Final Report
Further Site Investigation #3
Hurricane Road Industrial Development / Former Houghland Tomato Cannery
1130 East Eastview Drive
Franklin, Indiana
IDEM Site Identification Number 2013-42015
Patriot Project No.: 19-0096-01E

Prepared For:
Indiana Department of Environmental Management
Office of Land Quality - State Cleanup Section
100 North Senate Avenue
ICGN, Room 1101
Indianapolis, Indiana 46204-2251
Attention: Tim Johnson

Prepared By:
Patriot Engineering and Environmental, Inc.
6150 East 75th Street,
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December 3, 2019

PATRIOT ENGINEERING
and ENVIRONMENTAL, Inc.
Engineering Value for Project Success

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RE: Final Report
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Dear Mr. Johnson,

Patriot Engineering and Environmental, Inc. (*Patriot*) is pleased to submit this report for the Further Site Investigation #3 (FSI #3) performed at the above-referenced Site. The FSI #3 was conducted in response to a directive from the Indiana Department of Environmental Management (IDEM) that further investigation of the Hurricane Road Industrial Development (HRID) property be conducted.

If you have any questions or comments regarding this report, please do not hesitate to contact Mike Casper at (317) 576-8058 or mcasper@patrioteng.com.

Respectfully submitted,

Patriot Engineering and Environmental, Inc.

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FINAL REPORT - FURTHER SITE INVESTIGATION #3
HURRRICANE ROAD INDUSTRIAL DEVELOPMENT /
FORMER HOUGHLAND TOMATO CANNERY
1130 E. EASTVIEW DRIVE
FRANKLIN, INDIANA
IDEM SITE IDENTIFICATION NUMBER 2013-42015
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1.0 INTRODUCTION

Patriot Engineering and Environmental, Inc. (*Patriot)* was retained by Kroger, Gardis & Regas, LLP on behalf of Hurricane Road Industrial Development, LLC (HRID) to conduct a Further Site Investigation #3 (FSI #3) of the HRID property located at 1130 East Eastview Drive in Franklin, Indiana (henceforth referred to as the Site). The location of the Site is depicted on the Site Location Map included as Figure 1 in Appendix A, while the layout of the Site is depicted on the Site Layout Map included as Figure 2 in Appendix A. The FSI #3 was conducted in response to a Further Site Investigation Review letter from the Indiana Department of Environmental Management (IDEM) dated November 2, 2018 requiring further investigation of soil and groundwater conditions on the Site. This report documents the activities conducted during the FSI #3 and presents our findings and conclusions relative to the Site.

2.0 SITE BACKGROUND

2.1 Site Description

The Site is a portion of the former Houghland property, a former tomato canning operation, that was subsequently divided into two properties. Mr. Robert Clawson, doing business as HRID, owns the eastern portion of the former Houghland property at 1130 E. Eastview Drive (IDEM Site Identification Number 2013-42015). Mr. Clawson leases the buildings on the property to various commercial tenants.

2.2 Chemicals of Concern

Investigations performed at the Site have revealed the presence of volatile organic compounds (VOCs) in both soil and groundwater. The chemicals of concern (COCs) present at the Site are primarily the VOCs tetrachloroethene (PCE) and trichloroethene (TCE), with lesser amounts of cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride.

2.3 Further Site Investigation Background

Patriot has conducted several investigations at the Site, including a Further Site Investigation (FSI) in August and September 2016 (*Patriot* Project Number 16-1158-01E), an Additional Site Investigation (ASI) in July 2017 (*Patriot* Project Number 17-0995-01E) and a Further Site Investigation (FSI #2) in April through June 2018 (*Patriot* Project Number 18-0449-01E). The final FSI #2 report was issued to IDEM on July 25, 2018. The IDEM reviewed the FSI #2 report and issued its Further Site Investigation Review Letter dated November 2, 2018. The letter stated that "the horizontal and vertical extents of contamination are still not delineated. Additional borings/monitoring wells are needed to the east and directly above the clay unit to the east and south". IDEM's comments for the HRID property are provided below, followed by a summary of the activities conducted by *Patriot* during this FSI #3 to address the comments.

None of the off-site temporary sampling points advanced during the FSI #2 were advanced to the clay unit identified in the on-Site deep soil borings. Information on conditions along the top of the clay unit is needed off-Site to the east. Based on the boring log for monitoring well MW-15D, borings and/or wells may need to be advanced at least 47 feet below ground surface (ft-bgs) to delineate downgradient off-Site groundwater contamination.

> *Patriot* set the base of the well screens for each of the deep wells installed during the FSI #3 at the top of the clay unit underlying the water-bearing unit being monitored by the shallow wells. Soil samples were also collected from the clay unit at each boring location for laboratory analysis.

The only permanent monitoring wells sampled during the FSI #2 were the deep monitoring wells and the shallow wells that were paired with deep wells. Sampling of all wells, including those on the Reed property is needed to provide a more accurate representation of shallow and deep dissolved phase contamination.

> Patriot sampled the entire monitoring well network during the FSI #3. The consultant for the adjacent Reed property concurrently sampled the monitoring wells on the Reed property to provide an accurate representation of shallow and deep dissolved phase contamination.

The IDEM's other comments in the November 2, 2019 letter did not require a response or action.

3.0 FURTHER SITE INVESTIGATION ACTIVITIES

3.1 On-Site and Off-Site Soil Borings

Patriot mobilized to the Site to perform the soil boring and monitoring well installation activities from January 22 through January 28, 2019. *Patriot* advanced ten borings during the FSI #3 investigation. Three of the borings were located on the HRID property and seven of the borings were located in the adjacent agricultural field to the east of the Site that is owned by the Kasting Family Limited Partnership. Prior to initiating investigation activities at the Site, the location of the water main from the inactive City of Franklin Webb Wellfield on the eastern side of the agricultural field was located using ground penetrating radar (GPR). Seven borings were advanced in the agricultural field in a grid pattern at distances of 150 feet, 300 feet and 500 feet east of the property boundary. The borings were positioned so that the northernmost borings (SB-150A, SB-300A) were installed as close to the water main as possible to determine whether the water main was acting as a preferential pathway for contaminant migration. Three borings were advanced on the HRID property. The approximate locations of the borings and the water main are shown on Figure 2 in Appendix A. A hollow stem auger rig equipped with dual core samplers was used to advance the borings to a depth where a clay unit underlying the surficial sand and gravel aquifer was encountered. The sampling was performed in accordance with standard IDEM protocols for environmental investigations. All equipment coming into contact with the samples designated for analysis was decontaminated before and during use by cleaning with non-phosphate detergent wash and distilled water rinses.

Soil samples were obtained using a 2-inch diameter, stainless steel, dual core barrel sampler equipped with a polyvinyl chloride (PVC) liner. Soil samples were collected by hydraulically pushing the sampler to the desired depth and recovering the sampler with a continuous soil sample within the PVC liner inside the barrel. A new PVC liner was used for each sample collection. Subsequent samples were collected by advancing the sampler to the deeper target zone.

Following collection, the lithology of each soil sample was visually classified in accordance with the Unified Soil Classification System and the sample was field screened for odor, staining, and the presence of volatile organic vapors using headspace analysis. The field screening procedure is typically used to qualitatively determine if petroleum products or VOCs are present in the soil samples. Headspace analysis was conducted by placing a portion of the sample in a sealed zip-lock plastic bag and allowing the sample to equilibrate for approximately 5 minutes. A Mini-Rae photoionization detector (PID) organic vapor analyzer was used to measure the concentration of total photoionizable

vapors (TPVs) emitted from the sample. The soil lithology and field screening results were recorded on soil boring logs, which are included as Appendix B.

Two soil samples were collected for laboratory analysis from each boring with the exception of boring SB-300B where only one sample was collected. One sample was collected from the unsaturated zone in each of the ten borings at the depth interval determined to have the greatest potential for COC impacts and one sample was collected from the upper 1 foot of the clay unit at the base of the water-bearing unit in nine of the ten borings. A deep sample was not collected at boring SB-300 because a sufficient volume of clay was not recovered from the sampler. The soil samples were collected using the methanol preservation method in accordance with SW-846 Method 5035. The sample containers were labeled, placed on ice in a cooler, and delivered to Pace Analytical Services, Inc. (Pace) using chain-of-custody controls. Soil samples were analyzed for VOCs using United States Environmental Protection Agency (U.S. EPA) SW-846 Test Method 8260. Quality assurance/quality control (QA/QC) procedures included the collection and analysis of one duplicate sample (DUP) of SB-12D 8-10, one matrix spike/matrix spike duplicate (MS/MSD) sample of SB-12D 29-30, and a trip blank.

Soil cuttings generated during the drilling activities were containerized in sealed 55-gallon drums and stored on-Site pending disposal.

3.2 Installation of Groundwater Monitoring Wells

After the clay unit was encountered, the dual tube sampling equipment was removed, and a deep monitoring well was installed through the hollow-stem augers in each of the ten boring locations. Each deep monitoring well was constructed using a 5-foot length of 2-inch inside diameter (ID), 0.010-inch slotted PVC screen that was set at the top of the clay unit. A sufficient length of 2-inch ID PVC riser to reach the ground surface was attached to the well screen. A sand pack was placed around the well screen to a height of approximately 1 foot above the well screen. A 1-foot thick bentonite seal was placed above the sand pack and the remaining annular space was filled with bentonite chips to grade.

After completion of the deep wells, a paired shallow monitoring well was installed at one of the on-Site boring locations (MW-33 that was paired with MW-33D) and at each of the seven off-Site boring locations. Paired shallow wells were already present at the other two on-Site boring locations (MW-12 that was paired with deep well MW12D and MW-14 that was paired deep well MW-14D). The borings for the shallow wells were blank drilled to a depth of approximately 5 feet below the groundwater table using hollow stem augers based on the lithology obtained from the deep borings. The shallow wells were

constructed using 10-foot long sections of 2-inch ID, 0.010-inch slotted PVC screen that intersected the water table and sufficient lengths of 2-inch ID PVC riser to reach the ground surface. A sand pack was installed to a height of at least 1 foot above the top of the well screen and the remaining annular space was sealed with hydrated bentonite chips to just below the land surface.

The on-Site wells were completed with flush-mounted, steel protective covers set in concrete pads. Protective covers were not installed at the monitoring well locations in the agricultural field as these wells were scheduled to be removed prior to the field being plowed and planted in the spring of 2019. The top-of-casing elevations for the new wells were surveyed by an Indiana-licensed surveyor to be used in determining groundwater flow characteristics. The groundwater monitoring well diagrams for the new monitoring wells are included in Appendix B, and their locations are depicted on Figure 2. A summary of the monitoring well data is provided in Table 1 in Appendix C.

3.4 Monitoring Well Sampling

Patriot conducted three groundwater sampling events at the Site during the FSI #3 in order to obtain sufficient groundwater flow and quality data prior to abandoning the temporary monitoring wells in the agricultural field in the spring of 2019. Two of the sampling events consisted of sampling only the 16 sets of paired deep and shallow wells and the remaining sampling event consisted of sampling the entire monitoring well network. The monitoring wells at the adjacent Reed Manufacturing property were also sampled by Ramboll Environ simultaneously with the Site-wide sampling event. The scope and dates of the three sampling events are shown below.

Sampling Event	Scope of Work	Dates Work Performed
Sampling Event #1	Sample only paired deep and shallow wells.	February 5th-12th
Sampling Event #2	Sample entire well network	March 4th-12th
Sampling Event #3	Sample only paired deep and shallow wells.	March 25th -April 1st

Prior to sampling, each monitoring well was gauged using an electronic water level meter. The depth to groundwater and total well depth from the surveyed top-of-casing was measured to the nearest 0.01 foot at each well. The water level probe and tape were

decontaminated with a non-phosphate detergent wash and distilled water rinses after use at each well to prevent cross contamination. The depth to groundwater measurements and corresponding groundwater elevations for this investigation and previous gauging events are provided in Table 2 in Appendix C.

The groundwater monitoring wells were sampled in accordance with the low-flow sampling method outlined in the IDEM Micro-Purge Sampling Option Technical Guidance Document (June 3, 1998, revised November 3, 2009). The low-flow sampling was conducted using a submersible pump to purge and sample the wells at low flow rates of 50 to 200 milliliters per minute (ml/min). During the low-flow purging, a multi parameter water quality probe (Horiba Model U22) with a flow-through cell was used to measure pH, conductivity, turbidity, dissolved oxygen (DO), temperature, total dissolved solids (TDS), and oxidation-reduction potential (ORP). Groundwater samples were collected once the parameter values stabilized in accordance with the criteria stated in the IDEM technical guidance document. The data collected during the sampling activities were recorded on groundwater sampling field data forms, which are provided in Appendix D.

The ground water samples were collected in new, laboratory-supplied, 40 milliliter, amber glass vials with Teflon-lined caps preserved with hydrochloric acid. The sample containers were labeled, placed on ice in a cooler, and delivered to Pace using chain-of-custody controls. The low-flow pump was decontaminated after use at each well with non-phosphate detergent wash followed by a triple distilled-water rinse. New disposable polyethylene tubing was used at each well location. All monitoring well purge water and decontamination water was containerized in sealed 55-gallon drums for off-Site disposal.

Groundwater samples were analyzed for VOCs using U.S. EPA SW-846 Method 8260. QA/QC procedures included the collection and analysis of one duplicate groundwater sample and one MS/MSD groundwater sample per every 20 samples as summarized below.

Sampling Event	**Duplicate Sample**	**MS/MSD Sample**
Sampling Event #1	MW-30 & MW-11	MW-31 & MW-11D
Sampling Event #2	TMW-5D, MW-15D, MW-30	MW-18, MW-20, MW-21
Sampling Event #3	TMW-5D, MW-30	TMW-7, MW-12D

4.0 INVESTIGATION RESULTS

4.1 Soil Results

4.1.1 Site Stratigraphy and groundwater

The types of soils encountered during the FSI #3 were generally consistent across the Site and consistent with previous investigations. The upper soils consisted primarily of brown, slightly moist to moist, soft to stiff silt with some clayey silt or silty clay to a depth of approximately 5 to 10 feet bgs. Scattered thin layers of slightly moist clay and slightly moist well-graded sand were encountered in the silt in some of the borings. The silt was primarily underlain by poorly graded to well graded sand to depths ranging from approximately 27 to 60 feet bgs. Scatted thin interbedded layers of silt or sandy gravel were encountered within the sand in some of the borings. The sand was underlain by a gray, moist, stiff, low plasticity to non-plastic clay confining layer where the borings were terminated. The surface elevation of the clay layer decreases (i.e., becomes deeper) to the east-northeast across the Site. A contour map showing the surface elevation of the clay layer underlying the water-bearing sand is included in as Figure 3 in Appendix A.

Groundwater was encountered under unconfined conditions at depths ranging from 5 to 14 feet bgs at the Site and 5 to 9 feet bgs on the adjacent agricultural property, with the changes in depth generally corresponding to changes in the ground surface elevation.

The lithologic descriptions, field screening results, groundwater levels and soil sampling depths obtained during this FSI #3 are provided on the boring logs in Appendix B. A cross-section depicting vertical soil stratigraphy in an east-west direction is included as Figure 4 in Appendix A. Cross-sections depicting soil stratigraphy in a north-south direction are included as Figure 5 and Figure 6 in Attachment A.

4.1.2 Field Screening Results

Field inspection of the soil samples did not reveal any odors, staining or other sensory evidence of potential COC impacts. Field PID monitoring revealed TPV readings ranging from non-detectable to 17.4 parts per million (ppm) in the samples.

4.1.3 Analytical Results

Two soil samples were collected at each boring location except for boring B-300 where only a shallow sample was collected. One sample was collected from above the saturated zone in each of the ten borings advanced during this investigation and one soil sample was collected from the upper 1 foot of the underlying clay unit in nine of the ten borings, all of which were submitted for VOC analysis. The samples from the unsaturated zone

were collected at the depths exhibiting the greatest potential for COC impacts and ranged in depth from 3 to 18 feet bgs. The samples from the upper 1-foot of the clay unit were collected at depths ranging from 29 to 63 feet bgs. The analytical results were compared to the IDEM Remediation Closure Guide (RCG) Soil Migration to Groundwater Screening Levels (MTGSLs), Residential Direct Contact Screening Levels (RDCSLs), Commercial/Industrial Direct Contact Screening Levels (IDCSLs), and Excavation Worker Direct Contact Screening Levels (EDCSLs). The soil analytical results for this FSI #3 are summarized on Table 3 in Appendix C and are plotted on the Soil Analytical Results Map included as Figure 7 in Appendix A. The soil samples from the top of the clay layer from previous investigations are also included on Table 3. The soil analytical laboratory results and chain-of-custody forms are provided in Appendix E.

COCs were detected in the FSI #3 unsaturated zone samples from borings SB-150B, SB-300D and SB-33D, and in the clay unit samples from borings SB-150A and SB-150 B. No other FSI #3 soil samples contained detectable concentrations of COCs. TCE was detected in the three above-referenced unsaturated zone samples at concentrations of 0.0052 milligrams per kilogram (mg/kg) in sample SB-150B (5-7), 0.052 mg/kg in sample SB-300D (3-5), and 0.11 mg.kg in sample SB-33D(16-18). The reported TCE concentrations in samples SB-300D (3-5) and SB-33D (16-18) exceeded the RCG MTGSL of 0.036 mg/kg but were below the remaining RCG Screening Levels. The unsaturated zone sample SB-33D (16-18) also contained PCE at a concentration of 0.11 mg/kg, which exceeded the RCG MTGSL of 0.045 mg/kg.

Clay unit sample SB-150AD (59-60) contained cis-1,2-DCE at a concentration below all of the RCG Screening Levels. Clay unit sample SB-150B (51-52) contained TCE and trans-1,2-DCE at concentrations below all of the RCG Screening Levels and cis-1,2-DCE at a concentration of 4.0 mg/kg, which exceeds the RCG MTGSL of 0.41 mg/kg but is below the remaining RCG Screening Levels. Based on the low concentrations of COCs in the clay layer samples, it appears that the reported COC impacts are due to contact with contaminated groundwater rather than being indicative of a soil COC source area.

4.2 Groundwater Results

4.2.1 Groundwater Flow Data

Groundwater elevations were gauged from the entire well network during all three groundwater sampling events. The shallow groundwater elevations were plotted on the groundwater potentiometric surface maps included as Figures 8A through 8C. The flow direction in both shallow and deeper groundwater is generally to the south across the northern half of the Site, to the southeast on the southern half of the Site, and to the

southeast or east on the adjacent agricultural field. Hydraulic gradients across the Site generally ranged from approximately 0.02 feet/foot to 0.005 feet/foot. The hydraulic gradient on the adjacent agricultural field generally ranged from approximately 0.009 feet/foot to 0.0018 feet/foot. Since groundwater was encountered under unconfined conditions, no appreciable vertical hydraulic gradient was observed in the paired shallow and deep monitoring wells.

4.2.2 Groundwater Analytical Results

Groundwater samples were collected from the 16 sets of paired deep and shallow wells during all three of the FSI #3 sampling events and from the entire monitoring well network (41 wells) during the second FSI #3 sampling event (March 4-12, 2019). The analytical results were compared to RCG Residential Tap Water Screening Levels (TWSLs) and the RCG Residential and Commercial/Industrial Vapor Intrusion from Groundwater Screening Levels (VIGWSLs) where established. The groundwater analytical results from this investigation and the corresponding RCG Screening Levels are summarized on Table 4 in Appendix C and on Figures 9A, 9B and 9C in Appendix A. The groundwater analytical laboratory reports and chain of custody forms are included in Appendix F. Table 5 in Appendix C is a comprehensive summary of the groundwater analytical results from the various investigations that have been conducted at the Site.

An error while conducting the groundwater sampling during all three FSI #3 sampling events resulted in the analytical results for MW-30 being reported as from the corresponding deeper well MW-31 and the results from MW-31 being reported as from MW-30. This error was easily identified because samples from deeper well MW-31 historically contained no detectable concentrations of PCE and TCE while MW-30 historically contained PCE and TCE at concentrations exceeding RCG Screening Levels. The results from FSI #3 sampling showed the opposite correlation due to the sampling error. The figures and tables in this report have been corrected to accurately reflect the data obtained from each well although the laboratory analytical reports still show the incorrect well identification number.

PCE, TCE, cis-1,2-DCE, trans-1,2-DCE and vinyl chloride were COCs detected in the groundwater samples collected during FSI #3. PCE was detected in 13 of the 41 wells sampled during FSI #3, all of which were located on the HRID property. PCE was not detected in any of the wells on the adjacent agricultural property. PCE impacts are present in shallow and deep groundwater on the southeastern and south-central portions of the Site, downgradient of a small wooded area that straddles the western portion of the HRID property and the eastern portion of the adjacent Reed property. This small wooded area is a suspected source area for COCs. The areal extents of PCE impacts in the shallow

and deep groundwater during the March 4-12, 2019 sampling event are shown on Figures 10 and 11, respectively, in Appendix A. The highest PCE concentrations exceed the RCG Residential VIGWSL and were reported in samples from shallow groundwater monitoring well MW-30, which is located immediately downgradient of the small wooded area. The PCE concentrations in shallow groundwater decrease in downgradient and cross-gradient directions to the north, east and south. PCE concentrations in the deep groundwater are generally lower than the concentrations encountered in the shallow groundwater. The area of PCE impacts in the deep groundwater is of the same general shape and size as the area of PCE impacts in the shallow water but is located slightly farther east (downgradient). The lateral extent of the PCE impacts appears to be delineated in both the shallow and deep groundwater and PCE impacts are limited to the Site. The highest PCE concentrations in the deeper groundwater exceed the RCG TWSL but are below the RCG Residential VIGWSL. The PCE concentrations in the individual wells over time appear to be fairly stable with no significant upward or downward trends.

TCE was detected in 28 of the 41 wells sampled during FSI #3, including 11 of the 14 wells on the adjacent agricultural property to the east. TCE impacts are present in the shallow and deep groundwater extending from the far eastern portion of the Reed property onto the adjacent agricultural property to the east of the Site, with the highest TCE concentrations exceeding the RCG Commercial/Industrial VIGWSL in both shallow and deep groundwater. The areal extents and general concentrations of TCE impacts in the shallow and deep groundwater during the March 4-12, 2019 groundwater sampling event are shown on Figures 12 and 13, respectively, in Appendix A.

The TCE concentration in the groundwater sample from shallow monitoring well MW-15 collected during the March 4-12 sampling event was reported to be non-detectable at an analytical reporting limit of 5.0 ug/L. This was inconsistent with the six other sampling events where TCE concentrations ranged from 6.7 ug/L to 50.3 ug/L, so the TCE value of 49.3 ug/L from February 8, 2019 (FSI #3 sampling event #1) was used to develop the isoconcentration map on Figure 12. The TCE concentration in the groundwater sample from deep monitoring well MW-14D collected during the March 4-12 sampling event was also reported to be non-detectable at a laboratory reporting limit of 5.0 ug/L. This was inconsistent with the two other sampling events where TCE concentrations ranged from 524 ug/L to 583 ug/L, so the TCE value of 524 ug/L from April 1, 2019 was used to develop the isoconcentration map on Figure 13. It is not known whether these reported TCE concentrations are an anomalous occurrence or are the result of a sampling error.

The highest TCE concentrations in the shallow groundwater on the western portion of the Site are located in roughly the same area as the shallow PCE impacts discussed above.

The TCE concentrations decrease in a downgradient (eastern) direction until the southeastern portion of the Site where the TCE concentrations then begin increasing to the east (downgradient) and onto the adjacent agricultural property. The extent of TCE impacts in the shallow groundwater has been defined and extends approximately 400 feet onto the agricultural property to the east of the Site. The TCE plume in the deep groundwater is in the same general location as the TCE plume in the shallow groundwater. The TCE concentrations in the deep groundwater plume appear to increase from near the source area in a downgradient direction, but a sharp decrease in TCE concentrations occurs at the downgradient and cross gradient edges of the deep TCE plume. The extent of PCE impacts exceeding the RCG Commercial/Industrial VIGWSL in deep groundwater has been defined in the downgradient and cross gradient directions, but the extent of TCE impacts exceeding the RCG Residential VIGWSL and the RCG TWSL in the deep groundwater is not completely defined on the adjacent agricultural property. The TCE concentrations in the individual shallow and deep wells over time appear to be fairly stable with no significant upward or downward trends.

Cis-1,2-DCE was detected in 17 of the 41 wells sampled during FSI #3, including eight of the 14 wells on the adjacent agricultural property to the east. Cis-1,2-DCE impacts are primarily present in the deep groundwater on the far eastern (downgradient) edge of the Site and on the adjacent agricultural property. In the shallow groundwater, cis-1,2-DCE was detected in samples from MW-14 (7.7 ug/L) during sampling event #3, MW-15 (579 ug/L) during sampling event #3, MW-22 (10.8 ug/L) in sampling event #1, MW-33 (5.6 ug/L) during sampling event #2, and TMW-6 (24.4 ug/L) during sampling event #2. The sample from well MW-15 is the only shallow water sample that contained cis-1,2-DCE at a concentration above the RCG TWSL of 70 ug/L. As shown on Table 5, cis-1,2-DCE was not detected in samples from the above-referenced wells during any previous or subsequent sampling events other than the ones stated above, indicating that cis-1,2-DCE is not extensively or consistently present in the shallow groundwater. For monitoring well MW-15 where cis-1,2-DCE was reported at a concentration exceeding the RCG TWSL during the April 2019 sampling event #3, the previous six sampling events revealed no detectable concentrations of cis-1,2-DCE. Therefore, it is likely that the reported concentration of cis-1,2-DCE in the sample from MW-15 in April 2019 is anomalous, possibly caused by an unidentified sampling or laboratory error. Future sampling of well MW-15 will assist in determining the validity of the April 2019 data point. Based on the data collected to date, the extent of cis-1,2-DCE in the shallow groundwater has been defined.

