/2011
5/4/2011
6/4/2011
Date
Groundwater Elevations


Hydrograph MW-31A
689.50
689.00
688.50
688.00
687.50
687.00
686.50
686.00
Groundwater Elevation (ft)
11/4/2009
12/4/2009
1/4/2010
2/4/2010
3/4/2010
4/4/2010
5/4/2010
6/4/2010
7/4/2010
8/4/2010
9/4/2010
10/4/2010
11/4/2010
12/4/2010
1/4/2011
2/4/2011
3/4/2011
4/4/2011
5/4/2011
6/4/2011
Date
Groundwater Elevations


Hydrograph MW-31B
700.00
690.00
680.00
670.00
660.00
650.00
640.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
11/4/2009
12/4/2009
1/4/2010
2/4/2010
3/4/2010
4/4/2010
5/4/2010
6/4/2010
7/4/2010
8/4/2010
9/4/2010
10/4/2010
11/4/2010
12/4/2010
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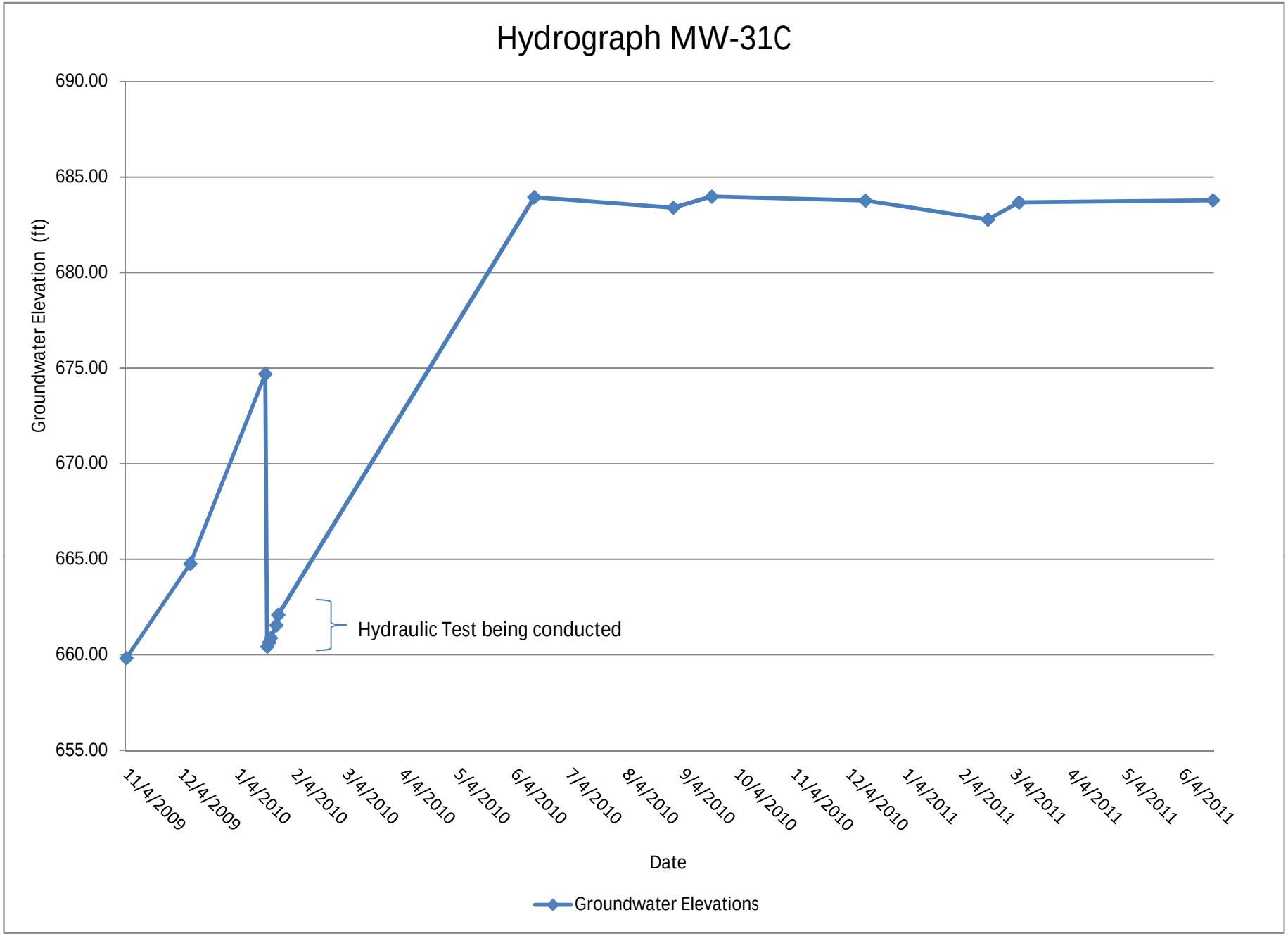
2/4/2011
3/4/2011
4/4/2011
5/4/2011
6/4/2011
Date
Groundwater Elevation


Hydrograph MW-31C
690.00
685.00
680.00
675.00
670.00
665.00
660.00
655.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
11/4/2009
12/4/2009
1/4/2010
2/4/2010
3/4/2010
4/4/2010
5/4/2010
6/4/2010
7/4/2010
8/4/2010
9/4/2010
10/4/2010
11/4/2010
12/4/2010
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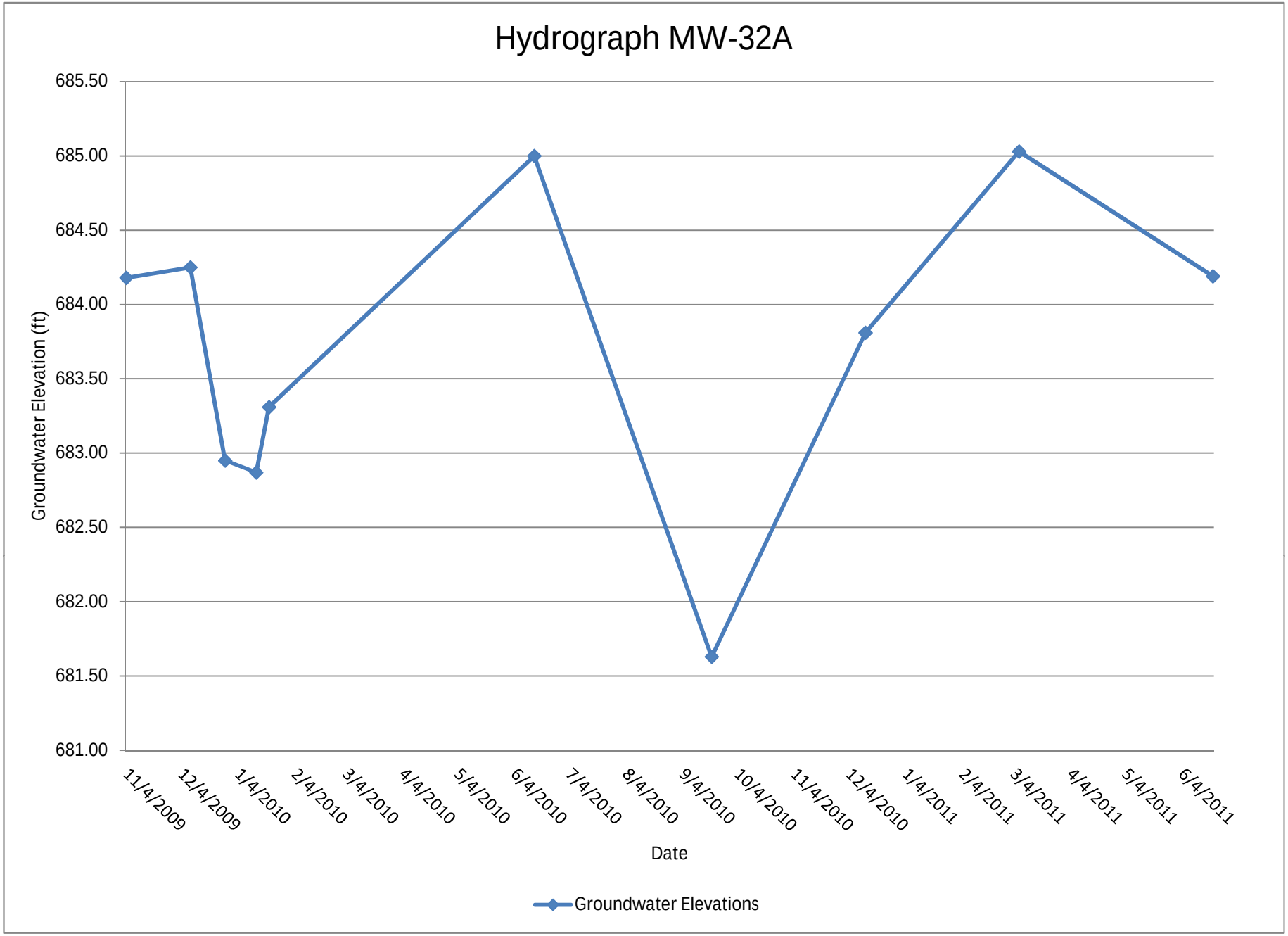
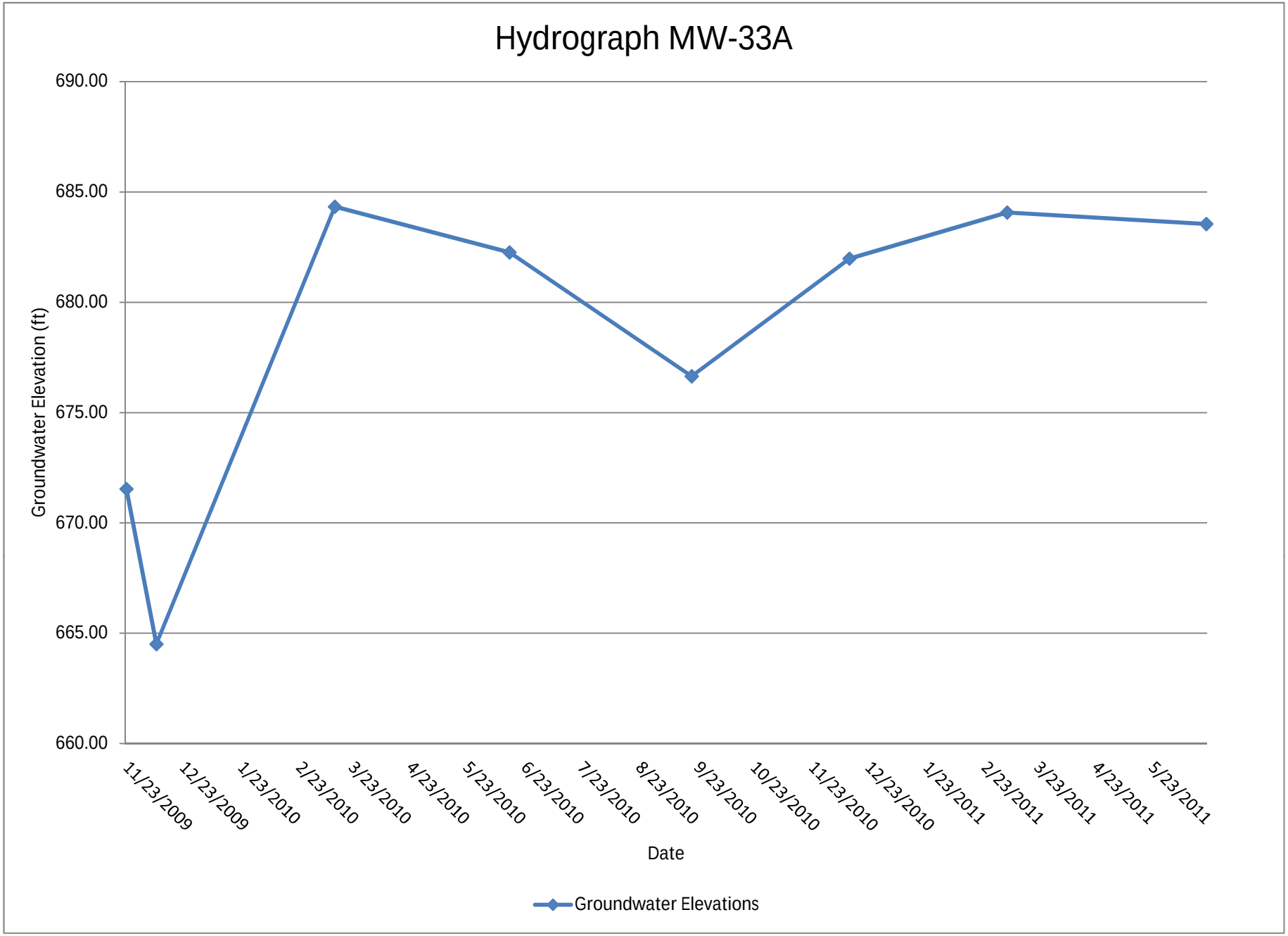
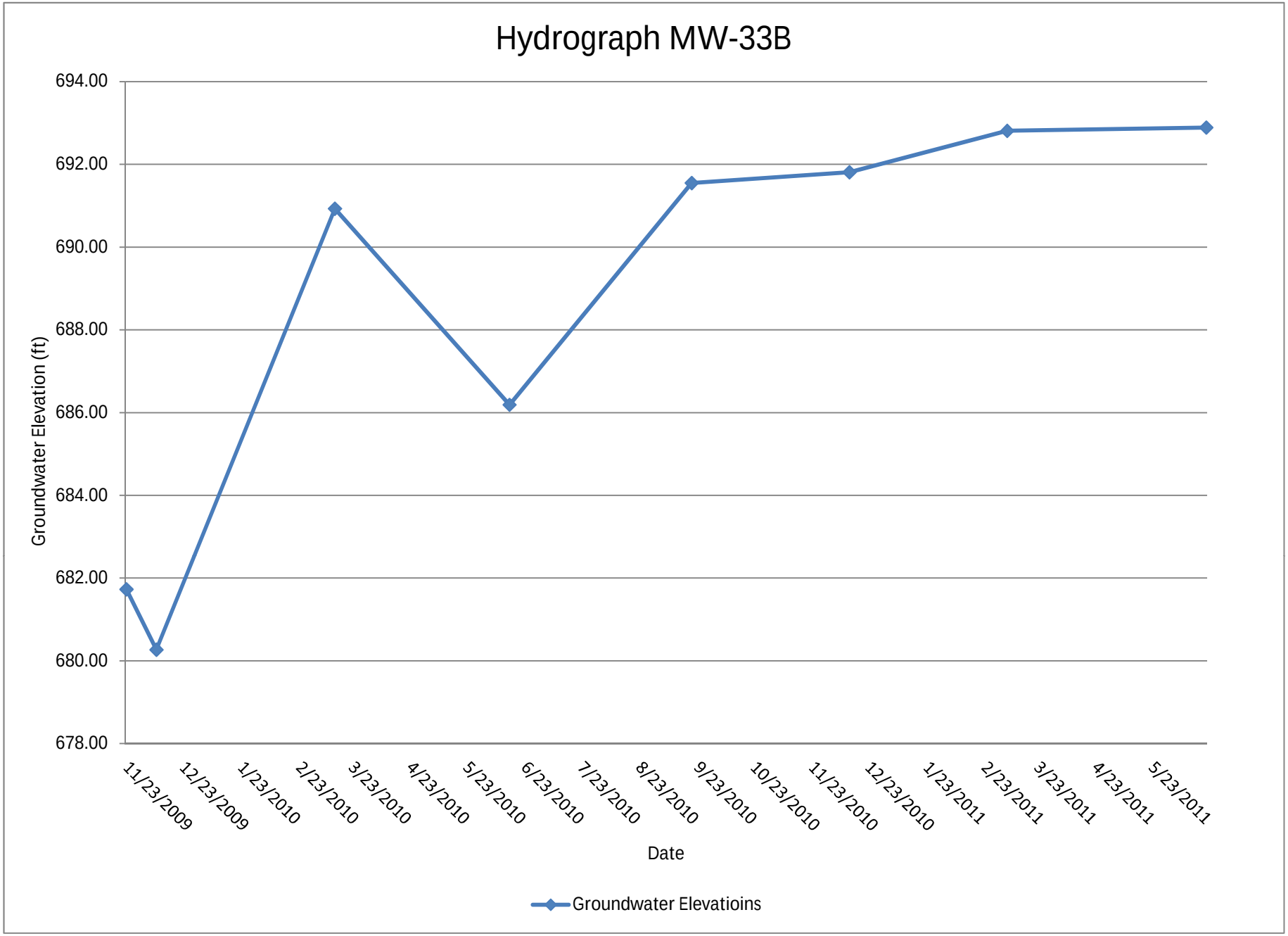
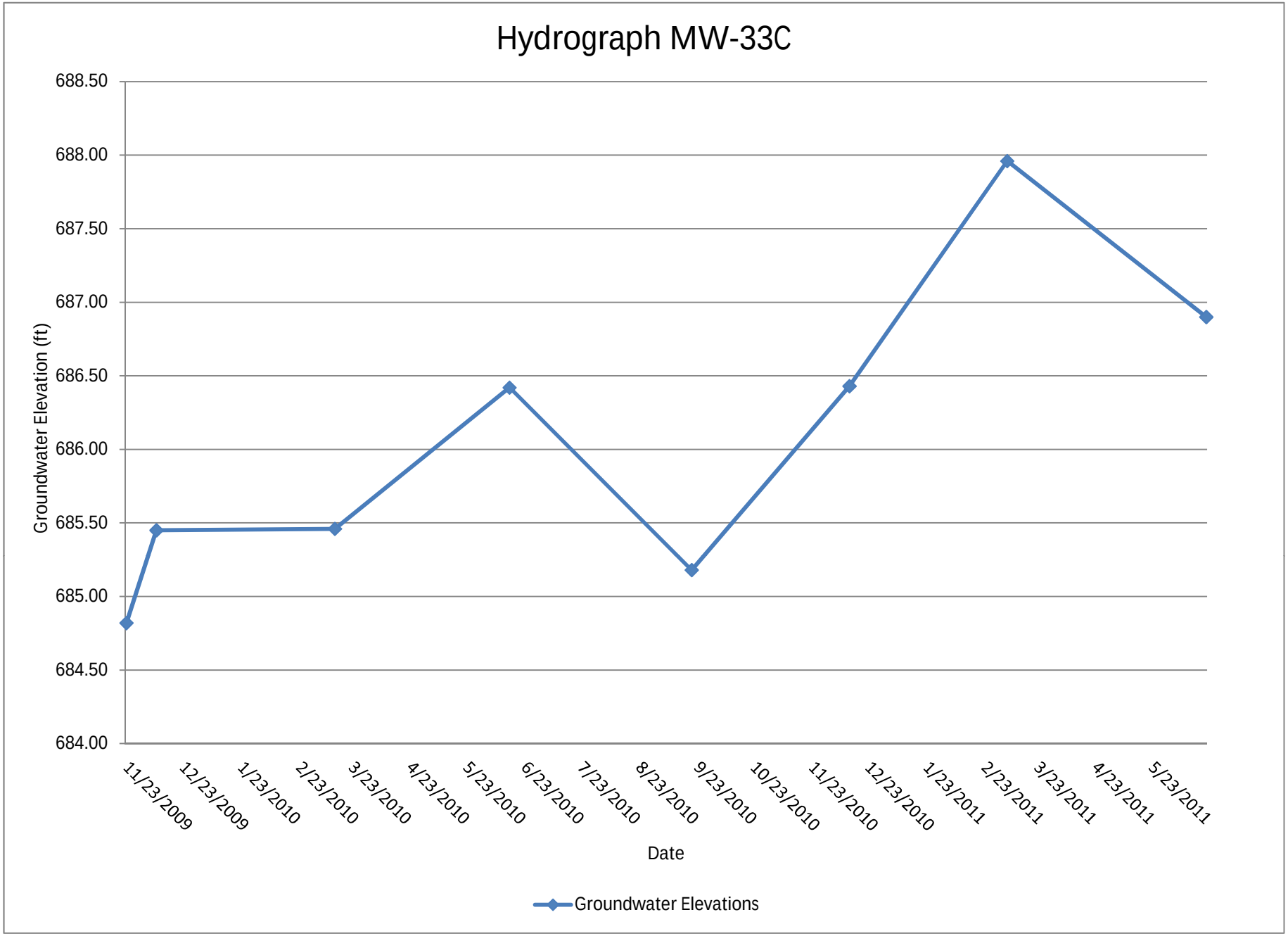
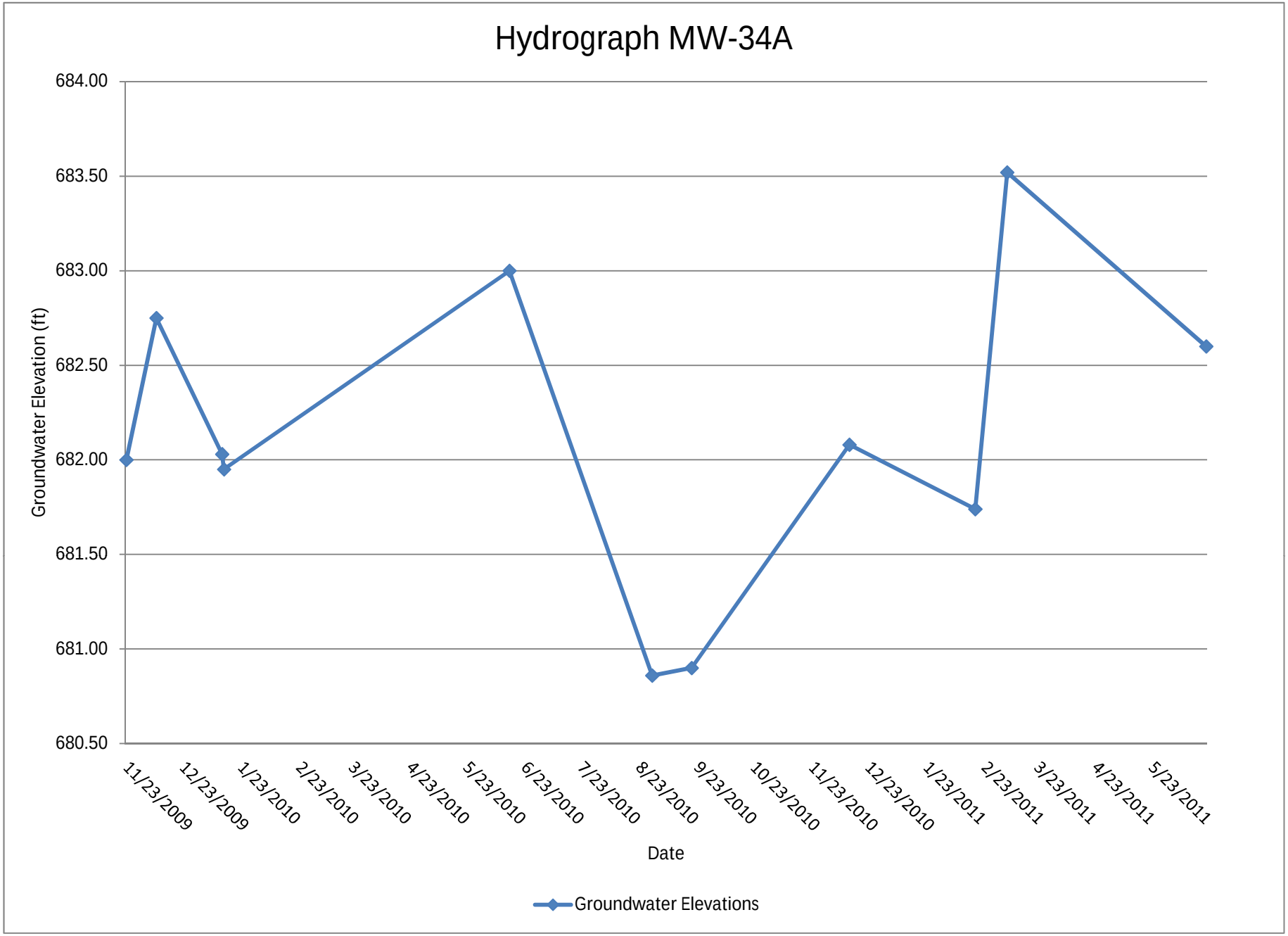
2/4/2011
3/4/2011
4/4/2011
5/4/2011
6/4/2011
Date
Groundwater Elevations

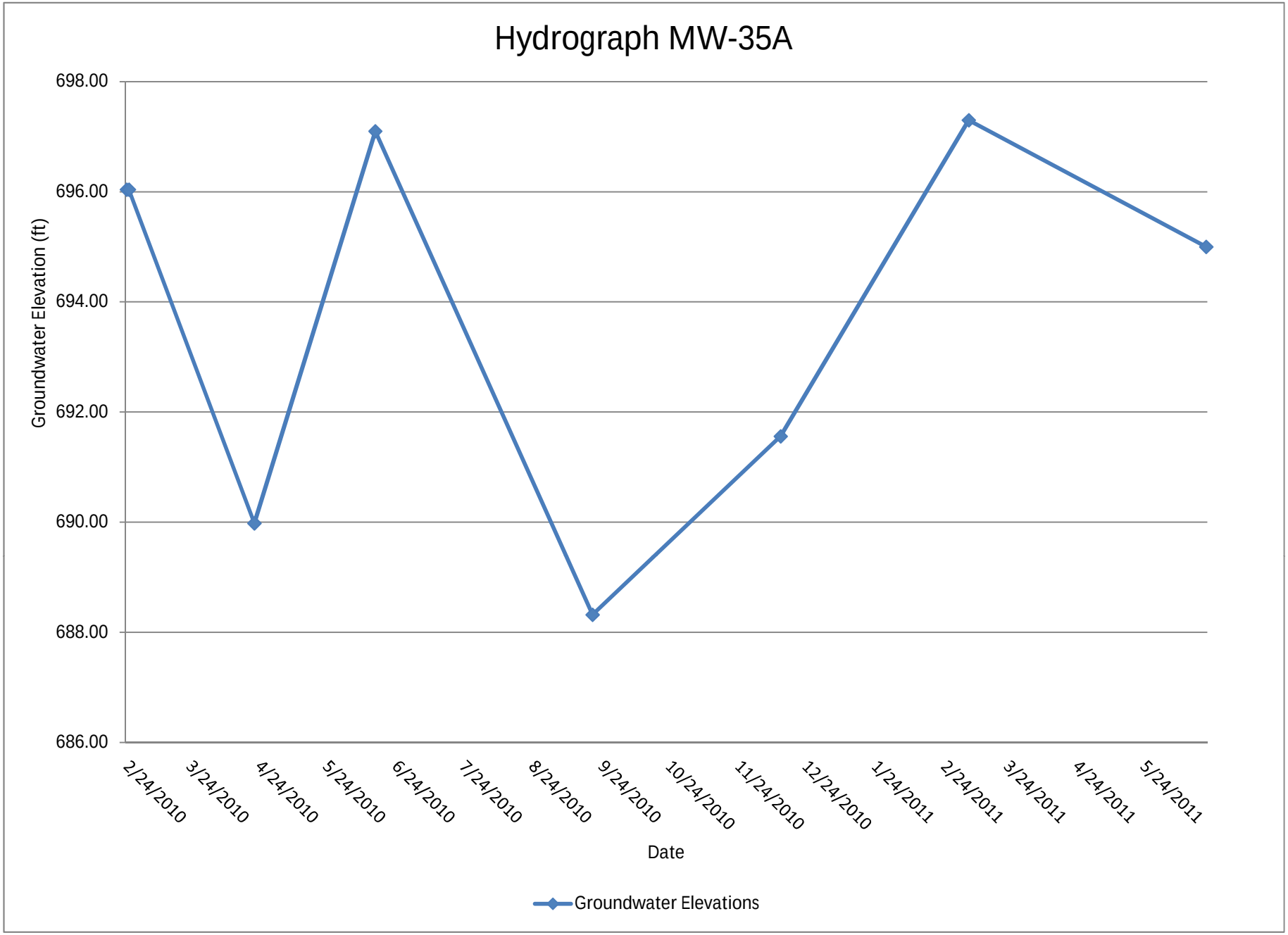

Hydrograph MW-32A
685.50
685.00
684.50
684.00
683.50
683.00
682.50
682.00
681.50
681.00
Groundwater Elevation (ft)
11/4/2009
12/4/2009
1/4/2010
2/4/2010
3/4/2010
4/4/2010
5/4/2010
6/4/2010
7/4/2010
8/4/2010
9/4/2010
10/4/2010
11/4/2010
12/4/2010
1/4/2011
2/4/2011
3/4/2011
4/4/2011
5/4/2011
6/4/2011
Date
Groundwater Elevations

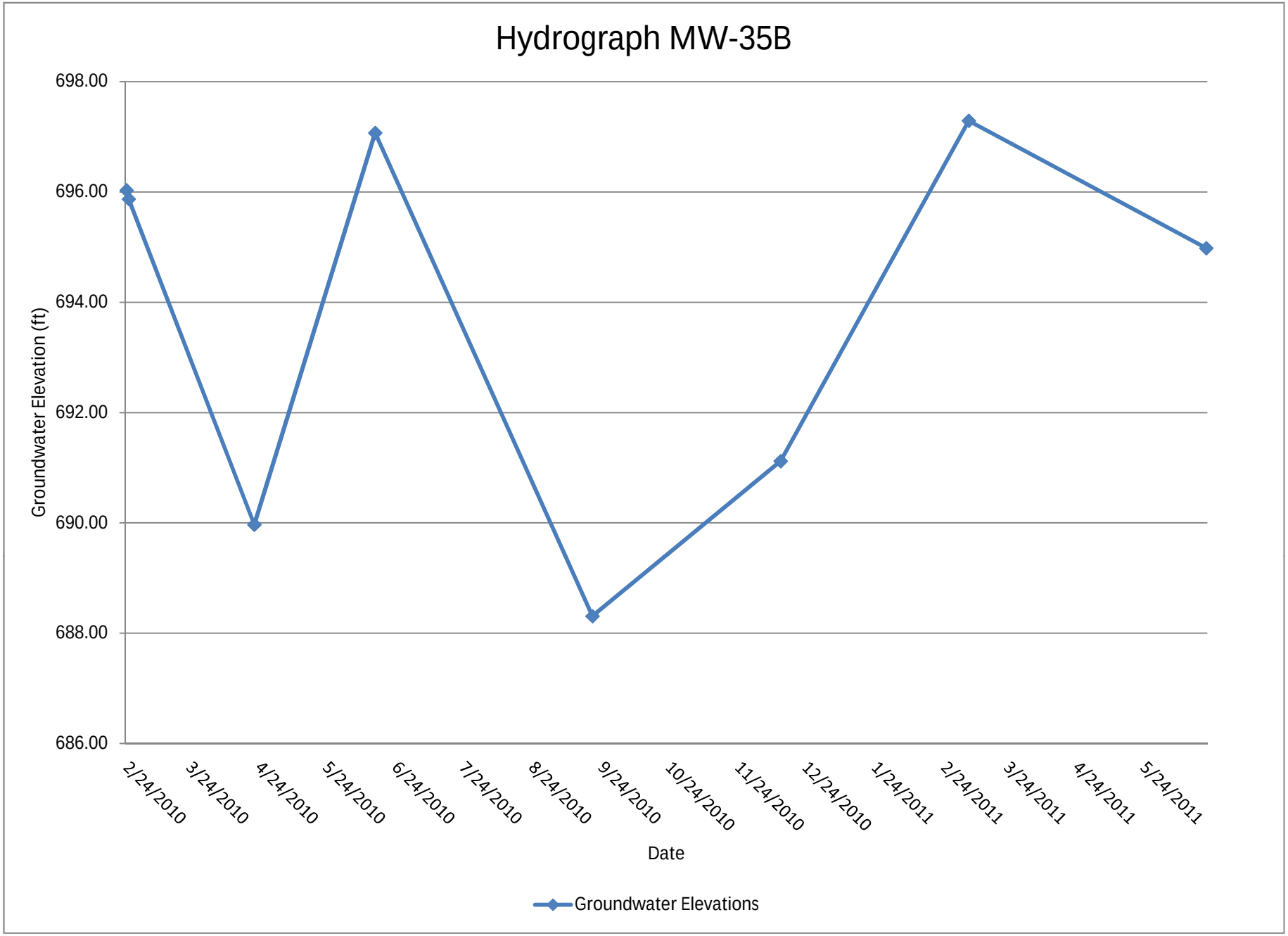

Hydrograph MW-33A
690.00
685.00
680.00
675.00
670.00
665.00
660.00
Groundwater Elevation (ft)
11/23/2009
12/23/2009
1/23/2010
2/23/2010
3/23/2010
4/23/2010
5/23/2010
6/23/2010
7/23/2010
8/23/2010
9/23/2010
10/23/2010
11/23/2010
12/23/2010
1/23/2011
2/23/2011
3/23/2011
4/23/2011
5/23/2011
Date
Groundwater Elevations

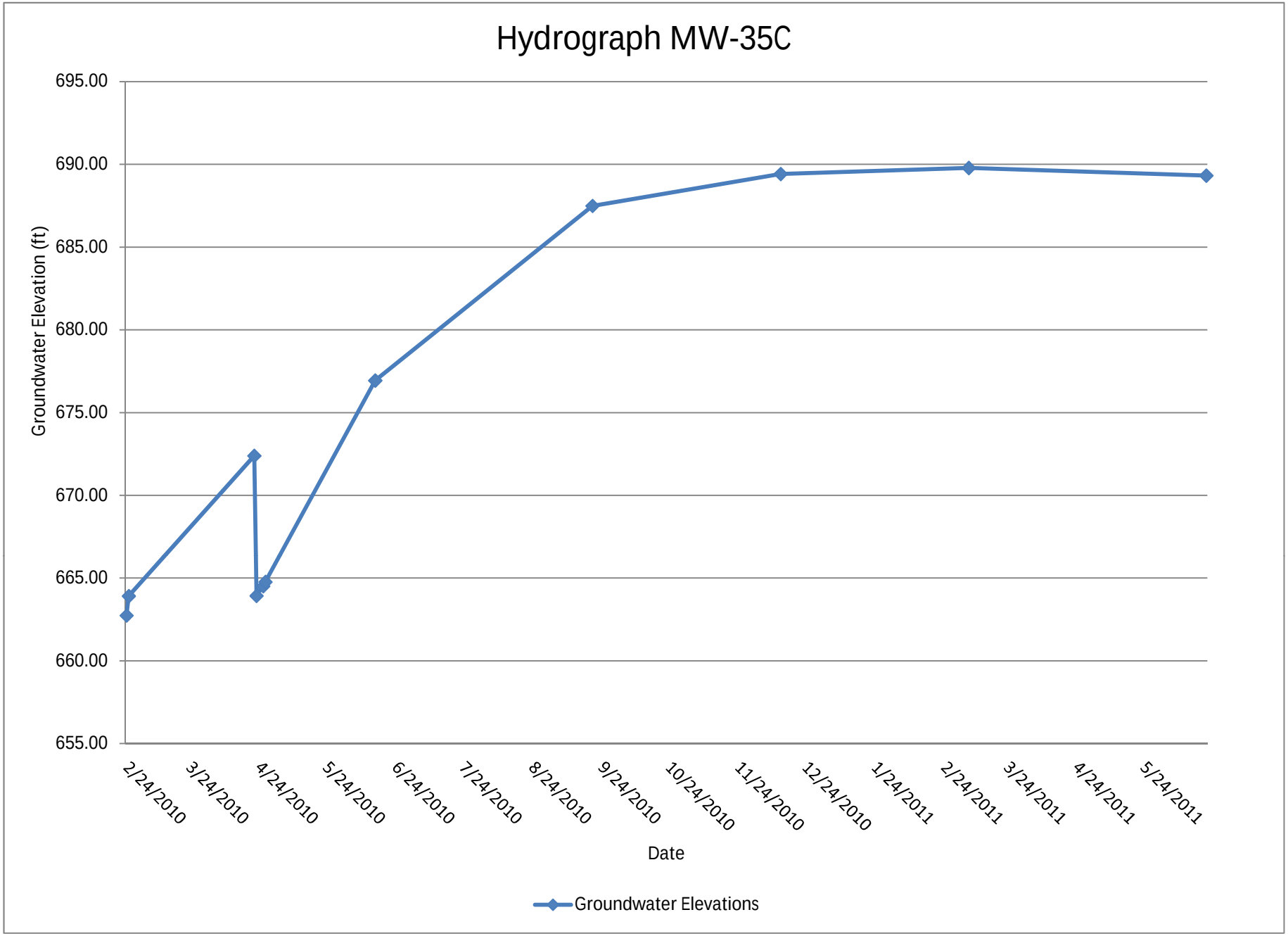

Hydrograph MW-33B
694.00
692.00
690.00
688.00
686.00
684.00
682.00
680.00
678.00
Groundwater Elevation (ft)
11/23/2009
12/23/2009
1/23/2010
2/23/2010
3/23/2010
4/23/2010
5/23/2010
6/23/2010
7/23/2010
8/23/2010
9/23/2010
10/23/2010
11/23/2010
12/23/2010
1/23/2011
2/23/2011
3/23/2011
4/23/2011
5/23/2011
Date
Groundwater Elevatioins

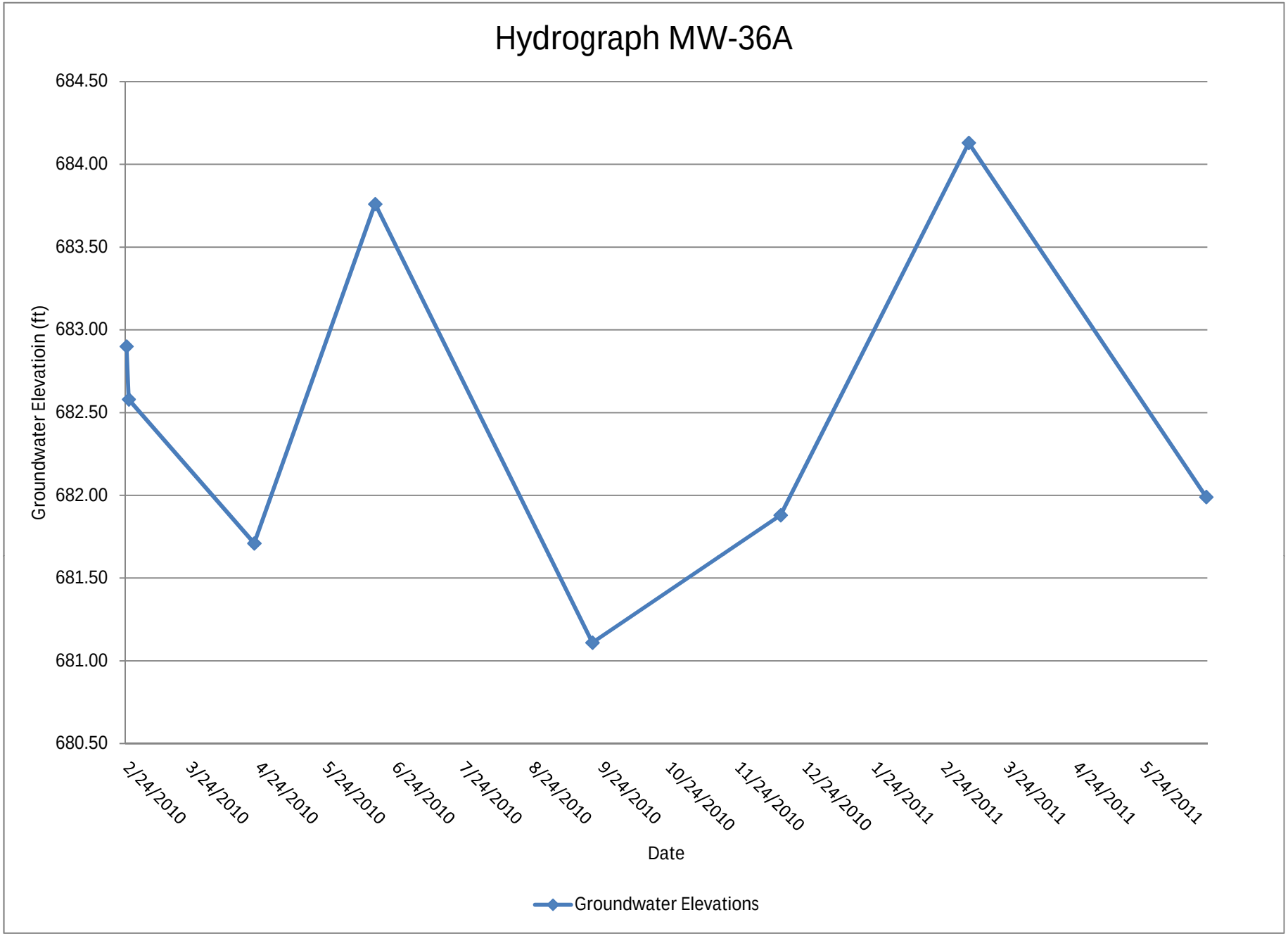

Hydrograph MW-33C
688.50
688.00
687.50
687.00
686.50
686.00
685.50
685.00
684.50
684.00
Groundwater Elevation (ft)
11/23/2009
12/23/2009
1/23/2010
2/23/2010
3/23/2010
4/23/2010
5/23/2010
6/23/2010
7/23/2010
8/23/2010
9/23/2010
10/23/2010
11/23/2010
12/23/2010
1/23/2011
2/23/2011
3/23/2011
4/23/2011
5/23/2011
Date
Groundwater Elevations

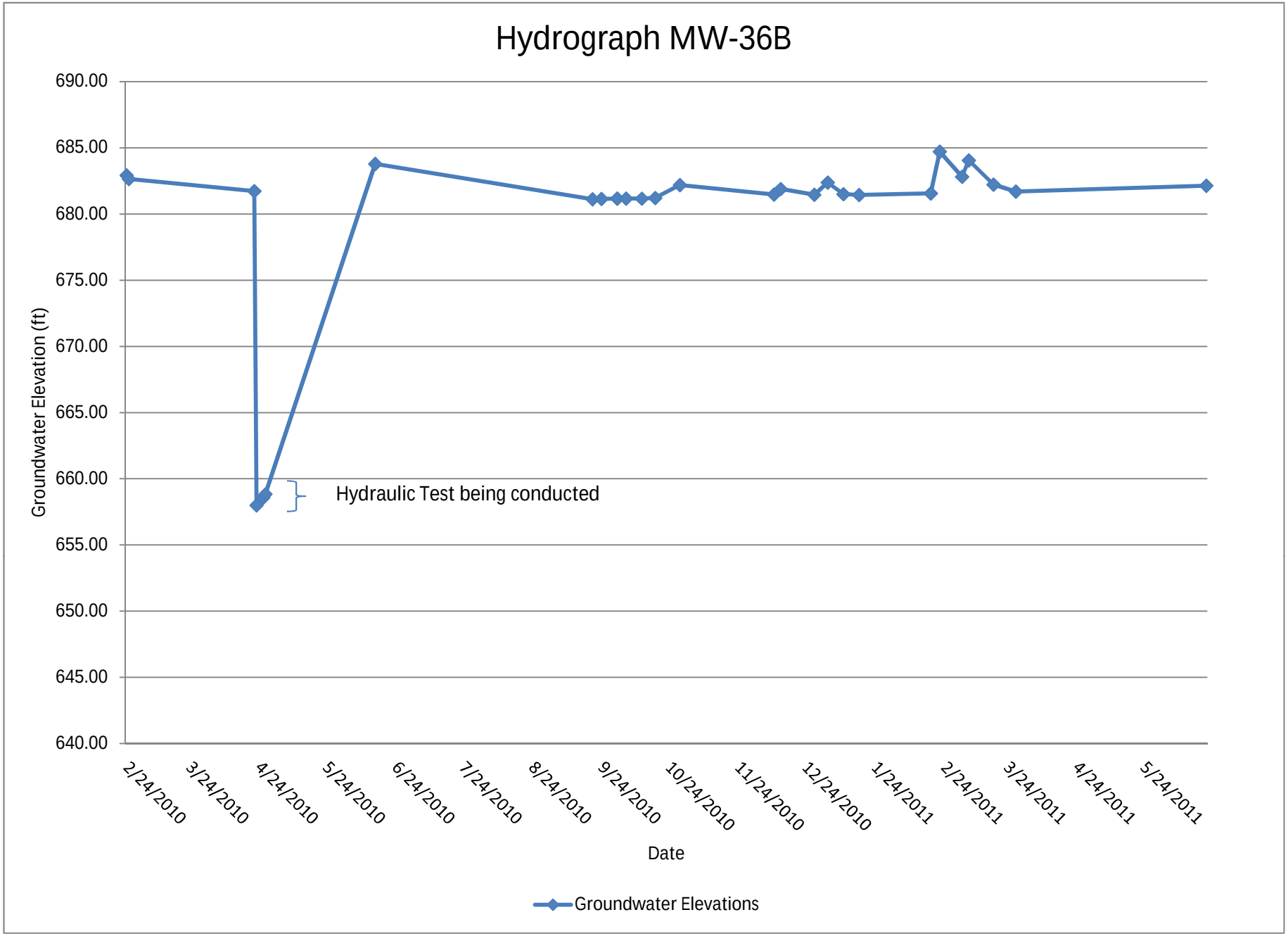

Hydrograph MW-34A
684.00
683.50
683.00
682.50
682.00
681.50
681.00
680.50
Groundwater Elevation (ft)
11/23/2009
12/23/2009
1/23/2010
2/23/2010
3/23/2010
4/23/2010
5/23/2010
6/23/2010
7/23/2010
8/23/2010
9/23/2010
10/23/2010
11/23/2010
12/23/2010
1/23/2011
2/23/2011
3/23/2011
4/23/2011
5/23/2011
Date
Groundwater Elevations

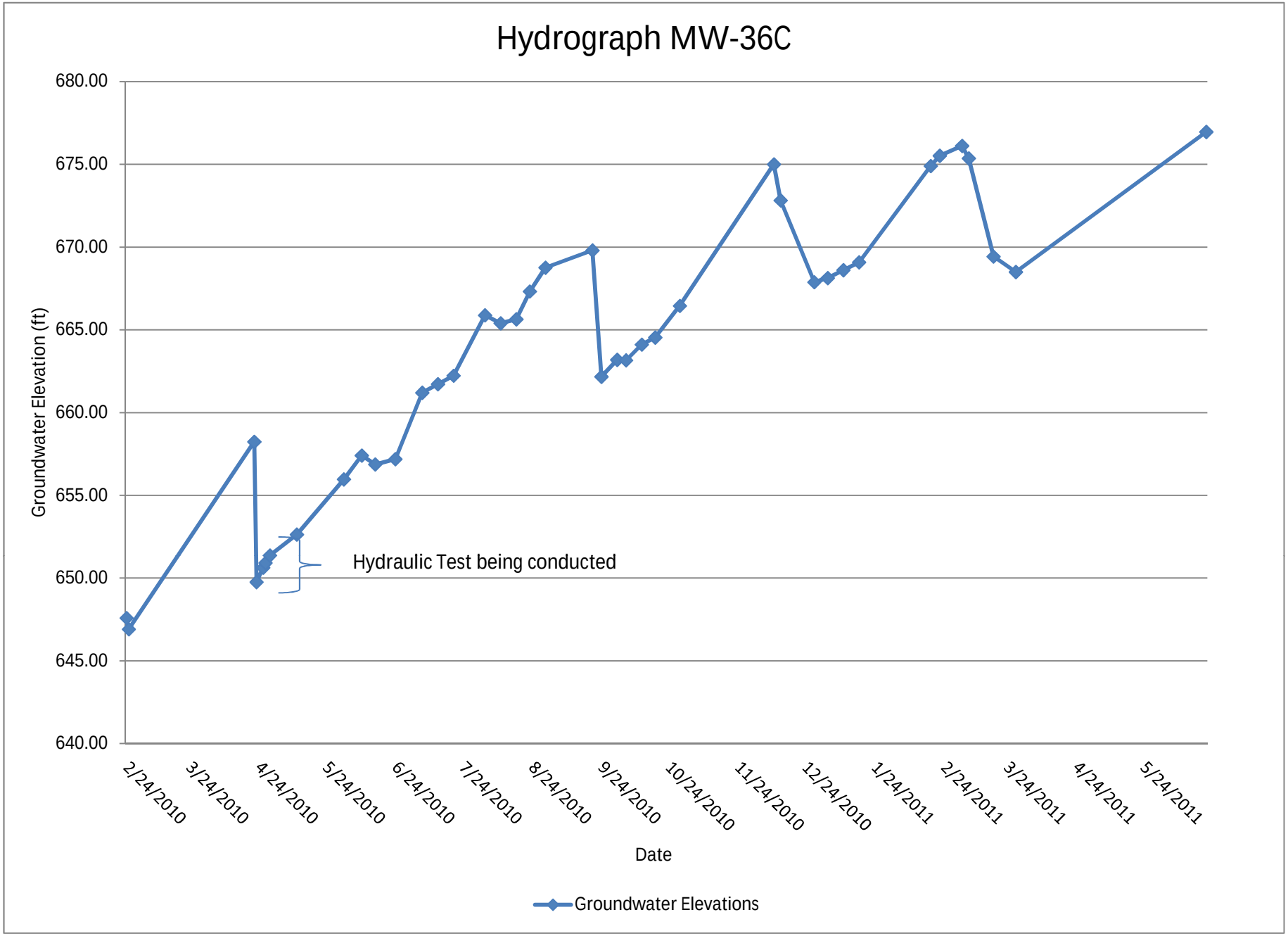

Hydrograph MW-35A
698.00
696.00
694.00
692.00
690.00
688.00
686.00
Groundwater Elevation (ft)
2/24/2010
3/24/2010
4/24/2010
5/24/2010
6/24/2010
7/24/2010
8/24/2010
9/24/2010
10/24/2010
11/24/2010
12/24/2010
1/24/2011
2/24/2011
3/24/2011
4/24/2011
5/24/2011
Date
Groundwater Elevations

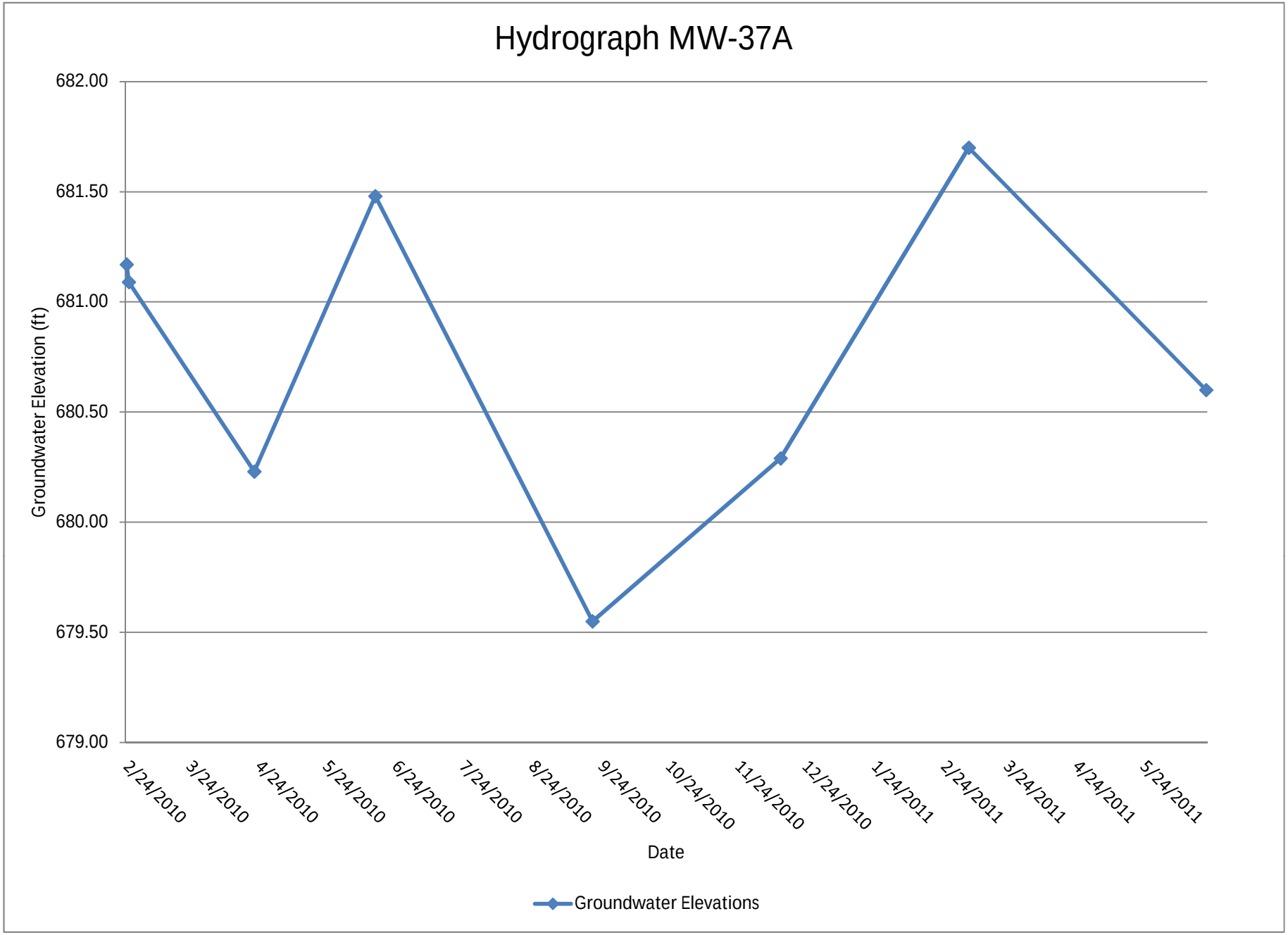

Hydrograph MW-35B
698.00
696.00
694.00
692.00
690.00
688.00
686.00
Groundwater Elevation (ft)
2/24/2010
3/24/2010
4/24/2010
5/24/2010
6/24/2010
7/24/2010
8/24/2010
9/24/2010
10/24/2010
11/24/2010
12/24/2010
1/24/2011
2/24/2011
3/24/2011
4/24/2011
5/24/2011
Date
Groundwater Elevations

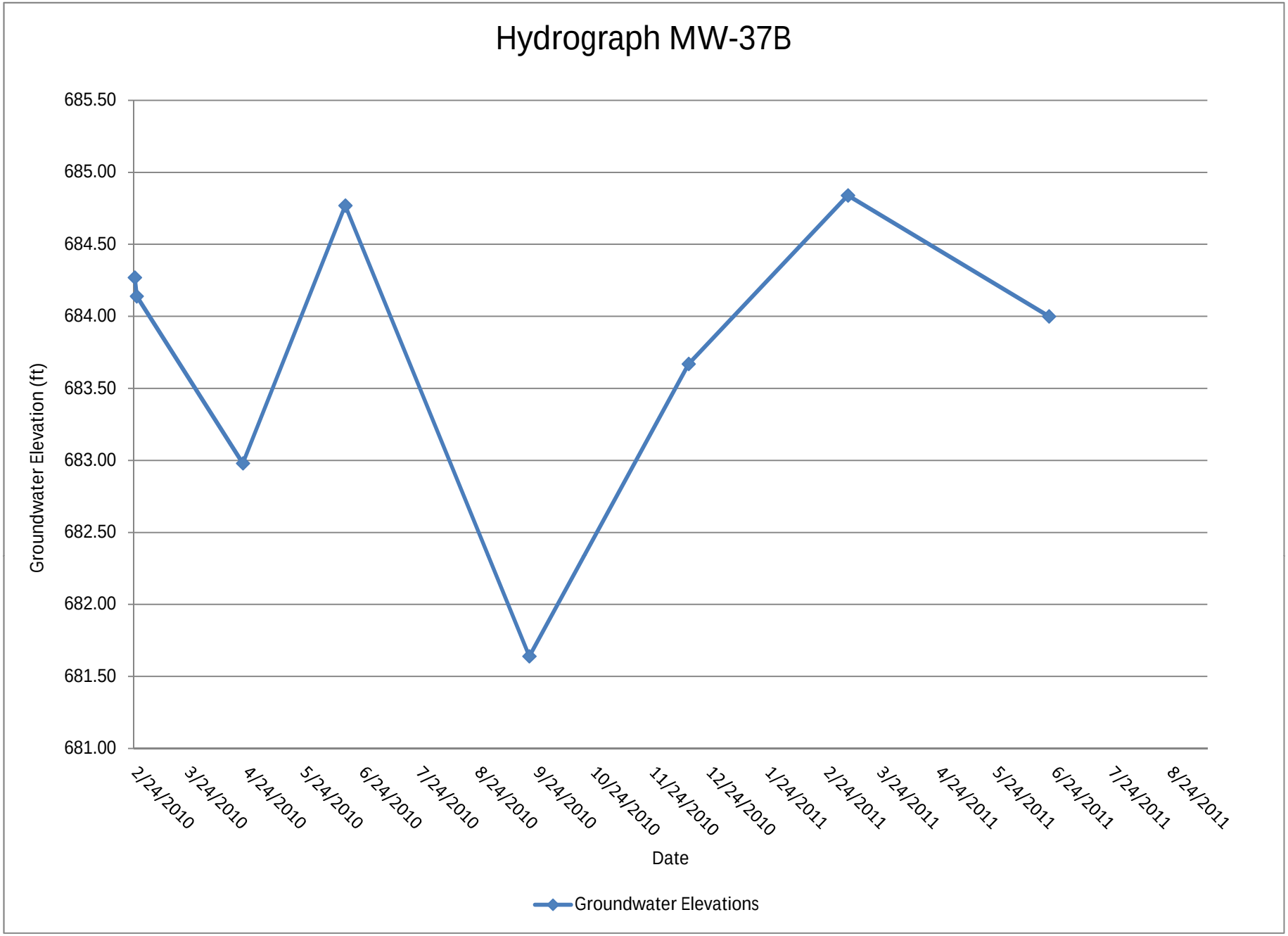

Hydrograph MW-35C
695.00
690.00
685.00
680.00
675.00
670.00
665.00
660.00
655.00
Groundwater Elevation (ft)
2/24/2010
3/24/2010
4/24/2010
5/24/2010
6/24/2010
7/24/2010
8/24/2010
9/24/2010
10/24/2010
11/24/2010
12/24/2010
1/24/2011
2/24/2011
3/24/2011
4/24/2011
5/24/2011
Date
Groundwater Elevations


Hydrograph MW-36A
684.50
684.00
683.50
683.00
682.50
682.00
681.50
681.00
680.50
Groundwater Elevatioin (ft)
2/24/2010
3/24/2010
4/24/2010
5/24/2010
6/24/2010
7/24/2010
8/24/2010
9/24/2010
10/24/2010
11/24/2010
12/24/2010
1/24/2011
2/24/2011
3/24/2011
4/24/2011
5/24/2011
Date
Groundwater Elevations


Hydrograph MW-36B
690.00
685.00
680.00
675.00
670.00
665.00
660.00
655.00
650.00
645.00
640.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
2/24/2010
3/24/2010
4/24/2010
5/24/2010
6/24/2010
7/24/2010
8/24/2010
9/24/2010
10/24/2010
11/24/2010
12/24/2010
1/24/2011
2/24/2011
3/24/2011
4/24/2011
5/24/2011
Date
Groundwater Elevations


Hydrograph MW-36C
680.00
675.00
670.00
665.00
660.00
655.00
650.00
645.00
640.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
2/24/2010
3/24/2010
4/24/2010
5/24/2010
6/24/2010
7/24/2010
8/24/2010
9/24/2010
10/24/2010
11/24/2010
12/24/2010
1/24/2011
2/24/2011
3/24/2011
4/24/2011
5/24/2011
Date
Groundwater Elevations


Hydrograph MW-37A
682.00
681.50
681.00
680.50
680.00
679.50
679.00
Groundwater Elevation (ft)
2/24/2010
3/24/2010
4/24/2010
5/24/2010
6/24/2010
7/24/2010
8/24/2010
9/24/2010
10/24/2010
11/24/2010
12/24/2010
1/24/2011
2/24/2011
3/24/2011
4/24/2011
5/24/2011
Date
Groundwater Elevations