In the deep groundwater, cis-1,2-DCE was detected in samples from on-Site deep wells MW-14D, MW-15D, MW-29D, MW-31, and MW-32, and in all seven of the off-Site deep

wells. The areal extent of cis-1,2-DCE impacts in the deep groundwater during the March 4-12, 2019 groundwater sampling event is shown on Figure 14 in Appendix A. The reported concentrations of cis-1,2-DCE exceeded the RCG TWSL of 70 ug/L in samples from on-Site well MW-15D (430 ug/L) and off-Site wells TMW-1D (660 ug/L), TMW-2D (250 ug/L), TMW-3D (539 ug/L), TMW-4D (270 ug/L), TMW-5D (1,040 ug/L) and TMW-7D (245 ug/L). The extent of cis-1,2-DCE impacts in deep groundwater has not been delineated to the north or east on the adjacent agricultural field. The concentrations of cis-1,2-DCE in the individual wells over time appear to be fairly stable with no significant upward or downward trends.

Trans-1,2-DCE was detected in eight of the 41 wells sampled during FSI #3, including samples from the shallow and deep wells MW-15 and MW-15D located on the far eastern edge of the Site, and samples from six of the seven deep wells on the adjacent agricultural property to the east. Trans-1,2-DCE impacts are primarily present in the deep groundwater on the far eastern portion of the Site and on the adjacent agricultural property. The samples from TMW-5D were the only samples that exceeded the RCG TWSL of 100 ug/L for trans-1,2-DCE. Since samples from deep monitoring wells located to the north, south, east and west of TMW-15D did not contain concentrations of trans-1,2-DCE at or above the RCG TWSL, the extent of trans-1,2-DCE exceeding the RCG residential screening levels has been delineated on the Site and adjacent property.

Vinyl chloride was only detected in a sample from one well during one sampling event during this FSI #3 and from the preceding sampling events. Vinyl chloride was reported at a concentration of 2.3 ug/L in the sample from deep monitoring well TMW-2D collected during sampling event #3 during this FSI # 3. The reported vinyl chloride concentration of 2.3 ug/L slightly exceeds the RCG TWSL of 2.0 ug/L and the RCG Residential VIGWSL of 2.1 ug/L. The extent of vinyl chloride impacts has been delineated and is only present in one well on the adjacent agricultural property. Based on the hydrogeological and COC data information discussed in this report, it appears that the vinyl chloride reported in the sample from TMW-2D is a degradation product of PCE, TCE, and/or cis- and trans-1,2-DCE from natural degradation.

Two duplicate samples were collected during the first and third groundwater monitoring event and three duplicate samples were collected during the third groundwater monitoring event. The analytical results for duplicate samples collected during this investigation are summarized in Table 4 and included with the analytical reports in Appendix F. Comparison of the duplicate sample analytical results with the original sample analytical results revealed good correlation between the samples except for the following:

- Analysis of duplicate sample A (DUP A) from the first monitoring event reported no detectable concentrations of cis-1,2-DCE (<5.0 ug/L) while analysis of the original sample MW-31 reported a cis-1,2-DCE concentration of 5.4 ug/L.

- Analysis of duplicate sample A (DUP A) from the second monitoring event reported a TCE concentration of 272 ug/L while analysis of the original sample TMW-5D reported a TCE concentrations of 444 ug/L.

- Analysis of duplicate sample A (DUP A) from the third monitoring event reported no detectable concentrations of trans-1,2-DCE (<5.0 ug/L) while analysis of the original sample TMW-5D reported a trans-1,2-DCE concentration of 112 ug/L.

4.3 Monitoring Well Abandonment

The 14 off-site wells (seven deep wells and seven shallow wells) were abandoned in accordance with Indiana Department of Natural Resources (IDNR) and IDEM regulations after the three FSI #3 groundwater monitoring events were completed in order to allow farming of the agricultural field in 2019. The wells were abandoned by filling the wells with bentonite granules, removing the upper 2 to 3 feet of PVC casing, and backfilling the remaining space with soil. Soil was used to backfill the remaining space rather than concrete as recommended by IDNR since concrete at or near the ground surface could damage farming equipment. Well abandonment logs have been submitted to the IDNR.

5.0 CONCLUSIONS

In response to IDEM's November 2, 2018 Further Site Investigation Review letter, *Patriot* conducted an FSI #3 at the Site to further evaluate the nature and extent of COC impacts at the Site and on the adjacent agricultural property to the east. The conclusions from this investigation are presented below.

5.1 Soil Investigation

Soil samples collected from borings advanced during this and previous investigations revealed that the stratigraphy of soil at the Site and adjacent agricultural property to the east primarily consists of silt with some clayey silt or silty clay to a depth of approximately 5 to 10 feet bgs with scattered thin layers of clay and sand encountered in the silt in some of the borings. The silt was primarily underlain by poorly graded to well graded sand to depths ranging from approximately 27 feet bgs on the western portion of the Site to 60 feet bgs on the agricultural property to the east. Scatted thin interbedded layers of silt or sandy gravel were encountered within the sand in some of the borings. The sand was

underlain by a gray, moist, stiff, low plasticity to non-plastic clay confining layer where the borings were terminated. The surface elevation of the clay layer decreases steadily to the east-northeast across the Site and the adjacent agricultural property.

Analysis of soil samples collected from the unsaturated zone in borings advanced during this investigation did not reveal evidence of impacts that would indicate the presence of a previously unidentified source area on the Site or on the adjacent agricultural property to the east. Evaluation of analytical data for soil samples collected during this and previous investigations continue to indicate the presence of elevated COC concentrations in soil in the wooded area that straddles the HRID and Reed properties on the far western portion of the Site, and potentially a smaller area of elevated COC concentrations near the buildings on the northwestern portion of the Site.

Analysis of soil samples collected from the top of the clay unit underlying the water-bearing zone being monitored at the Site revealed detectable concentrations of TCE, cis-1,2-DCE and/or trans-1,2-DCE in one sample each, with TCE and cis-1,2-DCE exceeding the RCG MTGSL. These data provide no evidence to suggest that a source area exists in the clay layer that could be resulting in ongoing impacts to the groundwater on and off the Site. Rather, it appears that the reported COC impacts in the clay layer are due to contact with contaminated groundwater rather than being indicative of a soil COC source area.

5.2 Groundwater Flow Characteristics

Groundwater was encountered under unconfined conditions both on-Site and off-Site to the east, at depths ranging from approximately 5 feet to 14 feet bgs. The flow direction in both shallow and deeper groundwater is generally to the south across the northern half of the Site, to the southeast on the southern half of the Site, and to the southeast or east on the adjacent agricultural field. In general, the hydraulic gradients across the Site ranged from approximately 0.02 feet/foot (ft/ft) to 0.005 ft/ft. The hydraulic gradient on the adjacent agricultural field is generally shallower, ranging from approximately 0.009 ft/ft to 0.0018 ft/ft. Since groundwater was encountered under unconfined conditions, no appreciable vertical hydraulic gradient was observed in the paired shallow and deep monitoring wells.

5.3 Groundwater Analytical Results

PCE, TCE, cis-1,2-DCE, trans-1,2-DCE and vinyl chloride were COCs detected in the groundwater samples collected during FSI #3 and in samples from previous investigations. The PCE plume appears to be emanating from an off-site source in the wooded area and does not extend off-Site. The PCE degradation product TCE is present farther downgradient, with additional degradation products cis-1,2-DCE and trans-1,2-DCE present in the deep zone. This suggests that the deeper portions of the plume are being degraded more completely than the shallow portions. The extent of PCE impacts are defined in the shallow and deep groundwater and are contained on-Site. TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride impacts extend onto the adjacent agricultural property in shallow and deep groundwater. The extent of cis-1,2-DCE impacts in the shallow groundwater and the extent of TCE and cis-1,2-DCE impacts in the deeper groundwater have not been delineated in a downgradient direction.

5.4 Summary

The soil data collected during FSI #3 revealed that :

- No indications of a previously undiscovered source area for COCs either on or off the Site was encountered.
- The clay confining layer at the base of the water-bearing unit being monitored slopes downward to the east (downgradient) and is not a source of ongoing groundwater impacts.

The groundwater data collected during this FSI #3 revealed that:

- The flow direction in both shallow and deep groundwater is generally to the south across the northern half of the Site, to the southeast on the southern half of the Site, and to the southeast or east on the adjacent agricultural field.
- PCE concentrations exceeding the RCG Commercial/Industrial Screening Levels are only present in shallow groundwater in a small area of the Site immediately downgradient of the suspected source area that straddles the Site's western property boundary, and the extent of PCE impacts exceeding the RCG Residential and Commercial/Industrial Screening Levels has been defined and is contained on-Site.

- TCE concentrations of TCE exceeding the RCG Commercial/Industrial Screening Levels are present in shallow and deep groundwater across much of the southern half of the Site and onto the adjacent agricultural property to the east.
- The extent of TCE impacts exceeding the RCG Screening Levels has been delineated in the shallow groundwater but has not been delineated in the deep groundwater on the adjacent agricultural property.
- Cis-1,2-DCE concentrations do not exceed the RCG Commercial/Industrial Screening Levels and concentrations of cis-1,2-DCE exceeding the RCG Residential TWSL are present in a small area on the southeastern portion of the Site and eastward onto the adjacent agricultural property.
- The extent of cis-1,2-DCE exceeding the RCG Residential Screening Levels has not been defined on the adjacent agricultural property.
- Vinyl chloride and trans-1,2-DCE are not significant COCs at the Site or off-Site.
- The TCE and cis-1,2-DCE concentrations in shallow and deep groundwater on the adjacent agricultural field are generally highest in the middle of the sampled area (TMW-5/5D) with generally lower concentrations reported in groundwater samples from upgradient (west and northwest) and cross gradient (north, south, and southwest) directions. The reason for this apparent anomaly has not yet been determined.

Interpretation of the data generated during the FSI #3 and previous investigations indicate that the likely groundwater COC source is soils in the wooded area on the western portion of the Site and the eastern portion of the adjacent Reed property. The potential exists for a smaller source area near the buildings on the western/northwestern portion of the Site, but no direct evidence of an additional source area has been discovered.

The presence of PCE on the upgradient western portion of the Site, the absence of TCE and other PCE daughter products in the area of highest PCE impacts immediately downgradient of the suspected source area, the presence of TCE at varying concentrations across the Site and onto the adjacent agricultural property, and the presence of cis-I,2-DCE and trans-1,2-DCE being limited to the downgradient eastern portion of Site the adjacent agricultural property suggest that degradation of PCE and TCE is occurring and is the likely source of the cis- and trans-1,2-DCE and the increased concentrations of TCE on the downgradient portion of the Site and adjacent property.

Further, the analytical data from the shallow and deeper groundwater samples collected at the Site demonstrate that PCE and TCE are present at concentrations well below their groundwater saturation limits, indicating that dense, nonaqueous-phase liquid (DNAPL) COCs are not present on the Site.

If you have any questions or comments regarding this submittal, or require any additional information, please do not hesitate to contact Michael Casper (317) 576-8058 or mcasper@patrioteng.com.

Sincerely,

Patriot Engineering and Environmental, Inc

.

James J Cody
Staff Engineer
Environmental Group

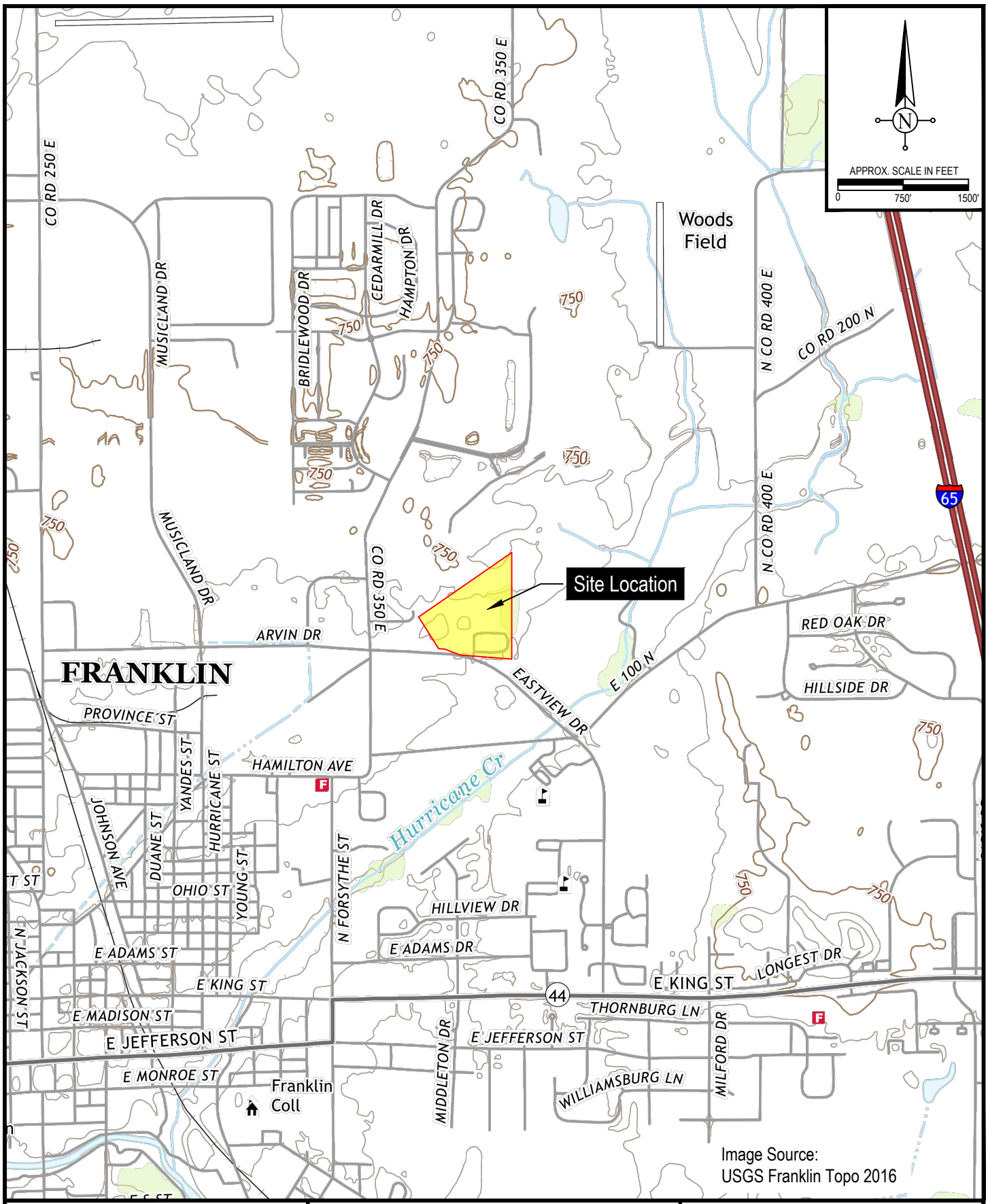
Michael F. Casper, LPG
Principal
Chief Environmental Consultant

Attachments

Cc: Greg Cafouros, Kroger Gardis & Regas
Charles Goodwin, Ramboll Environ

APPENDIX A

FIGURES

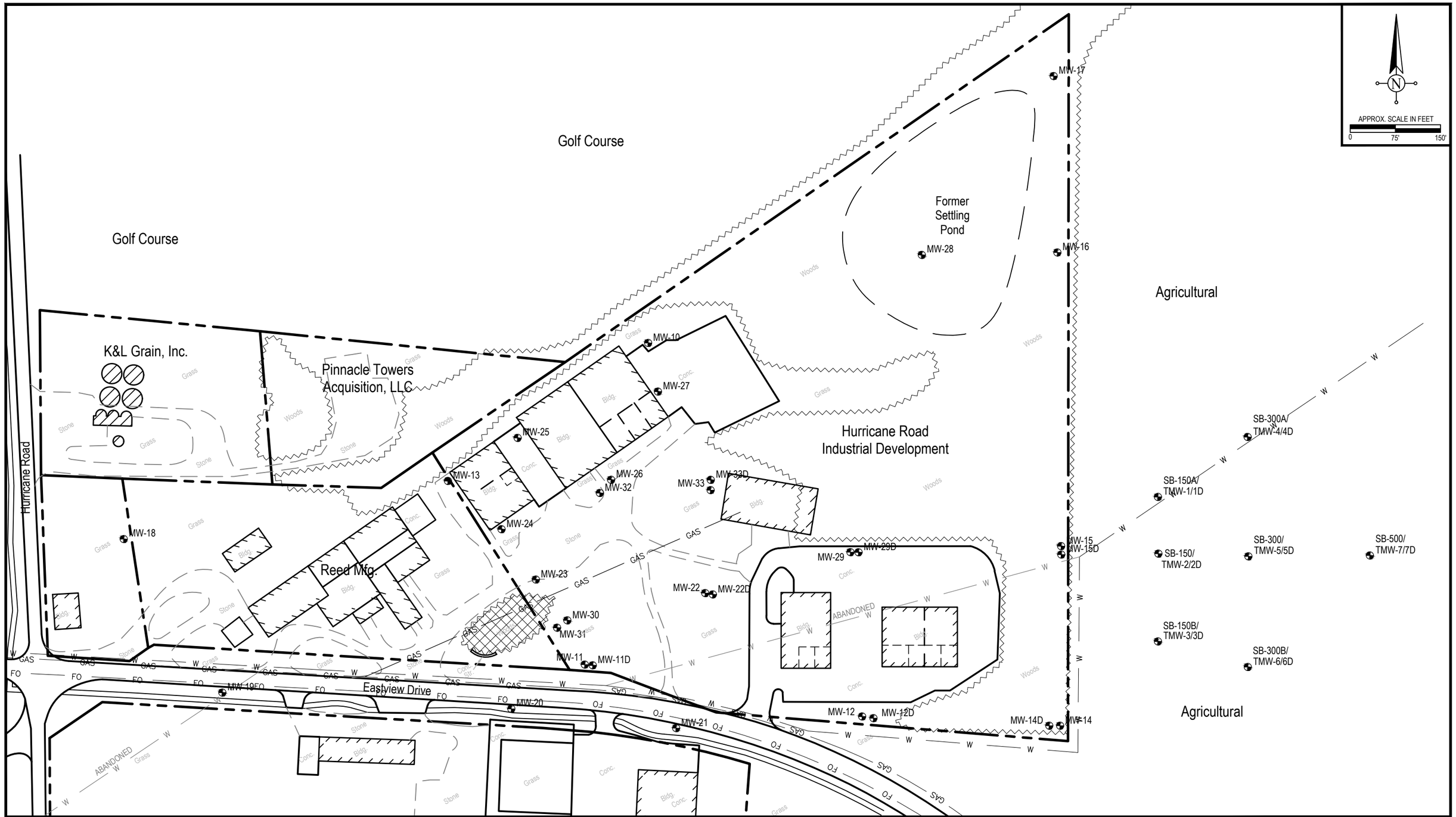


Patriot Engineering & Environmental, Inc.

Project: Former Houghland Tomato Cannery FSI #3 1130 E. Eastview Drive Franklin, Indiana IDEM Identification No. 2013-42015	
	Drawn By: J. DuMond
Project Number:19-0096-01E	Approved: J. Cody
Date: May 8, 2019	DWG: 19-0096-01_Ph2

Figure 1

Site Location Map



Patriot Engineering & Environmental, Inc.

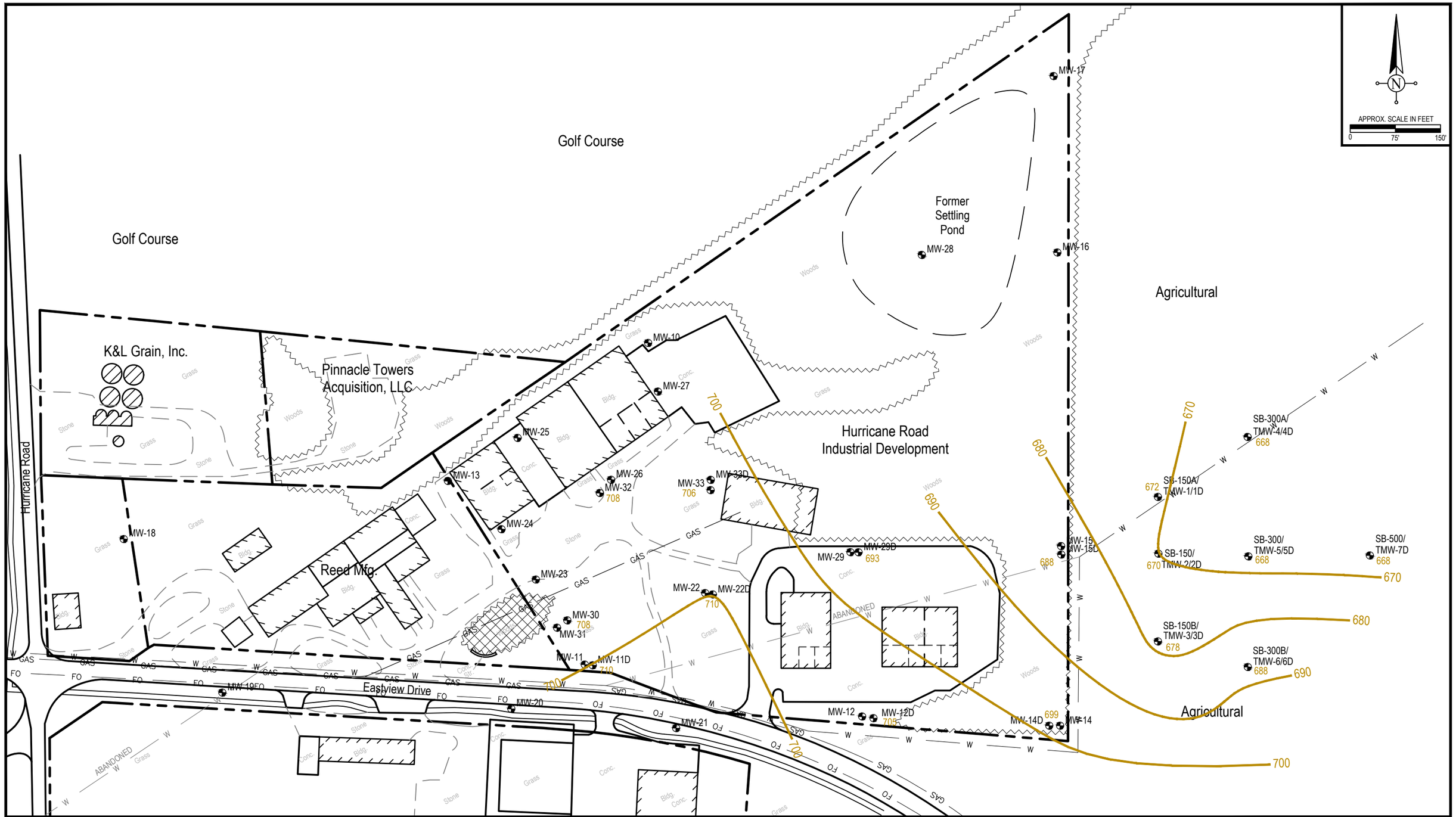
LEGEND

- Parcel Line
- Clawson Property Boundary
- W — Water Line
- GAS — Gas Line
- FO — Fiber Optic Line
- Patriot Monitoring Well Location
- Wooded area with fill and debris

Project: Former Houghland Tomato Cannery FSI #3 1130 E. Eastview Drive Franklin, Indiana IDEM Identification No. 2013-42015	
	Drawn By: J. DuMond
Project Number: 19-0096-01E	Approved: J. Cody
Date: July 2, 2019	DWG: 19-0096-01_Ph2

Figure 2

Site Layout Map



Patriot Engineering & Environmental, Inc.