Hydrograph MW-37B
685.50
685.00
684.50
684.00
683.50
683.00
682.50
682.00
681.50
681.00
Groundwater Elevation (ft)
2/24/2010
3/24/2010
4/24/2010
5/24/2010
6/24/2010
7/24/2010
8/24/2010
9/24/2010
10/24/2010
11/24/2010
12/24/2010
1/24/2011
2/24/2011
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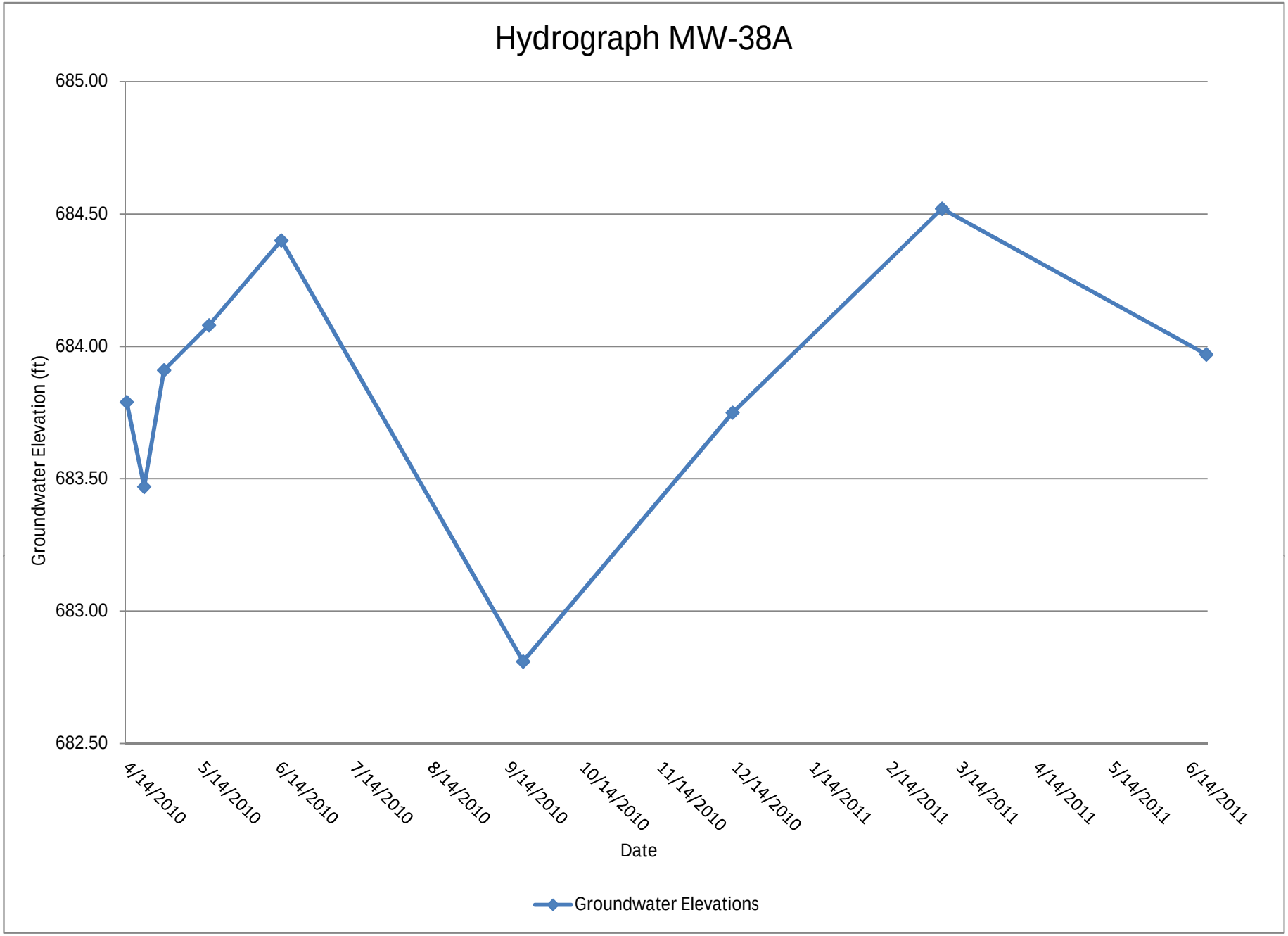
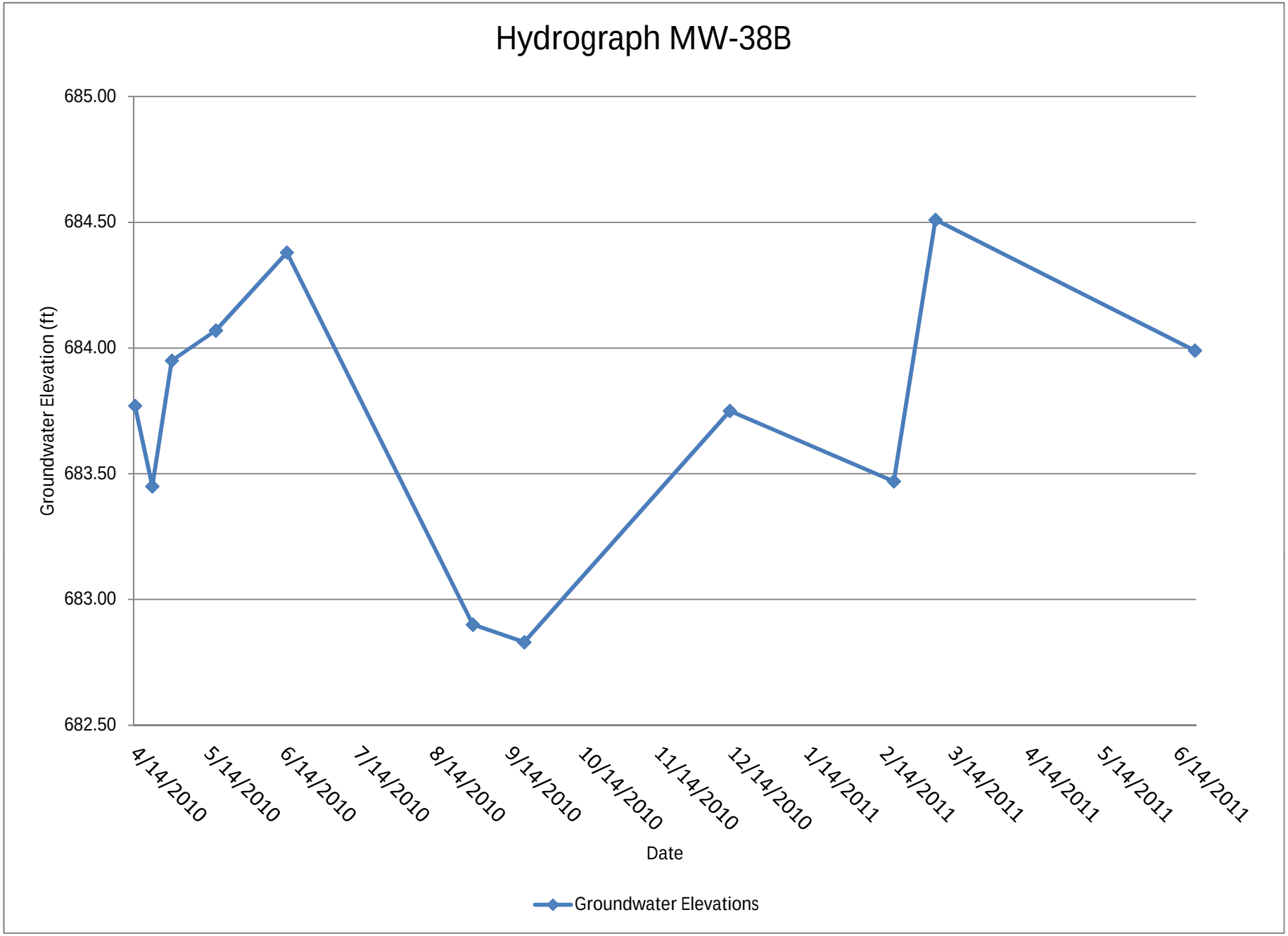
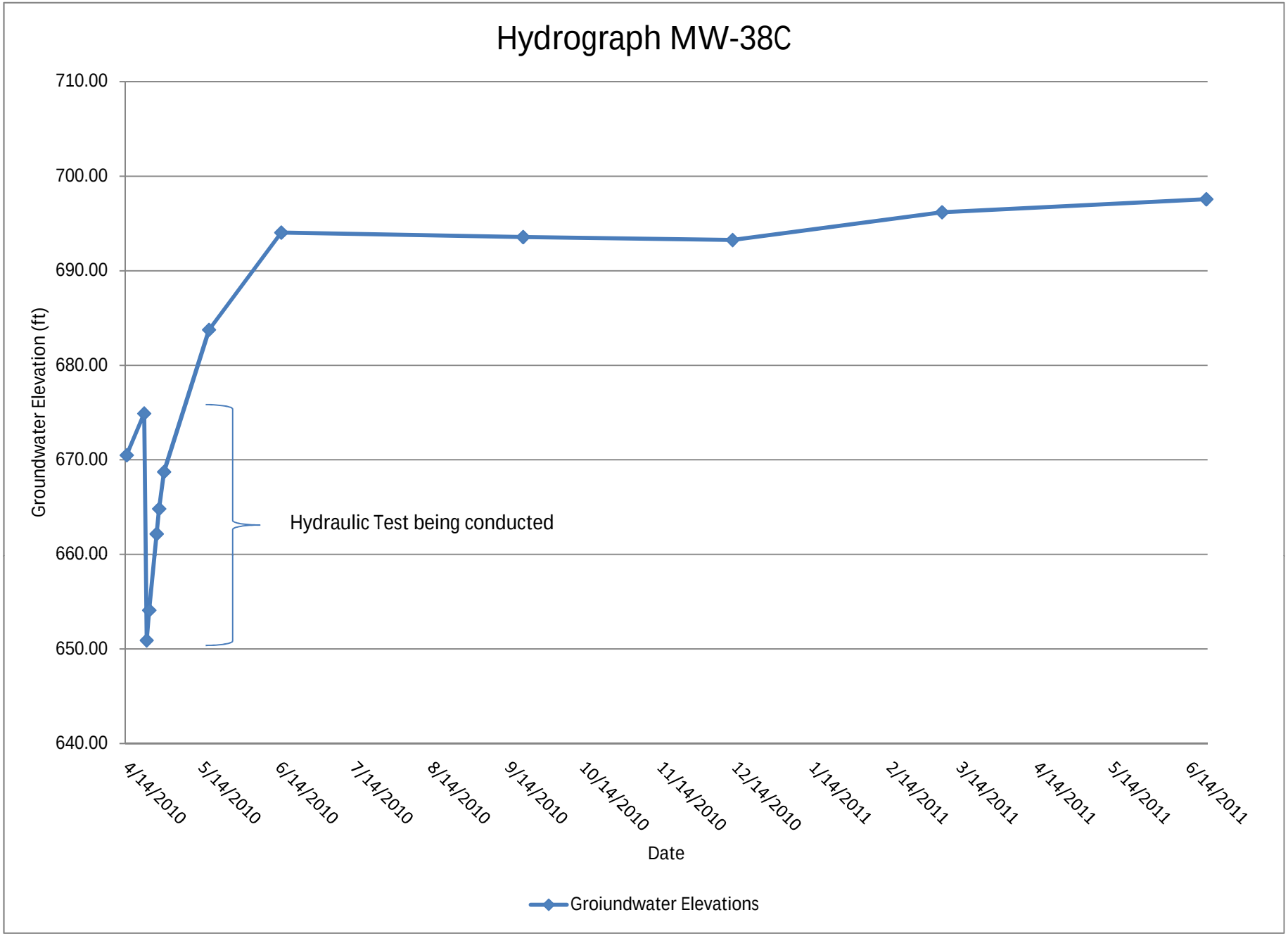
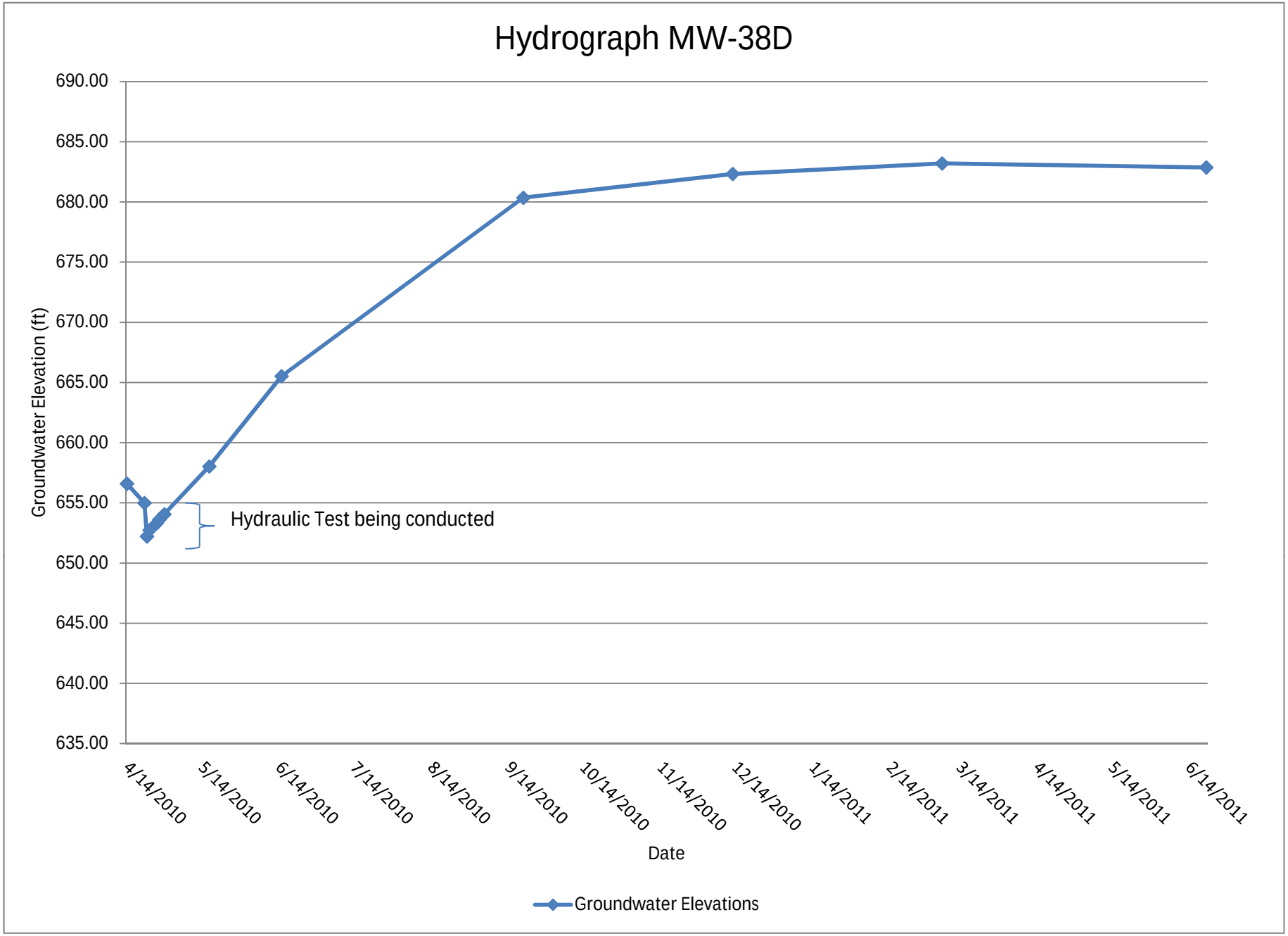
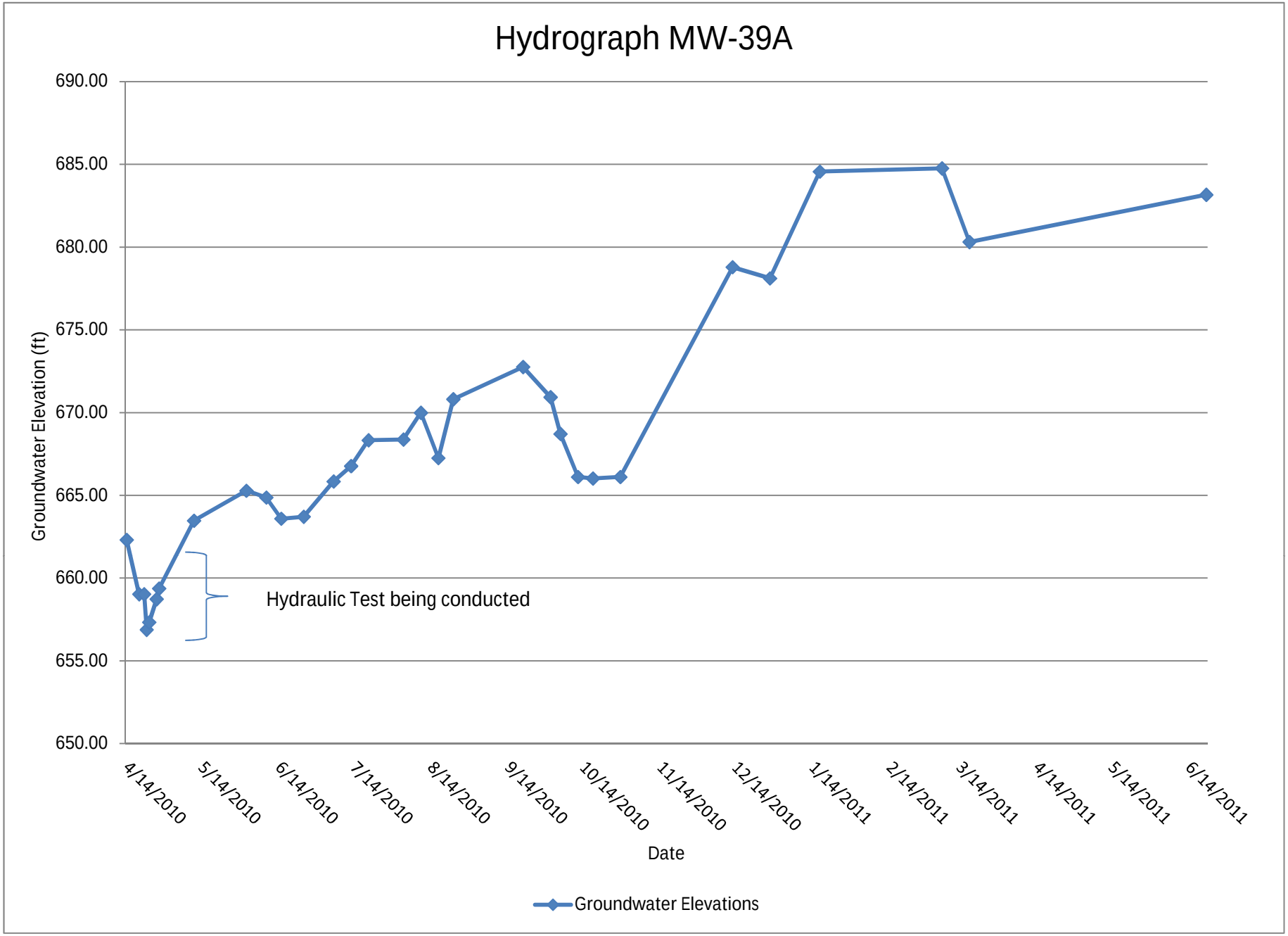
4/24/2011
5/24/2011
6/24/2011
7/24/2011
8/24/2011
Date
Groundwater Elevations

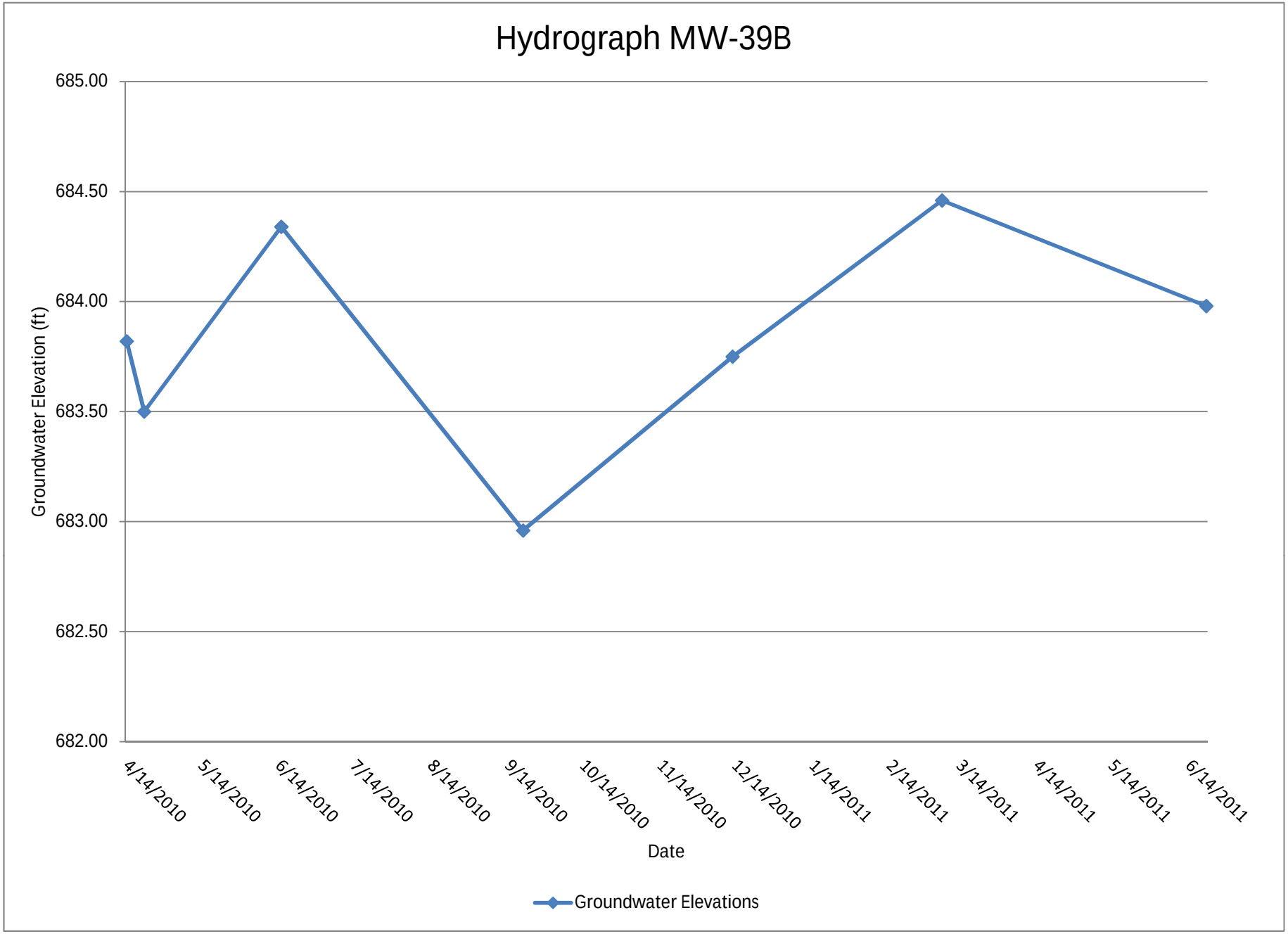

Hydrograph MW-38A
685.00
684.50
684.00
683.50
683.00
682.50
Groundwater Elevation (ft)
4/14/2010
5/14/2010
6/14/2010
7/14/2010
8/14/2010
9/14/2010
10/14/2010
11/14/2010
12/14/2010
1/14/2011
2/14/2011
3/14/2011
4/14/2011
5/14/2011
6/14/2011
Date
Groundwater Elevations

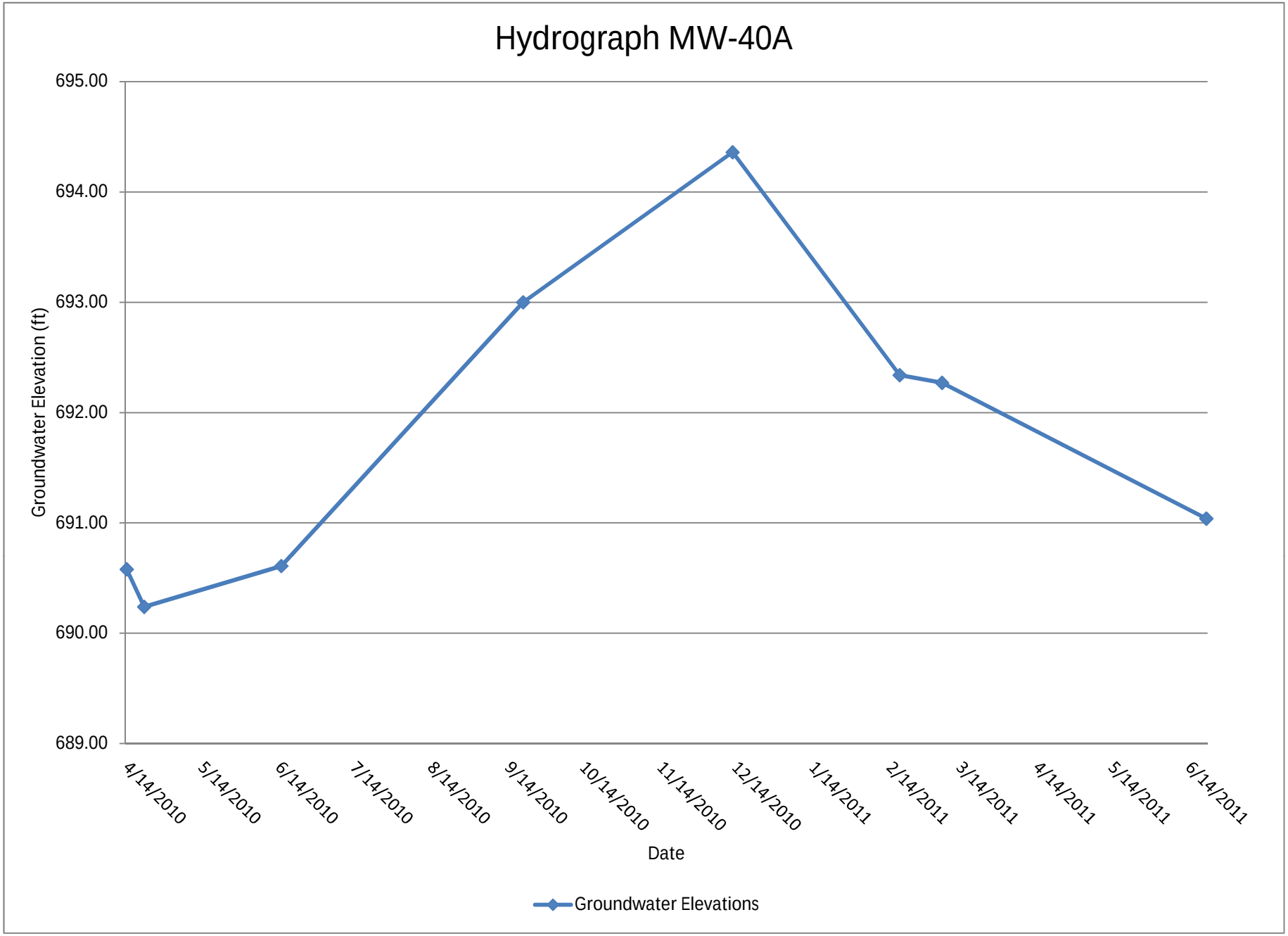

Hydrograph MW-38B
685.00
684.50
684.00
683.50
683.00
682.50
Groundwater Elevation (ft)
4/14/2010
5/14/2010
6/14/2010
7/14/2010
8/14/2010
9/14/2010
10/14/2010
11/14/2010
12/14/2010
1/14/2011
2/14/2011
3/14/2011
4/14/2011
5/14/2011
6/14/2011
Date
Groundwater Elevations

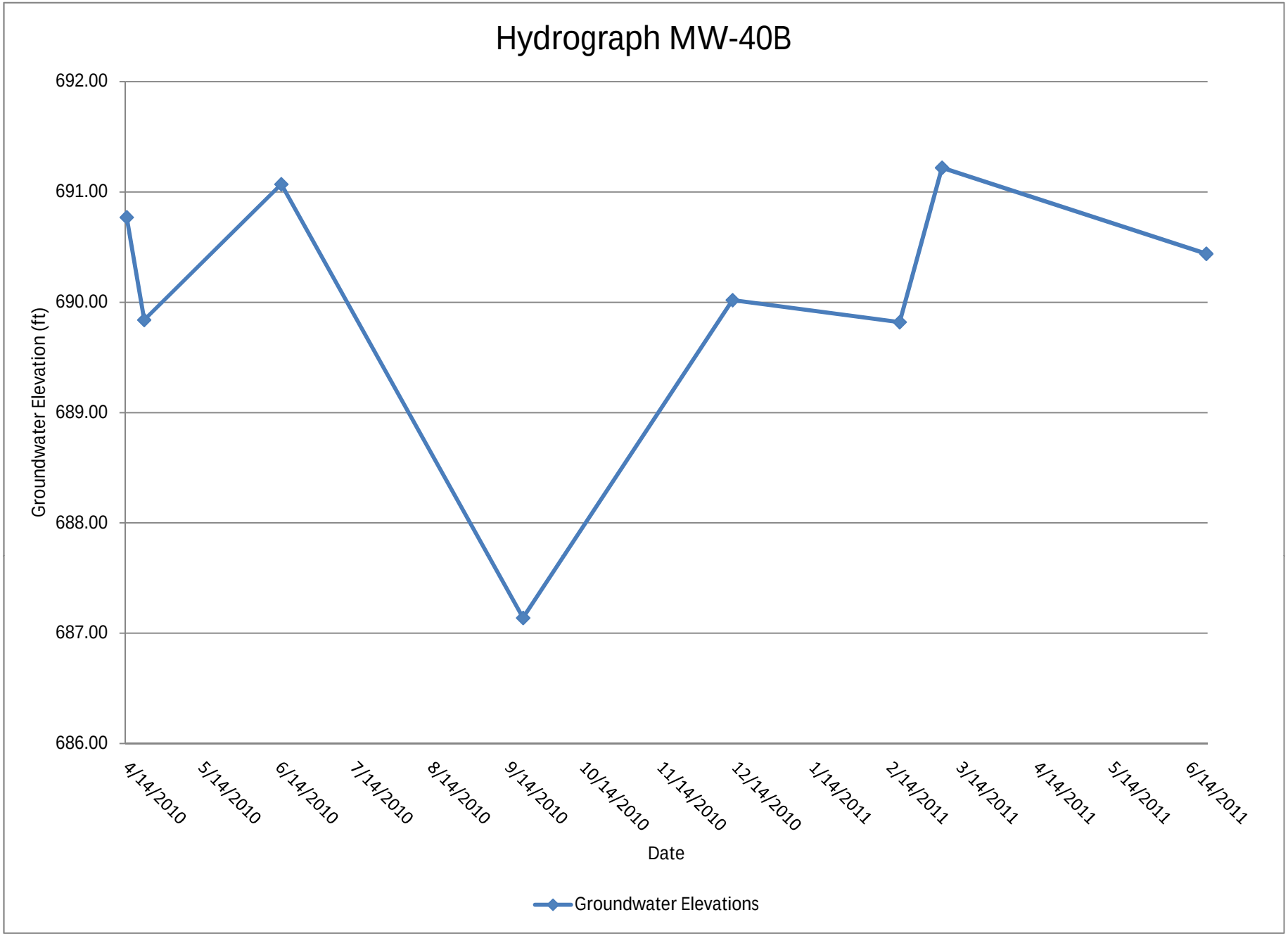

Hydrograph MW-38C
710.00
700.00
690.00
680.00
670.00
660.00
650.00
640.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
4/14/2010
5/14/2010
6/14/2010
7/14/2010
8/14/2010
9/14/2010
10/14/2010
11/14/2010
12/14/2010
1/14/2011
2/14/2011
3/14/2011
4/14/2011
5/14/2011
6/14/2011
Date
Groiundwater Elevations

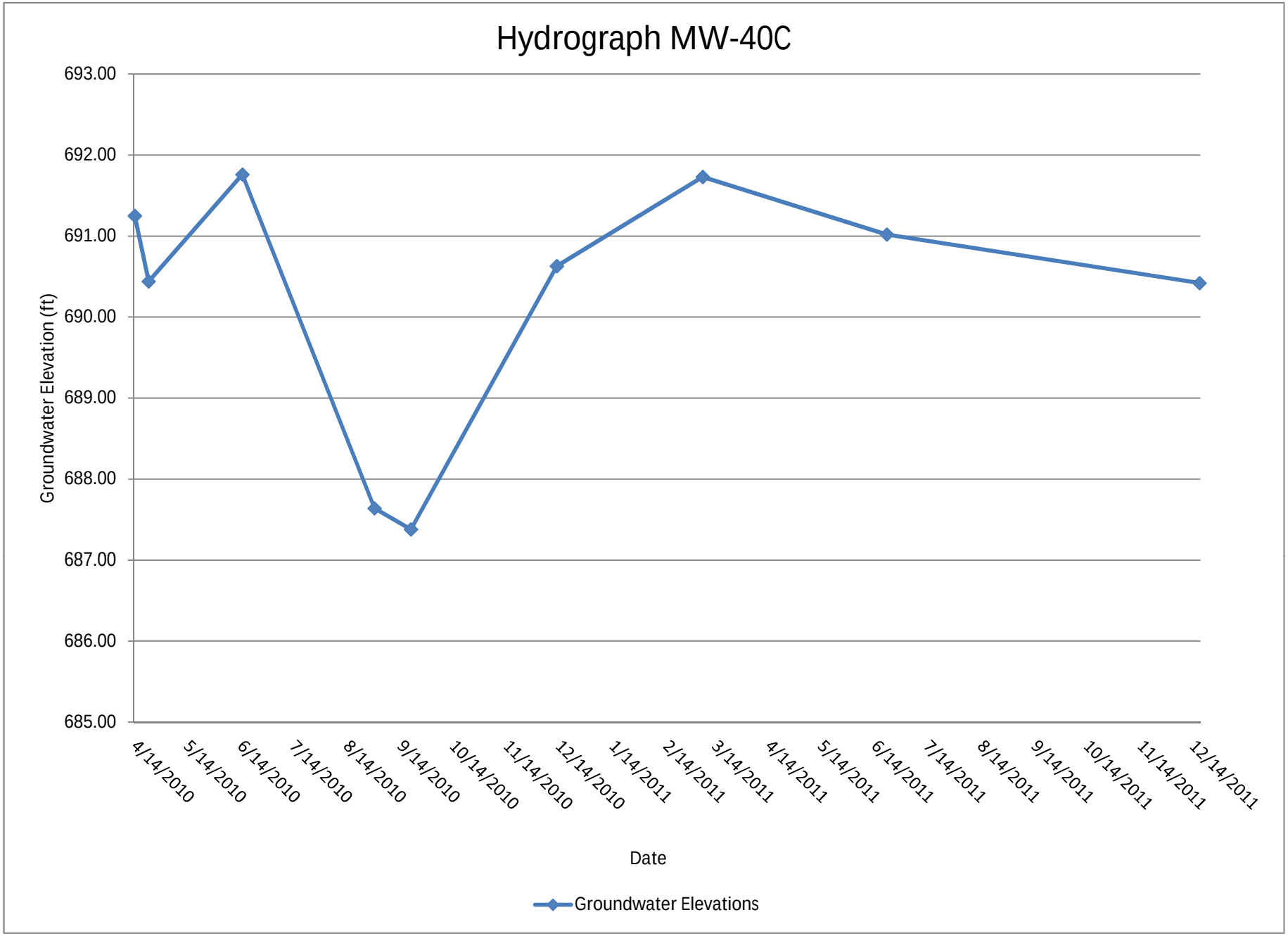

Hydrograph MW-38D
690.00
685.00
680.00
675.00
670.00
665.00
660.00
655.00
650.00
645.00
640.00
635.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
4/14/2010
5/14/2010
6/14/2010
7/14/2010
8/14/2010
9/14/2010
10/14/2010
11/14/2010
12/14/2010
1/14/2011
2/14/2011
3/14/2011
4/14/2011
5/14/2011
6/14/2011
Date
Groundwater Elevations

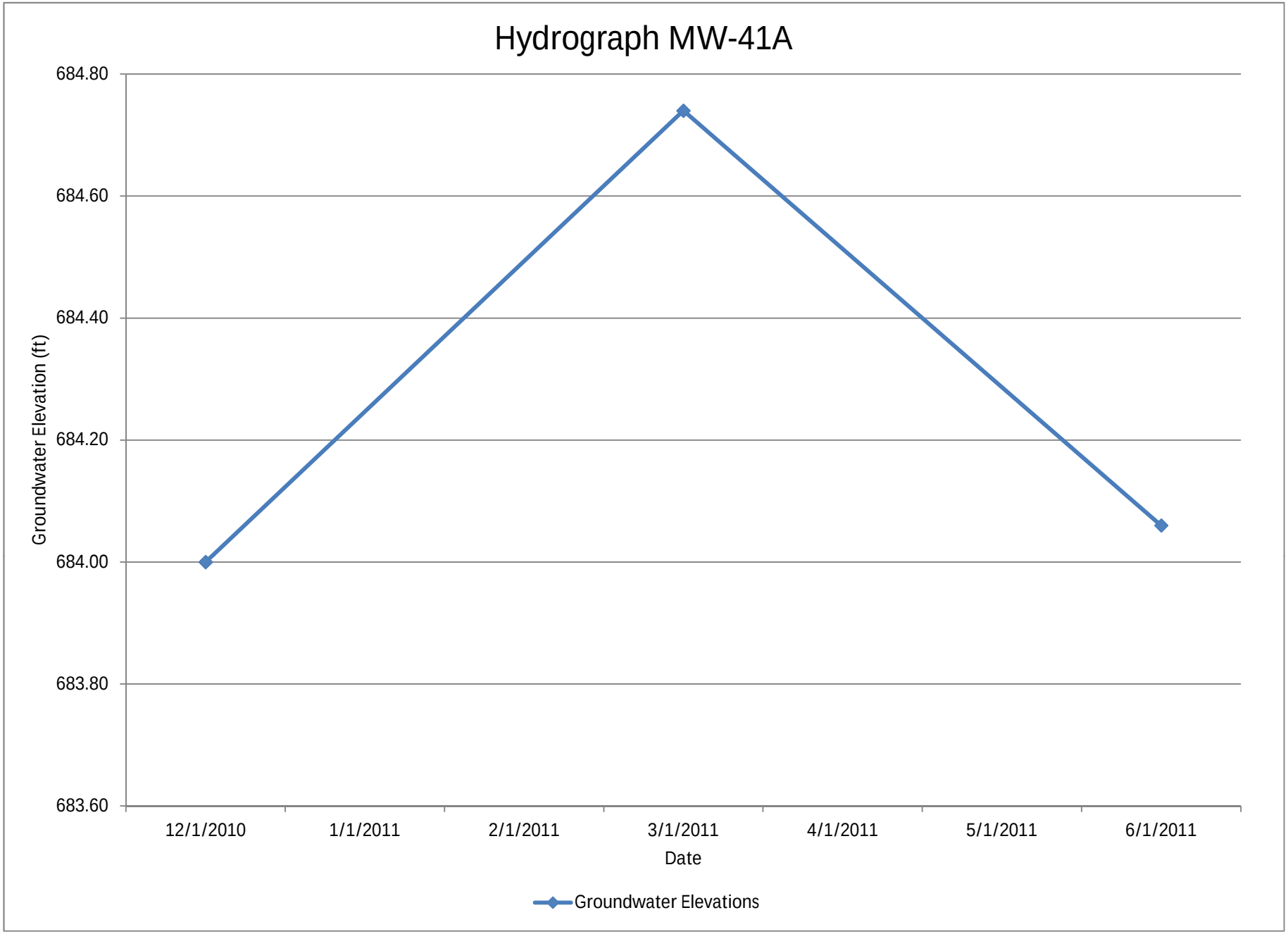

Hydrograph MW-39A
690.00
685.00
680.00
675.00
670.00
665.00
660.00
655.00
650.00
Groundwater Elevation (ft)
Hydraulic Test being conducted
4/14/2010
5/14/2010
6/14/2010
7/14/2010
8/14/2010
9/14/2010
10/14/2010
11/14/2010
12/14/2010
1/14/2011
2/14/2011
3/14/2011
4/14/2011
5/14/2011
6/14/2011
Date
Groundwater Elevations

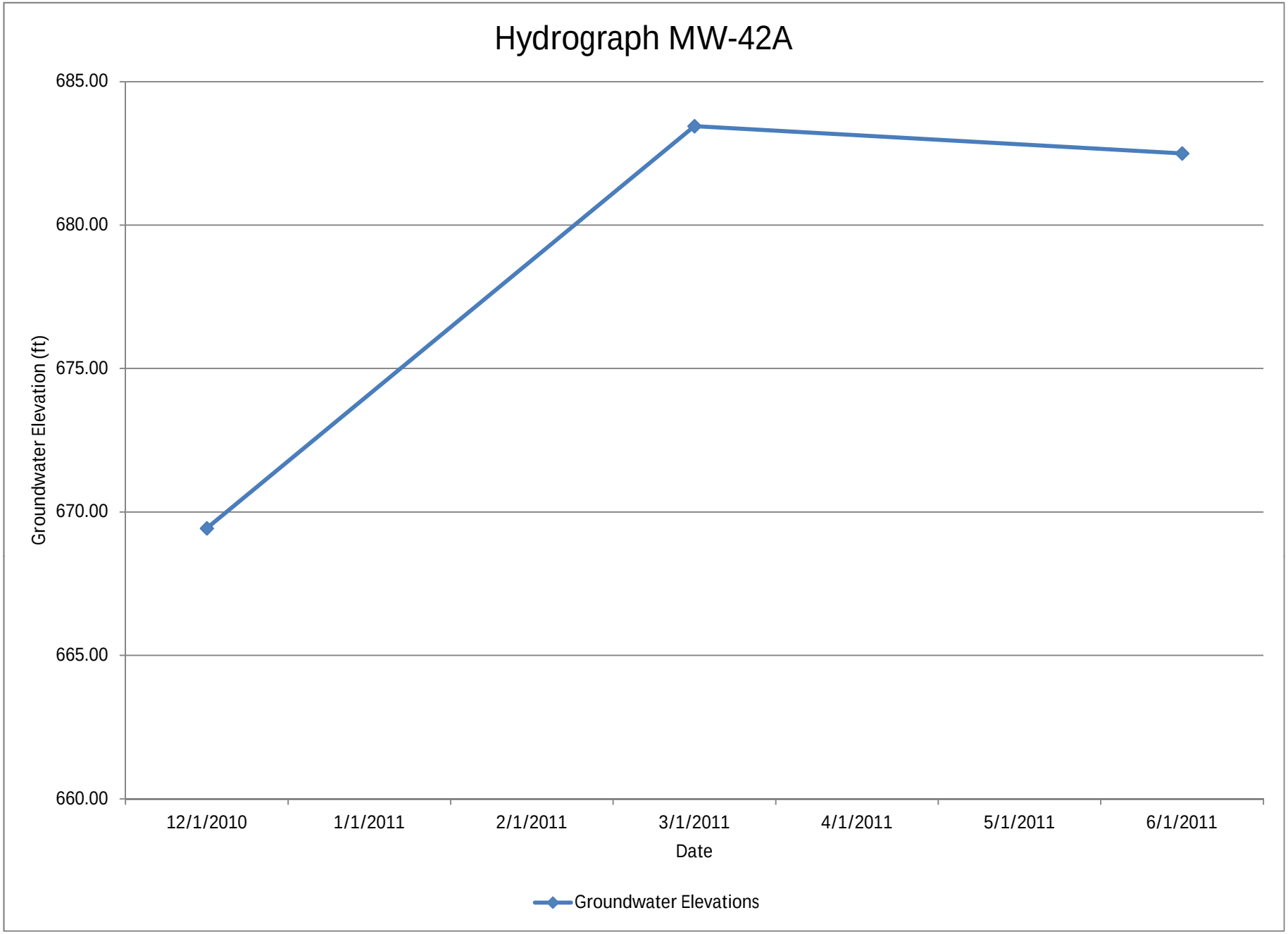

Hydrograph MW-39B
685.00
684.50
684.00
683.50
683.00
682.50
682.00
Groundwater Elevation (ft)
4/14/2010
5/14/2010
6/14/2010
7/14/2010
8/14/2010
9/14/2010
10/14/2010
11/14/2010
12/14/2010
1/14/2011
2/14/2011
3/14/2011
4/14/2011
5/14/2011
6/14/2011
Date
Groundwater Elevations

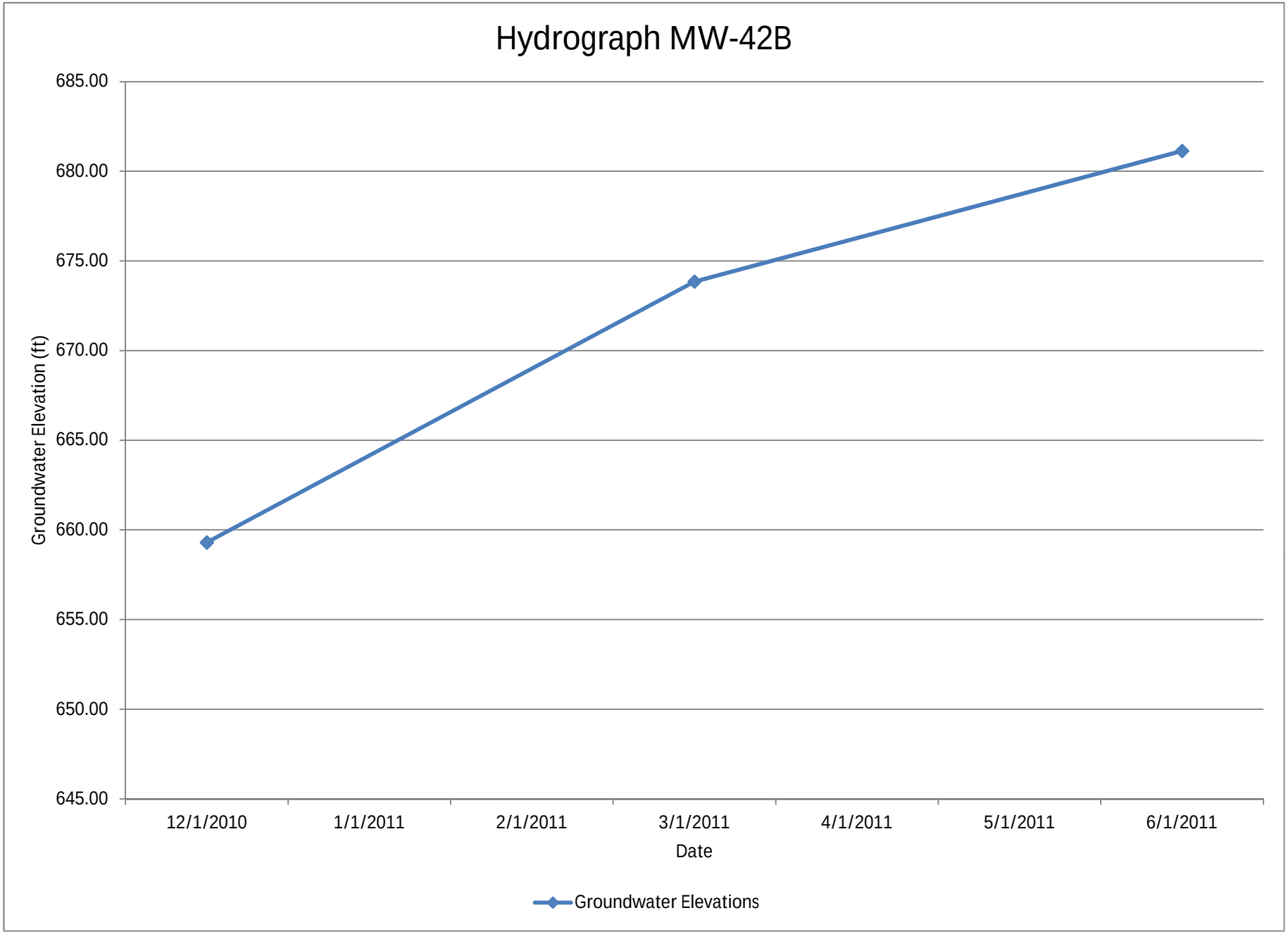

Hydrograph MW-40A
695.00
694.00
693.00
692.00
691.00
690.00
689.00
Groundwater Elevation (ft)
4/14/2010
5/14/2010
6/14/2010
7/14/2010
8/14/2010
9/14/2010
10/14/2010
11/14/2010
12/14/2010
1/14/2011
2/14/2011
3/14/2011
4/14/2011
5/14/2011
6/14/2011
Date
Groundwater Elevations

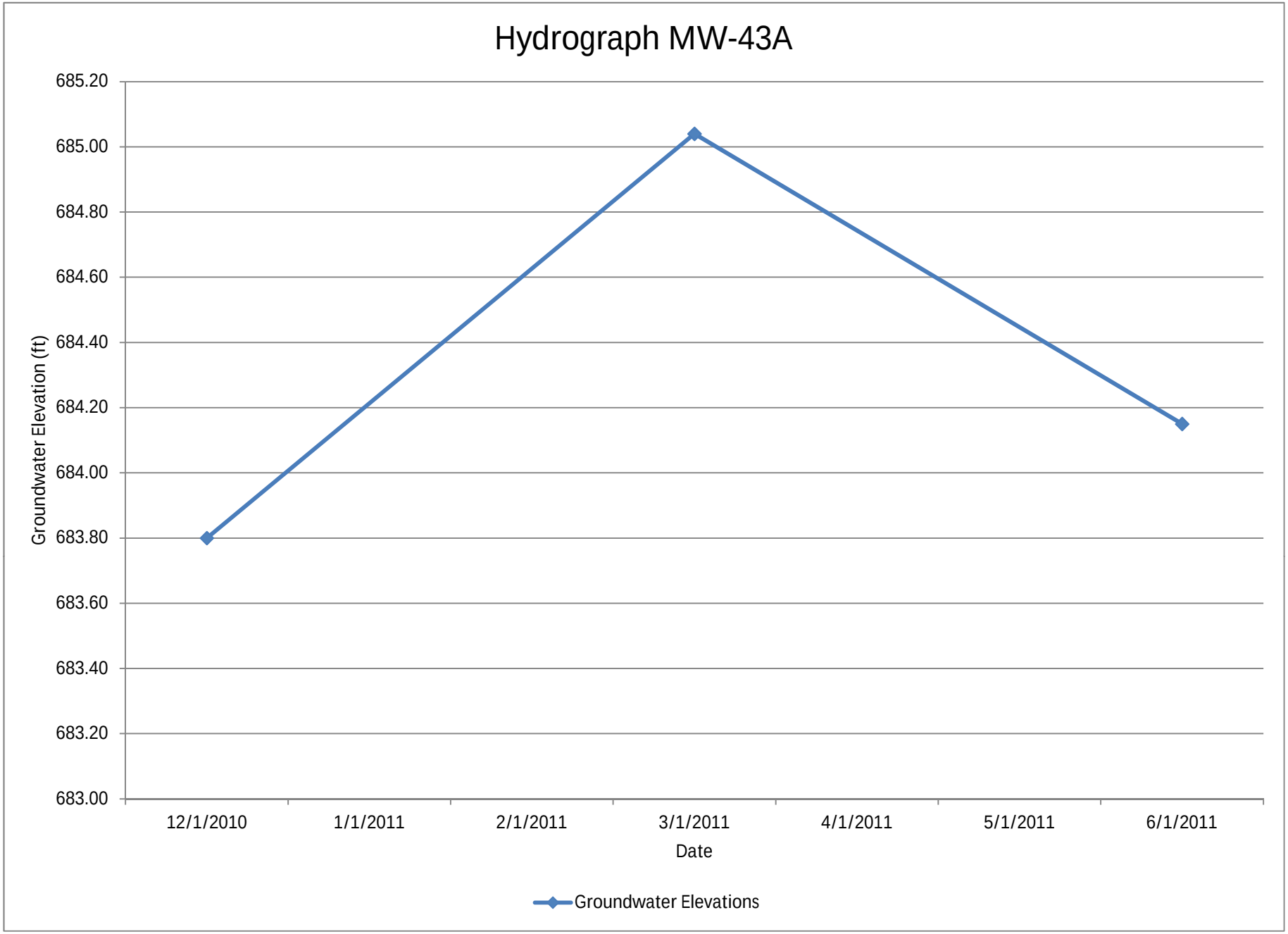

Hydrograph MW-40B
692.00
691.00
690.00
689.00
688.00
687.00
686.00
Groundwater Elevation (ft)
4/14/2010
5/14/2010
6/14/2010
7/14/2010
8/14/2010
9/14/2010
10/14/2010
11/14/2010
12/14/2010
1/14/2011
2/14/2011
3/14/2011
4/14/2011
5/14/2011
6/14/2011
Date
Groundwater Elevations

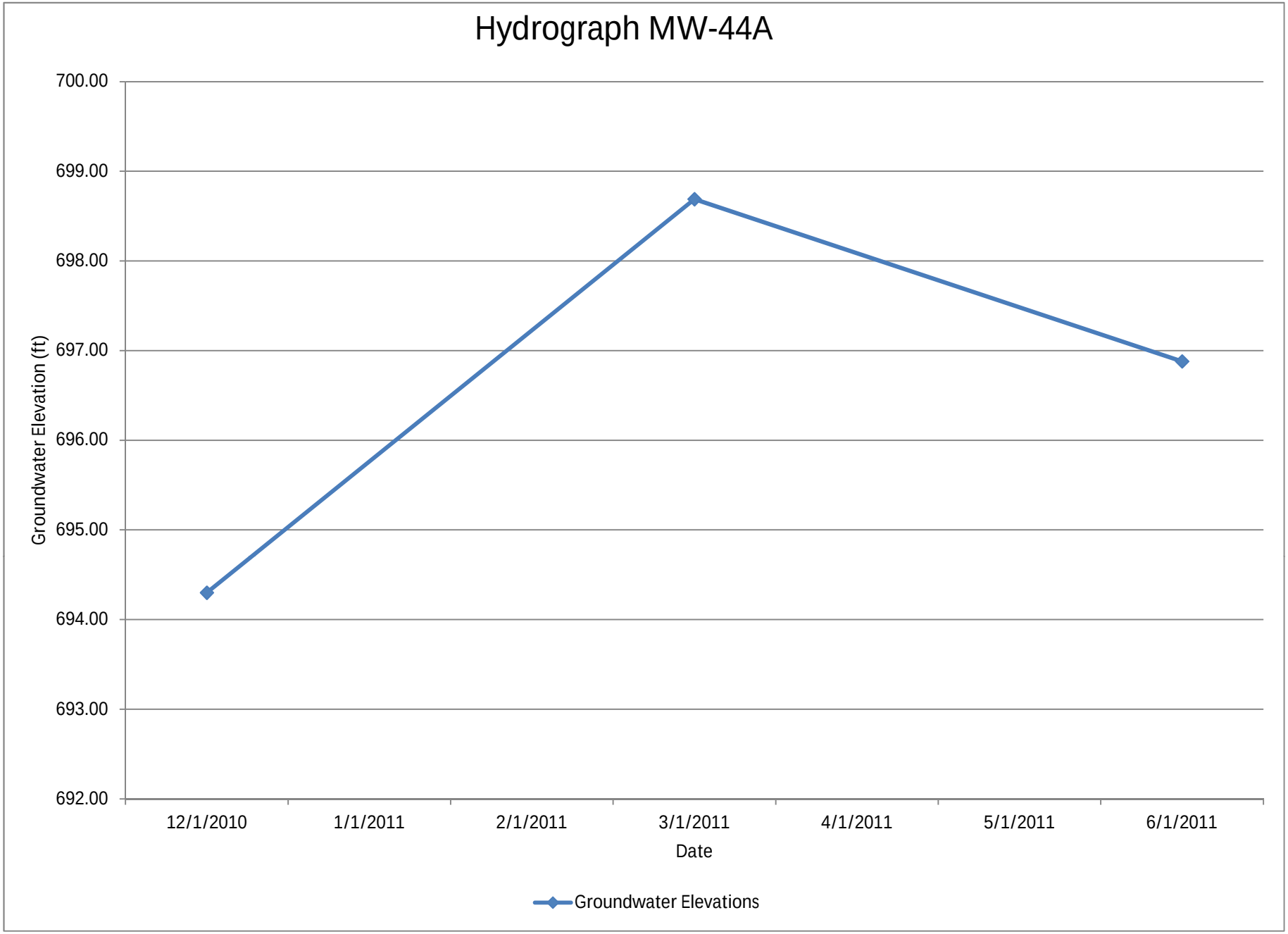

Hydrograph MW-40C
693.00
692.00
691.00
690.00
689.00
688.00
687.00
686.00
685.00
Groundwater Elevation (ft)
4/14/2010
5/14/2010
6/14/2010
7/14/2010
8/14/2010
9/14/2010
10/14/2010
11/14/2010
12/14/2010
1/14/2011
2/14/2011
3/14/2011
4/14/2011
5/14/2011
6/14/2011
7/14/2011
8/14/2011
9/14/2011
10/14/2011
11/14/2011
12/14/2011
Date
Groundwater Elevations

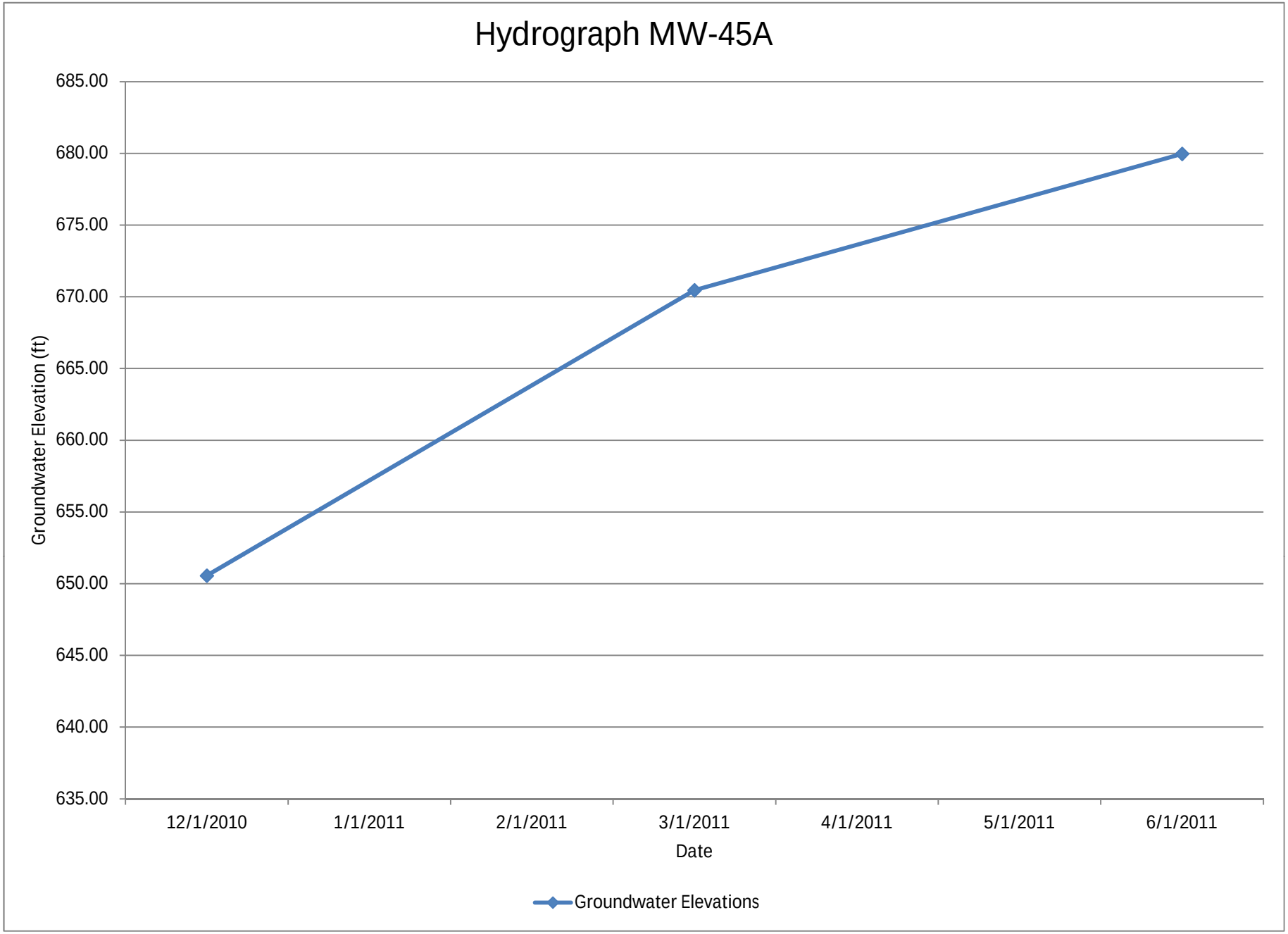

Hydrograph MW-41A
684.80
684.60
684.40
684.20
684.00
683.80
683.60
Groundwater Elevation (ft)
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