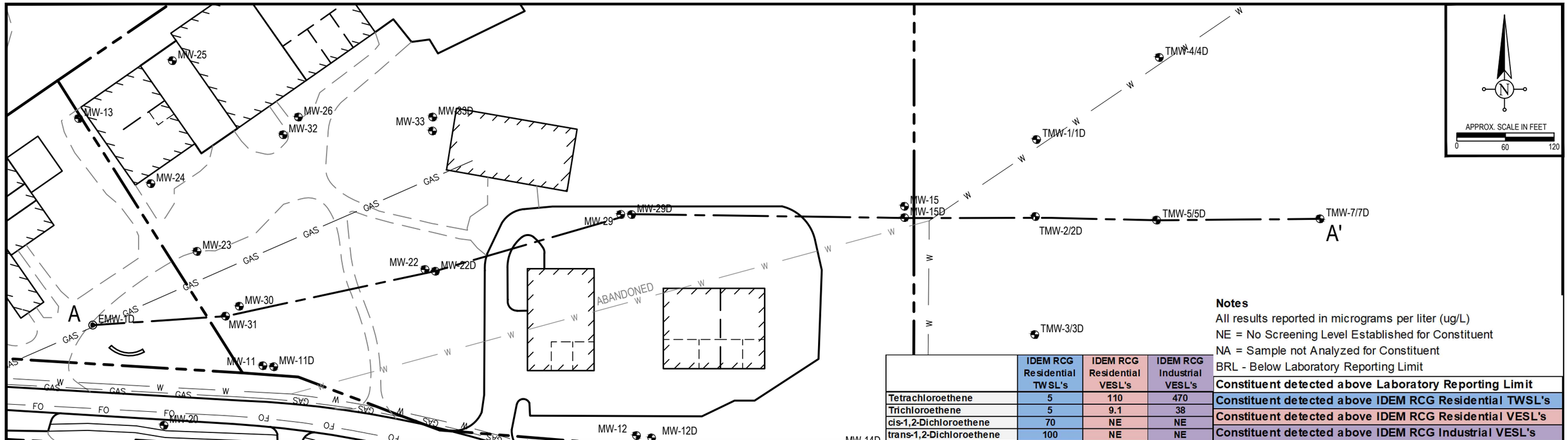
LEGEND

- Parcel Line
- Clawson Property Boundary
- W — Water Line
- GAS — Gas Line
- FO — Fiber Optic Line
- Patriot Monitoring Well Location
- Wooded area with fill and debris
- 708 — Elevation of Clay
- 690 — Clay Surface Contours

Project: Former Houghland Tomato Cannery FSI #3 1130 E. Eastview Drive Franklin, Indiana IDEM Identification No. 2013-42015	
	Drawn By: J. DuMond
Project Number: 19-0096-01E	Approved: J. Cody
Date: July 11, 2019	DWG: 19-0096-01_Ph2

Figure 3

Confining Layer Surface Elevation Map



Notes

All results reported in micrograms per liter (ug/L)

NE = No Screening Level Established for Constituent

NA = Sample not Analyzed for Constituent

BRL - Below Laboratory Reporting Limit

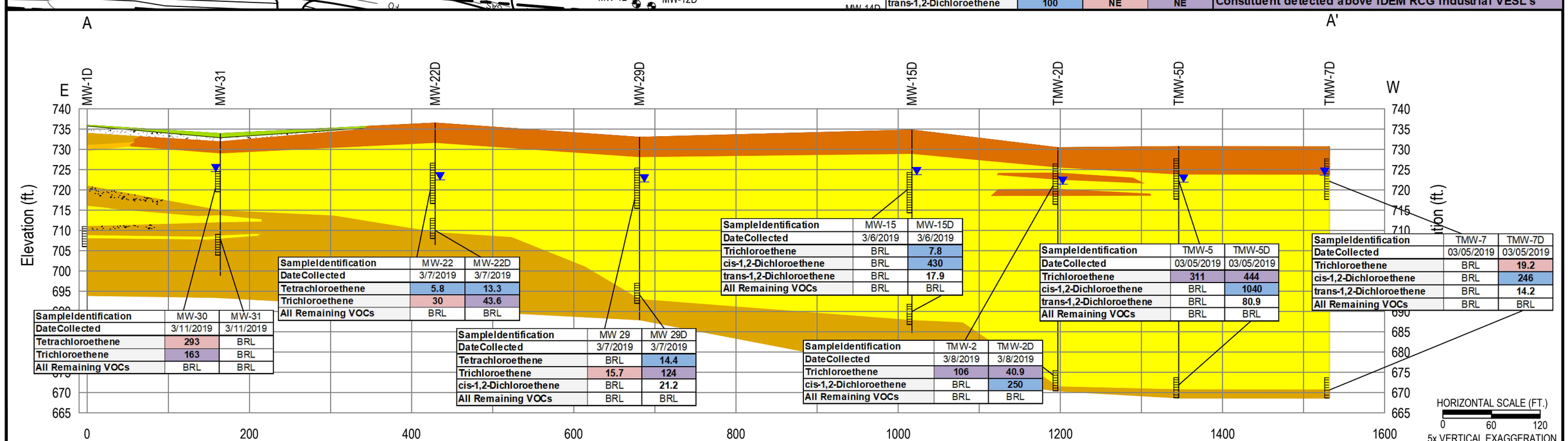
	IDEM RCG Residential TWSL's	IDEM RCG Residential VESL's	IDEM RCG Industrial VESL's
Tetrachloroethene	5	110	470
Trichloroethene	5	9.1	38
cis-1,2-Dichloroethene	70	NE	NE
trans-1,2-Dichloroethene	100	NE	NE

Constituent detected above Laboratory Reporting Limit

Constituent detected above IDEM RCG Residential TWSL's

Constituent detected above IDEM RCG Residential VESL's

Constituent detected above IDEM RCG Industrial VESL's



SampleIdentification	MW-30	MW-31
DateCollected	3/11/2019	3/11/2019
Tetrachloroethene	293	BRL
Trichloroethene	163	BRL
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-22	MW-22D
DateCollected	3/7/2019	3/7/2019
Tetrachloroethene	5.8	13.3
Trichloroethene	30	43.6
All Remaining VOCs	BRL	BRL

SampleIdentification	MW 29	MW 29D
DateCollected	3/7/2019	3/7/2019
Tetrachloroethene	BRL	14.4
Trichloroethene	15.7	124
cis-1,2-Dichloroethene	BRL	21.2
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-15	MW-15D
DateCollected	3/6/2019	3/6/2019
Trichloroethene	BRL	7.8
cis-1,2-Dichloroethene	BRL	430
trans-1,2-Dichloroethene	BRL	17.9
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-2	TMW-2D
DateCollected	3/8/2019	3/8/2019
Trichloroethene	106	40.9
cis-1,2-Dichloroethene	BRL	250
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-5	TMW-5D
DateCollected	03/05/2019	03/05/2019
Trichloroethene	311	444
cis-1,2-Dichloroethene	BRL	1040
trans-1,2-Dichloroethene	BRL	80.9
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-7	TMW-7D
DateCollected	03/05/2019	03/05/2019
Trichloroethene	BRL	19.2
cis-1,2-Dichloroethene	BRL	246
trans-1,2-Dichloroethene	BRL	14.2
All Remaining VOCs	BRL	BRL

Patriot Engineering & Environmental, Inc.

LEGEND

PATRIOT Monitoring Well
Environ Monitoring Well
A — — A' Cross Section Location

Topsoil
Fill
Silt
Sand

Clayey Sand
Clay
Clayey Gravel

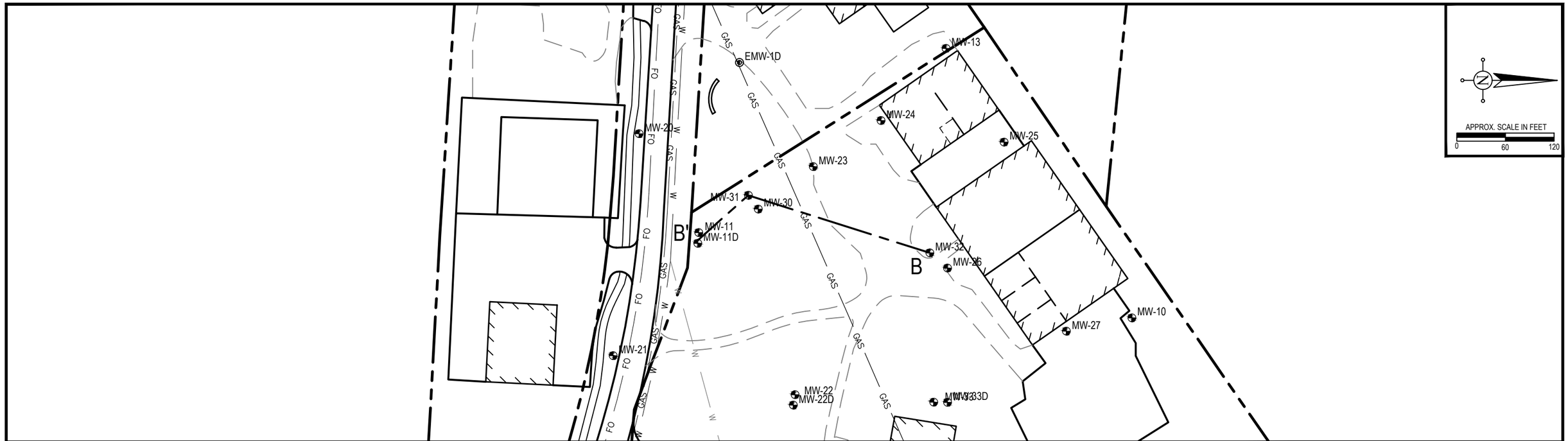
Water Level
Well Screen

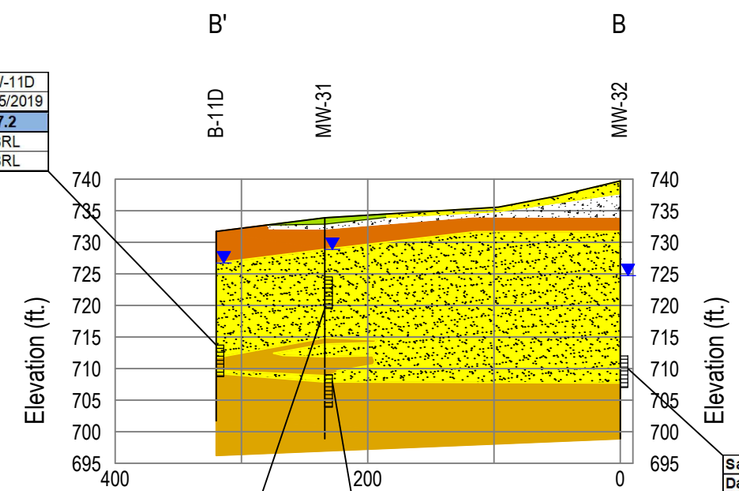
Project: Former Houghland Tomato Cannery FSI #3
1130 East Riverview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

Drawn By: J. DuMond
Project Number: 19-0096-01
Approved: J. Cody
Date: July 11, 2019
DWG: 19-0096-01_cs

Figure 4

Cross Section East-West
A-A'





SampleIdentification	MW-11	MW-11D
DateCollected	03/05/2019	03/05/2019
Tetrachloroethene	39.6	7.2
Trichloroethene	29.5	BRL
All Remaining VOCs	BRL	BRL

	IDEM RCG Residential TWSL's	IDEM RCG Residential VESL's	IDEM RCG Industrial VESL's
Tetrachloroethene	5	110	470
Trichloroethene	5	9.1	38
cis-1,2-Dichloroethene	70	NE	NE
trans-1,2-Dichloroethene	100	NE	NE

Notes

All results reported in micrograms per liter (ug/L)

NE = No Screening Level Established for Constituent

NA = Sample not Analyzed for Constituent

BRL - Below Laboratory Reporting Limit

Constituent detected above Laboratory Reporting Limit

Constituent detected above IDEM RCG Residential TWSL's

Constituent detected above IDEM RCG Residential VESL's

Constituent detected above IDEM RCG Industrial VESL's

SampleIdentification	MW-30	MW-31
DateCollected	3/11/2019	3/11/2019
Tetrachloroethene	293	BRL
Trichloroethene	163	BRL
All Remaining VOCs	BRL	BRL

SampleIdentification	MW 26	MW 32
DateCollected	3/11/2019	3/11/2019
Tetrachloroethene	12.5	16.1
Trichloroethene	35.5	37.9
All Remaining VOCs	BRL	BRL

HORIZONTAL SCALE (FT.)
0 60 120
5x VERTICAL EXAGGERATION

Patriot Engineering & Environmental, Inc.

LEGEND

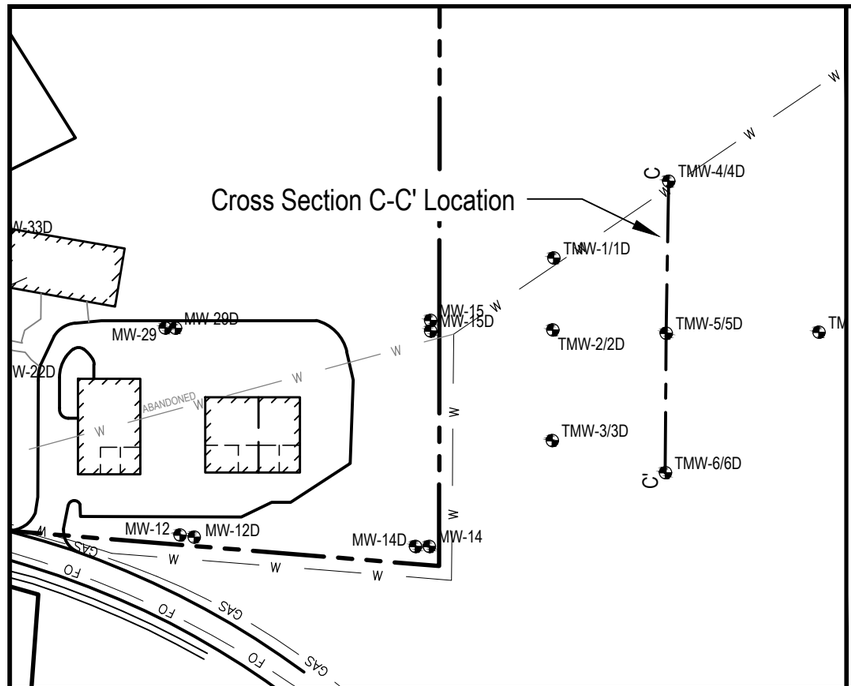
PATRIOT Monitoring Well
Environ Monitoring Well
B — — B' Cross Section Location
Topsoil
Fill
Sand
Clay
Silt
Water Level
Well Screen

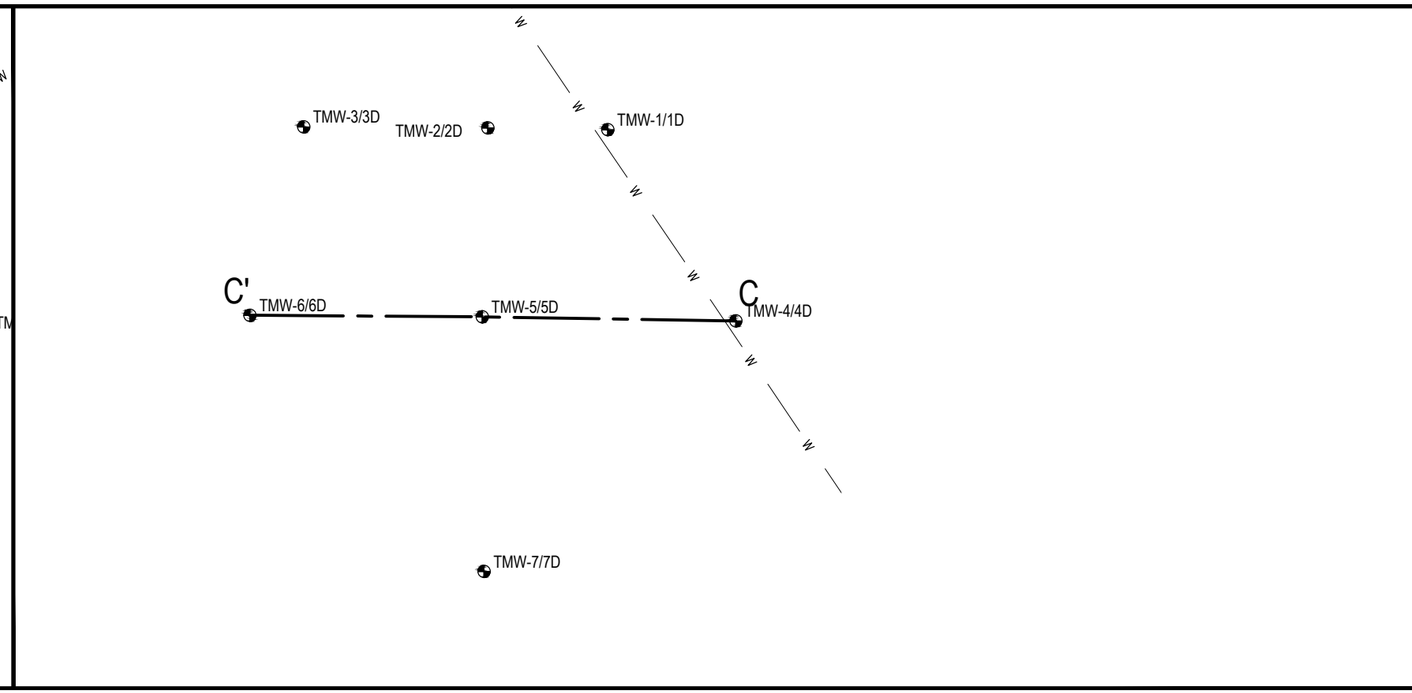
Project: Former Houghland Tomato Cannery FSI #3
1130 East Riverview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

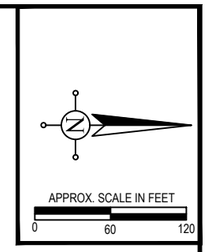
Drawn By: J. DuMond
Project Number: 19-0096-01
Approved: J. Cody
Date: July 11, 2019
DWG: 19-0096-01_cs

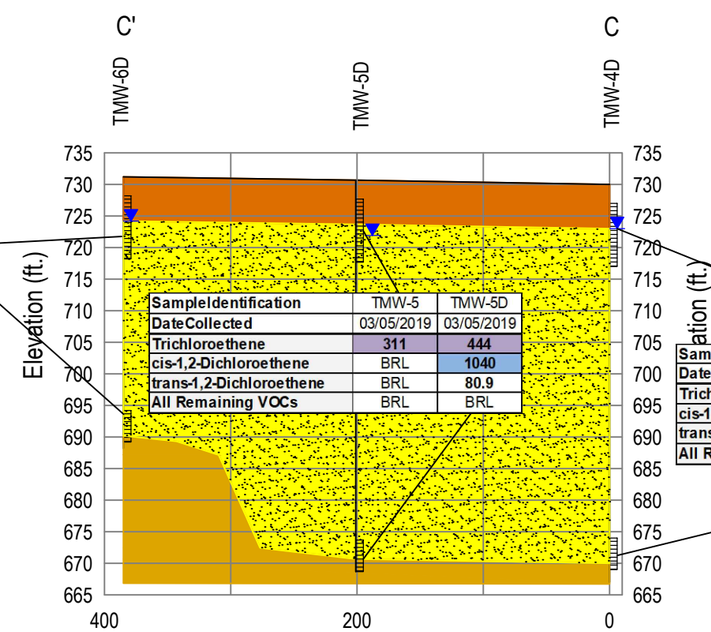
Figure 5

Cross Section East-West
B-B'









SampleIdentification	TMW-6	TMW-6D
DateCollected	03/05/2019	03/05/2019
cis-1,2-Dichloroethene	BRL	5.2
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-5	TMW-5D
DateCollected	03/05/2019	03/05/2019
Trichloroethene	311	444
cis-1,2-Dichloroethene	BRL	1040
trans-1,2-Dichloroethene	BRL	80.9
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-4	TMW-4D
DateCollected	3/8/2019	03/05/2019
Trichloroethene	BRL	7.3
cis-1,2-Dichloroethene	BRL	270
trans-1,2-Dichloroethene	BRL	9.8
All Remaining VOCs	BRL	BRL

	IDEM RCG Residential TWSL's	IDEM RCG Residential VESL's	IDEM RCG Industrial VESL's
Tetrachloroethene	5	110	470
Trichloroethene	5	9.1	38
cis-1,2-Dichloroethene	70	NE	NE
trans-1,2-Dichloroethene	100	NE	NE

Notes

All results reported in micrograms per liter (ug/L)

NE = No Screening Level Established for Constituent

NA = Sample not Analyzed for Constituent

BRL - Below Laboratory Reporting Limit

Constituent detected above Laboratory Reporting Limit

Constituent detected above IDEM RCG Residential TWSL's

Constituent detected above IDEM RCG Residential VESL's

Constituent detected above IDEM RCG Industrial VESL's

HORIZONTAL SCALE (FT.)
0 60 120
5x VERTICAL EXAGGERATION

Patriot Engineering & Environmental, Inc.

LEGEND

PATRIOT Monitoring Well

C — — — C' Cross Section Location

Silt

Sand

Clay

Water Level

Well Screen

Project: Former Houghland Tomato Cannery FSI #3
1130 East Riverview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

Drawn By: J. DuMond

Project Number: 19-0096-01

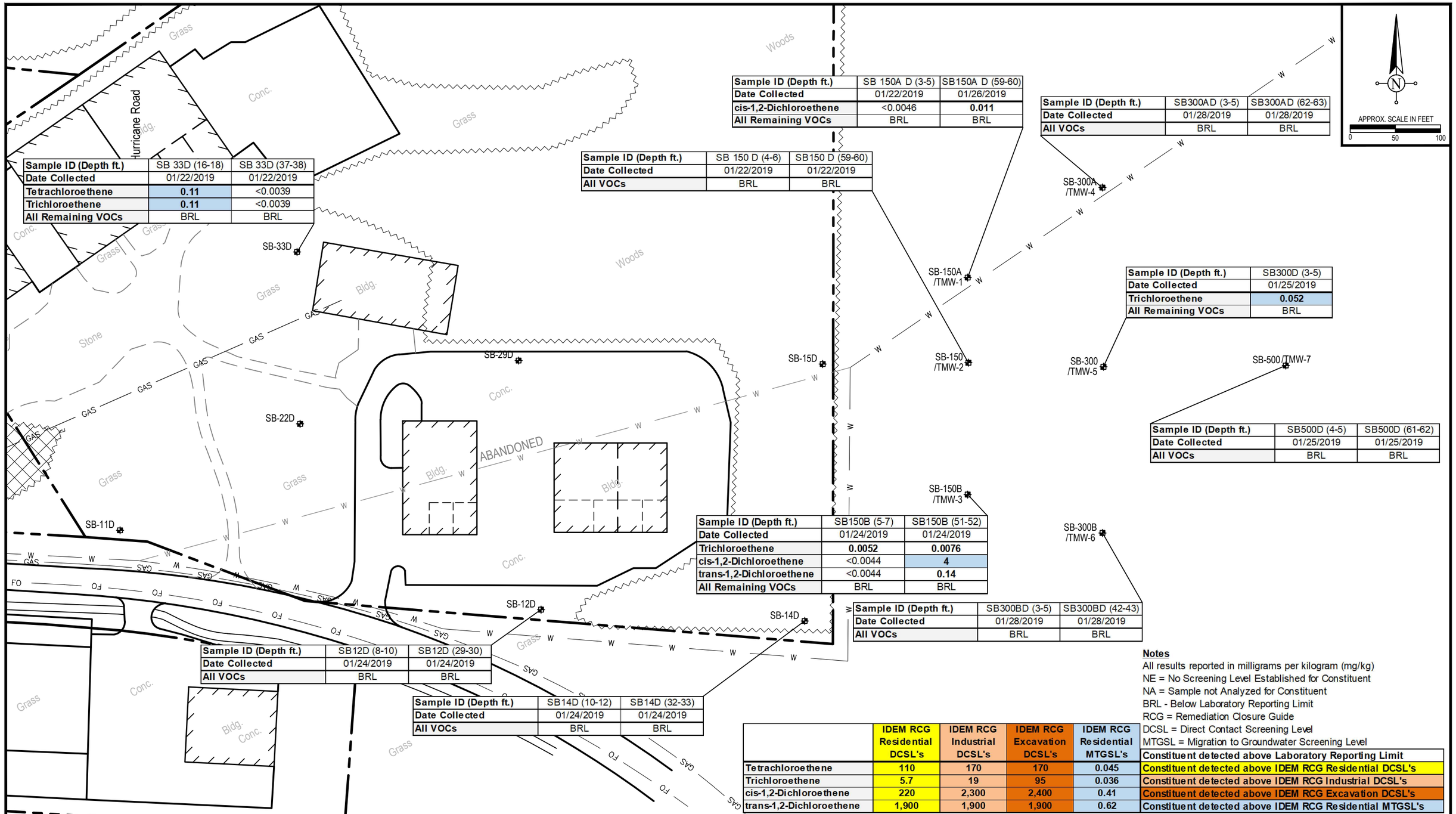
Approved: J. Cody

Date: July 11, 2019

DWG: 19-0096-01_cs

Figure 6

Cross Section South-North C-C'



Sample ID (Depth ft.)	SB 33D (16-18)	SB 33D (37-38)
Date Collected	01/22/2019	01/22/2019
Tetrachloroethene	0.11	<0.0039
Trichloroethene	0.11	<0.0039
All Remaining VOCs	BRL	BRL

Sample ID (Depth ft.)	SB 150A D (3-5)	SB150A D (59-60)
Date Collected	01/22/2019	01/26/2019
cis-1,2-Dichloroethene	<0.0046	0.011
All Remaining VOCs	BRL	BRL

Sample ID (Depth ft.)	SB 150 D (4-6)	SB150 D (59-60)
Date Collected	01/22/2019	01/22/2019
All VOCs	BRL	BRL

Sample ID (Depth ft.)	SB300AD (3-5)	SB300AD (62-63)
Date Collected	01/28/2019	01/28/2019
All VOCs	BRL	BRL

Sample ID (Depth ft.)	SB300D (3-5)
Date Collected	01/25/2019
Trichloroethene	0.052
All Remaining VOCs	BRL

Sample ID (Depth ft.)	SB500D (4-5)	SB500D (61-62)
Date Collected	01/25/2019	01/25/2019
All VOCs	BRL	BRL

Sample ID (Depth ft.)	SB150B (5-7)	SB150B (51-52)
Date Collected	01/24/2019	01/24/2019
Trichloroethene	0.0052	0.0076
cis-1,2-Dichloroethene	<0.0044	4
trans-1,2-Dichloroethene	<0.0044	0.14
All Remaining VOCs	BRL	BRL

Sample ID (Depth ft.)	SB300BD (3-5)	SB300BD (42-43)
Date Collected	01/28/2019	01/28/2019
All VOCs	BRL	BRL

Sample ID (Depth ft.)	SB12D (8-10)	SB12D (29-30)
Date Collected	01/24/2019	01/24/2019
All VOCs	BRL	BRL

Sample ID (Depth ft.)	SB14D (10-12)	SB14D (32-33)
Date Collected	01/24/2019	01/24/2019
All VOCs	BRL	BRL

Notes

All results reported in milligrams per kilogram (mg/kg)
NE = No Screening Level Established for Constituent
NA = Sample not Analyzed for Constituent
BRL - Below Laboratory Reporting Limit
RCG = Remediation Closure Guide
DCSL = Direct Contact Screening Level
MTGSL = Migration to Groundwater Screening Level

	IDEM RCG Residential DCSL's	IDEM RCG Industrial DCSL's	IDEM RCG Excavation DCSL's	IDEM RCG Residential MTGSL's	
					Constituent detected above Laboratory Reporting Limit
Tetrachloroethene	110	170	170	0.045	Constituent detected above IDEM RCG Residential DCSL's
Trichloroethene	5.7	19	95	0.036	Constituent detected above IDEM RCG Industrial DCSL's
cis-1,2-Dichloroethene	220	2,300	2,400	0.41	Constituent detected above IDEM RCG Excavation DCSL's
trans-1,2-Dichloroethene	1,900	1,900	1,900	0.62	Constituent detected above IDEM RCG Residential MTGSL's

Patriot Engineering & Environmental, Inc.