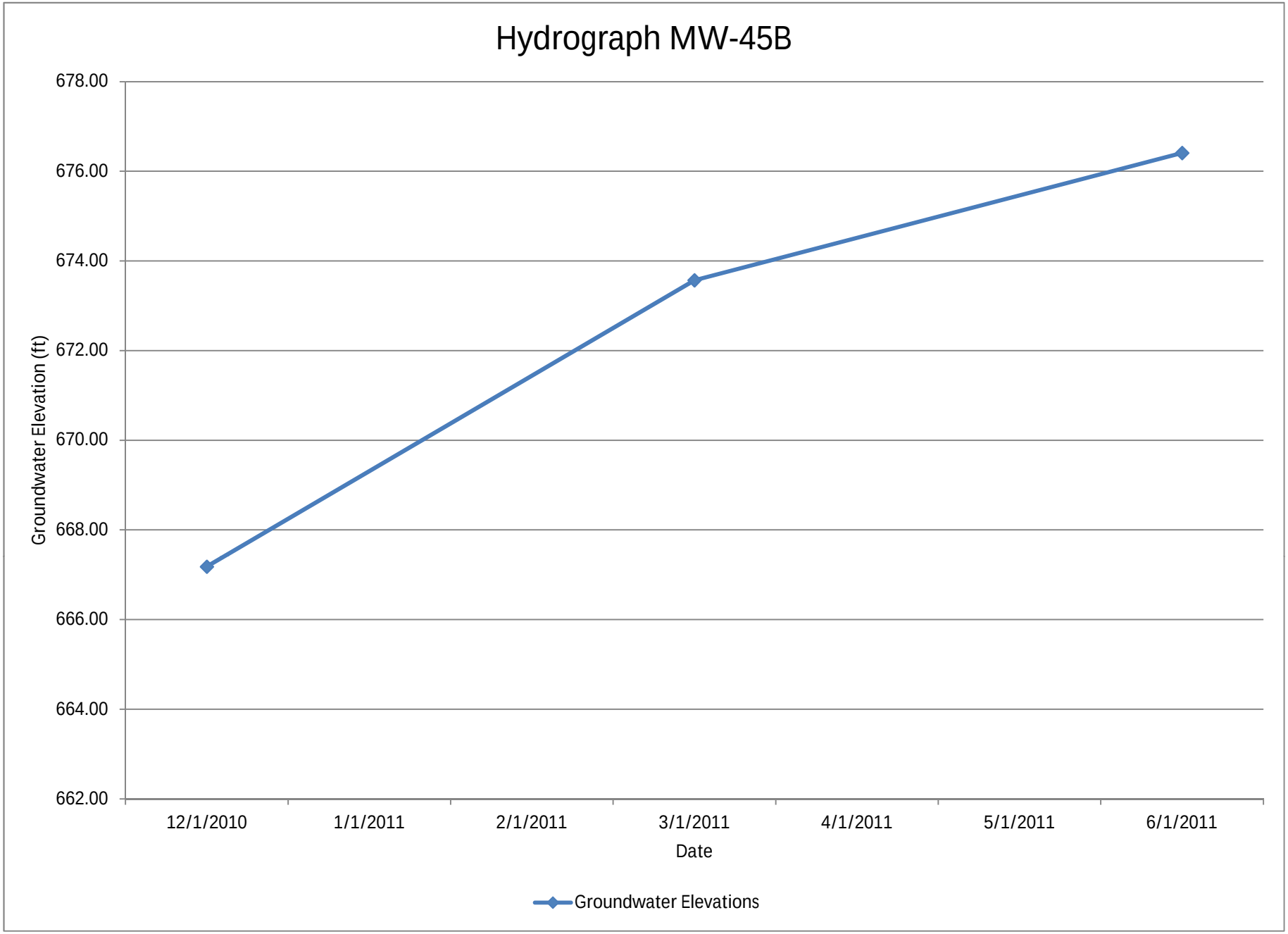

Hydrograph MW-42A
685.00
680.00
675.00
670.00
665.00
660.00
Groundwater Elevation (ft)
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

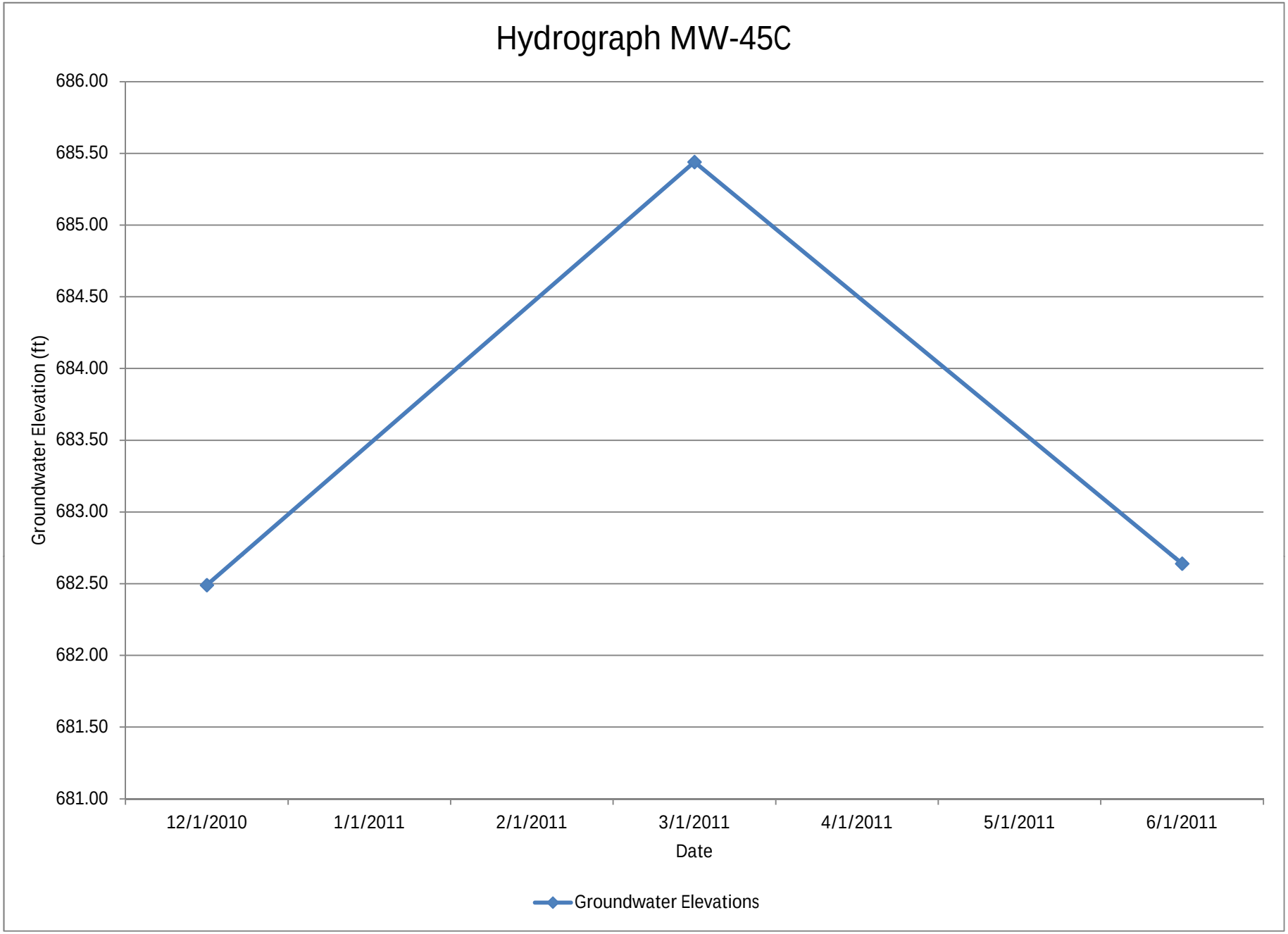

Hydrograph MW-42B
685.00
680.00
675.00
670.00
665.00
660.00
655.00
650.00
645.00
Groundwater Elevation (ft)
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

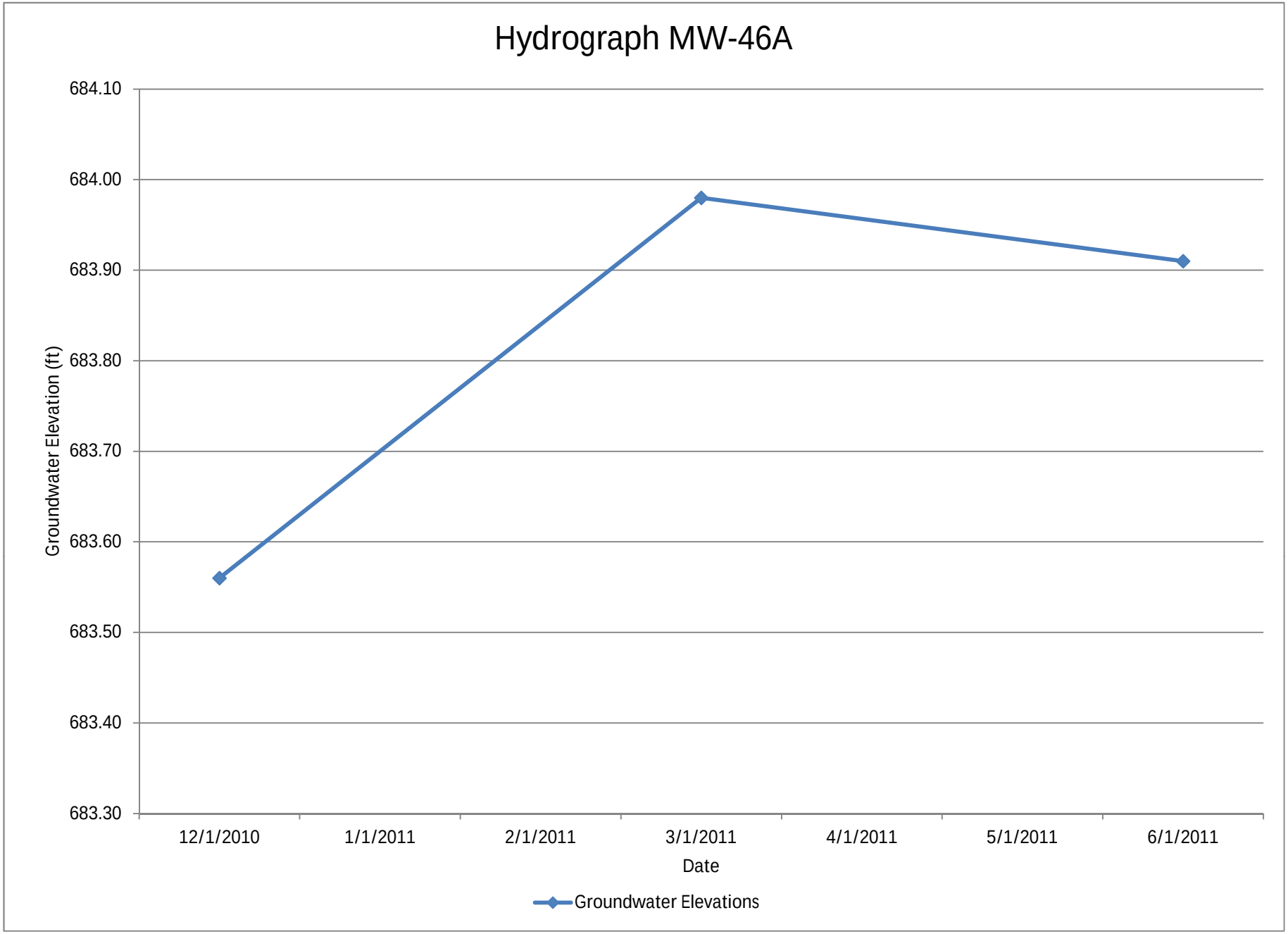

Hydrograph MW-43A
685.20
685.00
684.80
684.60
684.40
684.20
684.00
683.80
683.60
683.40
683.20
683.00
Groundwater Elevation (ft)
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

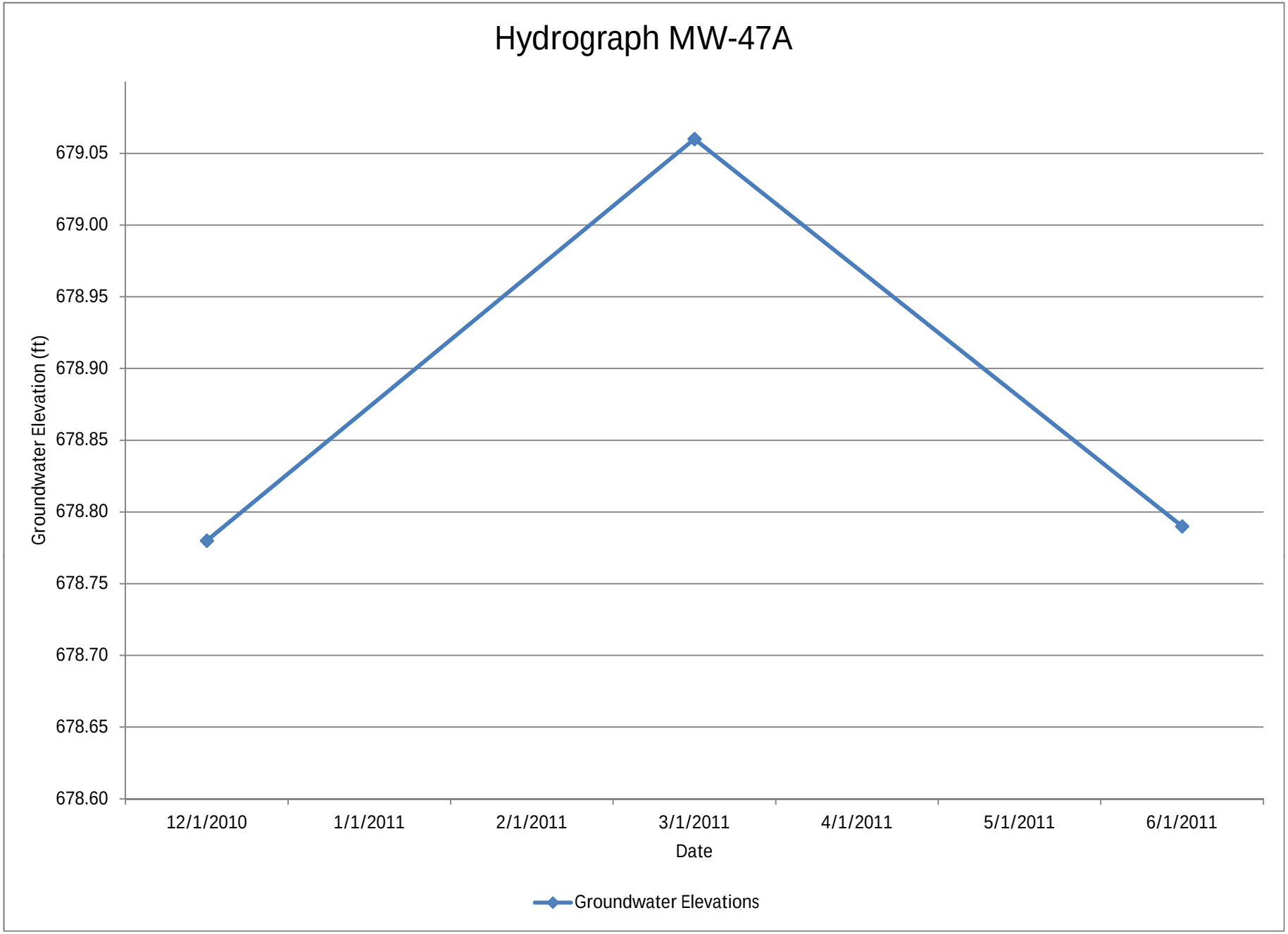

Hydrograph MW-44A
700.00
699.00
698.00
697.00
696.00
695.00
694.00
693.00
692.00
Groundwater Elevation (ft)
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

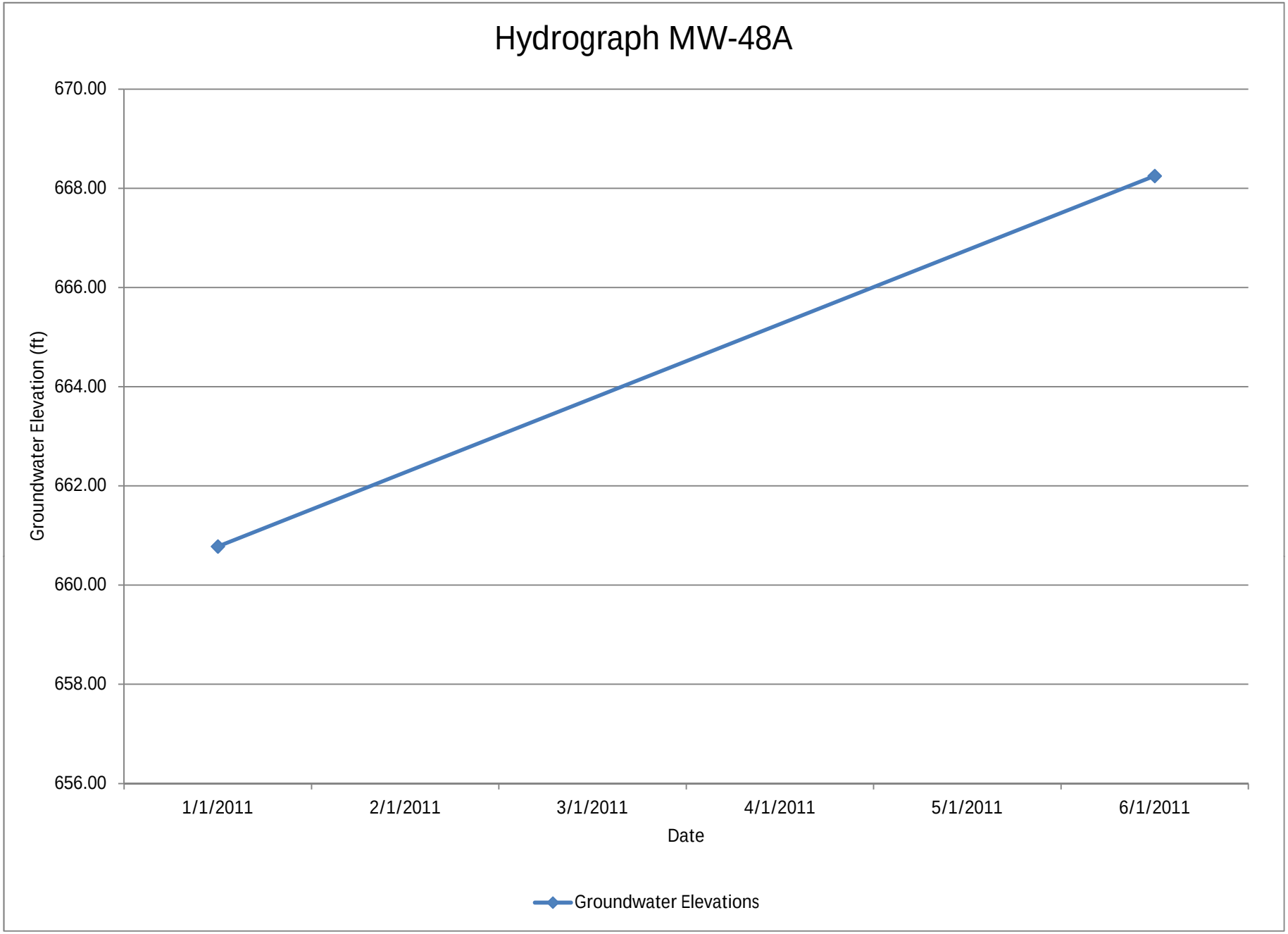

Hydrograph MW-45A
685.00
680.00
675.00
670.00
665.00
660.00
655.00
650.00
645.00
640.00
635.00
Groundwater Elevation (ft)
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

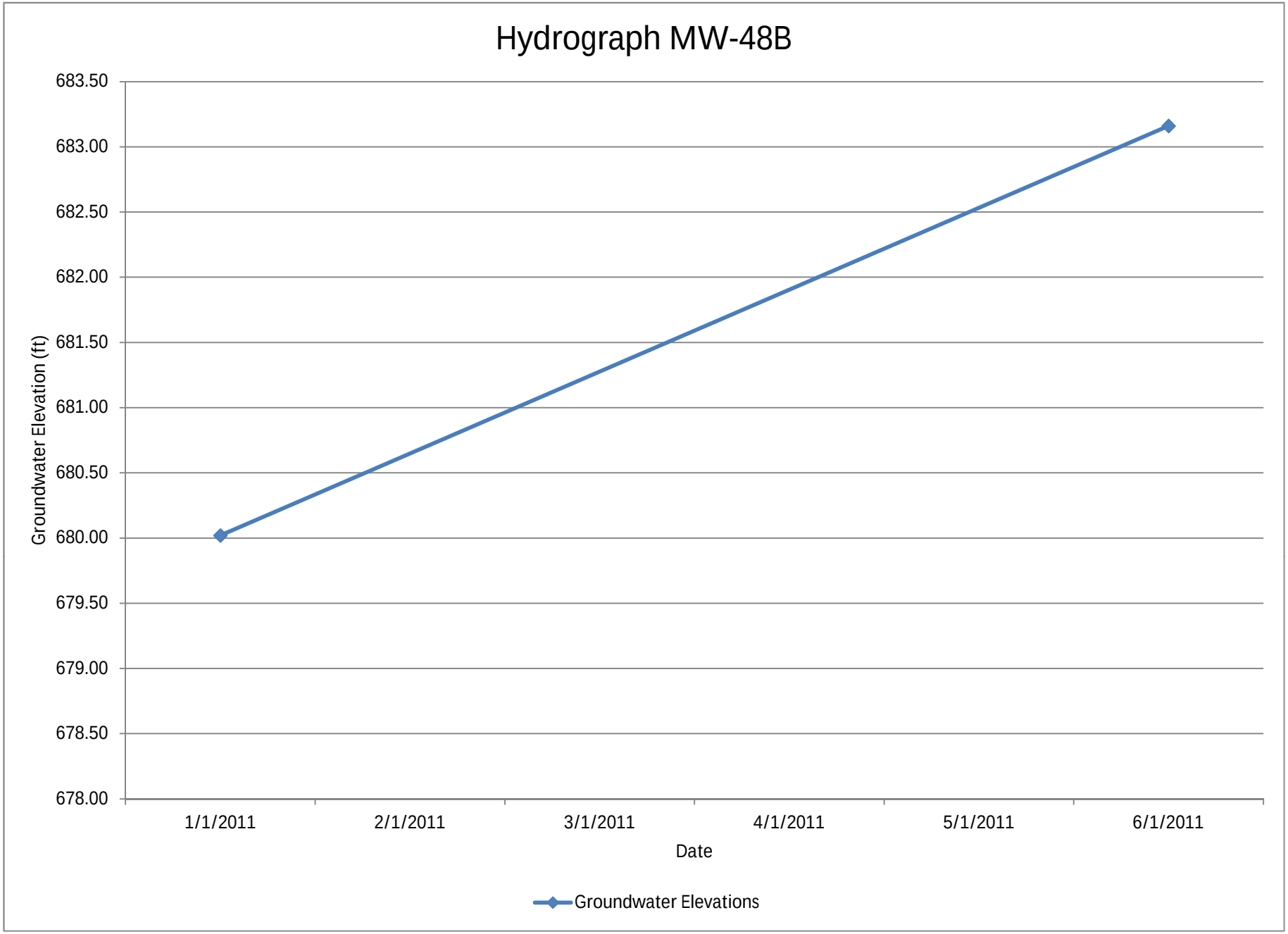

Hydrograph MW-45B
678.00
676.00
674.00
672.00
670.00
668.00
666.00
664.00
662.00
Groundwater Elevation (ft)
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

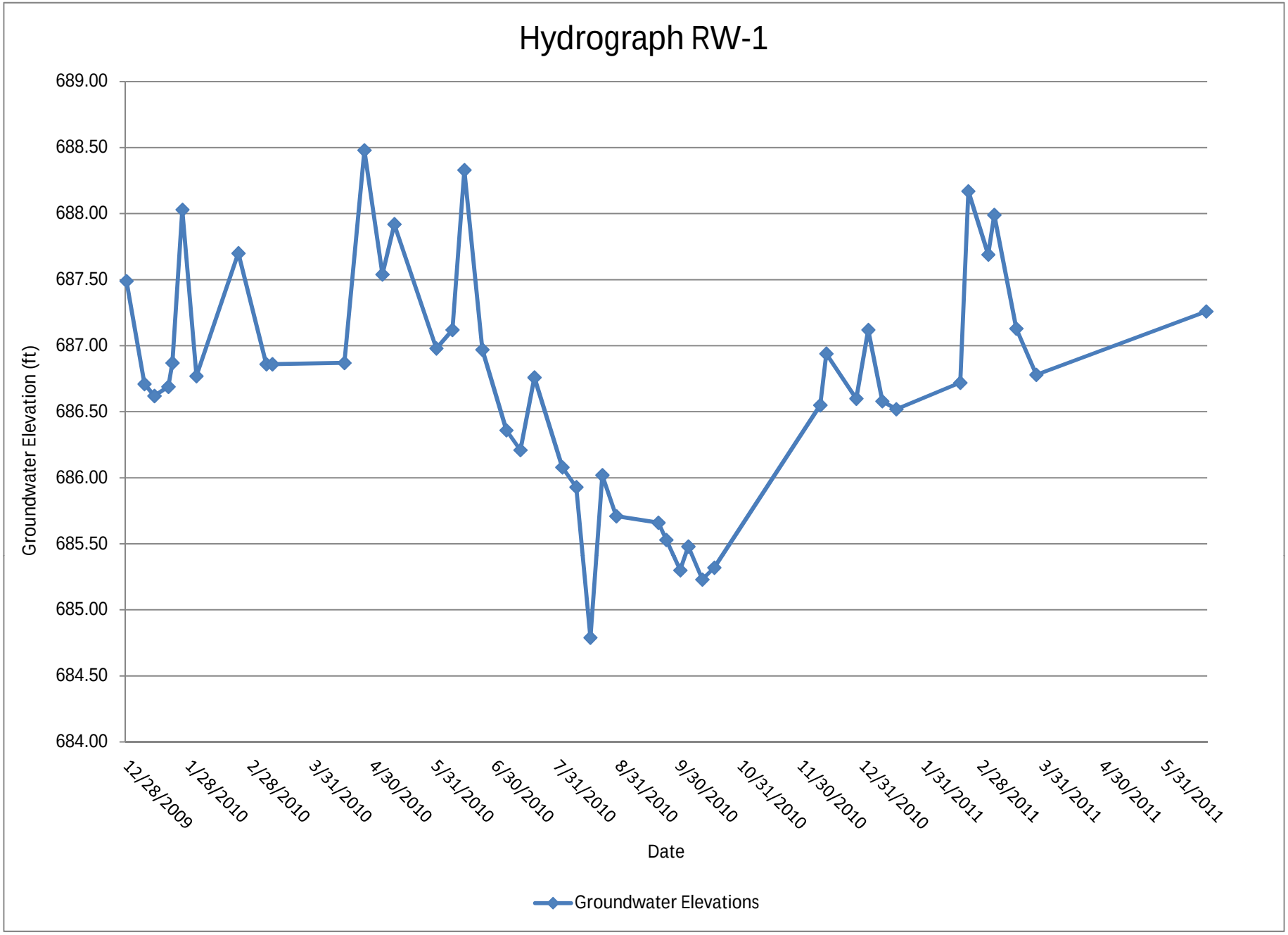

Hydrograph MW-45C
686.00
685.50
685.00
684.50
684.00
683.50
683.00
682.50
682.00
681.50
681.00
Groundwater Elevation (ft)
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

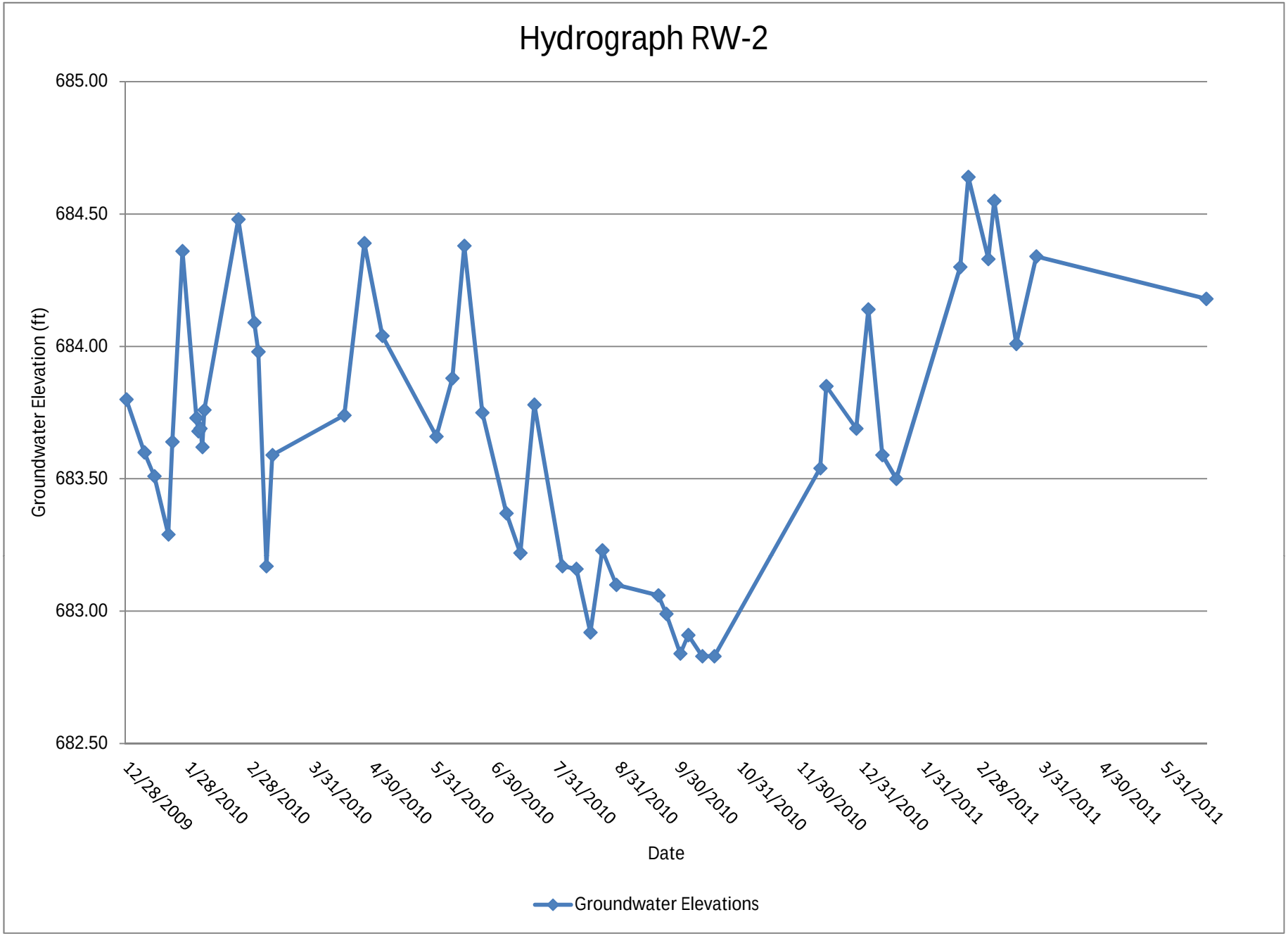

Hydrograph MW-46A
684.10
684.00
683.90
683.80
683.70
683.60
683.50
683.40
683.30
Groundwater Elevation (ft)
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