LEGEND

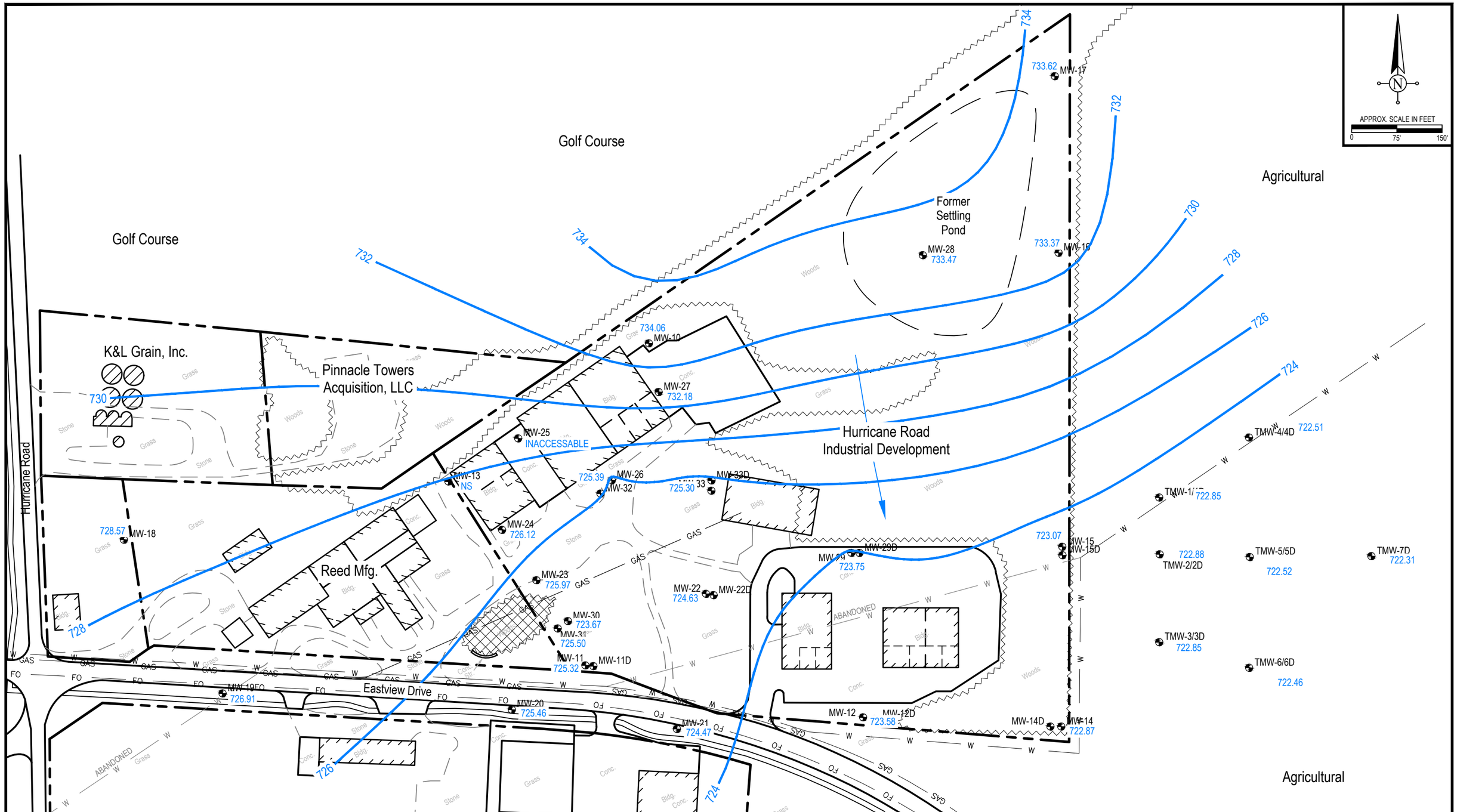
- Parcel Line
- Clawson Property Boundary
- W — Water Line
- GAS — Gas Line
- FO — Fiber Optic Line
- Patriot Soil Sample Location
- Wooded area with fill and debris

Project: Former Houghland Tomato Cannery FSI #3
1130 E. Eastview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

Drawn By: J. DuMond
Project Number: 19-0096-01E
Approved: J. Cody
Date: July 11, 2019
DWG: 19-0096-01_Ph2

Figure 7

Soil Analytical Results Map



Patriot Engineering & Environmental, Inc.

LEGEND

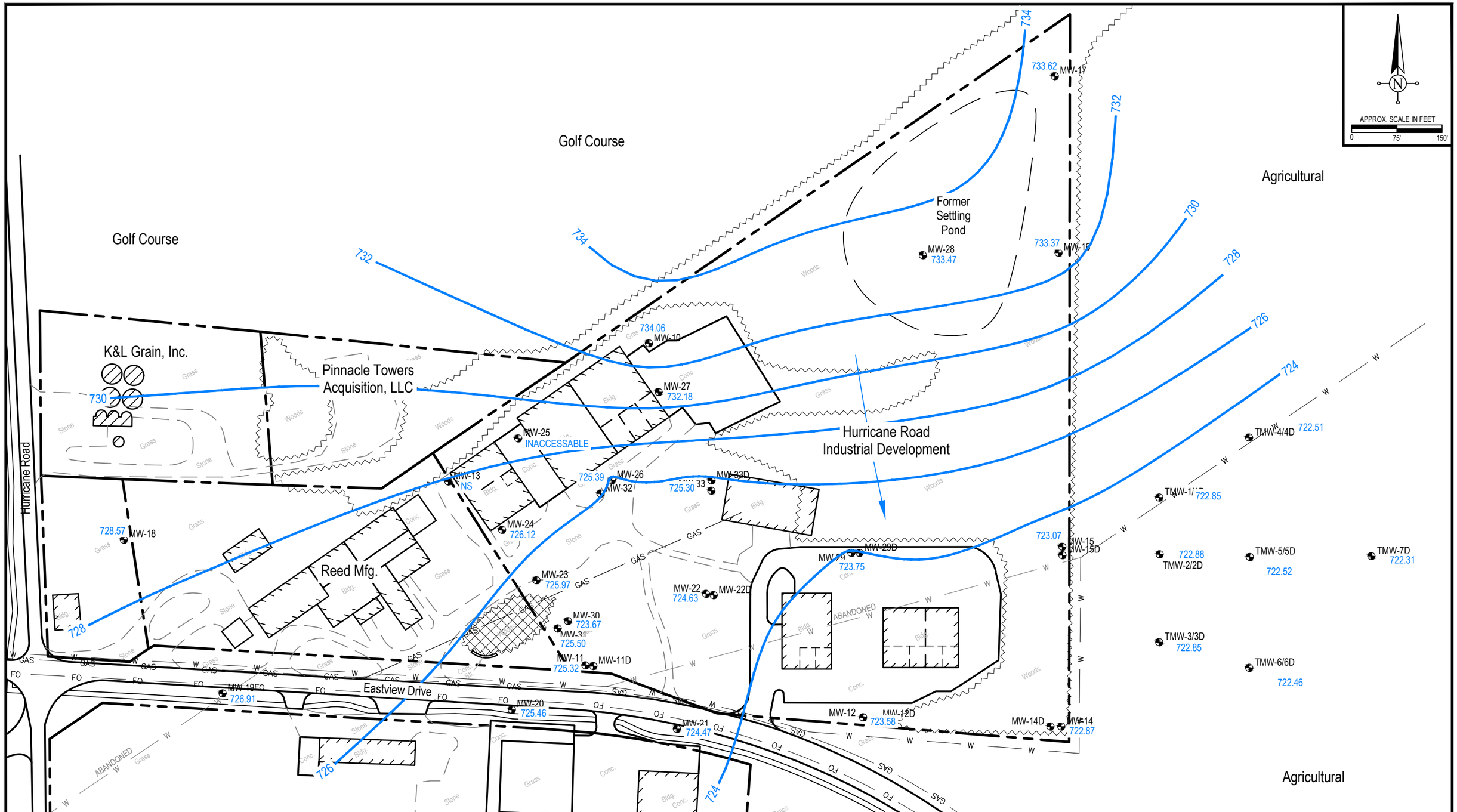
- Parcel Line
- Clawson Property Boundary
- W — Water Line
- GAS — Gas Line
- FO — Fiber Optic Line
- Patriot Monitoring Well Location
- Wooded area with fill and debris
- 723.48 Groundwater Elevation
- 724 Potentiometric Surface Contour w/Elevation
- Groundwater Flow Direction

Project: Former Houghland Tomato Cannery FSI #3
1130 E. Eastview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

	Drawn By: J. DuMond
Project Number: 19-0096-01E	Approved: J. Cody
Date: July 11, 2019	DWG: 19-0096-01_Ph2

Figure 8B

Groundwater Contour Map
March 4, 2019
Sampling Event #2



Patriot Engineering & Environmental, Inc.

LEGEND

- Parcel Line
- Clawson Property Boundary
- W — Water Line
- GAS — Gas Line
- FO — Fiber Optic Line
- Patriot Monitoring Well Location
- Wooded area with fill and debris
- 723.48 Groundwater Elevation
- 724 Potentiometric Surface Contour w/Elevation
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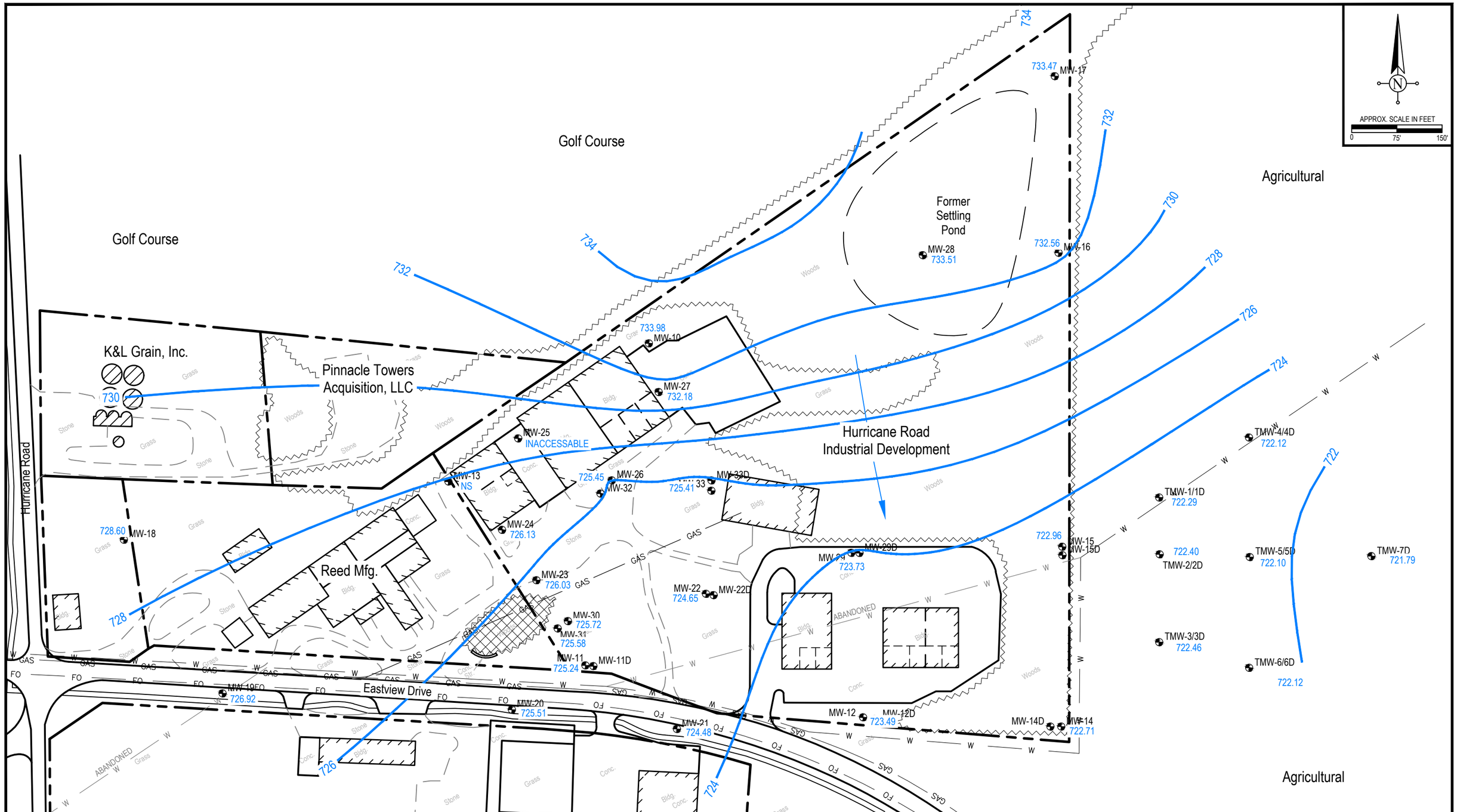
Project: Former Houghland Tomato Cannery FSI #3
1130 E. Eastview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

	Drawn By: J. DuMond
Project Number: 19-0096-01E	Approved: J. Cody
Date: July 11, 2019	DWG: 19-0096-01_Ph2

Figure 8B

Groundwater Contour Map
March 4, 2019
Sampling Event #2



Patriot Engineering & Environmental, Inc.

LEGEND

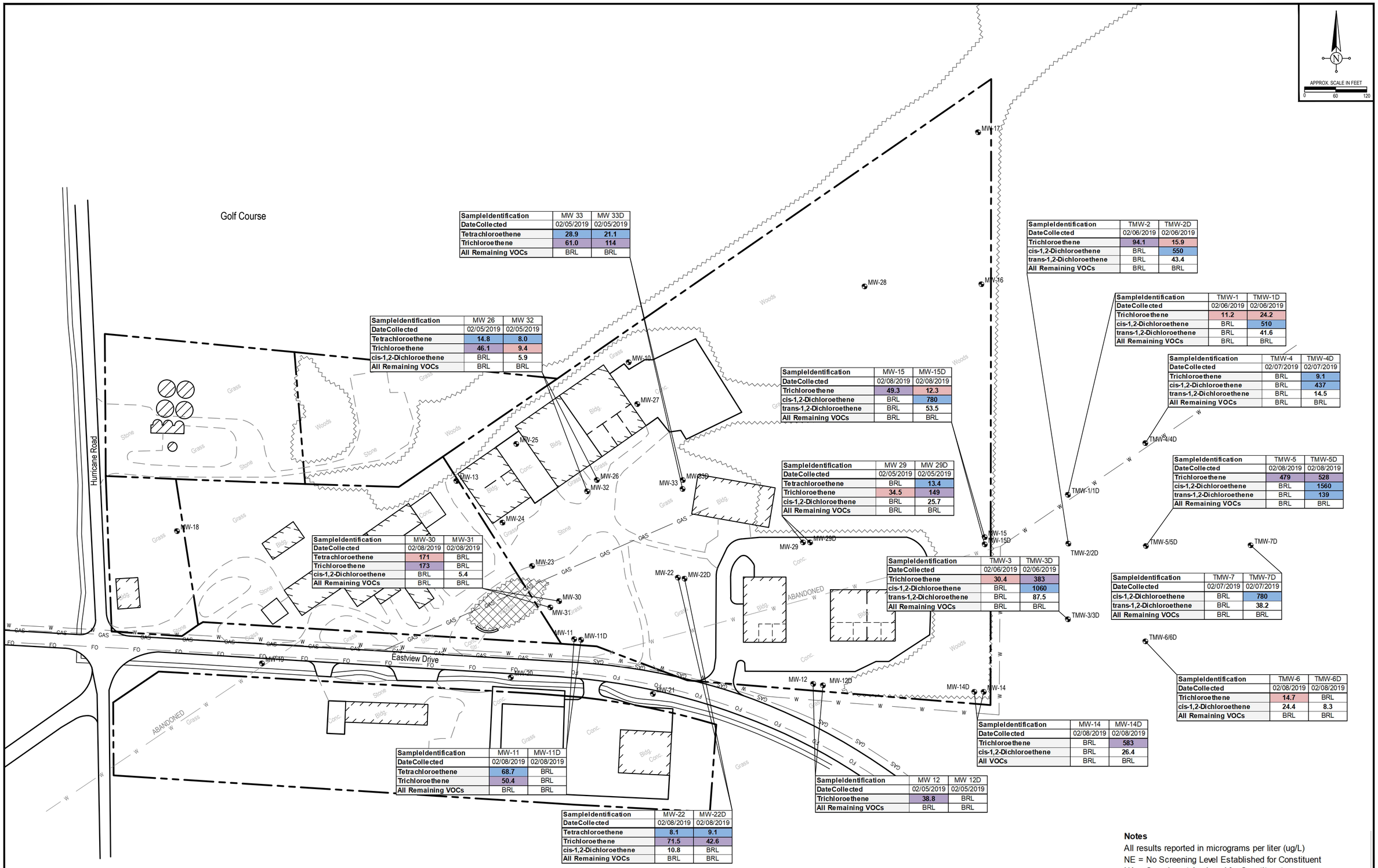
- Parcel Line
- Clawson Property Boundary
- W — Water Line
- GAS — Gas Line
- FO — Fiber Optic Line
- Patriot Monitoring Well Location
- Wooded area with fill and debris
- 723.48 Groundwater Elevation
- 724 Potentiometric Surface Contour w/Elevation
- Groundwater Flow Direction

Project: Former Houghland Tomato Cannery FSI #3
1130 E. Eastview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

	Drawn By: J. DuMond
Project Number: 19-0096-01E	Approved: J. Cody
Date: July 11, 2019	DWG: 19-0096-01_Ph2

Figure 8C

Groundwater Contour Map
March 25, 2019
Sampling Event #3



SampleIdentification	MW 33	MW 33D
DateCollected	02/05/2019	02/05/2019
Tetrachloroethene	28.9	21.1
Trichloroethene	61.0	114
All Remaining VOCs	BRL	BRL

SampleIdentification	MW 26	MW 32
DateCollected	02/05/2019	02/05/2019
Tetrachloroethene	14.8	8.0
Trichloroethene	46.1	9.4
cis-1,2-Dichloroethene	BRL	5.9
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-15	MW-15D
DateCollected	02/08/2019	02/08/2019
Trichloroethene	49.3	12.3
cis-1,2-Dichloroethene	BRL	780
trans-1,2-Dichloroethene	BRL	53.5
All Remaining VOCs	BRL	BRL

SampleIdentification	MW 29	MW 29D
DateCollected	02/05/2019	02/05/2019
Tetrachloroethene	BRL	13.4
Trichloroethene	34.5	149
cis-1,2-Dichloroethene	BRL	25.7
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-30	MW-31
DateCollected	02/08/2019	02/08/2019
Tetrachloroethene	171	BRL
Trichloroethene	173	BRL
cis-1,2-Dichloroethene	BRL	5.4
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-3	TMW-3D
DateCollected	02/06/2019	02/06/2019
Trichloroethene	30.4	383
cis-1,2-Dichloroethene	BRL	1060
trans-1,2-Dichloroethene	BRL	87.5
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-2	TMW-2D
DateCollected	02/06/2019	02/06/2019
Trichloroethene	94.1	15.9
cis-1,2-Dichloroethene	BRL	550
trans-1,2-Dichloroethene	BRL	43.4
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-1	TMW-1D
DateCollected	02/06/2019	02/06/2019
Trichloroethene	11.2	24.2
cis-1,2-Dichloroethene	BRL	510
trans-1,2-Dichloroethene	BRL	41.6
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-4	TMW-4D
DateCollected	02/07/2019	02/07/2019
Trichloroethene	BRL	9.1
cis-1,2-Dichloroethene	BRL	437
trans-1,2-Dichloroethene	BRL	14.5
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-5	TMW-5D
DateCollected	02/08/2019	02/08/2019
Trichloroethene	479	528
cis-1,2-Dichloroethene	BRL	1560
trans-1,2-Dichloroethene	BRL	139
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-7	TMW-7D
DateCollected	02/07/2019	02/07/2019
cis-1,2-Dichloroethene	BRL	780
trans-1,2-Dichloroethene	BRL	38.2
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-6	TMW-6D
DateCollected	02/08/2019	02/08/2019
Trichloroethene	14.7	BRL
cis-1,2-Dichloroethene	24.4	8.3
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-14	MW-14D
DateCollected	02/08/2019	02/08/2019
Trichloroethene	BRL	583
cis-1,2-Dichloroethene	BRL	26.4
All VOCs	BRL	BRL

SampleIdentification	MW-11	MW-11D
DateCollected	02/08/2019	02/08/2019
Tetrachloroethene	68.7	BRL
Trichloroethene	50.4	BRL
All Remaining VOCs	BRL	BRL

SampleIdentification	MW 12	MW 12D
DateCollected	02/05/2019	02/05/2019
Trichloroethene	38.8	BRL
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-22	MW-22D
DateCollected	02/08/2019	02/08/2019
Tetrachloroethene	8.1	9.1
Trichloroethene	71.5	42.6
cis-1,2-Dichloroethene	10.8	BRL
All Remaining VOCs	BRL	BRL

Notes

All results reported in micrograms per liter (ug/L)
NE = No Screening Level Established for Constituent
NA = Sample not Analyzed for Constituent
BRL - Below Laboratory Reporting Limit

	IDEM RCG Residential TWSL's	IDEM RCG Residential VESL's	IDEM RCG Industrial VESL's
Tetrachloroethene	5	110	470
Trichloroethene	5	9.1	38
cis-1,2-Dichloroethene	70	NE	NE
trans-1,2-Dichloroethene	100	NE	NE

Constituent detected above Laboratory Reporting Limit
Constituent detected above IDEM RCG Residential TWSL's
Constituent detected above IDEM RCG Residential VESL's
Constituent detected above IDEM RCG Industrial VESL's

Patriot Engineering & Environmental, Inc.

LEGEND
Parcel Line
Clawson Property Boundary
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GAS — Gas Line
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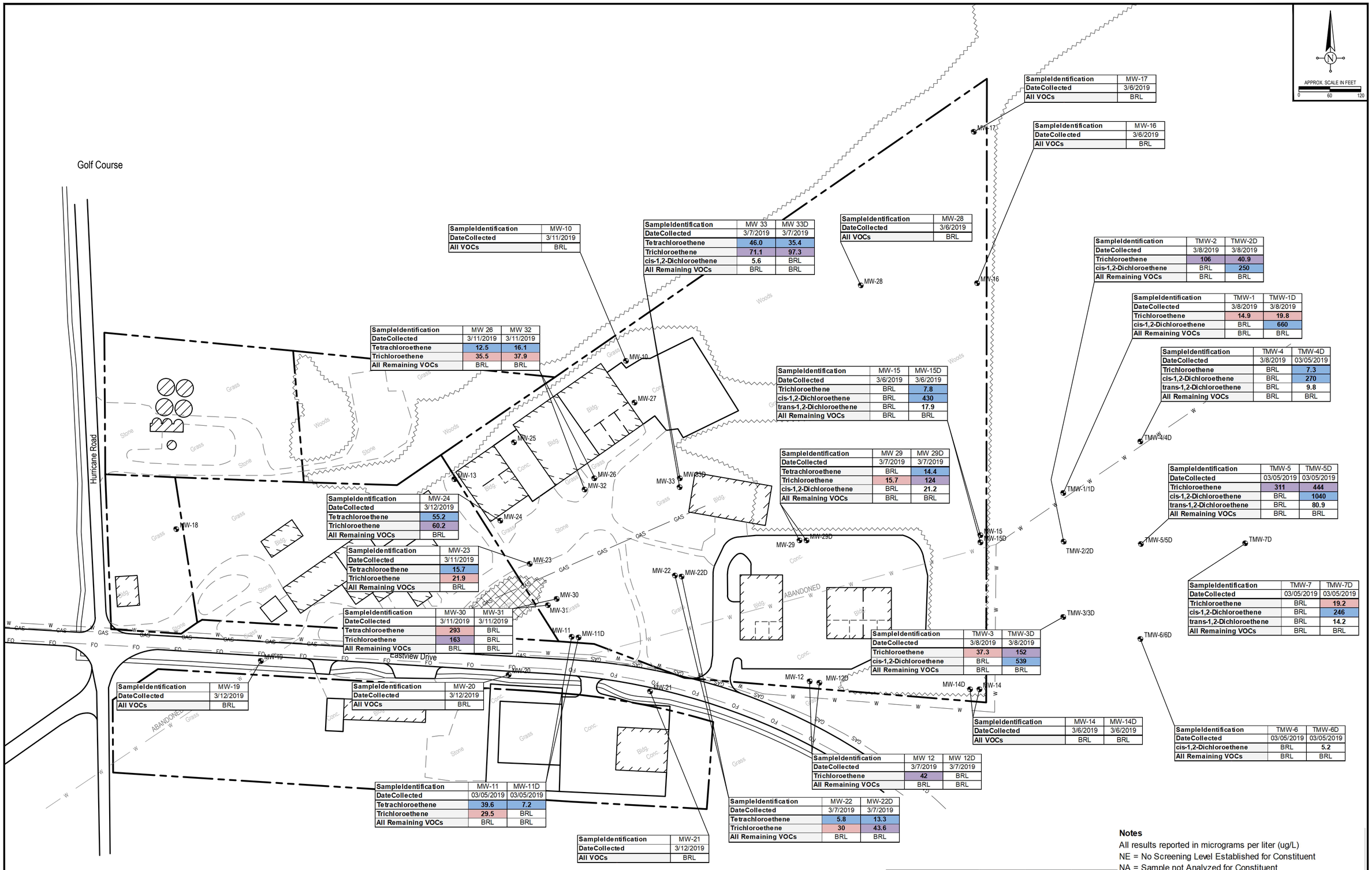
Patriot Monitoring Well Location
Wooded area with fill and debris

Project: Former Houghland Tomato Cannery FSI #3
1130 E. Eastview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

Drawn By: J. DuMond
Project Number: 19-0096-01E
Approved: J. Cody
Date: May 1, 2019
DWG: 19-0096-01_Ph2

Figure 9A
Groundwater Analytical Results Map
Sampling Event #1



SampleIdentification	MW-10
DateCollected	3/11/2019
All VOCs	BRL

SampleIdentification	MW 33	MW 33D
DateCollected	3/7/2019	3/7/2019
Tetrachloroethene	46.0	35.4
Trichloroethene	71.1	97.3
cis-1,2-Dichloroethene	5.6	BRL
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-28
DateCollected	3/6/2019
All VOCs	BRL

SampleIdentification	MW-17
DateCollected	3/6/2019
All VOCs	BRL

SampleIdentification	MW-16
DateCollected	3/6/2019
All VOCs	BRL

SampleIdentification	TMW-2	TMW-2D
DateCollected	3/8/2019	3/8/2019
Trichloroethene	106	40.9
cis-1,2-Dichloroethene	BRL	250
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-1	TMW-1D
DateCollected	3/8/2019	3/8/2019
Trichloroethene	14.9	19.8
cis-1,2-Dichloroethene	BRL	660
All Remaining VOCs	BRL	BRL

SampleIdentification	MW 26	MW 32
DateCollected	3/11/2019	3/11/2019
Tetrachloroethene	12.5	16.1
Trichloroethene	35.5	37.9
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-15	MW-15D
DateCollected	3/6/2019	3/6/2019
Trichloroethene	BRL	7.8
cis-1,2-Dichloroethene	BRL	430
trans-1,2-Dichloroethene	BRL	17.9
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-4	TMW-4D
DateCollected	3/8/2019	03/05/2019
Trichloroethene	BRL	7.3
cis-1,2-Dichloroethene	BRL	270
trans-1,2-Dichloroethene	BRL	9.8
All Remaining VOCs	BRL	BRL

SampleIdentification	MW 29	MW 29D
DateCollected	3/7/2019	3/7/2019
Tetrachloroethene	BRL	14.4
Trichloroethene	15.7	124
cis-1,2-Dichloroethene	BRL	21.2
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-5	TMW-5D
DateCollected	03/05/2019	03/05/2019
Trichloroethene	311	444
cis-1,2-Dichloroethene	BRL	1040
trans-1,2-Dichloroethene	BRL	80.9
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-24
DateCollected	3/12/2019
Tetrachloroethene	55.2
Trichloroethene	60.2
All Remaining VOCs	BRL

SampleIdentification	MW-23
DateCollected	3/11/2019
Tetrachloroethene	15.7
Trichloroethene	21.9
All Remaining VOCs	BRL

SampleIdentification	TMW-7	TMW-7D
DateCollected	03/05/2019	03/05/2019
Trichloroethene	BRL	19.2
cis-1,2-Dichloroethene	BRL	246
trans-1,2-Dichloroethene	BRL	14.2
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-30	MW-31
DateCollected	3/11/2019	3/11/2019
Tetrachloroethene	293	BRL
Trichloroethene	163	BRL
All Remaining VOCs	BRL	BRL

SampleIdentification	TMW-3	TMW-3D
DateCollected	3/8/2019	3/8/2019
Trichloroethene	37.3	152
cis-1,2-Dichloroethene	BRL	539
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-19
DateCollected	3/12/2019
All VOCs	BRL

SampleIdentification	MW-20
DateCollected	3/12/2019
All VOCs	BRL

SampleIdentification	MW-14	MW-14D
DateCollected	3/6/2019	3/6/2019
All VOCs	BRL	BRL

SampleIdentification	TMW-6	TMW-6D
DateCollected	03/05/2019	03/05/2019
cis-1,2-Dichloroethene	BRL	5.2
All Remaining VOCs	BRL	BRL

SampleIdentification	MW 12	MW 12D
DateCollected	3/7/2019	3/7/2019
Trichloroethene	42	BRL
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-11	MW-11D
DateCollected	03/05/2019	03/05/2019
Tetrachloroethene	39.6	7.2
Trichloroethene	29.5	BRL
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-22	MW-22D
DateCollected	3/7/2019	3/7/2019
Tetrachloroethene	5.8	13.3
Trichloroethene	30	43.6
All Remaining VOCs	BRL	BRL

SampleIdentification	MW-21
DateCollected	3/12/2019
All VOCs	BRL

Notes

All results reported in micrograms per liter (ug/L)
NE = No Screening Level Established for Constituent
NA = Sample not Analyzed for Constituent
BRL - Below Laboratory Reporting Limit

	IDEM RCG Residential TWSL's	IDEM RCG Residential VESL's	IDEM RCG Industrial VESL's
Tetrachloroethene	5	110	470
Trichloroethene	5	9.1	38
cis-1,2-Dichloroethene	70	NE	NE
trans-1,2-Dichloroethene	100	NE	NE

Constituent detected above Laboratory Reporting Limit
Constituent detected above IDEM RCG Residential TWSL's
Constituent detected above IDEM RCG Residential VESL's
Constituent detected above IDEM RCG Industrial VESL's

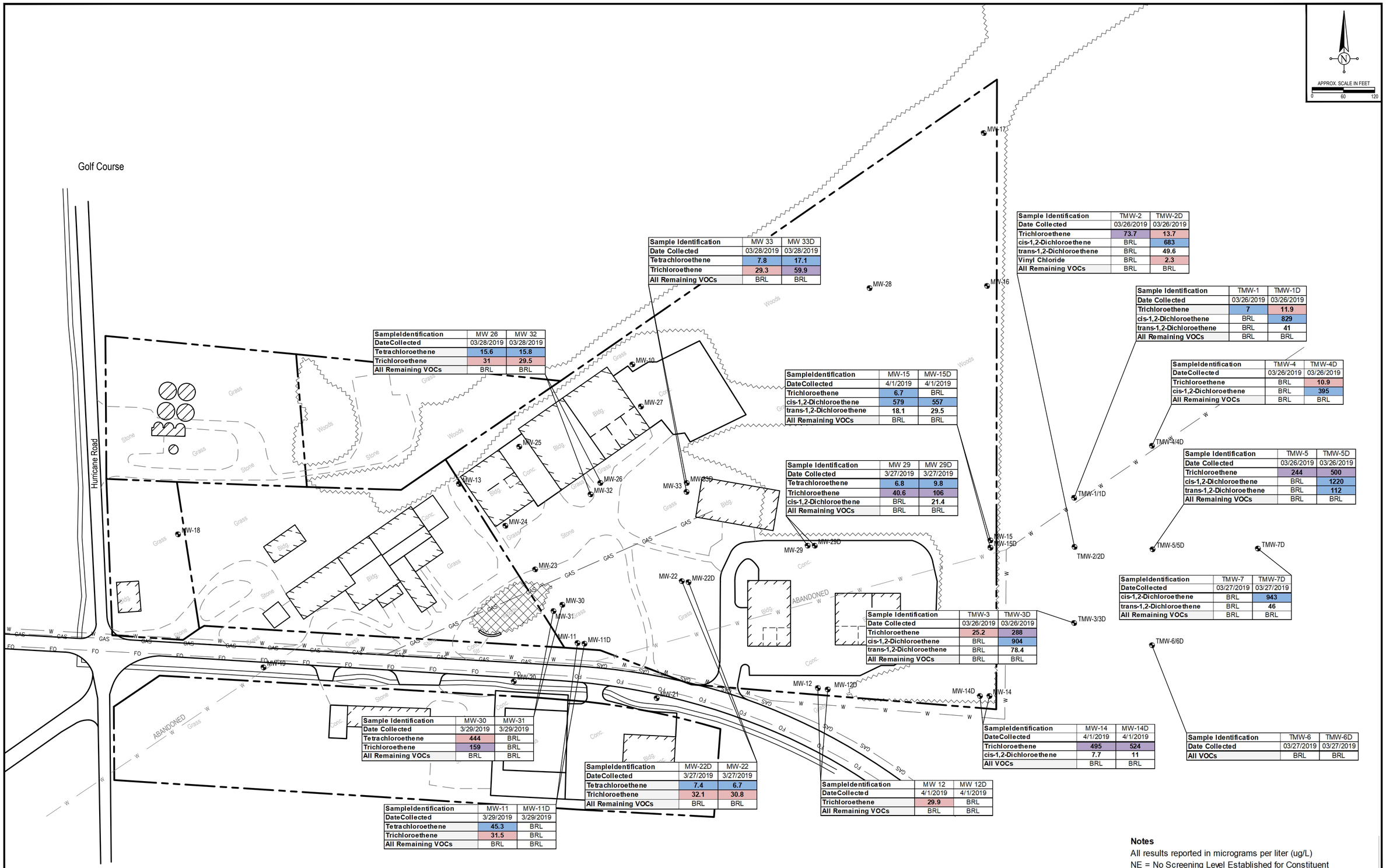
Patriot Engineering & Environmental, Inc.

LEGEND
Parcel Line
Clawson Property Boundary
W — Water Line
GAS — Gas Line
FO — Fiber Optic Line
Patriot Monitoring Well Location
Wooded area with fill and debris

Project: Former Houghland Tomato Cannery FSI #3
1130 E. Eastview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

Drawn By: J. DuMond
Project Number: 19-0096-01E
Approved: J. Cody
Date: May 1, 2019
DWG: 19-0096-01_Ph2

Figure 9B
Groundwater Analytical Results Map
Sampling Event #2



Sample Identification	MW 33	MW 33D
Date Collected	03/28/2019	03/28/2019
Tetrachloroethene	7.8	17.1
Trichloroethene	29.3	59.9
All Remaining VOCs	BRL	BRL

Sample Identification	TMW-2	TMW-2D
Date Collected	03/26/2019	03/26/2019
Trichloroethene	73.7	13.7
cis-1,2-Dichloroethene	BRL	683
trans-1,2-Dichloroethene	BRL	49.6
Vinyl Chloride	BRL	2.3
All Remaining VOCs	BRL	BRL

Sample Identification	TMW-1	TMW-1D
Date Collected	03/26/2019	03/26/2019
Trichloroethene	7	11.9
cis-1,2-Dichloroethene	BRL	829
trans-1,2-Dichloroethene	BRL	41
All Remaining VOCs	BRL	BRL

Sample Identification	MW 26	MW 32
Date Collected	03/28/2019	03/28/2019
Tetrachloroethene	15.6	15.8
Trichloroethene	31	29.5
All Remaining VOCs	BRL	BRL

Sample Identification	MW-15	MW-15D
Date Collected	4/1/2019	4/1/2019
Trichloroethene	6.7	BRL
cis-1,2-Dichloroethene	579	557
trans-1,2-Dichloroethene	18.1	29.5
All Remaining VOCs	BRL	BRL

Sample Identification	TMW-4	TMW-4D
Date Collected	03/26/2019	03/26/2019
Trichloroethene	BRL	10.9
cis-1,2-Dichloroethene	BRL	395
All Remaining VOCs	BRL	BRL

Sample Identification	MW 29	MW 29D
Date Collected	3/27/2019	3/27/2019
Tetrachloroethene	6.8	9.8
Trichloroethene	40.6	106
cis-1,2-Dichloroethene	BRL	21.4
All Remaining VOCs	BRL	BRL

Sample Identification	TMW-5	TMW-5D
Date Collected	03/26/2019	03/26/2019
Trichloroethene	244	500
cis-1,2-Dichloroethene	BRL	1220
trans-1,2-Dichloroethene	BRL	112
All Remaining VOCs	BRL	BRL

Sample Identification	TMW-3	TMW-3D
Date Collected	03/26/2019	03/26/2019
Trichloroethene	25.2	288
cis-1,2-Dichloroethene	BRL	904
trans-1,2-Dichloroethene	BRL	78.4
All Remaining VOCs	BRL	BRL

Sample Identification	TMW-7	TMW-7D
Date Collected	03/27/2019	03/27/2019
cis-1,2-Dichloroethene	BRL	943
trans-1,2-Dichloroethene	BRL	46
All Remaining VOCs	BRL	BRL

Sample Identification	MW-30	MW-31
Date Collected	3/29/2019	3/29/2019
Tetrachloroethene	444	BRL
Trichloroethene	159	BRL
All Remaining VOCs	BRL	BRL

Sample Identification	MW-14	MW-14D
Date Collected	4/1/2019	4/1/2019
Trichloroethene	495	524
cis-1,2-Dichloroethene	7.7	11
All VOCs	BRL	BRL

Sample Identification	TMW-6	TMW-6D
Date Collected	03/27/2019	03/27/2019
All VOCs	BRL	BRL

Sample Identification	MW-22D	MW-22
Date Collected	3/27/2019	3/27/2019
Tetrachloroethene	7.4	6.7
Trichloroethene	32.1	30.8
All Remaining VOCs	BRL	BRL

Sample Identification	MW 12	MW 12D
Date Collected	4/1/2019	4/1/2019
Trichloroethene	29.9	BRL
All Remaining VOCs	BRL	BRL

Sample Identification	MW-11	MW-11D
Date Collected	3/29/2019	3/29/2019
Tetrachloroethene	45.3	BRL
Trichloroethene	31.5	BRL
All Remaining VOCs	BRL	BRL

Notes

All results reported in micrograms per liter (ug/L)
NE = No Screening Level Established for Constituent
NA = Sample not Analyzed for Constituent
BRL - Below Laboratory Reporting Limit

	IDEM RCG Residential TWSL's	IDEM RCG Residential VESL's	IDEM RCG Industrial VESL's
Tetrachloroethene	5	110	470
Trichloroethene	5	9.1	38
cis-1,2-Dichloroethene	70	NE	NE
trans-1,2-Dichloroethene	100	NE	NE

Constituent detected above Laboratory Reporting Limit
Constituent detected above IDEM RCG Residential TWSL's
Constituent detected above IDEM RCG Residential VESL's
Constituent detected above IDEM RCG Industrial VESL's

Patriot Engineering & Environmental, Inc.

LEGEND
Parcel Line
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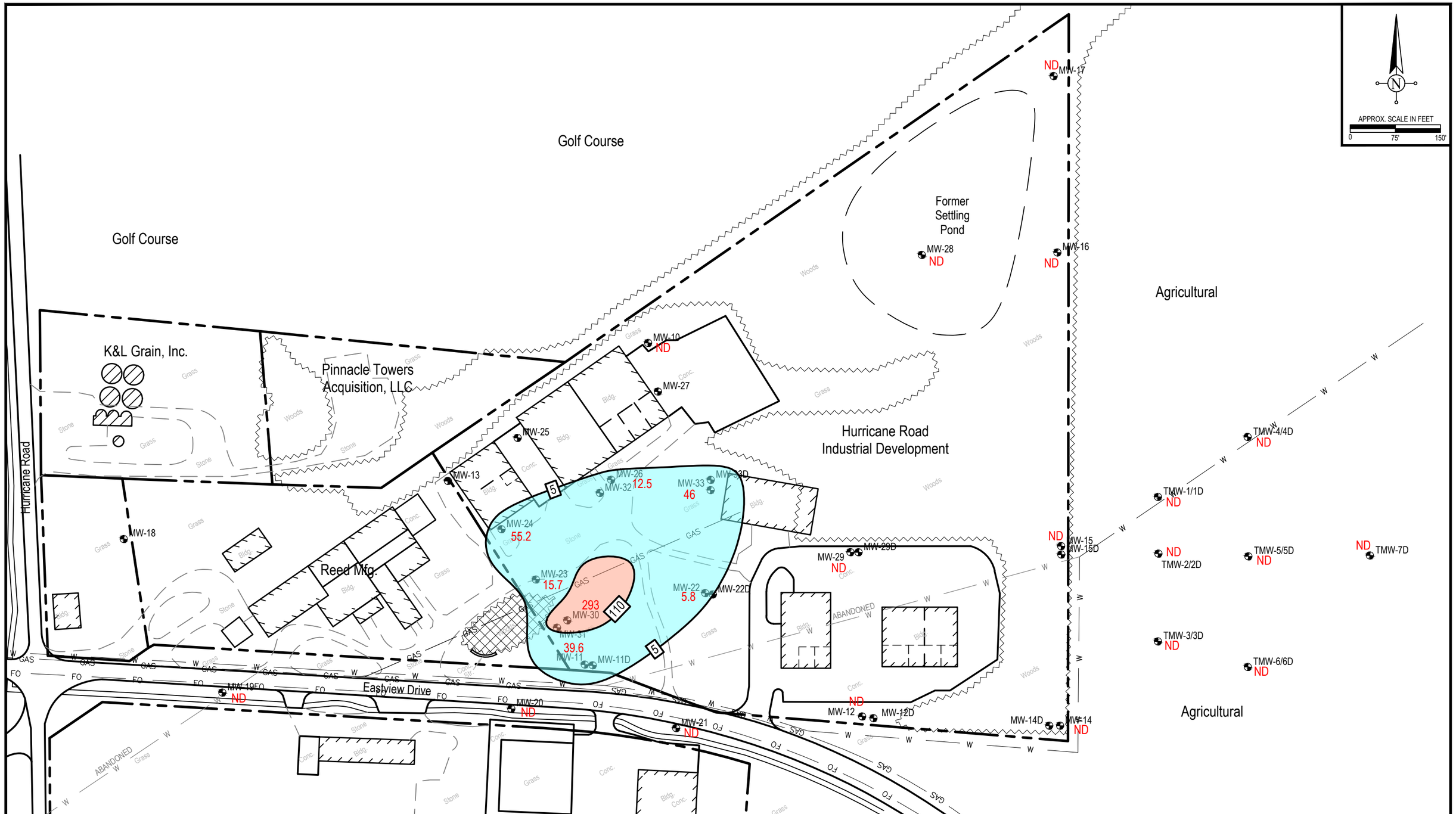
Patriot Monitoring Well Location
Wooded area with fill and debris

Project: Former Houghland Tomato Cannery FSI #3
1130 E. Eastview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

Drawn By: J. DuMond
Project Number: 19-0096-01E
Approved: J. Cody
Date: May 1, 2019
DWG: 19-0096-01_Ph2

Figure 9C
Groundwater Analytical Results Map
Sampling Event #3



Patriot Engineering & Environmental, Inc.

LEGEND

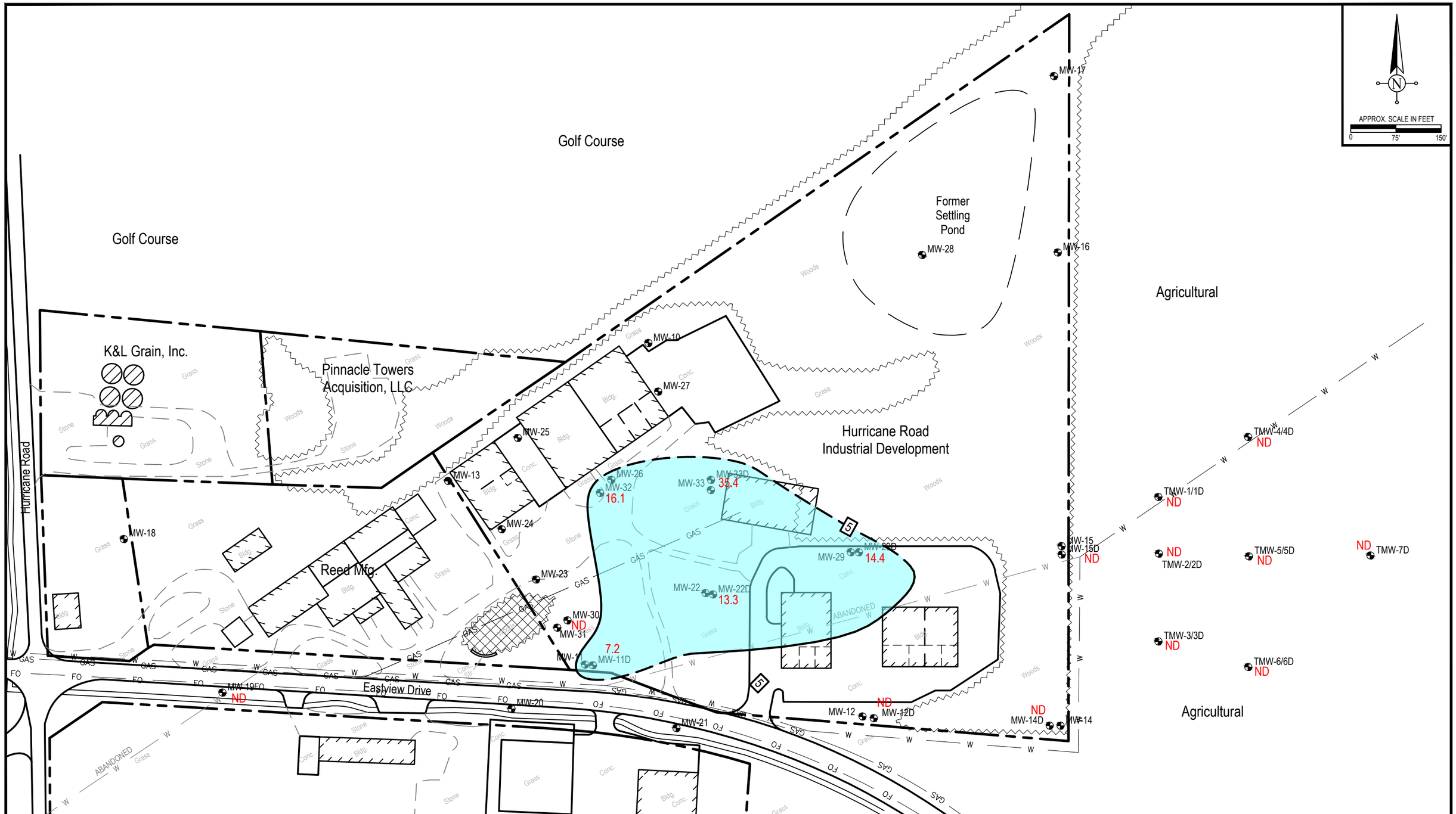
- Parcel Line
- Clawson Property Boundary
- W — Water Line
- GAS — Gas Line
- FO — Fiber Optic Line
- Patriot Monitoring Well Location
- Wooded area with fill and debris
- Inferred Isoconcentration Line
- 423 — PCE Concentration (µg/L)
- Area where contaminant exceeds IDEM RCG Residential TWSL for PCE (5 µg/L)
- Area where contaminant exceeds IDEM RCG Residential VESL for PCE (110 µg/L)
- Area where contaminant exceeds IDEM RCG Industrial VESL for PCE (470 µg/L)

Project: Former Houghland Tomato Cannery FSI #3
1130 E. Eastview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

	Drawn By: J. DuMond
Project Number: 19-0096-01E	Approved: J. Cody
Date: May 8, 2019	DWG: 19-0096-01_Ph2

Figure 10

PCE Plume Map
Shallow
March 4-12, 2019



Patriot Engineering & Environmental, Inc.

LEGEND

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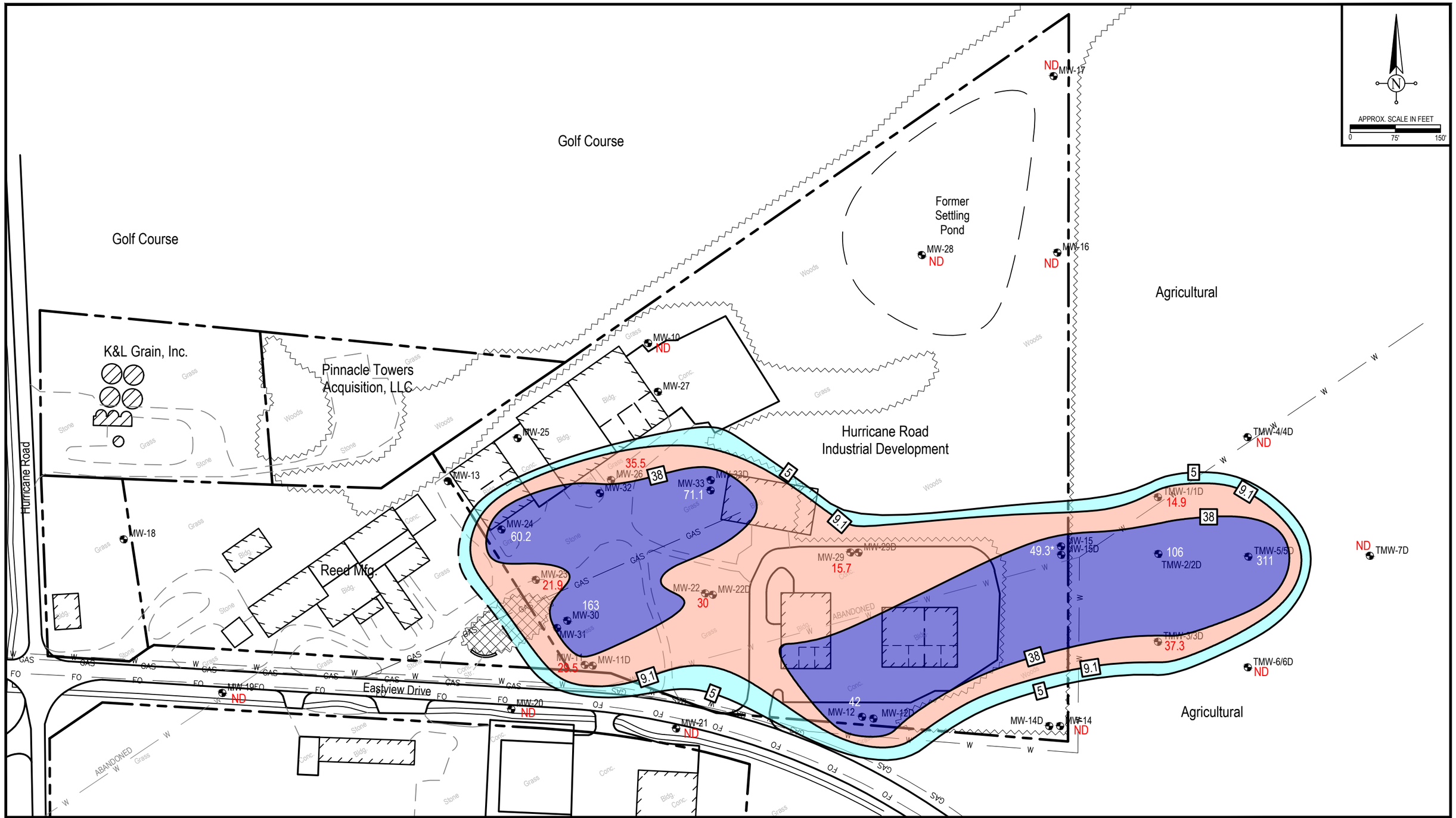
- Area where contaminant exceeds IDEM RCG Residential TWSL for PCE (5 µg/L)
- Area where contaminant exceeds IDEM RCG Residential VESL for PCE (110 µg/L)
- Area where contaminant exceeds IDEM RCG Industrial VESL for PCE (470 µg/L)

Project: Former Houghland Tomato Cannery FSI #3
1130 E. Eastview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

	Drawn By: J. DuMond
Project Number: 19-0096-01E	Approved: J. Cody
Date: September 17, 2019	DWG: 19-0096-01_Ph2

Figure 11

PCE Plume Map
Deep
March 4-12, 2019



Patriot Engineering & Environmental, Inc.