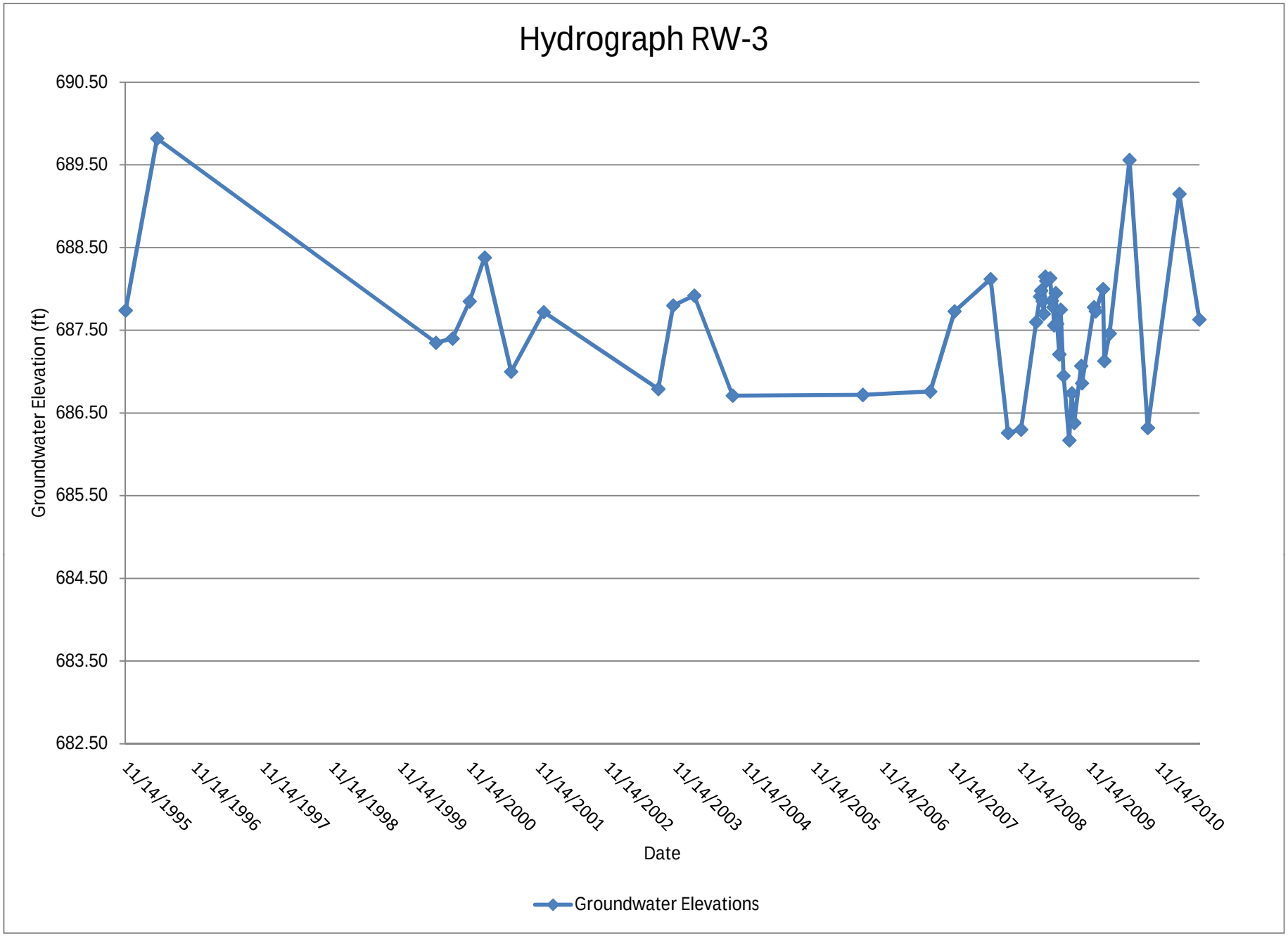

Hydrograph MW-47A
Groundwater Elevation (ft)
679.05
679.00
678.95
678.90
678.85
678.80
678.75
678.70
678.65
678.60
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

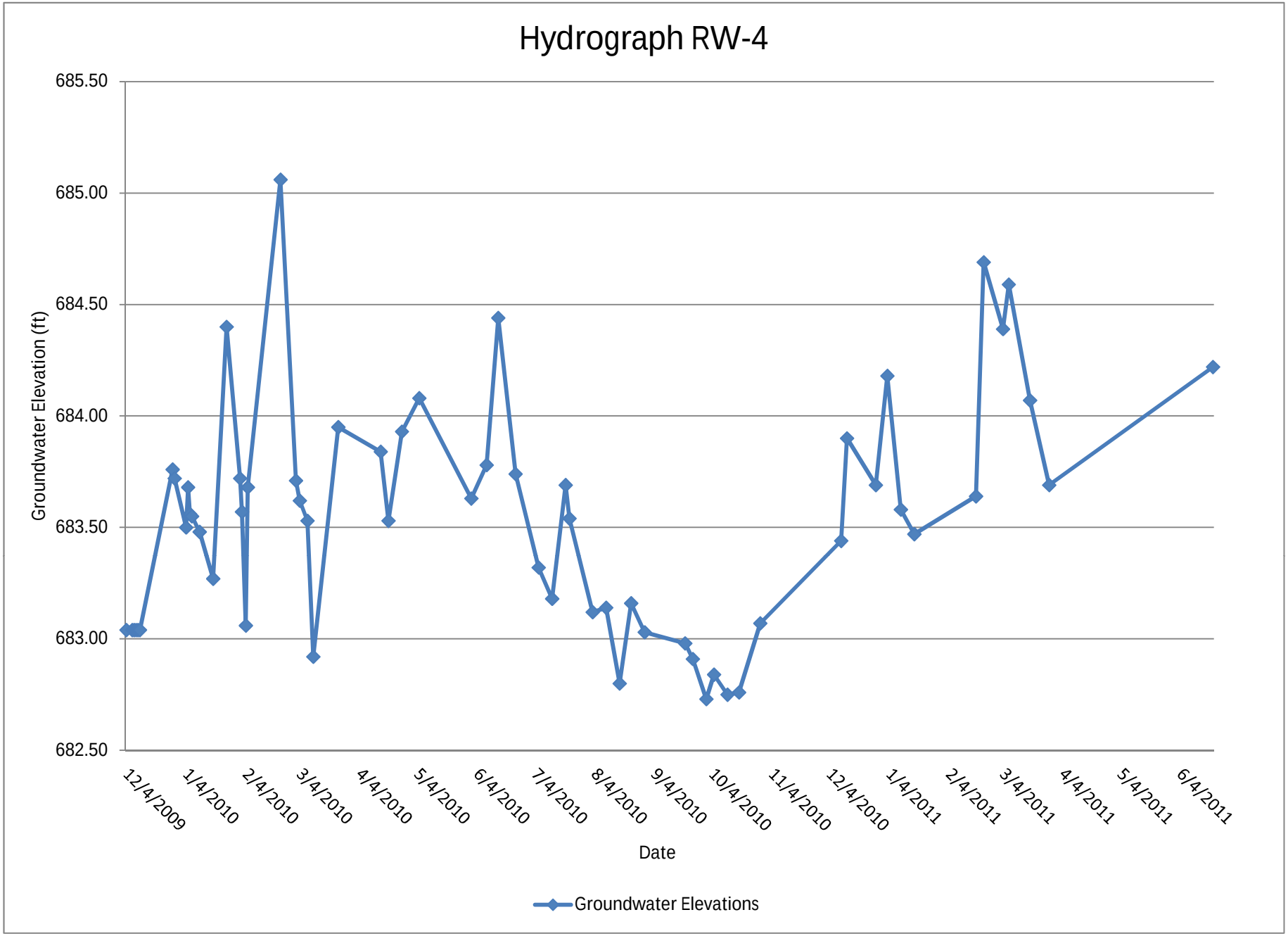

Hydrograph MW-48A
670.00
668.00
666.00
664.00
662.00
660.00
658.00
656.00
Groundwater Elevation (ft)
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

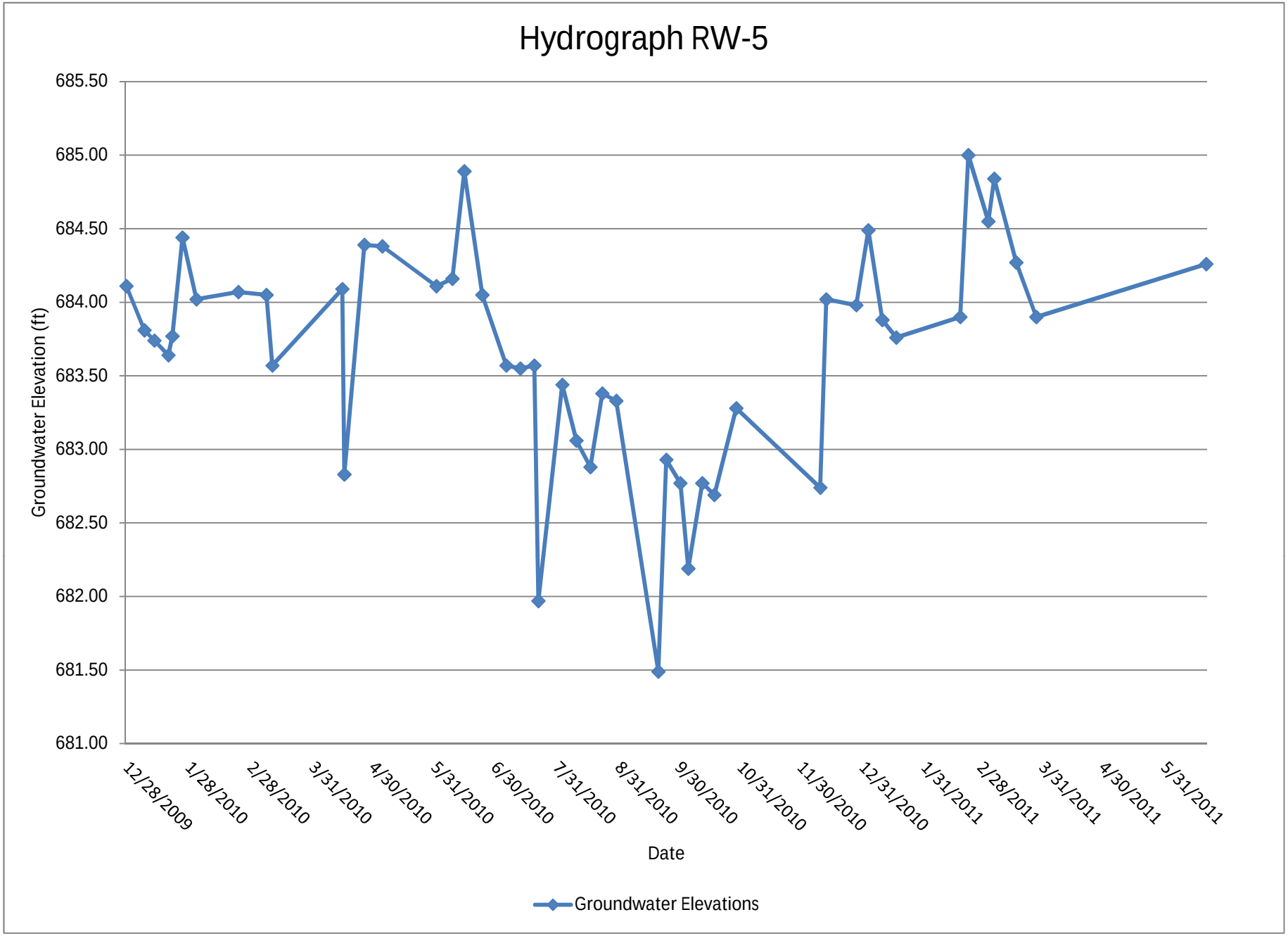

Hydrograph MW-48B
683.50
683.00
682.50
682.00
681.50
681.00
680.50
680.00
679.50
679.00
678.50
678.00
Groundwater Elevation (ft)
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
Date
Groundwater Elevations

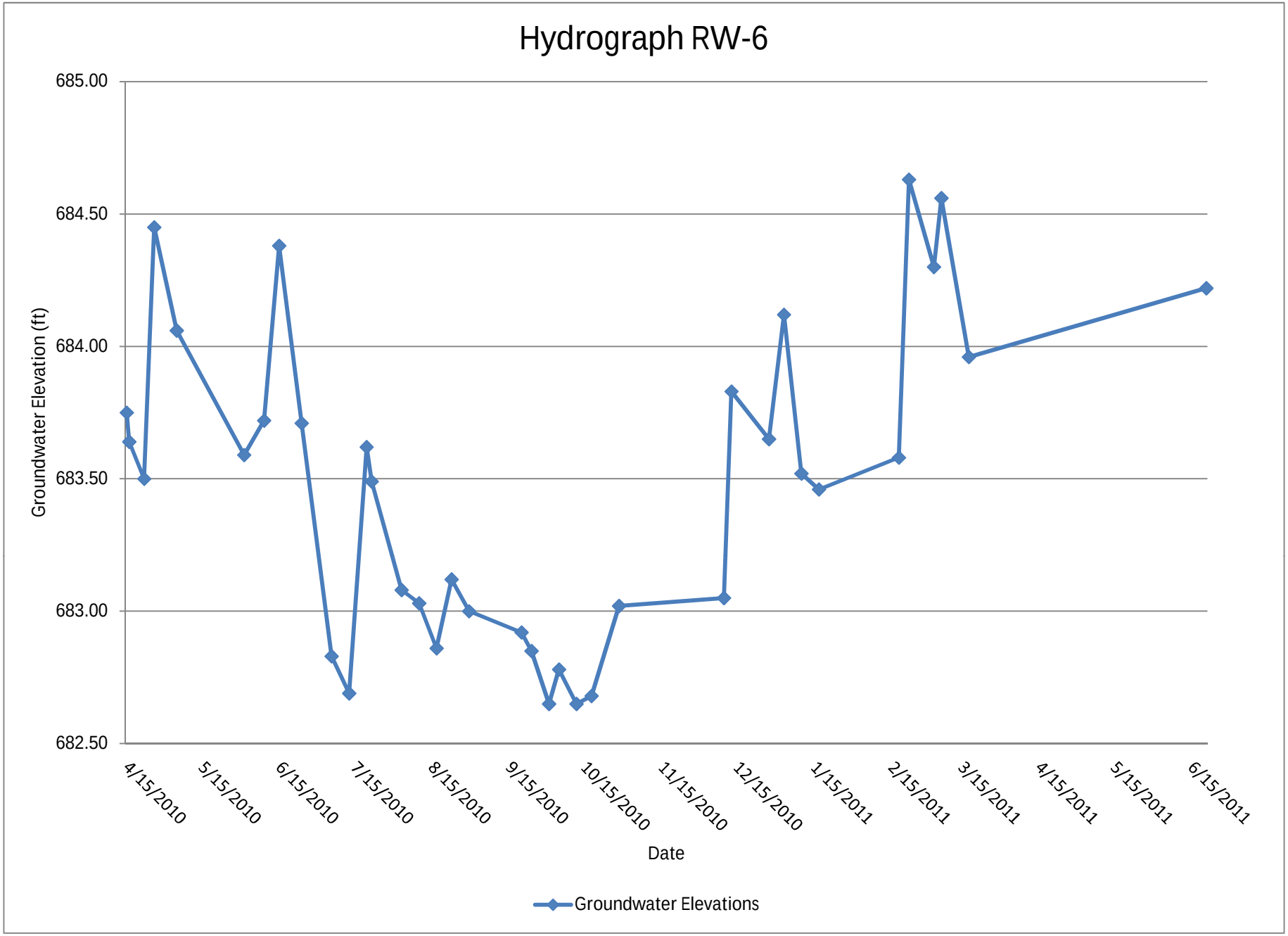

Hydrograph RW-1
689.00
688.50
688.00
687.50
687.00
686.50
686.00
685.50
685.00
684.50
684.00
Groundwater Elevation (ft)
12/28/2009
1/28/2010
2/28/2010
3/31/2010
4/30/2010
5/31/2010
6/30/2010
7/31/2010
8/31/2010
9/30/2010
10/31/2010
11/30/2010
12/31/2010
1/31/2011
2/28/2011
3/31/2011
4/30/2011
5/31/2011
Date
Groundwater Elevations

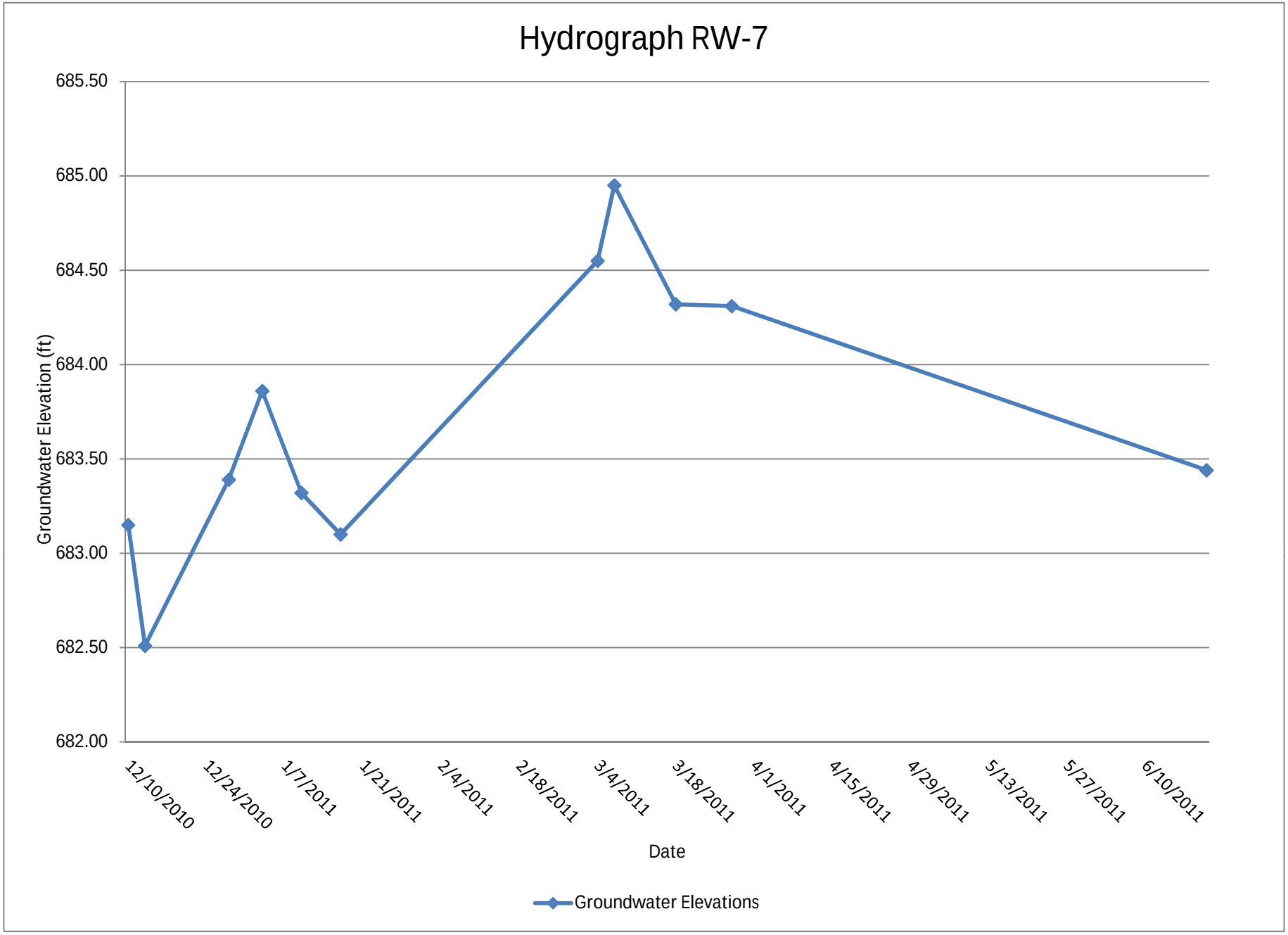

Hydrograph RW-2
685.00
684.50
684.00
683.50
683.00
682.50
Groundwater Elevation (ft)
12/28/2009
1/28/2010
2/28/2010
3/31/2010
4/30/2010
5/31/2010
6/30/2010
7/31/2010
8/31/2010
9/30/2010
10/31/2010
11/30/2010
12/31/2010
1/31/2011
2/28/2011
3/31/2011
4/30/2011
5/31/2011
Date
Groundwater Elevations

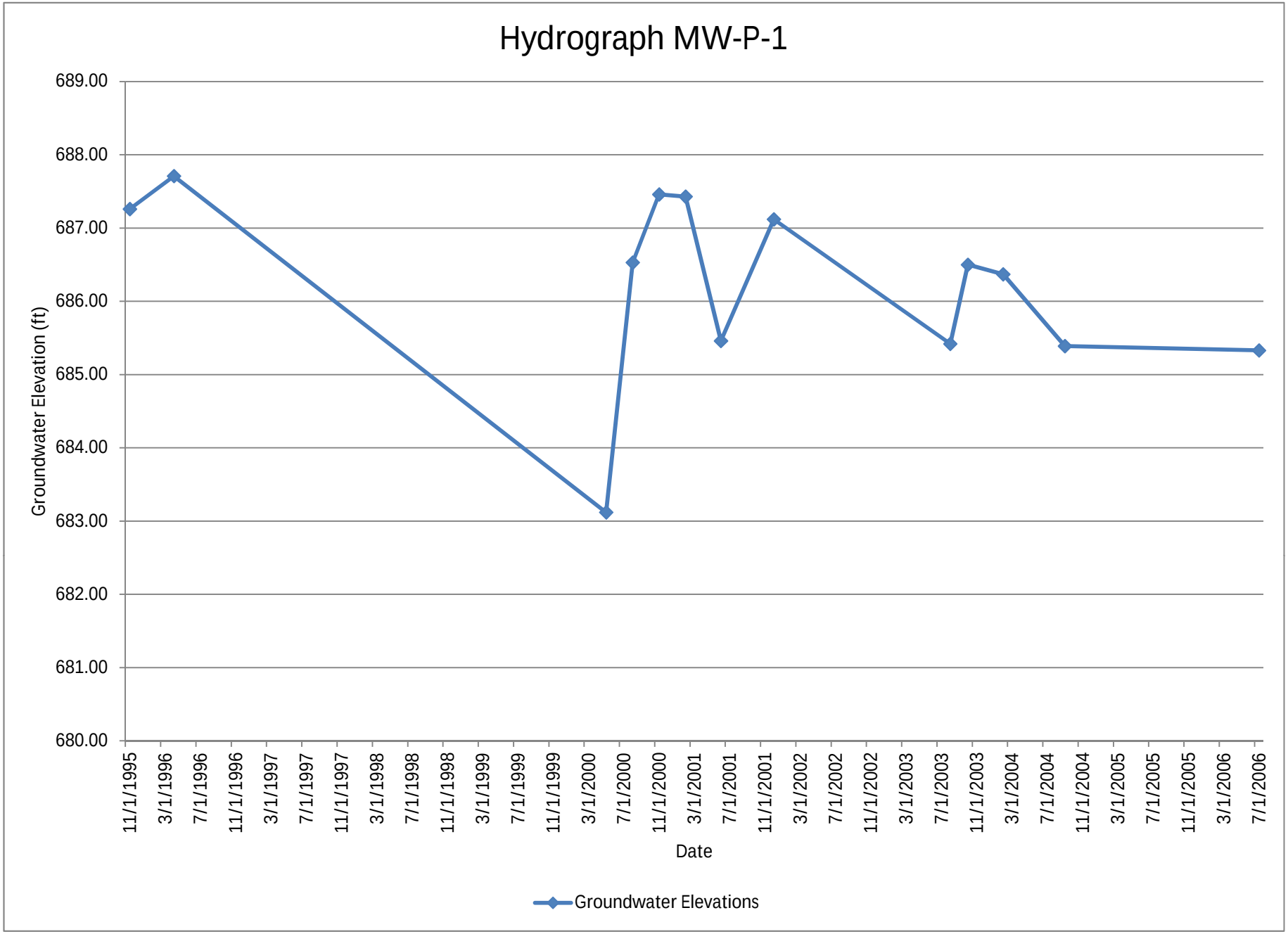

Hydrograph RW-3
690.50
689.50
688.50
687.50
686.50
685.50
684.50
683.50
682.50
Groundwater Elevation (ft)
11/14/1995
11/14/1996
11/14/1997
11/14/1998
11/14/1999
11/14/2000
11/14/2001
11/14/2002
11/14/2003
11/14/2004
11/14/2005
11/14/2006
11/14/2007
11/14/2008
11/14/2009
11/14/2010
Date
Groundwater Elevations

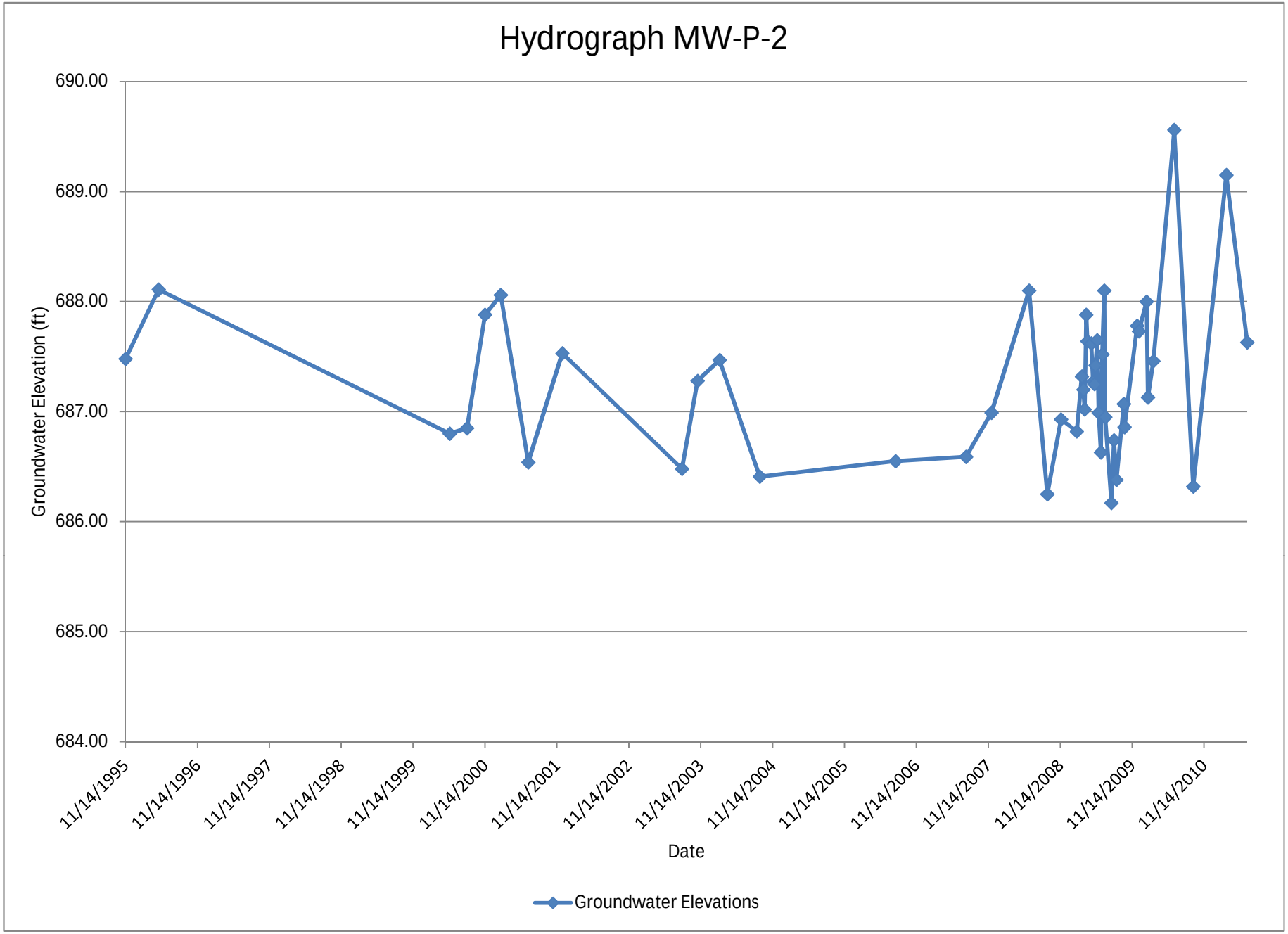

Hydrograph RW-4
685.50
685.00
684.50
684.00
683.50
683.00
682.50
Groundwater Elevation (ft)
12/4/2009
1/4/2010
2/4/2010
3/4/2010
4/4/2010
5/4/2010
6/4/2010
7/4/2010
8/4/2010
9/4/2010
10/4/2010
11/4/2010
12/4/2010
1/4/2011
2/4/2011
3/4/2011
4/4/2011
5/4/2011
6/4/2011
Date
Groundwater Elevations


Hydrograph RW-5
685.50
685.00
684.50
684.00
683.50
683.00
682.50
682.00
681.50
681.00
Groundwater Elevation (ft)
12/28/2009
1/28/2010
2/28/2010
3/31/2010
4/30/2010
5/31/2010
6/30/2010
7/31/2010
8/31/2010
9/30/2010
10/31/2010
11/30/2010
12/31/2010
1/31/2011
2/28/2011
3/31/2011
4/30/2011
5/31/2011
Date
Groundwater Elevations


Hydrograph RW-6
685.00
684.50
684.00
683.50
683.00
682.50
Groundwater Elevation (ft)
4/15/2010
5/15/2010
6/15/2010
7/15/2010
8/15/2010
9/15/2010
10/15/2010
11/15/2010
12/15/2010
1/15/2011
2/15/2011
3/15/2011
4/15/2011
5/15/2011
6/15/2011
Date
Groundwater Elevations