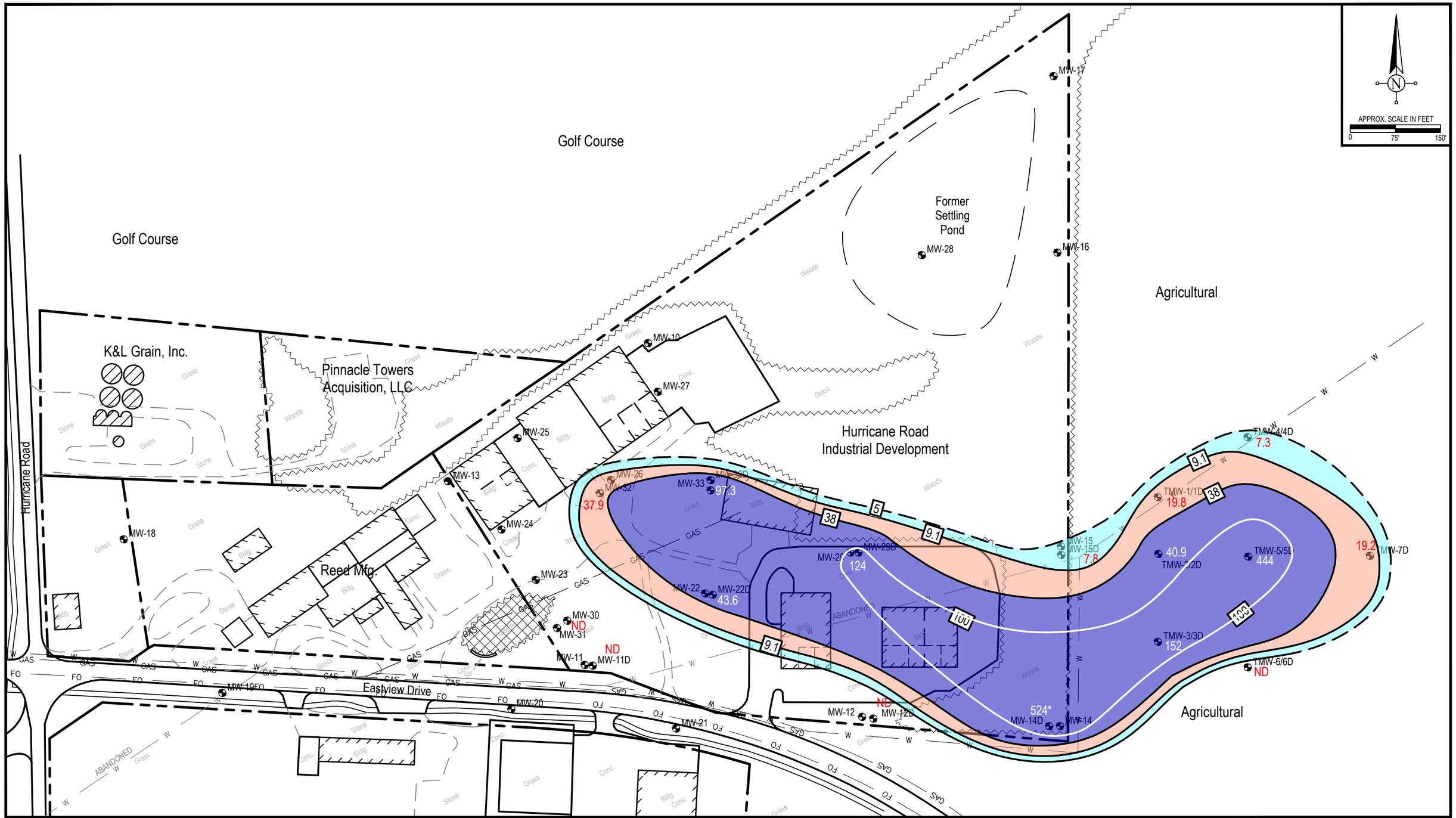
LEGEND

- Parcel Line
- Clawson Property Boundary
- W — Water Line
- GAS — Gas Line
- FO — Fiber Optic Line
- Patriot Monitoring Well Location
- Wooded area with fill and debris
- 49.3* — Inferred Isoconcentration Line, Data from February 2019
- 423 — PCE Concentration (µg/L)
- Area where contaminant exceeds IDEM RCG Residential TWSL for TCE (5 µg/L)
- Area where contaminant exceeds IDEM RCG Residential VESL for TCE (9.1 µg/L)
- Area where contaminant exceeds IDEM RCG Industrial VESL for TCE (38 µg/L)

Project: Former Houghland Tomato Cannery FSI #3 1130 E. Eastview Drive Franklin, Indiana IDEM Identification No. 2013-42015	
	Drawn By: J. DuMond
Project Number: 19-0096-01E	Approved: J. Cody
Date: May 8, 2019	DWG: 19-0096-01_Ph2

Figure 12

TCE Plume Map
Shallow
March 4-12, 2019



Patriot Engineering & Environmental, Inc.

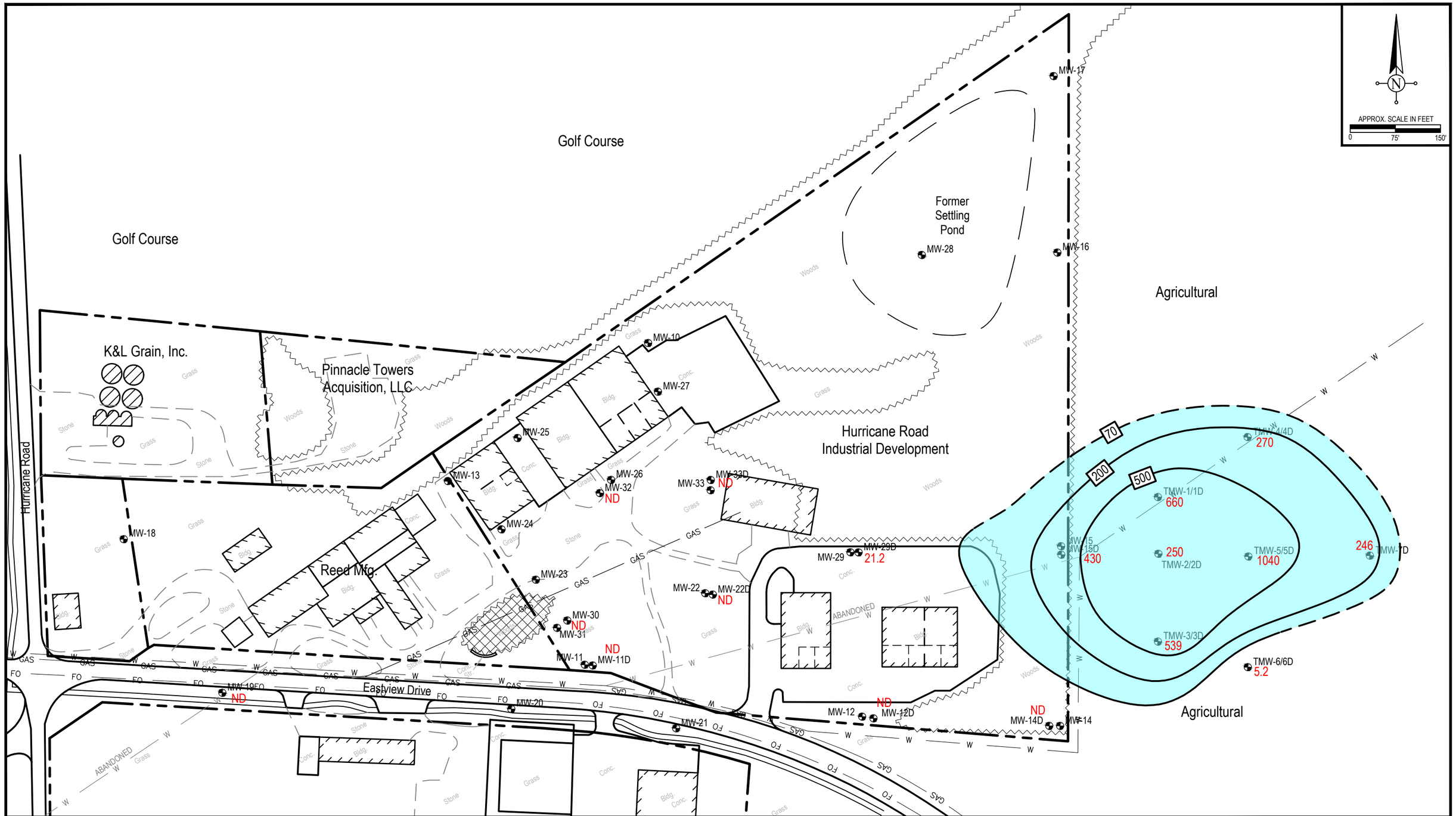
LEGEND

- Parcel Line
- Clawson Property Boundary
- W — Water Line
- GAS — Gas Line
- FO — Fiber Optic Line
- Patriot Monitoring Well Location
- Wooded area with fill and debris
- 524* — Inferred Isoconcentration Line; Data from April 2019
- 423 — PCE Concentration (µg/L)
- Area where contaminant exceeds IDEM RCG Residential TWSL for TCE (5 µg/L)
- Area where contaminant exceeds IDEM RCG Residential VESL for TCE (9.1 µg/L)
- Area where contaminant exceeds IDEM RCG Industrial VESL for TCE (38 µg/L)

Project: Former Houghland Tomato Cannery FSI #3 1130 E. Eastview Drive Franklin, Indiana IDEM Identification No. 2013-42015	
	Drawn By: J. DuMond
Project Number: 19-0096-01E	Approved: J. Cody
Date: September 17, 2019	DWG: 19-0096-01_Ph2

Figure 13

TCE Plume Map
Deep
March 4-12, 2019



Patriot Engineering & Environmental, Inc.

LEGEND

- Parcel Line
- Clawson Property Boundary
- W — Water Line
- GAS — Gas Line
- FO — Fiber Optic Line
- Patriot Monitoring Well Location
- Wooded area with fill and debris
- Inferred Isoconcentration Line
- 423 PCE Concentration (µg/L)
- Area where contaminant exceeds IDEM RCG Residential TWSL for cis-1,2 DCE (70 µg/L)
- Area where contaminant exceeds IDEM RCG Residential VESL for cis-1,2 DCE (NE µg/L)
- Area where contaminant exceeds IDEM RCG Industrial VESL for cis-1,2 DCE (NE µg/L)

Project: Former Houghland Tomato Cannery FSI #3
1130 E. Eastview Drive
Franklin, Indiana
IDEM Identification No. 2013-42015

	Drawn By: J. DuMond
Project Number: 19-0096-01E	Approved: J. Cody
Date: May 8, 2019	DWG: 19-0096-01_Ph2

Figure 14

cis-1,2 DCE Plume Map
Deep
March 4-12, 2019

APPENDIX B

SOIL BORING LOGS AND MONITORING WELL CONSTRUCTION DIAGRAMS

PATRIOT ENGINEERING and Environmental Inc.

Indianapolis, Terre Haute, Evansville, Fort Wayne, Lafayette, Bloomington
Louisville, KY Dayton, Cincinnati, OH Nashville, TN

LOG OF BORING SB-12D/MW-12D

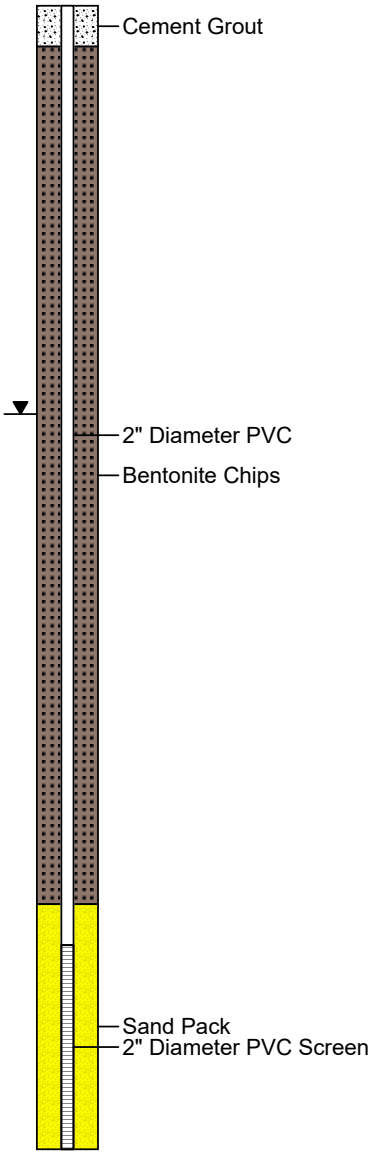
Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-24-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, slightly moist, stiff, fine grained, SILT	75%	0.4	
	SW		Brown, slightly moist, fine to coarse grained, SAND, with some silt		0.3	
	CL		Brown, slightly moist, stiff, CLAY			
5	ML		Brown, moist, soft,SILT, w/some fine sand	70%	0.6	
	SW		Brown, moist, fine grained, SAND, w/trace silt		0.6	Sample SB-12D (8-10') collected DUP taken
10	ML		Brown, saturated, stiff, SILT, with some fine sand	90%	0.5	
	SW		Brown, saturated, medium dense, SAND, with trace coarse gravel		0.7	
15	SW		Brown, saturated, medium dense, SAND, w/trace coarse gravel	80%	0.5	
					1.0	
20	ML		Brown, moist, stiff, fine grained, SILT, with sand	60%	0.5	
	SW		Brown, moist, medium dense, fine grained, SAND		0.7	
25				60%	0.5	
	CL		Gray, stiff, non plastic, CLAY		0.5	Sample SB-12D (29-30') collected MS/MSD taken
30						

Boring terminated at 30 ft bgs
Note: TPV = Total Photoionizable Vapors in parts per million (PPM)

Well: MW-12D
Elev.:



PATRIOT ENGINEERING and Environmental Inc.

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Louisville, KY Dayton, Cincinnati, OH Nashville, TN

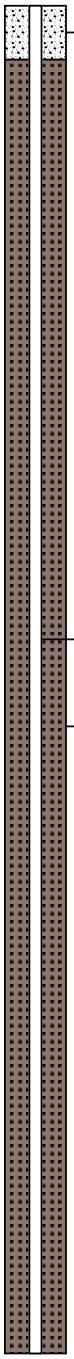
LOG OF BORING SB-14D/MW-14D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, soft,low plasticity, SILT	60%	0.8 1.1 1.1	
5	ML		Brown and gray, slightly moist, stiff, low plasticity, CLAYEY SILT	90%	1.3	
	GW		Gray, slightly moist, loose, SANDY COARSE GRAVEL		0.7	
10	ML		Brown, moist, soft,low plasticity, SILT	70%	1.0 1.3 1.2	Sample SB-14D (10-12') collected
15	SW		Brown, saturated, fine to coarse grained, SAND, w/little silt	50%	1.1 1.6	
20	SW		Brown, very moist, medium dense, fine to coarse grained, SAND	50%	1.6 2.7	
25						

Well: MW-14D
Elev.:



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LOG OF BORING SB-14D/MW-14D

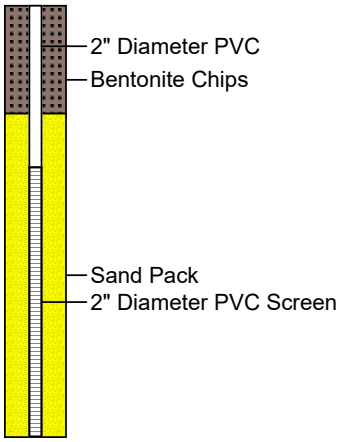
Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
25	SW		Brown, very moist, medium dense, fine to coarse grained, SAND	40%	3.3 1.8	
	SW		Brown, very moist, medium dense, fine to coarse grained, SAND, w/little coarse gravel		7.1	
30	SW		Brown, very moist, medium dense, fine grained, SAND	30%	2.6	
	CL		Gray, stiff, non plastic, CLAY		1.0	Sample SB-14D (32-33.5') collected
35						
40						
45						
50						

Boring terminated at 33.5 ft bgs
Note: TPV = Total Photoionizable Vapors in parts per million (PPM)

Well: MW-14D
Elev.:



PATRIOT ENGINEERING and Environmental Inc.

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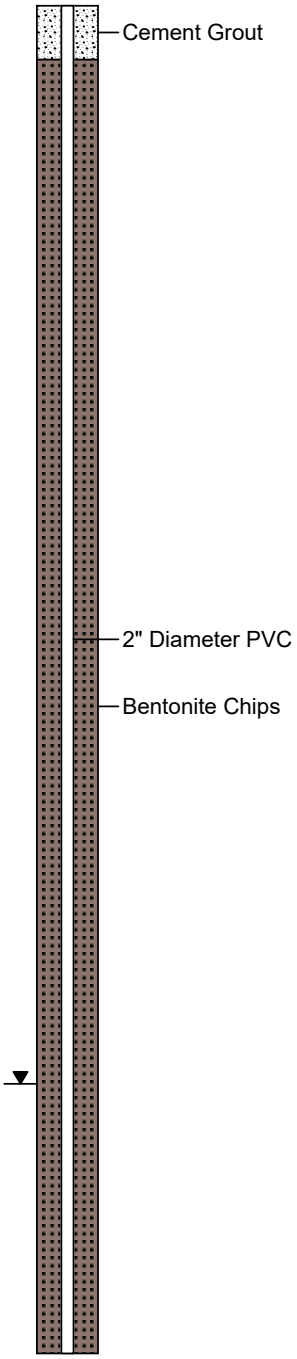
LOG OF BORING SB-33D/MW-33D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	GW		Coarse GRAVEL			
	ML		Brown, moist, stiff, low plasticity, SILT	80%	0.3 1.2	
5	ML		Brown, moist, soft,low plasticity, SILT	60%	1.5 1.2	
10	SW		Brown and gray, moist, loose, fine grained, SAND, w/trace gravel	60%	1.2 2.1	
15				30%	2.5	Sample SB-33D (16-18') collected
20	SW		Brown and gray, moist, loose, fine grained, SAND, w/substantial gravel	60%	4.0	
25						

Well: MW-33D
Elev.:



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Indianapolis, Terre Haute, Evansville, Fort Wayne, Lafayette, Bloomington
Louisville, KY Dayton, Cincinnati, OH Nashville, TN

LOG OF BORING SB-33D/MW-33D

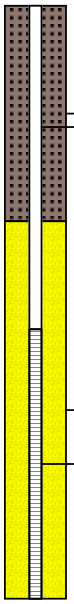
Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
25						
	SW		Brown and gray, moist, loose, fine grained, SAND, w/trace gravel	60%		
30				50%		
35	CL		Gray, moist, stiff, non plastic, CLAY	80%		Sample SB-33D (37-38') collected
40						
45						
50						

Boring terminated at 38 ft bgs
Note: TPV = Total Photoionizable Vapors in parts per million (PPM)

Well: MW-33D
Elev.:



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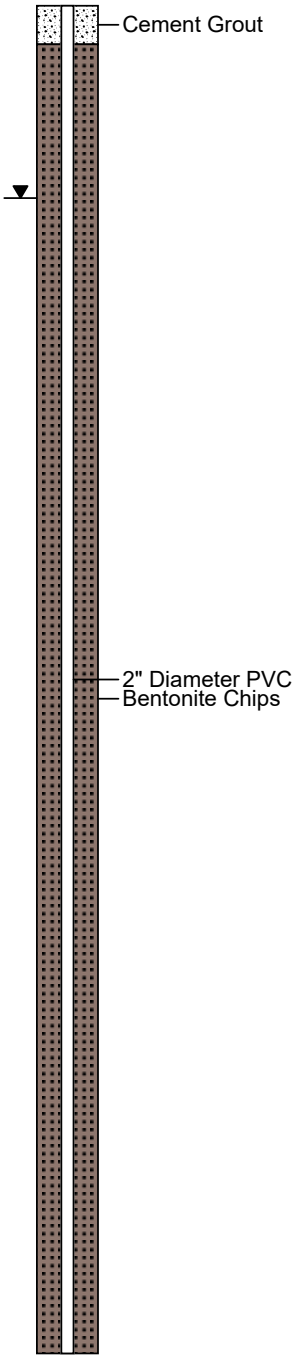
LOG OF BORING SB-150AD/TMW-1D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Well: TMW-1D
Elev.:

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, SILT, w/trace coarse gravel	100%	0.3	Sample SB-150AD (3-5') collected
5	SW		Brown, saturated, loose, fine grained, SAND	100%	0.3	
					0.3	
					0.3	
10				50%	0.0	
					0.0	
15				40%	0.0	
					0.0	
20				35%	0.0	
					0.0	
25				40%	0.0	
					0.0	
30	SW		Brown, saturated, loose, fine grained, SAND	30%	0.0	
					0.0	
35						



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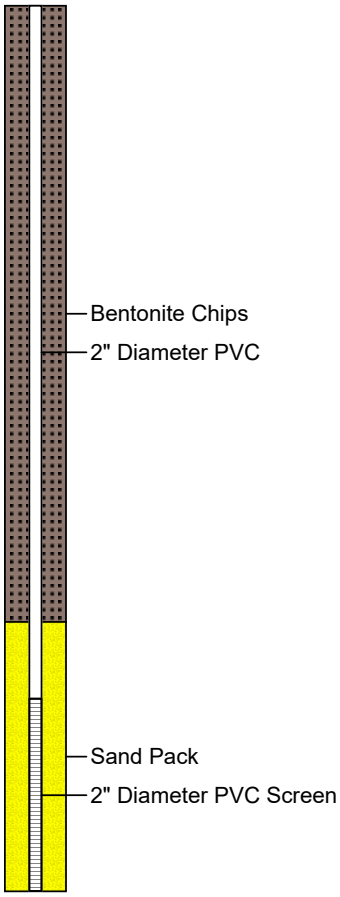
LOG OF BORING SB-150AD/TMW-1D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Well: TMW-1D
Elev.:

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
35	SW		Brown, saturated, loose, fine grained, SAND	30%	0.0	
40				30%	0.0	
					0.0	
45				50%	0.0	
					0.0	
50				50%	0.0	
					0.0	
55				60%	0.0	
	CL		Gray, stiff, non plastic, CLAY		0.0	Sample SB-150AD (59-60') collected
60			Boring terminated at 60 ft bgs Note: TPV = Total Photoionizable Vapors in parts per million (PPM)			
65						
70						



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Indianapolis, Terre Haute, Evansville, Fort Wayne, Lafayette, Bloomington
Louisville, KY Dayton, Cincinnati, OH Nashville, TN

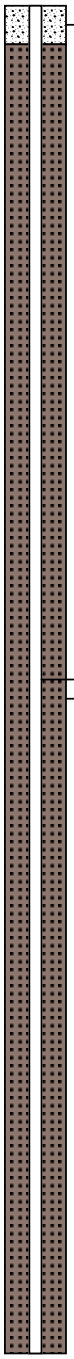
LOG OF BORING SB-150B/TMW-3D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Well: TMW-3D
Elev.:

Depth in Feet	USCS	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML	Brown, moist, medium stiff, low plasticity, SILT	70%	0.0	
	CL	Brown and gray, slightly moist, stiff, SILTY CLAY		0.0	
5	ML	Brown, moist, soft,low plasticity, SILT		0.0	Sample SB-150B (5-7') collected
	SW	Brown, saturated, loose, fine to medium grained, SAND	90%	0.0	
10	ML	Brown, saturated, soft,low plasticity, fine grained, SILT, with sand		0.0	
	SW	Brown, saturated, loose, fine to medium grained, SAND	70%		
15	SM	Brown, saturated, low plasticity, fine grained, SAND, with silt		0.0	
	SW	Brown, saturated, loose, fine to medium grained, SAND	40%	0.0	
20				0.0	
			50%	0.3	
				0.3	
25			40%	2.3	
				3.4	
30			50%	9.6	
				12.1	
35					



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LOG OF BORING SB-150B/TMW-3D

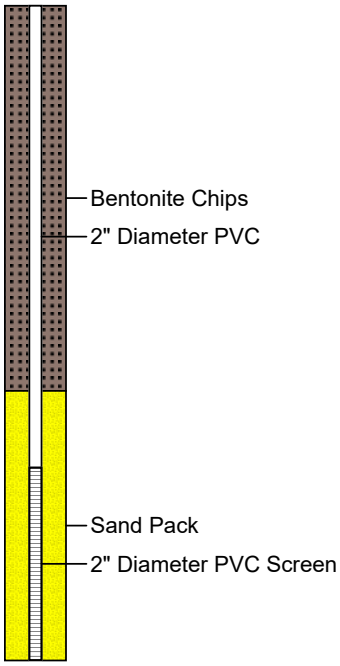
Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
35	SW		Brown, saturated, loose, fine to medium grained, SAND	50%	3.8 17.4	
40	SW		Gray, saturated, fine to coarse grained, SAND	45%	6.3 6.6	
45				46%	0.0	
50	CL		Gray, slightly moist, stiff, CLAY		0.2	Sample SB-150B (51-52') collected
55						
60						
65						
70						

Boring terminated at 52 ft bgs
Note: TPV = Total Photoionizable Vapors in parts per million (PPM)

Well: TMW-3D
Elev.:



PATRIOT ENGINEERING and Environmental Inc.

Indianapolis, Terre Haute, Evansville, Fort Wayne, Lafayette, Bloomington
Louisville, KY Dayton, Cincinnati, OH Nashville, TN

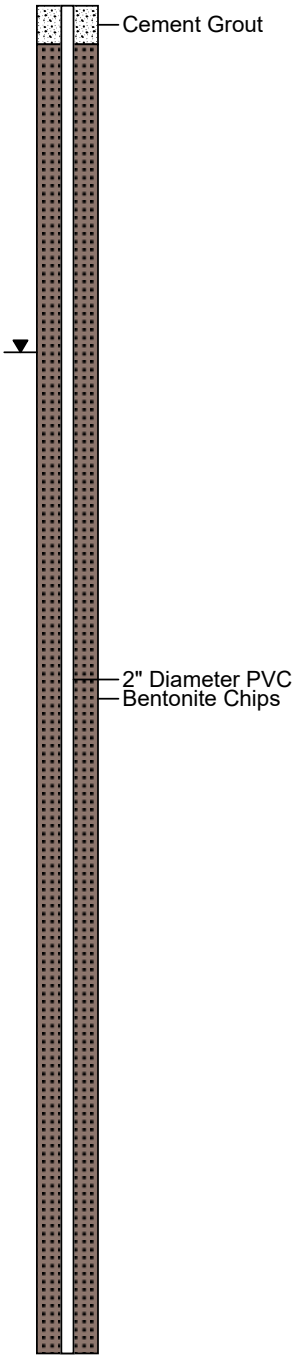
LOG OF BORING SB-150D/TMW-2D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, low plasticity, SILT	100%	0.4	
					0.4	Sample SB-150D (4-6') collected
5	SW		Brown, wet, loose, fine to medium grained, SAND	100%	0.2	
	ML		Gray, moist, stiff, non plastic, SILT			
	SW		Brown, saturated, loose, fine grained, SAND		0.3	
10	ML		Brown, moist, non plastic, SILT	100%	0.3	
	SW		Brown, saturated, loose, fine to medium grained, SAND		0.9	
15				100%	0.6	
					0.6	
20				100%	1.4	
					0.4	
25				100%	7.4	
					3.5	
30				40%	3.9	
35					12.8	

Well: TMW-2D
Elev.:



PATRIOT ENGINEERING and Environmental Inc.

Indianapolis, Terre Haute, Evansville, Fort Wayne, Lafayette, Bloomington
Louisville, KY Dayton, Cincinnati, OH Nashville, TN

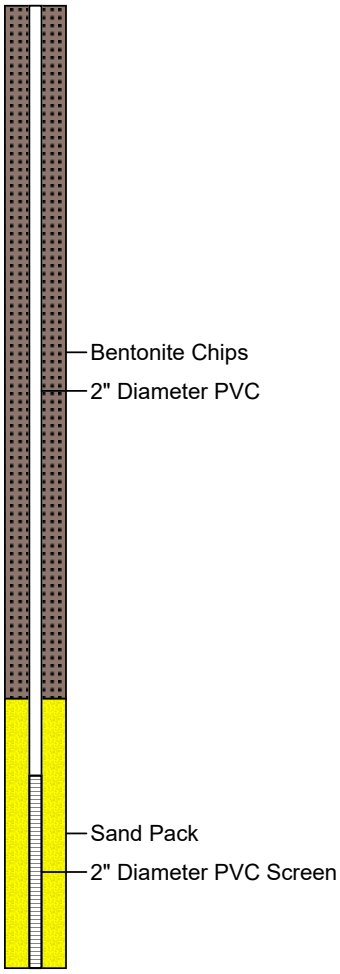
LOG OF BORING SB-150D/TMW-2D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
35	SW		Brown, saturated, loose, fine to medium grained, SAND	50%	11.1	
					4.7	
40				80%	0.7	
					3.3	
45				60%	8.4	
					2.7	
50				60%	2.5	
					2.2	
55				70%	1.0	
	CL		Gray, stiff, non plastic, CLAY		0.3	Sample SB-150D (59-60') collected
60			Boring terminated at 60 ft bgs Note: TPV = Total Photoionizable Vapors in parts per million (PPM)			
65						
70						

Well: TMW-2D
Elev.:



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Indianapolis, Terre Haute, Evansville, Fort Wayne, Lafayette, Bloomington
Louisville, KY Dayton, Cincinnati, OH Nashville, TN

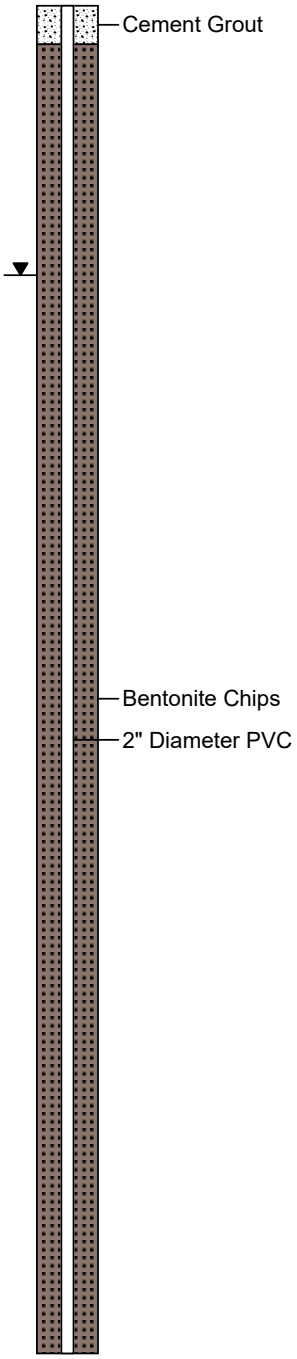
LOG OF BORING SB-300AD/TMW-4D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, low plasticity, SILT	80%	0.0	
					0.0	Sample SB-300AD (3-5') collected
5				40%	0.0	
	SW		Brown, saturated, loose, fine grained, SAND		0.0	
10				50%	0.0	
					0.0	
15				50%	0.0	
					0.0	
20				40%	0.0	
					0.0	
25				35%	0.0	
					0.0	
30				40%	0.0	
					0.0	
35						

Well: TMW-4D
Elev.:



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LOG OF BORING SB-300AD/TMW-4D

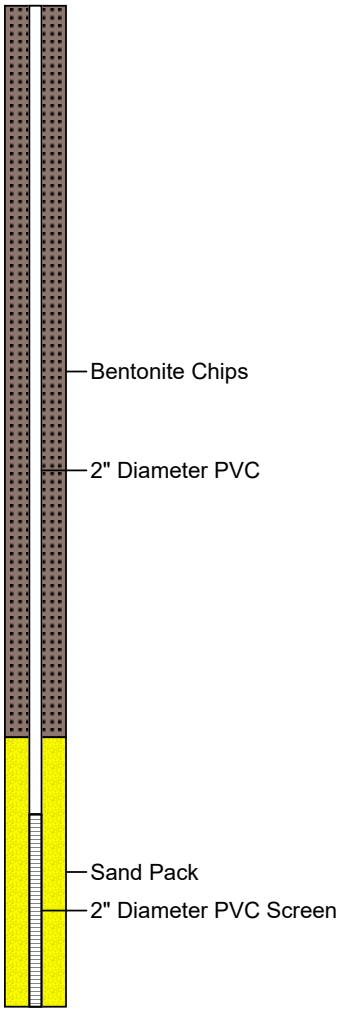
Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Well: TMW-4D
Elev.:

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
35	SW		Brown, saturated, loose, fine grained, SAND	40%	0.0	
					0.0	
40				30%	0.0	
					0.0	
45				40%	0.0	
					0.0	
50				40%	0.0	
					0.0	
55				30%	0.0	
					0.0	
60	CL		Gray, moist, stiff, non plastic, CLAY		0.0	Sample SB-300AD (62-63') collected
65						
70						

Boring terminated at 63 ft bgs
Note: TPV = Total Photoionizable Vapors in parts per million (PPM)



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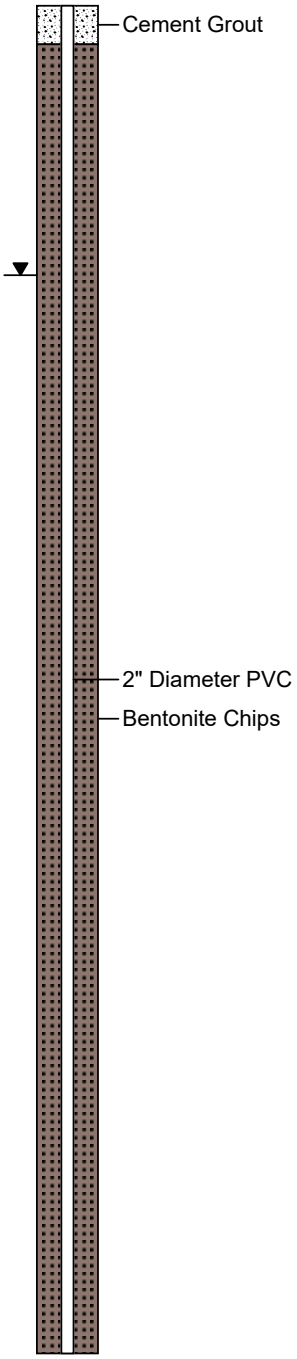
LOG OF BORING SB-300BD/TMW-6D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, low plasticity, SILT	90%	0.0	
					0.0	
5				40%	0.0	
	SW		Brown, saturated, loose, fine grained, SAND		0.0	
10				40%	0.0	
					0.3	
15				30%	0.0	
					0.0	
20				35%	0.2	
					0.2	
25				40%	0.3	
					0.2	
30				40%	0.7	
					0.5	
35						

Well: TMW-6D
Elev.:



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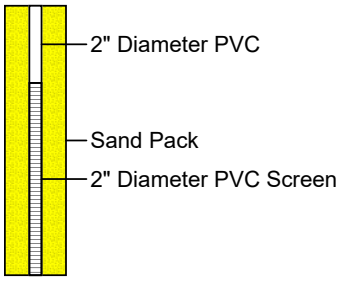
LOG OF BORING SB-300BD/TMW-6D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
35	SW		Brown, saturated, loose, fine grained, SAND	40%	0.0 0.1	
40	CL		Brown, moist, stiff, non plastic, CLAY		0.0	Sample SB-300BD (42-43') collected
45			Boring terminated at 43 ft bgs Note: TPV = Total Photoionizable Vapors in parts per million (PPM)			
50						
55						
60						
65						
70						

Well: TMW-6D
Elev.:



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LOG OF BORING SB-300D/TMW-5D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, low plasticity, SILT	60%	0.0	
					0.0	Sample SB-300D (4-5') collected
5				70%	0.0	
	SW		Brown, saturated, loose, fine to medium grained, SAND		0.0	
10				60%	0.3	
					0.3	
15				50%	0.3	
					0.3	
20	SW		Brown, saturated, loose, fine to medium grained, SAND	30%	0.5	
25				30%	2.5	
30				25%	5.1	
35						

Well: TMW-5D
Elev.:

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LOG OF BORING SB-300D/TMW-5D

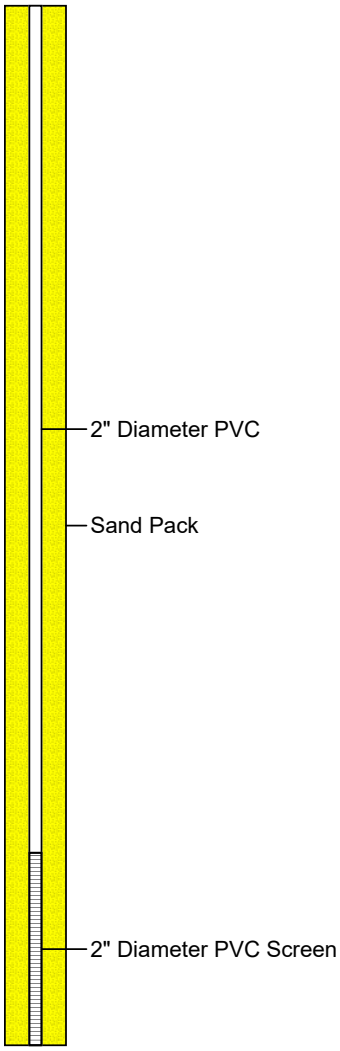
Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
35	SW		Brown, saturated, loose, fine to medium grained, SAND		3.0	
40					6.0	
45						
					5.0	
50					3.5	
55					1.9	
60	CL		Gray, stiff, non plastic, CLAY		1.0	
65						
70						

Boring terminated at 62 ft bgs
Note: TPV = Total Photoionizable Vapors in parts per million (PPM)

Well: TMW-5D
Elev.:



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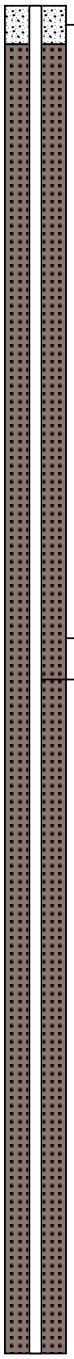
LOG OF BORING SB-500D/TMW-7D

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, low plasticity, SILT	60%	0.0	
					0.0	
5				70%	0.0	
	SW		Brown, saturated, loose, fine to medium grained, SAND		0.0	
10				60%	0.3	test
					0.3	
15				50%	0.3	
					0.3	
20				30%	0.5	
25				30%	2.5	
30				25%	5.1	
35						

Well: TMW-7D
Elev.:



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LOG OF BORING SB-500D/TMW-7D

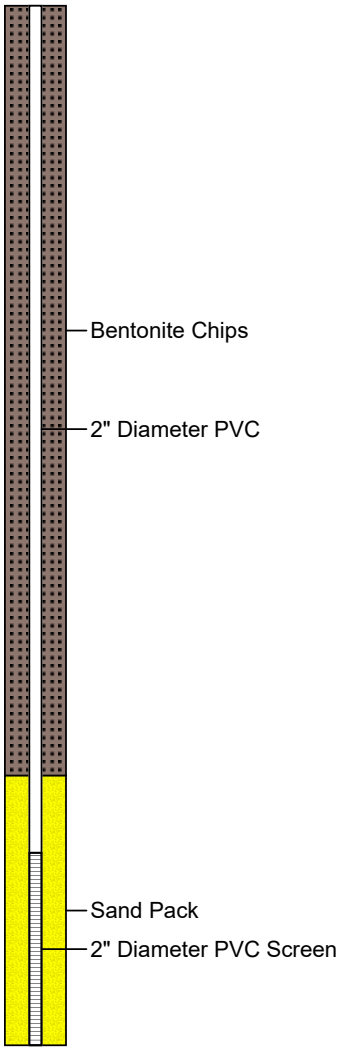
Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Well: TMW-7D
Elev.:

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
35	SW		Brown, saturated, loose, fine to medium grained, SAND	30%	3.0	
40				25%	6.0	
45				30%	5.0	
50				35%	3.5	
55				40%	1.9	
60			Gray, stiff, non plastic, CLAY			
65						
70						

Boring terminated at 60 ft bgs
Note: TPV = Total Photoionizable Vapors in parts per million (PPM)



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LOG OF BORING TMW-1

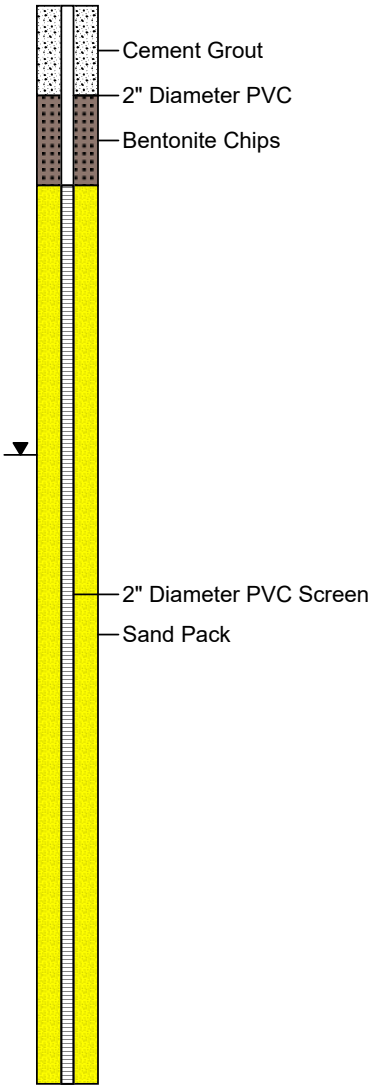
Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, SILT, w/trace coarse gravel	100%	0.3 0.3	Sample SB-150AD (3-5') collected
5	SW		Brown, saturated, loose, fine grained, SAND	100%	0.3 0.3	
10				50%	0.0	
15						

Boring terminated at 12 ft bgs
Note: TPV = Total Photoionizable Vapors in parts per million (PPM)

Well: TMW-1
Elev.:



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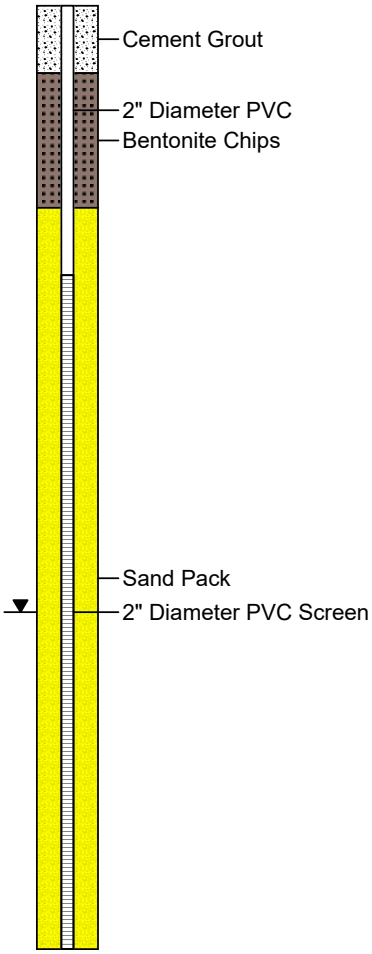
LOG OF BORING TMW-2

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, low plasticity, SILT	100%	0.4 0.4	Sample SB-150D (4-6') collected
5	SW		Brown, wet, loose, fine to medium grained, SAND	100%		
	ML		Gray, moist, stiff, non plastic, SILT		0.2	
	SW		Brown, saturated, loose, fine grained, SAND		0.3	
10	ML		Brown, moist, non plastic, SILT	100%	0.3	
	SW		Brown, saturated, loose, fine to medium grained, SAND			
15			Boring terminated at 14 ft bgs Note: TPV = Total Photoionizable Vapors in parts per million (PPM)			
20						

Well: TMW-2
Elev.:



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LOG OF BORING TMW-3

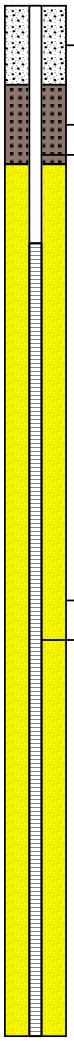
Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, low plasticity, SILT	70%	0.0	
	CL		Brown and gray, slightly moist, stiff, SILTY CLAY		0.0 0.0	
5	ML		Brown, moist, soft,low plasticity, SILT	90%		Sample SB-150B (5-7') collected
	SW		Brown, saturated, loose, fine to medium grained, SAND		0.0 0.0	
10	ML		Brown, saturated, soft,low plasticity, fine grained, SILT, with sand	70%		
	SW		Brown, saturated, loose, fine to medium grained, SAND		0.0	
15						

Boring terminated at 13 ft bgs
Note: TPV = Total Photoionizable Vapors in parts per million (PPM)

Well: TMW-3
Elev.:



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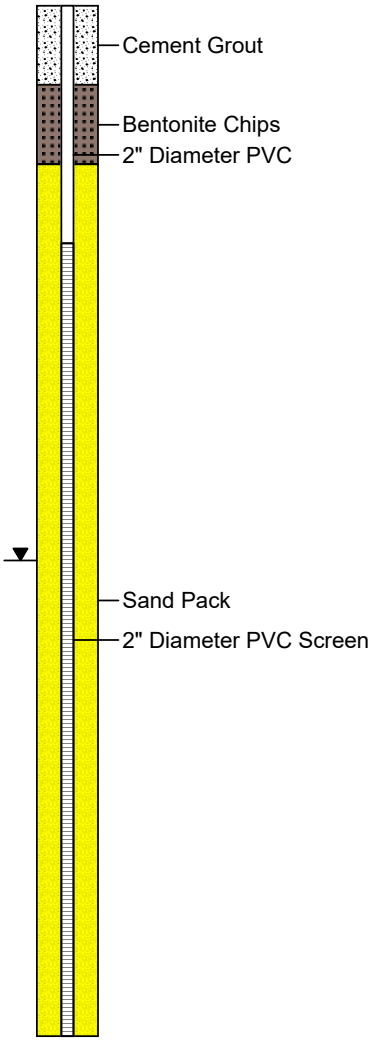
LOG OF BORING TMW-4

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, low plasticity, SILT	80%	0.0	
					0.0	Sample SB-300AD (3-5') collected
5					0.0	
	SW		Brown, saturated, loose, fine grained, SAND	40%	0.0	
10				50%	0.0	
15			Boring terminated at 13 ft bgs Note: TPV = Total Photoionizable Vapors in parts per million (PPM)			

Well: TMW-4
Elev.:



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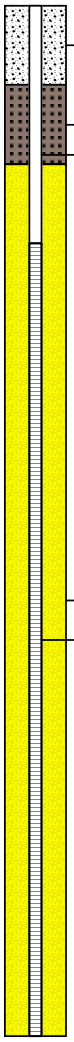
LOG OF BORING TMW-5

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, low plasticity, SILT	60%	0.0	
					0.0	Sample SB-300D (4-5') collected
5					0.0	
	SW		Brown, saturated, loose, fine to medium grained, SAND	70%	0.0	
10				60%	0.3	
15			Boring terminated at 13 ft bgs Note: TPV = Total Photoionizable Vapors in parts per million (PPM)			

Well: TMW-5
Elev.:



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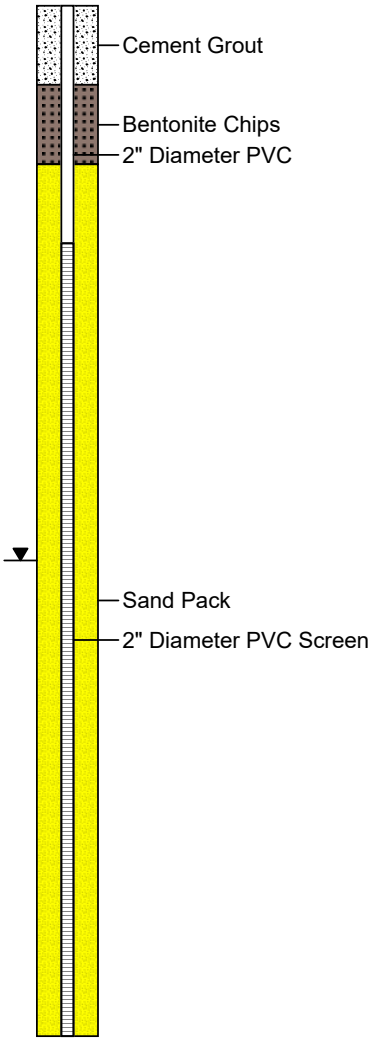
LOG OF BORING TMW-6

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, low plasticity, SILT	90%	0.0	
					0.0	
5					0.0	
	SW		Brown, saturated, loose, fine grained, SAND	40%	0.0	
10				40%	0.0	
15			Boring terminated at 13 ft bgs Note: TPV = Total Photoionizable Vapors in parts per million (PPM)			

Well:
Elev.:



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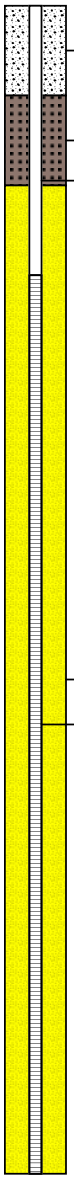
LOG OF BORING TMW-7

Former Houghland Tomato Cannery
1130 E. Eastview Drive
Franklin, Indiana

Project No.	: 19-0096-01E	Company Rep.	: J. Cody
Boring Date	: 1-22-2019	Northing Coord.	: N/A
Hole Diameter	: 2 inches	Easting Coord.	: N/A
Drilling Method	: HSA	Survey By	: N/A
Sampling Method	: N/A	Logged By	: J. Cody

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	RECOVERY	TPV	REMARKS
0	ML		Brown, moist, medium stiff, low plasticity, SILT	60%	0.0	
					0.0	
5					0.0	
	SW		Brown, saturated, loose, fine to medium grained, SAND	70%	0.0	
10				60%	0.3	
15			Boring terminated at 13 ft bgs Note: TPV = Total Photoionizable Vapors in parts per million (PPM)			

Well: TMW-7
Elev.:



APPENDIX C

TABLES

TABLE 1

WELL CONSTRUCTION SUMMARY
Former Houghland Tomato Cannery
1130 East Eastview Drive
Franklin, Indiana
Patriot Project Number 19-0096-01E

WELL	DATE INSTALLED	WELL ELEVATION (ft)*	TOTAL DEPTH (ft)	SCREEN INTERVAL (depth in ft)
MW-10	6/10/2013 (ISI)	738.15	14.4	723.8 - 733.8
MW-11	6/10/2013 (ISI)	731.85	13.7	718.2 - 728.2
MW-11D	6/6/2018 (FSI #2)	731.71	23.0	708.7- 713.7
MW-12	6/10/2013 (ISI)	732.36	15.1	717.3 - 727.3
MW-12D	1/24/2019 (FSI #3)	731.82	28.0	703.8- 708.8
MW-13	6/10/2013 (ISI)	740.45	20.9	719.6 - 729.6
MW-14	9/18/2013 (ISI)	734.15	20.0	714.2 - 724.2
MW-14D	1/24/2019 (FSI #3)	731.45	33.0	698.5- 703.5
MW-15	9/18/2013 (ISI)	735.30	21.0	714.3 - 724.3
MW-15D	6/6/2018 (FSI #2)	734.76	48.0	686.7 - 691.7
MW-16	9/18/2013 (ISI)	735.65	19.9	715.7 - 725.7
MW-17	9/18/2013 (ISI)	745.02	24.1	720.9 - 730.9
MW-18	2/13/2014 (FSI)	737.39	14.4	723.0 - 733.0
MW-19	2/13/2014 (FSI)	733.21	12.4	720.8 - 730.8
MW-20	2/13/2014 (FSI)	729.99	14.7	715.3 - 725.3
MW-21	2/13/2014 (FSI)	729.21	13.6	715.6 - 725.6
MW-22	2/13/2014 (FSI)	736.47	18.9	717.6 - 727.6
MW-22D	6/6/2018 (FSI #2)	736.85	28.0	708.8 - 713.8
MW-23	2/13/2014 (FSI)	739.78	20.0	719.8 - 729.8
MW-24	2/13/2014 (FSI)	740.93	21.8	719.1 - 729.1
MW-25	2/14/2014 (FSI)	741.01	23.6	717.4 - 727.4
MW-26	2/14/2014 (FSI)	739.31	22.9	716.4 - 726.4
MW-27	2/14/2014 (FSI)	740.06	16.9	723.2 - 733.2
MW-28	2/19/2014 (FSI)	739.62	21.3	718.3 - 728.3
MW-29	2/13/2014 (FSI)	732.96	17.6	715.4 - 725.4
MW-29D	6/6/2018 (FSI #2)	733.12	41.0	692.1 - 697.1
MW-30	8/29/2016 (FSI)	734.02	14.5	719.5 - 724.5
MW-31	8/16/2017 (ASI)	733.87	30.0	703.8 - 708.8
MW-32	8/16/2017 (ASI)	739.72	33.0	706.7 - 711.7
MW-33	1/22/2019 (FSI #3)	740.79	18.0	722.8 - 732.8
MW-33D	1/22/2019 (FSI #3)	741.05	33.0	708.1 - 713.1
TMW-1	1/22/2019 (FSI #3)	731.54	12.0	719.5 - 729.5
TMW-1D	1/22/2019 (FSI #3)	730.32	58.0	672.3 - 677.3
TMW-2	1/22/2019 (FSI #3)	730.12	14.0	716.1 - 726.1
TMW-2D	1/22/2019 (FSI #3)	730.40	60.0	670.4 - 675.4

WELL	DATE INSTALLED	WELL ELEVATION (ft)*	TOTAL DEPTH (ft)	SCREEN INTERVAL (depth in ft)
TMW-3	1/24/2019 (FSI #3)	731.24	13.0	718.2 - 728.2
TMW-3D	1/24/2019 (FSI #3)	731.27	52.0	679.3 - 684.3
TMW-4	1/28/2019 (FSI #3)	730.43	13.0	717.4 - 727.4
TMW-4D	1/28/2019 (FSI #3)	730.03	61.0	669.1 - 674.1
TMW-5	1/28/2019 (FSI #3)	729.60	13.0	716.6 - 726.6
TMW-5D	1/28/2019 (FSI #3)	730.69	57.0	673.7 - 678.7
TMW-6	1/28/2019 (FSI #3)	731.29	13.0	718.3 - 728.3
TMW-6D	1/28/2019 (FSI #3)	731.22	42.0	689.2 - 694.2
TMW-7	1/25/2019 (FSI #3)	730.16	13.0	717.2 - 727.2
TMW-7D	1/25/2019 (FSI #3)	730.62	62.0	668.6 - 673.6

Table Notes:
Top of casing elevations were surveyed by Kimbley & Proctor, Inc and are based on USC & GS Datum.