Hydrograph RW-7
685.50
685.00
684.50
684.00
683.50
683.00
682.50
682.00
Groundwater Elevation (ft)
12/10/2010
12/24/2010
1/7/2011
1/21/2011
2/4/2011
2/18/2011
3/4/2011
3/18/2011
4/1/2011
4/15/2011
4/29/2011
5/13/2011
5/27/2011
6/10/2011
Date
Groundwater Elevations


Hydrograph MW-P-1
689.00
688.00
687.00
686.00
685.00
684.00
683.00
682.00
681.00
680.00
Groundwater Elevation (ft)
11/1/1995
3/1/1996
7/1/1996
11/1/1996
3/1/1997
7/1/1997
11/1/1997
3/1/1998
7/1/1998
11/1/1998
3/1/1999
7/1/1999
11/1/1999
3/1/2000
7/1/2000
11/1/2000
3/1/2001
7/1/2001
11/1/2001
3/1/2002
7/1/2002
11/1/2002
3/1/2003
7/1/2003
11/1/2003
3/1/2004
7/1/2004
11/1/2004
3/1/2005
7/1/2005
11/1/2005
3/1/2006
7/1/2006
Date
Groundwater Elevations


Hydrograph MW-P-2
690.00
689.00
688.00
687.00
686.00
685.00
684.00
Groundwater Elevation (ft)
11/14/1995
11/14/1996
11/14/1997
11/14/1998
11/14/1999
11/14/2000
11/14/2001
11/14/2002
11/14/2003
11/14/2004
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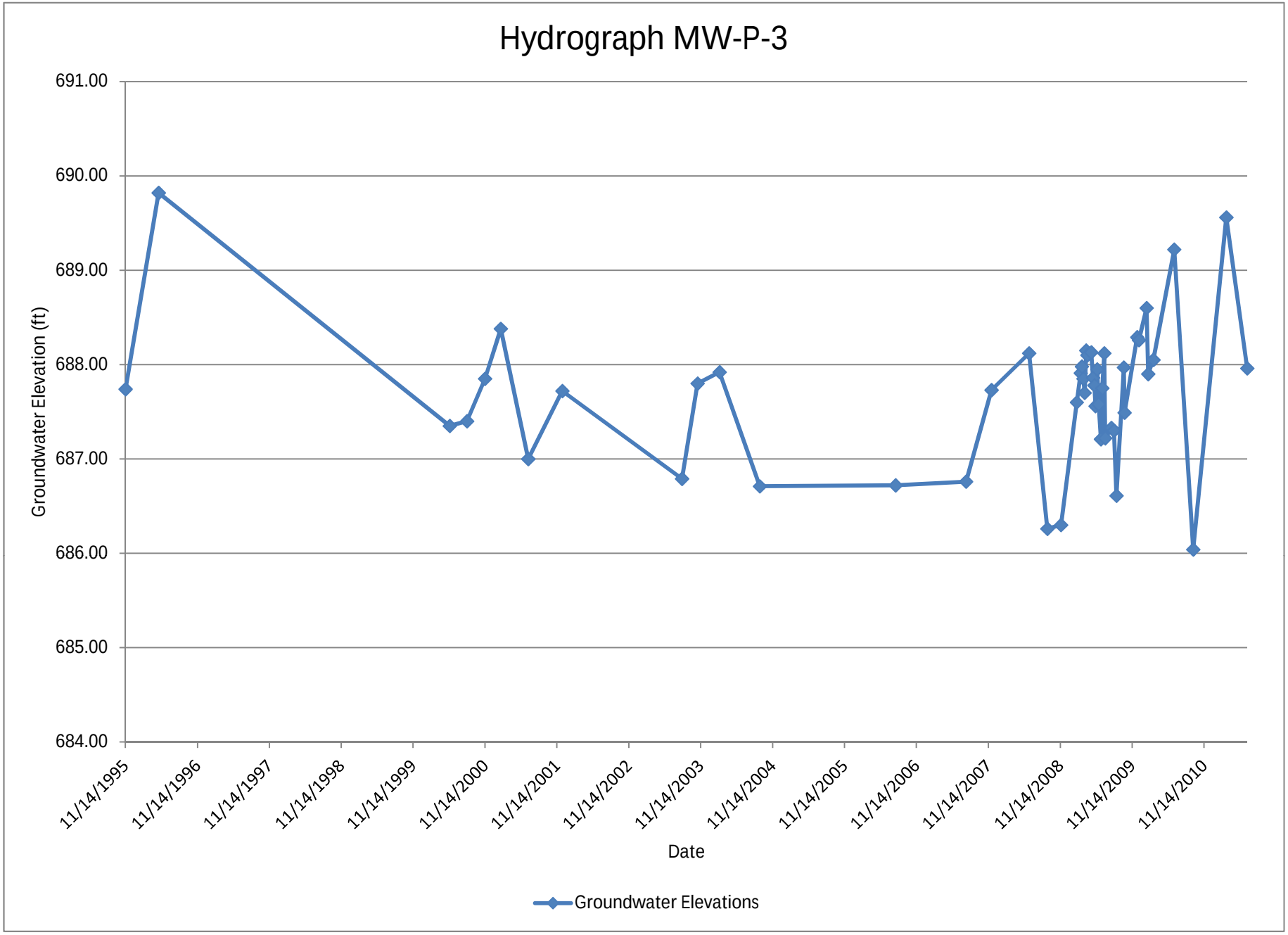
11/14/2006
11/14/2007
11/14/2008
11/14/2009
11/14/2010
Date
Groundwater Elevations


Hydrograph MW-P-3
691.00
690.00
689.00
688.00
687.00
686.00
685.00
684.00
Groundwater Elevation (ft)
11/14/1995
11/14/1996
11/14/1997
11/14/1998
11/14/1999
11/14/2000
11/14/2001
11/14/2002
11/14/2003
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11/14/2007
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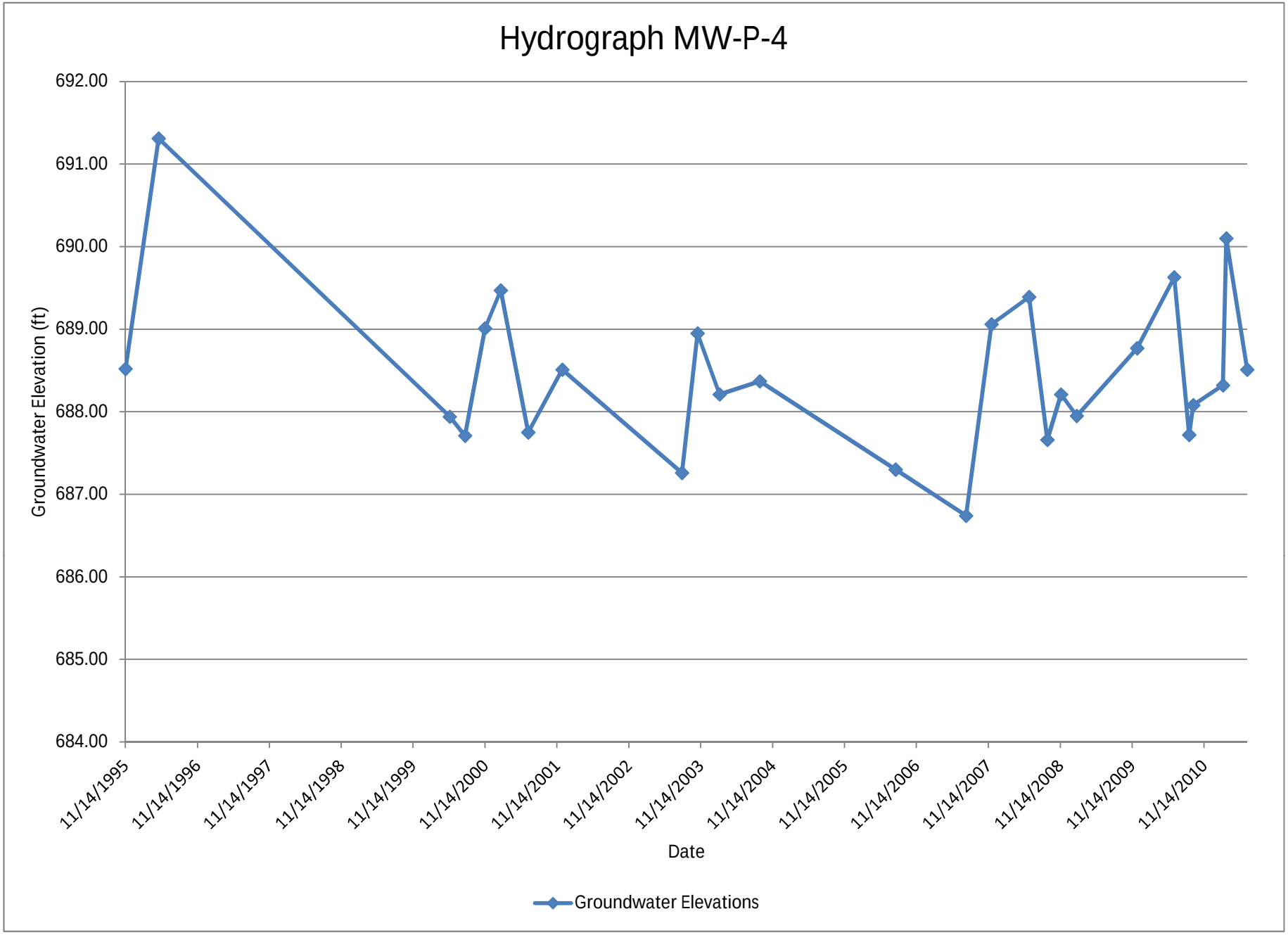
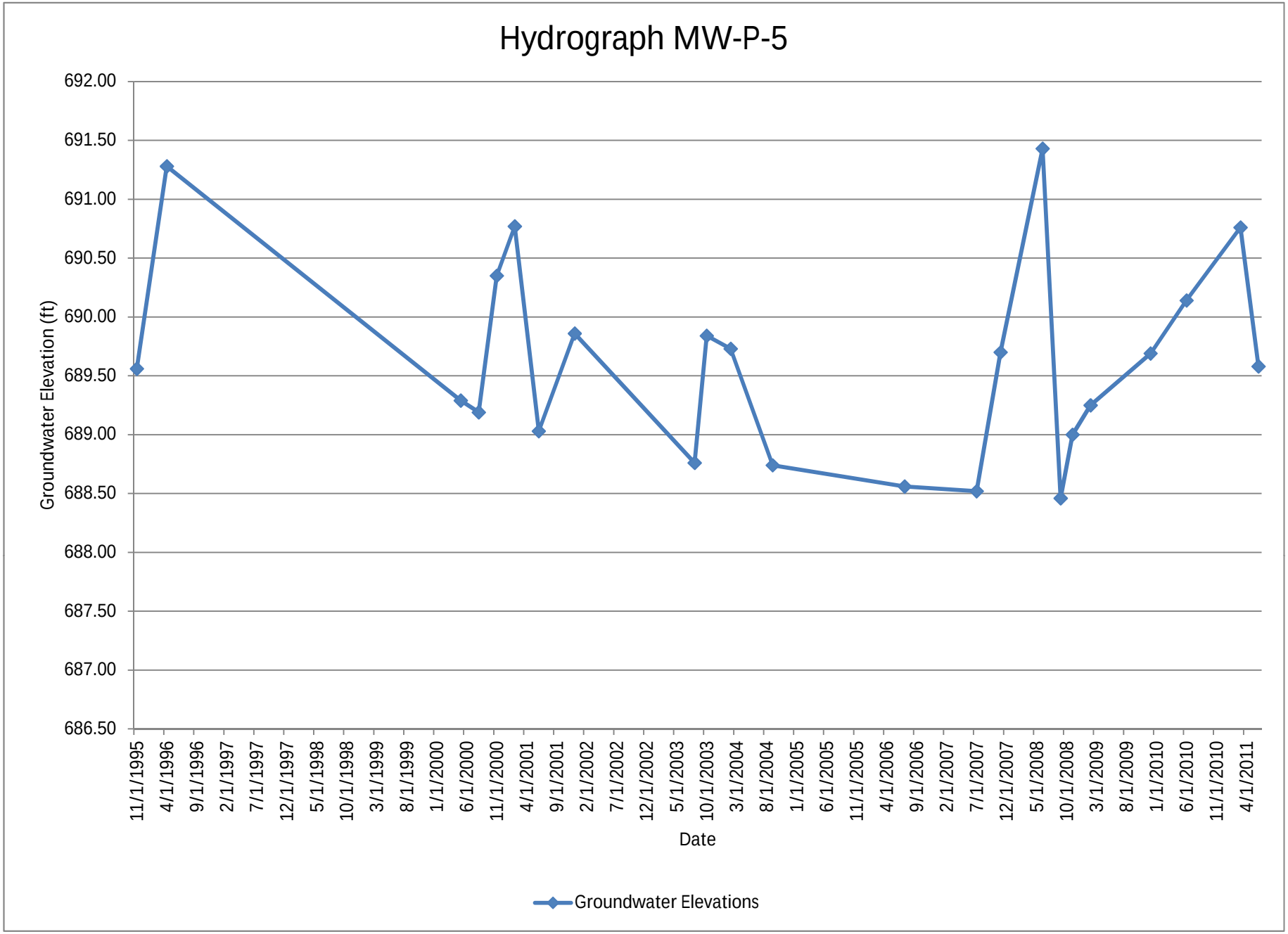
11/14/2009
11/14/2010
Date
Groundwater Elevations


Hydrograph MW-P-4
692.00
691.00
690.00
689.00
688.00
687.00
686.00
685.00
684.00
Groundwater Elevation (ft)
11/14/1995
11/14/1996
11/14/1997
11/14/1998
11/14/1999
11/14/2000
11/14/2001
11/14/2002
11/14/2003
11/14/2004
11/14/2005
11/14/2006
11/14/2007
11/14/2008
11/14/2009
11/14/2010
Date
Groundwater Elevations


Hydrograph MW-P-5
692.00
691.50
691.00
690.50
690.00
689.50
689.00
688.50
688.00
687.50
687.00
686.50
Groundwater Elevation (ft)
11/1/1995
4/1/1996
9/1/1996
2/1/1997
7/1/1997
12/1/1997
5/1/1998
10/1/1998
3/1/1999
8/1/1999
1/1/2000
6/1/2000
11/1/2000
4/1/2001
9/1/2001
2/1/2002
7/1/2002
12/1/2002
5/1/2003
10/1/2003
3/1/2004
8/1/2004
1/1/2005
6/1/2005
11/1/2005
4/1/2006
9/1/2006
2/1/2007
7/1/2007
12/1/2007
5/1/2008
10/1/2008
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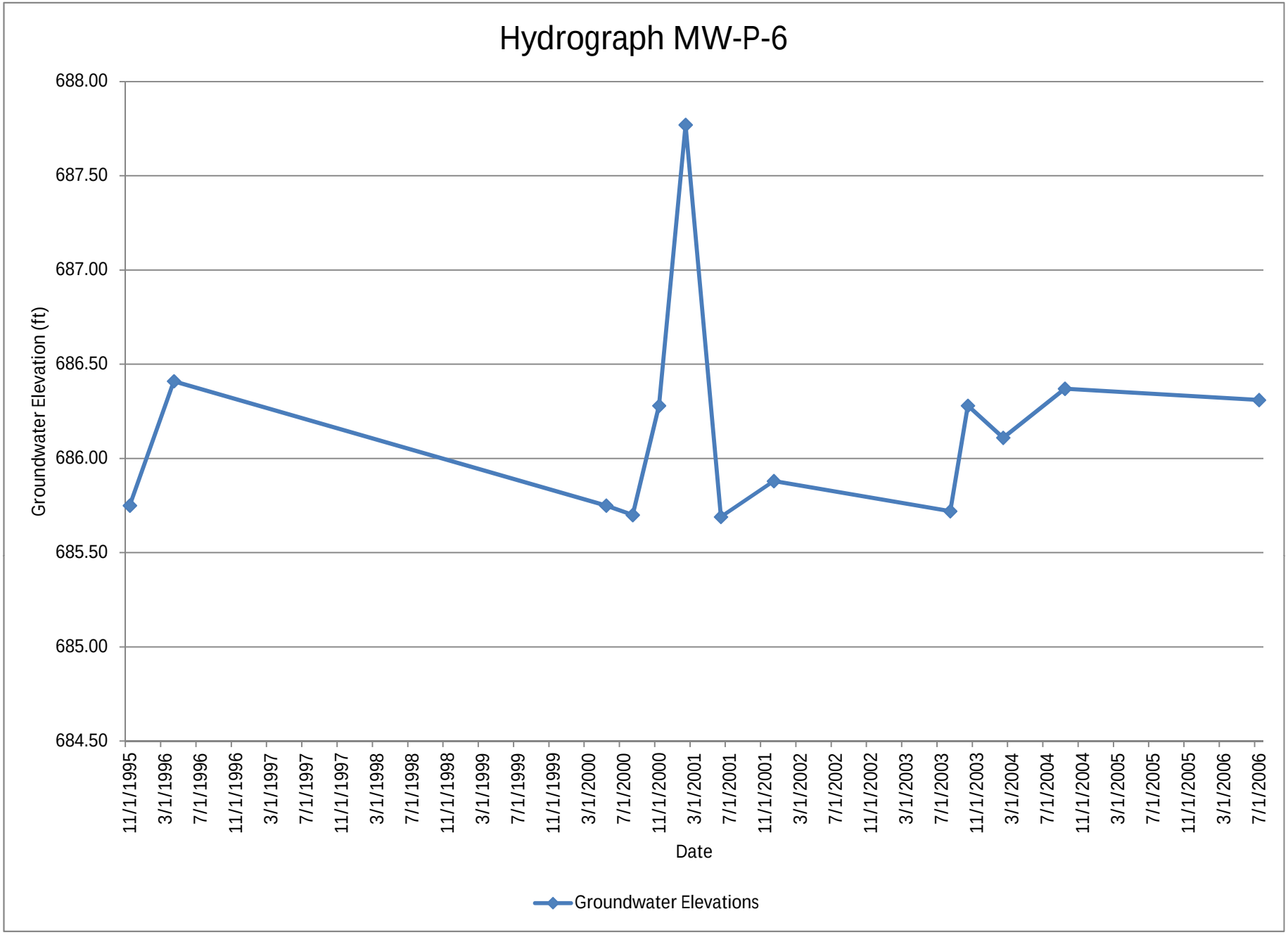
8/1/2009
1/1/2010
6/1/2010
11/1/2010
4/1/2011
Date
Groundwater Elevations


Hydrograph MW-P-6
688.00
687.50
687.00
686.50
686.00
685.50
685.00
684.50
Groundwater Elevation (ft)
11/1/1995
3/1/1996
7/1/1996
11/1/1996
3/1/1997
7/1/1997
11/1/1997
3/1/1998
7/1/1998
11/1/1998
3/1/1999
7/1/1999
11/1/1999
3/1/2000
7/1/2000
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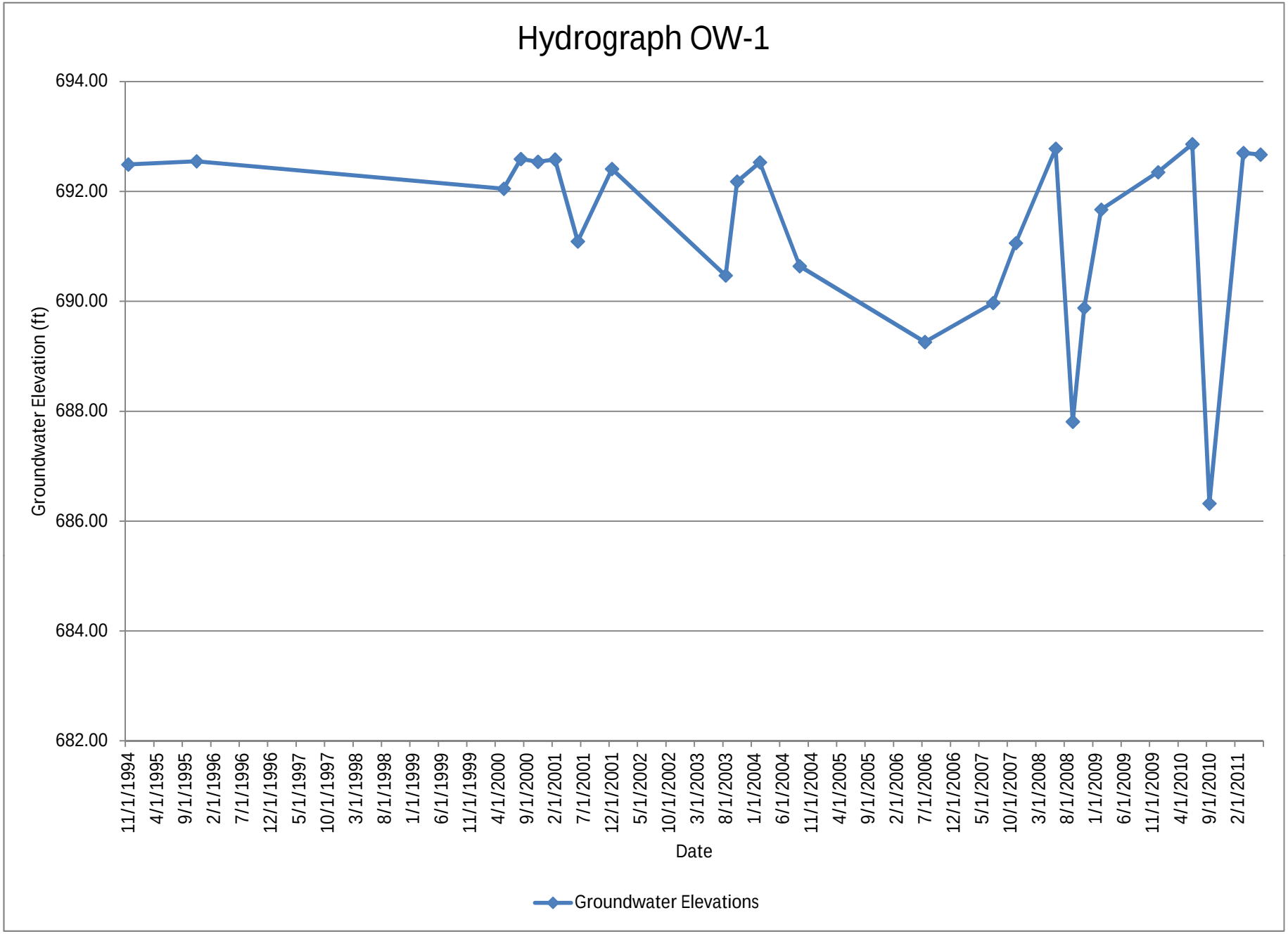
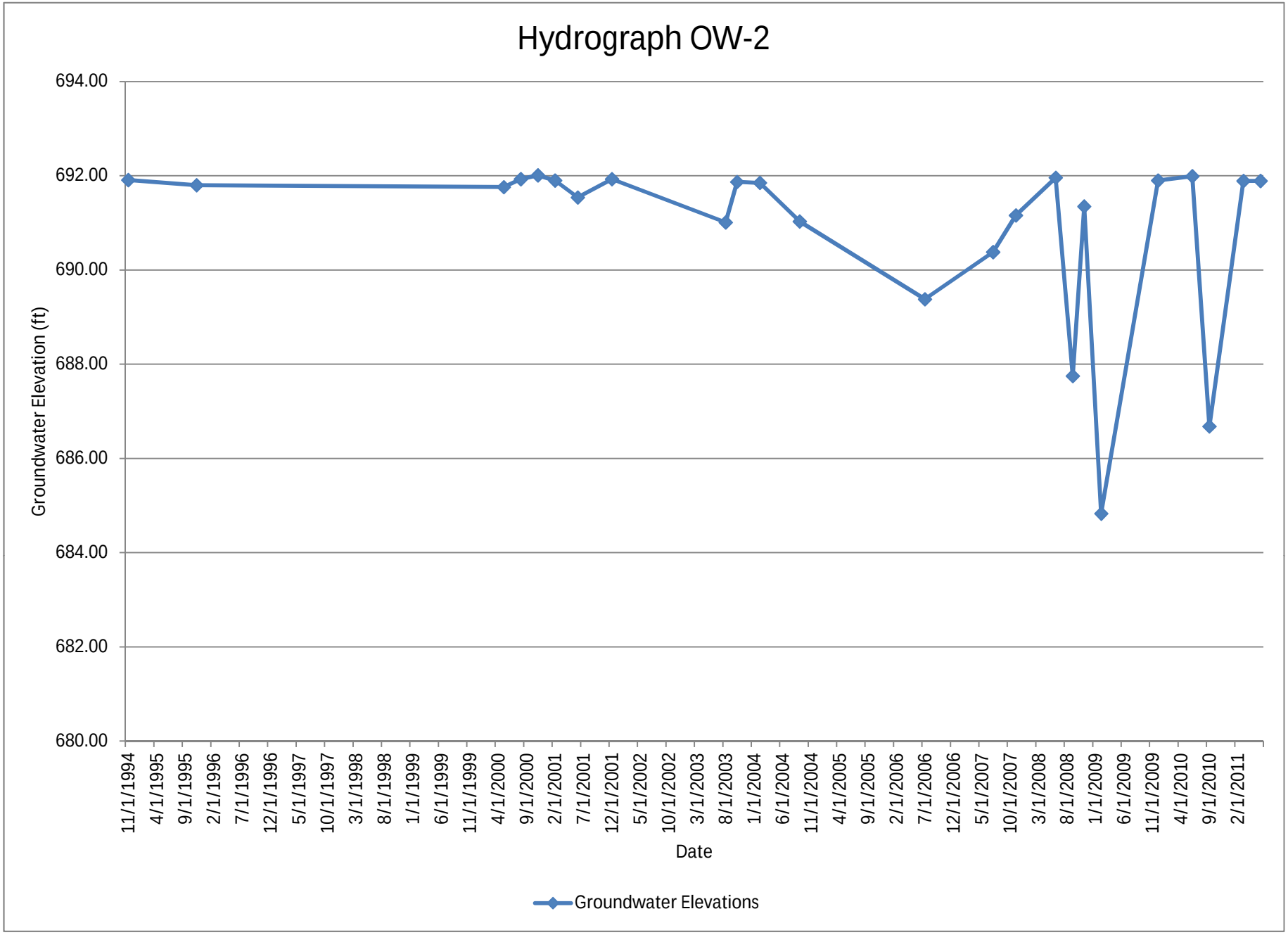
11/1/2002
3/1/2003
7/1/2003
11/1/2003
3/1/2004
7/1/2004
11/1/2004
3/1/2005
7/1/2005
11/1/2005
3/1/2006
7/1/2006
Date
Groundwater Elevations


Hydrograph OW-1
694.00
692.00
690.00
688.00
686.00
684.00
682.00
Groundwater Elevation (ft)
11/1/1994
4/1/1995
9/1/1995
2/1/1996
7/1/1996
12/1/1996
5/1/1997
10/1/1997
3/1/1998
8/1/1998
1/1/1999
6/1/1999
11/1/1999
4/1/2000
9/1/2000
2/1/2001
7/1/2001
12/1/2001
5/1/2002
10/1/2002
3/1/2003
8/1/2003
1/1/2004
6/1/2004
11/1/2004
4/1/2005
9/1/2005
2/1/2006
7/1/2006
12/1/2006
5/1/2007
10/1/2007
3/1/2008
8/1/2008
1/1/2009
6/1/2009
11/1/2009
4/1/2010
9/1/2010
2/1/2011
Date
Groundwater Elevations


Hydrograph OW-2
694.00
692.00
690.00
688.00
686.00
684.00
682.00
680.00
Groundwater Elevation (ft)
11/1/1994
4/1/1995
9/1/1995
2/1/1996
7/1/1996
12/1/1996
5/1/1997
10/1/1997
3/1/1998
8/1/1998
1/1/1999
6/1/1999
11/1/1999
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9/1/2000
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3/1/2008
8/1/2008
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6/1/2009
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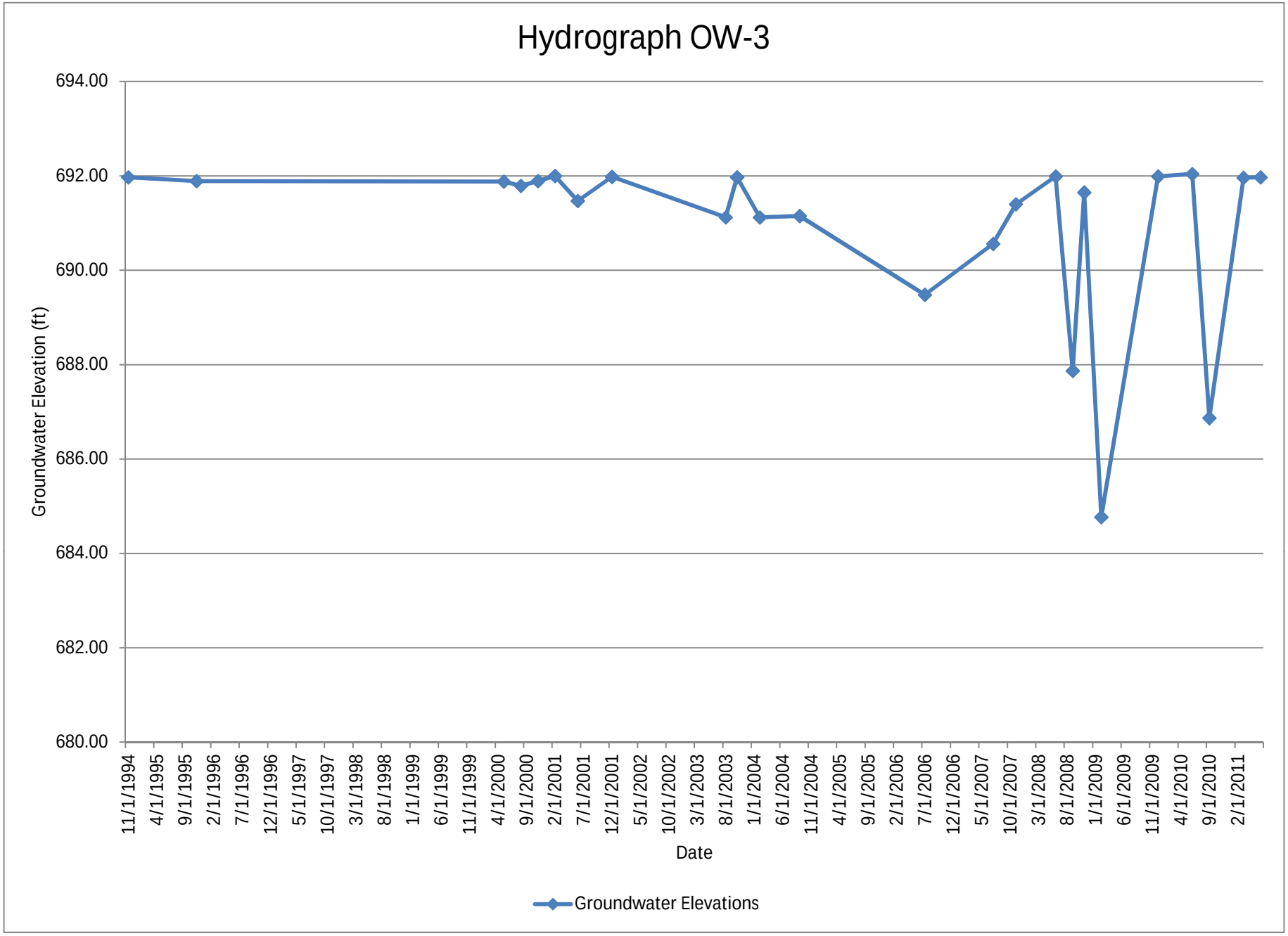
9/1/2010
2/1/2011
Date
Groundwater Elevations


Hydrograph OW-3
694.00
692.00
690.00
688.00
686.00
684.00
682.00
680.00
Groundwater Elevation (ft)
11/1/1994
4/1/1995
9/1/1995
2/1/1996
7/1/1996
12/1/1996
5/1/1997
10/1/1997
3/1/1998
8/1/1998
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11/1/1999
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11/1/2004
4/1/2005
9/1/2005
2/1/2006
7/1/2006
12/1/2006
5/1/2007
10/1/2007
3/1/2008
8/1/2008
1/1/2009
6/1/2009
11/1/2009
4/1/2010
9/1/2010
2/1/2011
Date
Groundwater Elevations

AUG. 1913
BLOOMINGTON
IND.

CONSOLIDATED STONE CO.

STONE SAWING
EARTH FLOOR
ENG.
CINDER FL.
TRAVELING CRANE
R. R. SIDING
SIDING TO HUNTER BROS. STONE CO.
C. I. & L. R. R. (MONON) SIDING
SCALES
OFFICE
STONE SAWING
TRAVELING CRANE
R. R. SIDING
STONE PLANING
EARTH FLOOR
CASTINGS & TOOL ROOM
MACHINE SHOP
EARTH FL.
STONE SAWING
EARTH FL.
ENG. 250 HP DYN.
THE GEN'R. GENERATORS
I.E.P.
STONE FL.
BOILERS
ASH PIT
BOILER GROUND
CABLE NO.
ELEV'D WATER TANK 30'x8'D.
SIDING
RUNS DAY ONLY - NIGHT AND SUNDAY WATCHMAN - NO CLOCK - POWER: STEAM AND ELEC. - HEAT: STOVES FUEL: COAL - LIGHTS: ELECTRIC - I.E.R. - WATER FROM QUARRY HOLES SUPPLIED BY NATURAL SPRINGS - 1" HOSE USED IN MFG - NO FIRE APPARATUS -
NO EXPOSURE ANY SIDE
ABOUT 600' TO CRESCENT STONE CO.

Located 2 Miles S.W. of Court Ho.

COAL NO. ABOVE FL.
STONE FL.
SMITH FLOOR
F.P.
CITY WATER WORKS
MAN ON DUTY DAY & NIGHT - FUEL: COAL - TWO LAIDLAW-DUNN R. PUMPS, CAPCY: TWO AND THREE MILLION GAL'S PER 24 HRS - ONE SMITH-VAILE R. PUMP CAPCY: ONE MILLION GAL'S PER 24 HRS -
VAC.
Pond
QUARRY
QUARRY & POND
HYDRAULIC PUMP
CRESCENT STONE COMPANY
NIGHT WATCHMAN (NONE SUNDAY) NO CLOCK - POWER AND LIGHTS: ELEC. I.E.P. - HEAT: STOVES - FUEL: COAL - WATER FROM ENST QUARRY - SMALL AMOUNT OF 1/4" HOSE -
ENG. DYN.
I.E.P.
COAL
ABOUT 400 FT.
ABOUT 600' TO CONSOLIDATED STONE CO.
BL. SM.
MACHINE SHOP
EARTH FLOOR
OFFICE
Located about 2½ Miles N.W. of Court Ho.
NO EXPOSURE ANY SIDE

Located about 3 Miles N.W. of Court Ho.
NO EXPOSURE ANY SIDE

QUARRY
SIDING TO HUNTER BROS. STONE MILL
ENG. 65 HP
STONE SAWING
EARTH FLOOR
ABOUT 800' TO HUNTER BROS. STONE MILL
HUNTER BROS. - STONE MILL
NO WATCHMAN - POWER: STEAM - LIGHTS: NONE - FUEL: COAL - WATER FROM WELL - NO FIRE APP. -
VAC. SHED
C. I. & L. R. R. SIDING
SIDING
CABLE NO. ENG. 65 HP
ABOUT 600' TO STAR STONE CO.
STONE SAWING
EARTH FL.
ENG. 150 HP
OFF.
SHAFT
STAR STONE COMPANY
NO WATCHMAN - POWER: STEAM - HEAT: STOVES - FUEL: COAL - LIGHTS: NONE - WATER FROM QUARRY HOLES - NO FIRE APPARATUS -
TOP OF EMBANKMENT

TIE PILES
TIE PILES
OFFICE (CR)
NIGHT & SUNDAY WATCHMAN - NEWMAN CLOCK - 6 STATIONS - HOURLY ROUNDS - POWER AND LIGHTS: ELECTRIC I.E.R. - HEAT: STEAM - FUEL: COAL AND REFUSE - WATER FROM CREEK NEAR BY - CHEMICAL EXTINGUISHERS IN ALL BUILDINGS - NO HOSE - METAL CONVEYERS TO WOOD WORKING MACHINERY -
MACHINE SHOP
EARTH FL.
CONCRETE RESERVOIR
ELEC. MOTOR
IRON CREOSOTE TANK
IRON CREOSOTE TANKS
IRON CREOSOTE TANK
STONE FLOOR
CREOSOTE TANK
IRON BUILDING
IRON CREOSOTE TANK
INDIANA TIE & CREOSOTING CO.
NO EXPOSURE
C. I. & L. (MONON) R. R. MAIN LINE
NO EXPOSURE
C. I. & L. (MONON) R. R.
S. MORTON
W. 1ST ST.
STONE SAWING & PLANING
RAISED 8'
AIR COMPR.
EARTH FLOOR
BLOOMINGTON CUT STONE CO.
STONE CUTTING SHED
OFFICE
NIGHT AND SUNDAY WATCHMAN - NO CLOCK - POWER AND LIGHTS: ELECTRIC, I.E.R. - HEAT: STOVES - FUEL: COAL - CITY WATER & OWN WELL - NO FIRE APP. -
SHED
W. ALLEN
STONE SAWING AND PLANING
EARTH FLOOR
OFFICE
J. H. NOLAN & SON STONE WKS.
NO WATCHMAN - POWER: STEAM AND ELEC. - FUEL: COAL - LIGHTS: ELEC. I.E.R. - WATER FROM WELL - 3/4" HOSE DISTRD. - NO EXPOSURE ANY SIDE
245' TO HORDLEY STONE CO.
S. WALNUT
NO EXPOSURE
SAW MILL
DRYING BLOCK MFG.
IRON BUILDING
CONCRETE PLATFORM
TIE PILES

MAIN LINE OF MONON R. R. BEYOND
MONON R. R. YARDS
C. I. & L. (MONON) R. R. ROUND HO.
TO BE OFFICE, STEAM AIR AND TOOL ROOM
50' 2" HOSE ON REEL
2" HYD.
15 STALLS
STONE FLOOR
TURN TABLE
STONE FL.
HEATER
F.P.
I.E.P.
DYN.
ENG. 15 HP.
OFFICE & MACHINE SHOP
WELL
COOK DEEP WELL PUMP
W. TANK 20' AB. GR.
OIL NO. 6
OIL & WASTE NO. 1
FIRE PROOF CONCRETE AIR CONTAINER
SIDING
150 FT.
NO EXPOSURE AND SIDE, EXCEPT AS SHOWN -
Scale of Feet.
50 40 30 20 10 0 50 100 150

BRICK ARCHED KILNS DOWN DRAUGHT
GARRISON BRICK COMPANY
CAPACITY: 25,000 IN 24 HOURS
WATCHMAN WHEN BURNING - POWER: STEAM - FUEL: COAL - LIGHTS: OIL LANTERNS - WATER FROM WELL & CREEK - NO FIRE APPARATUS -
DRYING SHED
DRYING SHED
DRYING SHED
REPAIR SHOP
TWO WOOD MACHINES
ENG. 80 HP
Creek
DAM
NO EXPOSURE
S. WALNUT
S. MORTON
MONON R. R.
SIDING
COAL
HEATER USED IN WINTER ONLY
OOLITIC STONE MILLS CO.
STONE SAWING
STONE SORTING ROOM
TRAVELING CRANE
BL. SM.
OFFICE
550' TO ROGERS ST.
NO WATCHMAN - POWER AND LIGHTS: ELECTRIC, FROM CITY - HEAT: STOVES - CITY WATER - 100' 1" HOSE - ELEC. PUMP & PUMP HOUSE ABOUT 350 FT EAST OF PLANT, SUPPLIES 6,000 GALLON W. TANK -
BLOOMINGTON-BEDFORD STONE CO.
NIGHT AND SUNDAY WATCHMAN - NO CLOCK - POWER: STEAM - HEAT: STOVES - FUEL: COAL - NO LIGHTS - CITY WATER - NO FIRE APP'S -
ENG.
STONE SAWING
RAISED 8'
EARTH FLOOR
17' TO EAVES
CABLE NO.
BL. SM.
EARTH FL.
C. I. & L. (MONON) R. R. SIDING
ABOUT 340 FT.
CABLE NO.
ENG. 45 HP
100' 1" HOSE ON REEL
NO FIRE ELEV.
NO AB. GROUND

SANBORN
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1913
(year)

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27

APRIL 1927
BLOOMINGTON
IND.

CONSOLIDATED STONE CO.

STONE SAWING

MACHINE SHOP

TRAVELING CRANE

R. R. SIDING

12,000 GAL. W.T. ELEVD. 90' ABV. GRD. ON STEEL TOWER.

RUNS DAYS ONLY. NIGHT & SUNDAY WATCHMAN. APPROVED CLOCK. HEAT: STOVES. LIGHTS. ELEC. POWER: STEAM & ELEC. I.E.P. FUEL: COAL. WATER FROM QUARRY HOLES, SUPPLIED BY NATURAL SPRINGS 1-12,000 GAL. WATER TANK. EXT'GRS. DIST'D.

ABOUT 600'

BL. SM. MACHINE SHOP EARTH FL.

ABOUT 500' TO CRESCENT STONE CO.

STONE SAWING EARTH FL.

CITY WATER WORKS
MAN ON DUTY DAY & NIGHT.
FUEL: COAL.

Pond

Located 2 Miles S.W. of Court Ho.

Located about 2½ Miles N.W. of Court Ho.
NO EXPOSURE ANY SIDE

QUARRY

QUARRY & POND

HYDRAULIC PUMP

CRESCENT STONE CO.
NIGHT WATCHMAN. NO CLOCK. HEAT. STOVES. POWER & LIGHTS. ELEC. I.E.P. FUEL: COAL. WATER FROM EAST QUARRY. SMALL AMT. OF ⅜" HOSE.

ABOUT 500' TO CONSOLIDATED STONE CO.

Located about 2½ Miles N.W. of Court Ho.
NO EXPOSURE ANY SIDE

C. I. & L. (MONON) R. R. ROUND HO.
NO WATCHMAN. MEN ON DUTY DAY & NIGHT. HEAT: STEAM. LIGHTS & POWER: ELEC. FUEL: COAL. WATER FROM WELL 211' DEEP & CREEK. 2-SMITH-VAILE F. P'S. 1-12"×8"×12" & 1-10"×6"×10", CAPY. 150 GALS. R. MIN. ALSO SUPPLIES 100,000 GAL. W.T. 150' 2" HOSE ON REELS. 250' 2" HOSE IN RESERVE. 600' 2½" ON CART.

OFFICE

MACHINE SHOP CONC. FL.

TURN TABLE

FULL OF TRACKS

STONE STALLS

STONE FL.

MAIN LINE BEYOND R. R. YARDS

NO EXPOSURE ANY SIDE EXCEPT AS SHOWN.

NO EXPOSURE ANY SIDE

Located about 3 Miles N.W. of Court Ho.

STONE SAWING EARTH FL.

HUNTER BRO'S. STONE MILL
NO WATCHMAN. POWER: STEAM. NO LIGHTS. FUEL: COAL. HEAT: STOVE. WATER FROM WELL. NO FIRE RPPS.

ABOUT 200' TO H. BL. SM. SHOP

R. R. SIDING

ABOUT 600' TO STAR STONE CO.

TIE PILES

INDIANA TIE & CREOSOTING CO.

CREOSOTE TK.

IRON CREOSOTE

NO EXPOSURE

ABOUT 335' TO C.I.&L. ROUND HO.

QUARRY

STAR STONE CO.
NOT IN OPERATION.
NO WATCHMAN. POWER: STEAM. NO LIGHTS. HEAT. STOVES. FUEL: COAL.

ABOUT 600' TO HUNTER BROS.

STONE SAWING EARTH FL.

Located about 3 Miles N.W. of Court Ho.
NO EXPOSURE ANY SIDE.

INDIANA LIME STONE CO.
AMERICAN MILL
NIGHT & SUNDAY WATCHMAN. APPROVED CLOCK. POWER & LIGHTS: ELEC. HEAT. STOVES. EXT'GRS.

11,000 GAL. ELEVD. 20' ABV. GRD. ON STEEL TOWER.

STONE SAWING EARTH FL.

TRAVELING CRANE EARTH FL. STEEL TRUSS RK.

OFFICE

W. ALLEN

SUPPLY HO. EARTH FL.

INDIANA LIME STONE CO.
319

21

S. WALNUT

S. MORTON

WATCHMAN. HEAT: STOVES. LIGHT & POWER: ELEC. FROM CITY. CITY WATER. 100' 1" HOSE. ELEC. PUMP & PUMP HO. ABOUT 350' EAST OF PLANT SUPPLIES 6,000 GAL. WATER TK.

I.C.R.R. SIDING

INDIANA LIME STONE CO.
SMITH QUARRY & RADLEY MILL
NIGHT & SUNDAY WATCHMAN. NO CLOCK. HEAT. STOVES. POWER: STEAM & ELEC. FUEL: COAL. NO LIGHTS. CITY WATER. NO FIRE RPPS.

STONE SAWING RAISED EARTH FL.

STORE RM.

CABLE HO.

ABOUT 540'

INDIANA LIME STONE CO.
MC DOEL MILL

STONE SAWING EARTH FL.

STONE SORTING RM. TRAVELING CRANE

DYNAMO CONC. FL.

Scale of Feet.

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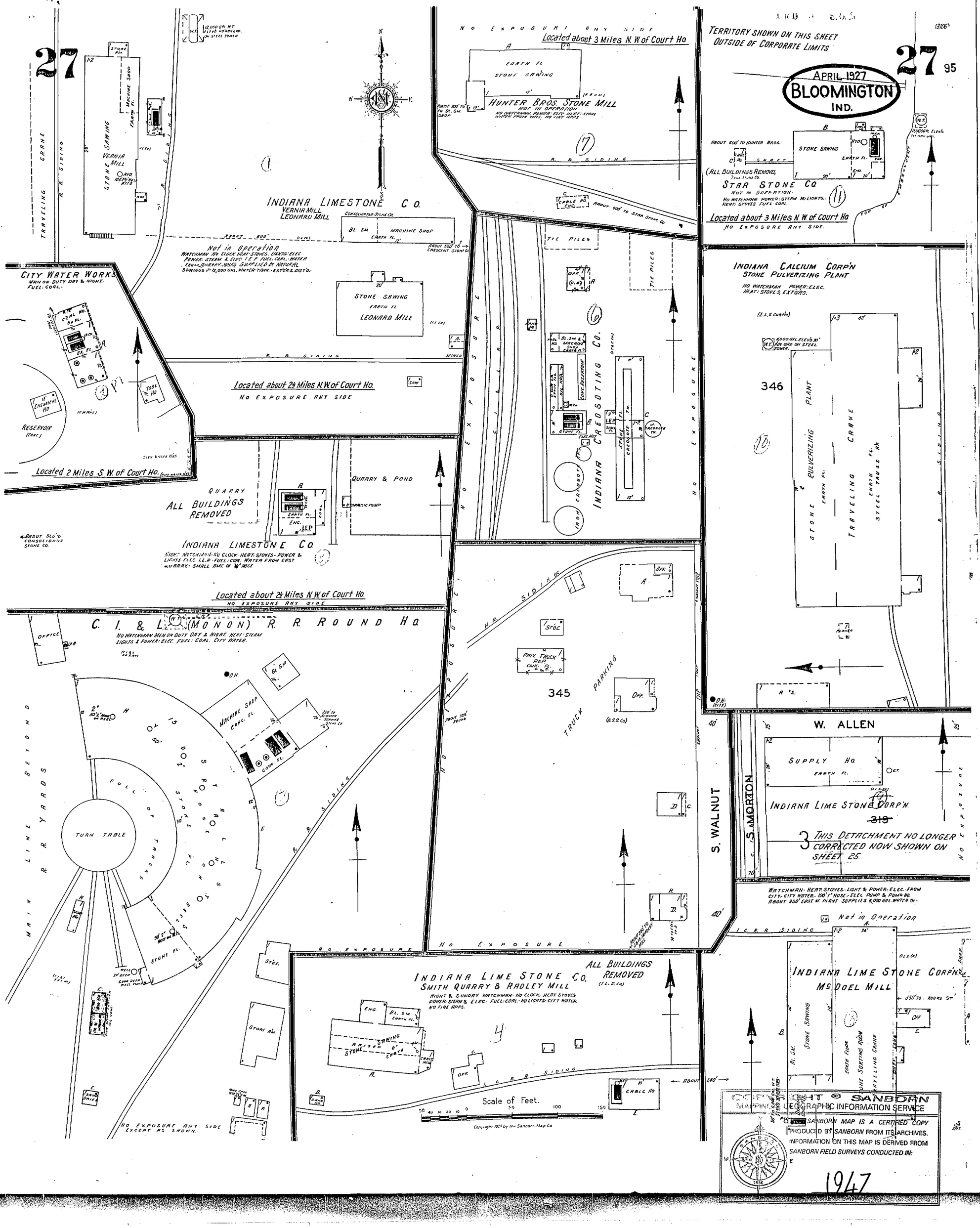
1927


27
TRAVELING CRANE
R. R. SIDING
STONE SAWING
VERNIA MILL
MACHINE SHOP
EARTH FL.
INDIANA LIMESTONE CO.
VERNIA MILL
LEONARD MILL
CONSOLIDATED STONE CO.
BL. SM.
MACHINE SHOP
EARTH FL.
ABOUT 500' TO CRESCENT STONE CO.
Not in Operation
WATCHMAN NO CLOCK HEAT: STOVES. LIGHTS: ELEC
POWER: STEAM & ELEC. I.E.P. FUEL: COAL. WATER
FROM QUARRY. WELLS SUPPLIED BY NATURAL
SPRINGS 1-12,000 GAL. WATER TANK - EXT'GRS. DIST'D.
STONE SAWING
EARTH FL.
LEONARD MILL
CITY WATER WORKS
MAN ON DUTY DAY & NIGHT.
FUEL: COAL.
RESERVOIR
(CONC.)
Located about 2¼ Miles N.W. of Court Ho.
NO EXPOSURE ANY SIDE
Located 2 Miles S.W. of Court Ho.
QUARRY
ALL BUILDINGS REMOVED
QUARRY & POND
INDIANA LIMESTONE CO.
NIGHT WATCHMAN NO CLOCK HEAT: STOVES - POWER & LIGHTS ELEC. I.E.P. FUEL: COAL. WATER FROM ERST
QUARRY - SMALL AMT. OF ¾" HOSE
Located about 2¼ Miles N.W. of Court Ho.
NO EXPOSURE ANY SIDE
C. I. & L. (MONON) R. R. ROUND HO.
NO WATCHMAN MEN ON DUTY DAY & NIGHT. HEAT: STEAM
LIGHTS & POWER: ELEC. FUEL: COAL. CITY WATER.
OFFICE
MACHINE SHOP
CONC. FL.
TURN TABLE
FULL OF TRACKS
STONE HOUSE
STONE FL.
MAIN LINE BEYOND R.R. YARDS
NO EXPOSURE ANY SIDE EXCEPT AS SHOWN.
NO EXPOSURE ANY SIDE
Located about 3 Miles N.W. of Court Ho.
EARTH FL.
STONE SAWING
HUNTER BROS. STONE MILL
NOT IN OPERATION
NO WATCHMAN. POWER: ELEC. HEAT: STOVE
WATER FROM WELL. NO FIRE APPS.
ABOUT 200' TO F.B. BL. SM. SHOP
R. R. SIDING
ABOUT 600' TO STAR STONE CO.
TIE PILES
INDIANA CREOSOTING CO.
BL. SM. & MACHINE SHOP
EARTH FL.
CONC. RESERVOIR
STONE FL.
CREOSOTE
IRON CREOSOTE TK.
NO EXPOSURE
TERRITORY SHOWN ON THIS SHEET OUTSIDE OF CORPORATE LIMITS
APRIL 1927
BLOOMINGTON
IND.
(3106)
95
STONE SAWING
EARTH FL.
ABOUT 600' TO HUNTER BROS.
(ALL BUILDINGS REMOVED)
STAR STONE CO.
NOT IN OPERATION
NO WATCHMAN. POWER: STEAM NO LIGHTS.
HEAT: STOVES. FUEL: COAL.
Located about 3 Miles N.W. of Court Ho.
NO EXPOSURE ANY SIDE.
INDIANA CALCIUM CORP'N
STONE PULVERIZING PLANT
NO WATCHMAN POWER: ELEC.
HEAT: STOVES, EXT'GRS.
346
STONE PULVERIZING PLANT
TRAVELING CRANE
EARTH FL.
STEEL TRUSS RK.
345
TRUCK PARKING
PRIV. TRUCK REP.
CONC. FL.
OFF.
S. WALNUT
S. MORTON
W. ALLEN
SUPPLY HO.
EARTH FL.
INDIANA LIME STONE CORP'N.
~~319~~
3 THIS DETACHMENT NO LONGER CORRECTED NOW SHOWN ON SHEET 25
WATCHMAN - HEAT: STOVES - LIGHT & POWER: ELEC. FROM CITY - CITY WATER - 100' 1" HOSE - ELEC. PUMP & PUMP HO.
ABOUT 350' EAST OF PLANT SUPPLIES 6,000 GAL. WATER TK.
Not in Operation
I.C.R.R. SIDING
INDIANA LIME STONE CO.
SMITH QUARRY & RADLEY MILL
ALL BUILDINGS REMOVED
NIGHT & SUNDRY WATCHMAN - NO CLOCK - HEAT: STOVES
POWER: STEAM & ELEC. - FUEL: COAL - NO LIGHTS - CITY WATER
NO FIRE APPS.
ENG.
BL. SM.
EARTH FL.
STONE SAWING
ROOFED 8' EARTH
OFF.
CABLE HO.
Scale of Feet.
INDIANA LIME STONE CORP'N.
McDOEL MILL
STONE SAWING
EARTH FLOOR
STONE SORTING ROOM
TRAVELING CRANE
BL. SM.
OFF.
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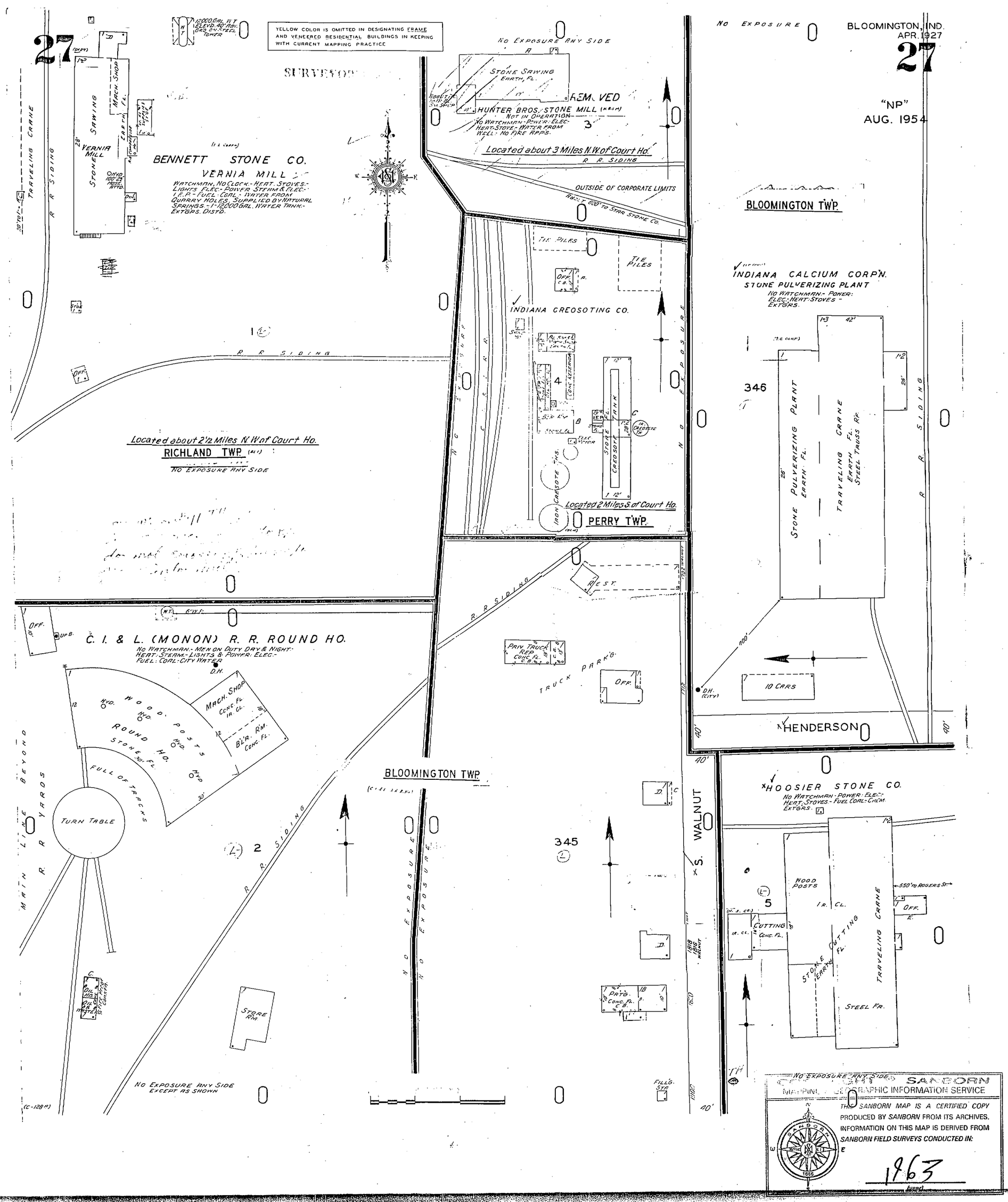
1947


BLOOMINGTON, IND.
APR. 1927
27
"NP"
AUG. 1954
YELLOW COLOR IS OMITTED IN DESIGNATING FRAME AND VENEERED RESIDENTIAL BUILDINGS IN KEEPING WITH CURRENT MAPPING PRACTICE
NO EXPOSURE ANY SIDE
NO EXPOSURE
TRAVELING CRANE
R R SIDING
STONE SAWING
MACH. SHOP
VERNIA MILL
BENNETT STONE CO.
VERNIA MILL
WATCHMAN, NO CLOCK - HEAT. STOVES - LIGHTS ELEC - POWER STEAM & ELEC - I.E.P. - FUEL COAL - WATER FROM QUARRY HOLES, SUPPLIED BY NATURAL SPRINGS - 1-12000 GAL. WATER TANK - EXTGRS. DISTD.
STONE SAWING
EARTH FL.
REMOVED
HUNTER BROS. STONE MILL
NOT IN OPERATION
NO WATCHMAN - POWER: ELEC - HEAT: STOVE - WATER FROM WELL - NO FIRE APP'S.
Located about 3 Miles N.W. of Court Ho.
OUTSIDE OF CORPORATE LIMITS
BLOOMINGTON TWP.
TIE PILES
INDIANA CREOSOTING CO.
INDIANA CALCIUM CORP'N.
STONE PULVERIZING PLANT
NO WATCHMAN - POWER: ELEC - HEAT - STOVES - EXTGRS.
346
STONE PULVERIZING PLANT
EARTH FL.
TRAVELING CRANE
EARTH FL.
STEEL TRUSS RF.
Located about 2½ Miles N.W. of Court Ho.
RICHLAND TWP.
NO EXPOSURE ANY SIDE
STONE CREOSOTE TANK
IRON CREOSOTE TKS.
Located 2 Miles S. of Court Ho.
PERRY TWP.
C. I. & L. (MONON) R. R. ROUND HO.
NO WATCHMAN - MEN ON DUTY DAY & NIGHT - HEAT: STEAM - LIGHTS & POWER: ELEC - FUEL: COAL - CITY WATER
WOOD POSTS
ROUND HO.
STONE FL.
MACH. SHOP
CONC. FL.
BL'R. RM.
CONC. FL.
FULL OF TRACKS
TURN TABLE
MAIN LINE BEYOND R. R. YARDS
PRIV. TRUCK REP.
TRUCK PARK'G.
BLOOMINGTON TWP.
345
S. WALNUT
10 CARS
HENDERSON
HOOSIER STONE CO.
NO WATCHMAN - POWER: ELEC - HEAT. STOVES - FUEL COAL - CHEM. EXTGRS.
WOOD POSTS
TRAVELING CRANE
STONE CUTTING
EARTH FL.
STEEL FR.
CUTTING
CONC. FL.
STORE RM.
NO EXPOSURE ANY SIDE EXCEPT AS SHOWN
SANBORN
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