TABLE 2

GROUNDWATER ELEVATION DATA
Former Houghland Tomato Cannery
1130 East Eastview Drive
Franklin, Indiana
Patriot Project Number 19-0096-01E

Well Identification	Date	Well Elevation (feet)	Depth to Groundwater	Groundwater Elevation
MW-10	9/24/2013	738.15	8.89	729.26
	3/5/2014		4.95	733.20
	8/31/2016		5.35	732.80
	8/21/2017		6.36	731.79
	6/14/2018		NS	NS
	2/4/2019		5.27	732.88
	3/4/2019		4.09	734.06
	3/25/2019		4.17	733.98
MW-11	9/24/2013	731.85	10.56	721.29
	3/5/2014		7.95	723.90
	8/31/2016		8.45	723.40
	8/21/2017		8.79	723.06
	6/14/2018		8.60	723.25
	2/4/2019		7.57	724.28
	3/4/2019		6.53	725.32
	3/25/2019		6.61	725.24
MW-11D	6/14/2018	731.71	14.85	716.86
	2/4/2019		7.54	724.17
	3/4/2019		6.40	725.31
	3/25/2019		6.48	725.23
MW-12	9/24/2013	732.36	12.14	720.22
	3/5/2014		9.68	722.68
	8/31/2016		10.55	721.81
	8/21/2017		10.90	721.46
	6/14/2018		NS	NS
	2/4/2019		9.51	722.85
	3/4/2019		8.78	723.58
	3/25/2019		8.87	723.49
MW-12D	2/4/2019	731.82	9.17	722.65
	3/4/2019		8.41	723.41
	3/25/2019		8.53	723.29
MW-13	9/24/2013	740.45	18.69	721.76
	3/5/2014		15.58	731.56
	8/31/2016		15.94	724.51
	8/21/2017		15.58	724.87
	6/14/2018		NS	NS
	2/4/2019		NS	NS
	3/4/2019		NS	NS
	3/25/2019		NS	NS
MW-14	9/24/2013	734.15	14.32	719.83
	3/5/2014		11.95	722.20
	8/31/2016		Well Inaccessible	
	8/21/2017		13.31	720.84
	6/14/2018		NS	NS
	2/4/2019		9.15	725.00
	3/4/2019		11.28	722.87
	3/25/2019		11.44	722.71
MW-14D	2/4/2019	731.45	11.95	719.50
	3/4/2019		8.47	722.98
	3/25/2019		8.56	722.89
MW-15	9/24/2013	735.30	15.41	719.89
	3/5/2014		12.98	722.32
	8/31/2016		Well Inaccessible	
	8/21/2017		14.35	720.95
	6/14/2018		13.95	721.35
	2/4/2019		12.94	722.36
	3/4/2019		12.23	723.07
	3/25/2019		12.34	722.96
MW-15D	6/14/2018	734.76	13.45	721.31
	2/4/2019		11.45	723.31
	3/4/2019		11.71	723.05
	3/25/2019		11.78	722.98

Well Identification	Date	Well Elevation (feet)	Depth to Groundwater	Groundwater Elevation
MW-16	9/24/2013	735.65	7.06	728.59
	3/5/2014		2.88	732.77
	8/31/2016		Well Inaccessible	
	8/21/2017		5.35	730.30
	6/14/2018		NS	NS
	2/4/2019		2.51	733.14
	3/4/2019		2.28	733.37
	3/25/2019		3.09	732.56
MW-17	9/24/2013	745.02	16.22	728.80
	3/5/2014		12.00	733.02
	8/31/2016		Well Inaccessible	
	8/21/2017		NS	NS
	6/14/2018		NS	NS
	2/4/2019		11.67	733.35
	3/4/2019		11.40	733.62
	3/25/2019		11.55	733.47
MW-18	3/5/2014	737.79	10.03	727.76
	8/31/2016		10.32	727.47
	8/21/2017		NS	NS
	6/14/2018		NS	NS
	2/4/2019		9.54	728.25
	3/4/2019		9.22	728.57
	3/25/2019		9.19	728.60
MW-19	3/5/2014	733.21	7.17	726.04
	8/31/2016		7.55	725.66
	8/21/2017		NS	NS
	6/14/2018		NS	NS
	2/4/2019		7.08	726.13
	3/4/2019		6.30	726.91
	3/25/2019		6.29	726.92
MW-20	3/5/2014	729.99	5.94	724.05
	8/31/2016		6.38	723.61
	8/21/2017		6.71	723.28
	6/14/2018		NS	NS
	2/4/2019		5.54	724.45
	3/4/2019		4.53	725.46
	3/25/2019		4.48	725.51
MW-21	3/5/2014	729.21	6.04	723.17
	8/31/2016		6.64	722.57
	8/21/2017		6.99	722.22
	6/14/2018		NS	NS
	2/4/2019		5.75	723.46
	3/4/2019		4.74	724.47
	3/25/2019		4.73	724.48
MW-22	3/5/2014	736.47	13.04	723.43
	8/31/2016		13.68	722.79
	8/21/2017		14.07	722.40
	6/14/2018		13.90	722.57
	2/4/2019		12.69	723.78
	3/4/2019		11.84	724.63
	3/25/2019		11.82	724.65
MW-22D	6/14/2018	736.85	14.21	722.64
	2/4/2019		13.03	723.82
	3/4/2019		12.12	724.73
	3/25/2019		12.09	724.76
MW-23	3/5/2014	739.78	15.40	724.38
	8/31/2016		15.91	723.87
	8/21/2017		16.30	723.48
	6/14/2018		NS	NS
	2/4/2019		Well Innaccesible	
	3/4/2019		13.81	725.97
	3/25/2019		13.75	726.03
MW-24	3/5/2014	740.93	16.31	724.62
	8/31/2016		16.71	724.22
	8/21/2017		17.16	723.77
	6/14/2018		NS	NS
	2/4/2019		15.87	725.06
	3/4/2019		14.81	726.12
	3/25/2019		14.80	726.13

Well Identification	Date	Well Elevation (feet)	Depth to Groundwater	Groundwater Elevation
MW-25	3/5/2014	741.01	16.50	724.51
	8/31/2016		Well Inaccessible	
	8/21/2017		Well Inaccessible	
	6/14/2018		Well Inaccessible	
	2/4/2019		Well Innaccesible	
	3/4/2019		Well Innaccesible	
	3/25/2019		Well Innaccesible	
MW-26	3/5/2014	739.31	15.25	724.06
	8/31/2016		15.80	723.51
	8/21/2017		16.19	723.12
	6/14/2018		16.11	723.20
	2/4/2019		14.86	724.45
	3/4/2019		13.92	725.39
	3/25/2019		13.86	725.45
MW-27	3/5/2014	740.06	8.11	731.95
	8/31/2016		8.19	731.87
	8/21/2017		8.81	731.25
	6/14/2018		NS	NS
	2/4/2019		8.25	731.81
	3/4/2019		7.88	732.18
	3/25/2019		7.88	732.18
MW-28	3/5/2014	739.62	6.72	732.90
	8/31/2016		Well Inaccessible	
	8/21/2017		9.40	730.22
	6/14/2018		NS	NS
	2/4/2019		6.43	733.19
	3/4/2019		6.15	733.47
	3/25/2019		6.11	733.51
MW-29	3/5/2014	732.96	10.17	722.79
	8/31/2016		11.04	721.92
	8/21/2017		11.43	721.53
	6/14/2018		11.16	721.80
	2/4/2019		10.00	722.96
	3/4/2019		9.21	723.75
	3/25/2019		9.23	723.73
MW-29D	6/14/2018	733.12	11.28	721.84
	2/4/2019		10.11	723.01
	3/4/2019		9.35	723.77
	3/25/2019		9.28	723.84
MW-30	8/31/2016	734.02	10.17	723.85
	8/21/2017		10.64	723.38
	6/14/2018		10.52	723.50
	2/4/2019		9.43	724.59
	3/4/2019		10.35	723.67
	3/25/2019		8.30	725.72
MW-31	8/21/2017	733.87	11.69	722.18
	6/14/2018		10.53	723.34
	2/4/2019		9.25	724.62
	3/4/2019		8.37	725.50
	3/25/2019		8.29	725.58
MW-32	8/21/2017	739.72	16.64	723.08
	6/14/2018		16.56	723.16
	2/4/2019		15.30	724.42
	3/4/2019		13.33	726.39
	3/25/2019		13.31	726.41
MW-33	2/4/2019	740.79	15.50	725.29
	3/4/2019		15.49	725.30
	3/25/2019		15.38	725.41
MW-33D	2/4/2019	741.05	16.81	724.24
	3/4/2019		15.87	725.18
	3/25/2019		15.83	725.22
TMW-1	2/4/2019	731.54	9.42	722.12
	3/4/2019		8.69	722.85
	3/25/2019		9.25	722.29
TMW-1D	2/4/2019	730.32	8.21	722.11
	3/4/2019		7.45	722.87
	3/25/2019		7.98	722.34
TMW-2	2/4/2019	730.12	8.05	722.07
	3/4/2019		7.24	722.88
	3/25/2019		7.72	722.40
TMW-2D	2/4/2019	730.4	8.26	722.14
	3/4/2019		7.58	722.82
	3/25/2019		8.03	722.37

Well Identification	Date	Well Elevation (feet)	Depth to Groundwater	Groundwater Elevation
TMW-3	2/4/2019	731.24	9.15	722.09
	3/4/2019		8.39	722.85
	3/25/2019		8.78	722.46
TMW-3D	2/4/2019	731.27	9.19	722.08
	3/4/2019		8.37	722.90
	3/25/2019		8.79	722.48
TMW-4	2/4/2019	730.43	8.5	721.93
	3/4/2019		7.92	722.51
	3/25/2019		8.31	
TMW-4D	2/4/2019	730.03	8.09	721.94
	3/4/2019		7.53	722.50
	3/25/2019		7.89	722.14
TMW-5	2/4/2019	729.6	7.70	721.90
	3/4/2019		7.08	722.52
	3/25/2019		7.50	722.10
TMW-5D	2/4/2019	730.69	8.85	721.84
	3/4/2019		8.25	722.44
	3/25/2019		8.68	722.01
TMW-6	2/4/2019	731.29	9.42	721.87
	3/4/2019		8.83	722.46
	3/25/2019		9.17	722.12
TMW-6D	2/4/2019	731.22	9.38	721.84
	3/4/2019		8.78	722.44
	3/25/2019		9.09	722.13
TMW-7	2/4/2019	730.16	8.41	721.75
	3/4/2019		7.85	722.31
	3/25/2019		8.37	721.79
TMW-7D	2/4/2019	730.62	8.90	721.72
	3/4/2019		8.33	722.29
	3/25/2019		8.63	721.99

Well Elevation = Top of the 2" Diameter Pipe - North Rim
NS=Not Sampled

TABLE 3
SOIL ANALYTICAL RESULTS
Former Houghland Cannery
1130 East Eastview Drive
Franklin, Indiana
Patriot Project Number 19-0096-01E

		Volatile Organic Compounds (VOCs) via EPA 8260				
Sample Identification	**Date Collected**	**Tetrachloroethene**	**Trichloroethene**	**cis-1,2-Dichloroethene**	**trans-1,2-Dichloroethene**	**All Remaining VOCs**
SB 150 D (4-6)	01/22/2019	<0.0036	<0.0036	<0.0036	<0.0036	BRL
SB150 D (59-60)	01/22/2019	<0.0039	<0.0039	<0.0039	<0.0039	BRL
SB 150A D (3-5)	01/22/2019	<0.0046	<0.0046	<0.0046	<0.0046	BRL
SB150A D (59-60)	01/26/2019	<0.0038	<0.0038	**0.011**	<0.0038	BRL
SB150B (5-7)	01/24/2019	<0.0044	**0.0052**	<0.0044	<0.0044	BRL
SB150B (51-52)	01/24/2019	<0.0053	**0.0076**	**4.0**	**0.14**	BRL
SB300D (3-5)	01/25/2019	<0.0042	**0.052**	<0.0042	<0.0042	BRL
SB300AD (3-5)	01/28/2019	<0.0045	<0.0045	<0.0045	<0.0045	BRL
SB300AD (62-63)	01/28/2019	<0.0044	<0.0044	<0.0044	<0.0044	BRL
SB300BD (3-5)	01/28/2019	<0.0042	<0.0042	<0.0042	<0.0042	BRL
SB300BD (42-43)	01/28/2019	<0.0040	<0.0040	<0.0040	<0.0040	BRL
SB500D (4-5)	01/25/2019	<0.0048	<0.0048	<0.0048	<0.0048	BRL
SB500D (61-62)	01/25/2019	<0.0039	<0.0039	<0.0039	<0.0039	BRL
SB12D (8-10)	01/24/2019	<0.0061	<0.0061	<0.0061	<0.0061	BRL
SB12D (29-30)	01/24/2019	<0.0038	<0.0038	<0.0038	<0.0038	BRL
SB14D (10-12)	01/24/2019	<0.0053	<0.0053	<0.0053	<0.0053	BRL
SB14D (32-33)	01/24/2019	<0.0043	<0.0043	<0.0043	<0.0043	BRL
SB 33D (16-18)	01/22/2019	**0.11**	**0.11**	<0.0047	<0.0047	BRL
SB 33D (37-38)	01/22/2019	<0.0039	<0.0039	<0.0039	<0.0039	BRL
B11D (23'-24')	6/7/2018	<0.0035	<0.0035	<0.0035	<0.0036	BRL
B15D (48'-49')	6/8/2018	<0.0035	**1.3**	**1.9**	**0.055**	BRL
B22D (28'-29')	6/6/2018	<0.0036	<0.0036	<0.0036	<0.0036	BRL
B29D (40'-41')	6/8/2018	<0.0036	**0.078**	**0.029**	<0.0036	BRL
IDEM RCG Residential DCSL's		**110**	**5.7**	**220**	**1,900**	**Varies**
IDEM RCG Industrial DCSL's		**170**	**19**	**2,300**	**1,900**	**Varies**
IDEM RCG Excavation DCSL's		**170**	**95**	**2,400**	**1,900**	**Varies**
IDEM RCG Residential MTGSL's		**0.045**	**0.036**	**0.41**	**0.62**	**Varies**

Notes

All results reported in milligrams per kilogram (mg/kg)

BOLD	= Constituent detected above Laboratory Reporting Limit
BOLD	= Constituent detected above IDEM RCG Residential DCSL's
BOLD	= Constituent detected above IDEM RCG Industrial DCSL's
BOLD	= Constituent detected above IDEM RCG Excavation DCSL's
BOLD	= Constituent detected above IDEM RCG Residential MTGSL's

NE = No Screening Level Established for Constituent
NA = Sample not Analyzed for Constituent
BRL - Below Laboratory Reporting Limit
RCG = Remediation Closure Guide
DCSL = Direct Contact Screening Level
MTGSL = Migration to Groundwater Screening Level

TABLE 4
GROUNDWATER ANALYTICAL RESULTS
Former Houghland Tomato Cannery
1130 East Eastview Drive, Franklin, Indiana
Patriot Project Number 19-0096-01E

Sample Identification	Date Collected		Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	All Remaining VOCs
		IDEM RCG Residential TWSL's	**5**	**5**	**70**	**100**	**2**	**Varies**
		IDEM RCG Residential VESL's	**110**	**9.1**	**NE**	**NE**	**2.1**	**Varies**
		IDEM RCG Industrial VESL's	**470**	**38**	**NE**	**NE**	**35**	**Varies**
		Sampling Event						
MW-10		FSI #3 Sampling Event #1	NS	NS	NS	NS	NS	NS
	3/11/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
		FSI #3 Sampling Event #3	NS	NS	NS	NS	NS	NS
MW-11	02/08/2019	FSI #3 Sampling Event #1	**68.7**	**50.4**	<5.0	<5.0	<2.0	BRL
	DUP B		**69.7**	**55.9**	<5.0	<5.0	<2.0	BRL
	03/05/2019	FSI #3 Sampling Event #2	**39.6**	**29.5**	<5.0	<5.0	<2.0	BRL
	3/29/2019	FSI #3 Sampling Event #3	**45.3**	**31.5**	<5.0	<5.0	<2.0	BRL
MW-11D	02/08/2019	FSI #3 Sampling Event #1	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/05/2019	FSI #3 Sampling Event #2	**7.2**	<5.0	<5.0	<5.0	<2.0	BRL
	3/29/2019	FSI #3 Sampling Event #3	<5.0	<5.0	<2.0	<5.0	<5.0	BRL
MW 12	02/05/2019	FSI #3 Sampling Event #1	<5.0	**38.8**	<5.0	<5.0	<2.0	BRL
	3/7/2019	FSI #3 Sampling Event #2	<5.0	**42.0**	<5.0	<5.0	<2.0	BRL
	4/1/2019	FSI #3 Sampling Event #3	<5.0	**29.9**	<2.0	<5.0	<5.0	BRL
MW 12D	02/05/2019	FSI #3 Sampling Event #1	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	3/7/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	4/1/2019	FSI#3 Sampling Event #3	<5.0	<5.0	<2.0	<5.0	<5.0	BRL
MW-14	02/08/2019	FSI #3 Sampling Event #1	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	3/6/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	4/1/2019	FSI #3 Sampling Event #3	<5.0	**495**	**7.7**	<5.0	<2.0	BRL
MW-14D	02/08/2019	FSI #3 Sampling Event #1	<5.0	**583**	**26.4**	<5.0	<2.0	BRL
	3/6/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	4/1/2019	FSI #3 Sampling Event #3	<5.0	**524**	**11**	<5.0	<2.0	BRL
MW-15	02/08/2019	FSI #3 Sampling Event #1	<5.0	**49.3**	<5.0	<5.0	<2.0	BRL
	3/6/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	4/1/2019	FSI #3 Sampling Event #3	<5.0	**6.7**	**579**	**18.1**	<2.0	BRL
MW-15D	02/08/2019	FSI #3 Sampling Event #1	<5.0	**12.3**	**780**	**53.5**	<2.0	BRL
	3/6/2019	FSI #3 Sampling Event #2	<5.0	**7.8**	**430**	**17.9**	<2.0	BRL
	DUP B		<5.0	**11.3**	**473**	**29.1**	<2.0	BRL
	4/1/2019	FSI #3 Sampling Event #3	<5.0	<5.0	**557**	**29.5**	<2.0	BRL
MW-16		FSI #3 Sampling Event #1	NS	NS	NS	NS	NS	NS
	3/6/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
		FSI #3 Sampling Event #3	NS	NS	NS	NS	NS	NS
MW-17		FSI #3 Sampling Event #1	NS	NS	NS	NS	NS	NS
	3/6/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
		FSI #3 Sampling Event #3	NS	NS	NS	NS	NS	NS
MW-19		FSI #3 Sampling Event #1	NS	NS	NS	NS	NS	NS
	3/12/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
		FSI #3 Sampling Event #3	NS	NS	NS	NS	NS	NS
MW-20		FSI #3 Sampling Event #1	NS	NS	NS	NS	NS	NS
	3/12/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
		FSI #3 Sampling Event #3	NS	NS	NS	NS	NS	NS
MW-21		FSI #3 Sampling Event #1	NS	NS	NS	NS	NS	NS
	3/12/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
		FSI #3 Sampling Event #3	NS	NS	NS	NS	NS	NS
MW-22	02/08/2019	FSI #3 Sampling Event #1	**8.1**	**71.5**	**10.8**	<5.0	<2.0	BRL
	3/7/2019	FSI #3 Sampling Event #2	**5.8**	**30**	<5.0	<5.0	<2.0	BRL
	3/27/2019	FSI #3 Sampling Event #3	**6.7**	**30.8**	<5.0	<5.0	<2.0	BRL
MW-22D	02/08/2019	FSI #3 Sampling Event #1	**9.1**	**42.6**	<5.0	<5.0	<2.0	BRL
	3/7/2019	FSI #3 Sampling Event #2	**13.3**	**43.6**	<5.0	<5.0	<2.0	BRL
	3/27/2019	FSI #3 Sampling Event #3	**7.4**	**32.1**	<5.0	<5.0	<2.0	BRL
MW-23		FSI #3 Sampling Event #1	NS	NS	NS	NS	NS	NS
	3/11/2019	FSI #3 Sampling Event #2	**15.7**	**21.9**	<5.0	<5.0	<2.0	BRL
		FSI #3 Sampling Event #3	NS	NS	NS	NS	NS	NS

Sample Identification	Date Collected		Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	All Remaining VOCs
		IDEM RCG Residential TWSL's	**5**	**5**	**70**	**100**	**2**	**Varies**
		IDEM RCG Residential VESL's	**110**	**9.1**	**NE**	**NE**	**2.1**	**Varies**
		IDEM RCG Industrial VESL's	**470**	**38**	**NE**	**NE**	**35**	**Varies**
		Sampling Event						
MW-24		FSI #3 Sampling Event #1	NS	NS	NS	NS	NS	NS
	3/12/2019	FSI #3 Sampling Event #2	**55.2**	**60.2**	<5.0	<5.0	<2.0	BRL
		FSI #3 Sampling Event #3	NS	NS	NS	NS	NS	NS
MW 26	02/05/2019	FSI #3 Sampling Event #1	**14.8**	**46.1**	<5.0	<5.0	<2.0	BRL
	3/11/2019	FSI #3 Sampling Event #2	**12.5**	**35.5**	<5.0	<5.0	<2.0	BRL
	03/28/2019	FSI #3 Sampling Event #3	**15.6**	**31**	<2.0	<5.0	<5.0	BRL
MW 32 (deep well paried with MW-26)	02/05/2019	FSI #3 Sampling Event #1	**8**	**9.4**	**5.9**	<5.0	<2.0	BRL
	3/11/2019	FSI #3 Sampling Event #2	**16.1**	**37.9**	<5.0	<5.0	<2.0	BRL
	03/28/2019	FSI #3 Sampling Event #3	**15.8**	**29.5**	<2.0	<5.0	<5.0	BRL
MW-27		FSI #3 Sampling Event #1	NS	NS	NS	NS	NS	NS
	3/11/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
		FSI #3 Sampling Event #3	NS	NS	NS	NS	NS	NS
MW-28		FSI #3 Sampling Event #1	NS	NS	NS	NS	NS	NS
	3/6/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
		FSI #3 Sampling Event #3	NS	NS	NS	NS	NS	NS
MW 29	02/05/2019	FSI #3 Sampling Event #1	<5.0	**34.5**	<5.0	<5.0	<2.0	BRL
	3/7/2019	FSI #3 Sampling Event #2	<5.0	**15.7**	<5.0	<5.0	<2.0	BRL
	3/27/2019	FSI #3 Sampling Event #3	**6.8**	**40.6**	<5.0	<5.0	<2.0	BRL
MW 29D	02/05/2019	FSI #3 Sampling Event #1	**13.4**	**149**	**25.7**	<5.0	<2.0	BRL
	3/7/2019	FSI #3 Sampling Event #2	**14.4**	**124**	**21.2**	<5.0	<2.0	BRL
	3/27/2019	FSI #3 Sampling Event #3	**9.8**	**106**	**21.4**	<5.0	<2.0	BRL
MW-30	02/08/2019	FSI #3 Sampling Event #1	**171**	**173**	<5.0	<5.0	<2.0	BRL
	3/11/2019	FSI #3 Sampling Event #2	**293**	**163**	<5.0	<5.0	<2.0	BRL
	3/29/2019	FSI #3 Sampling Event #3	**444**	**159**	<2.0	<5.0	<5.0	BRL
MW-31	02/08/2019	FSI #3 Sampling Event #1	<5.0	<5.0	**5.4**	<5.0	<2.0	BRL
	DUP A		<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	3/11/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	DUP C		<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	3/29/2019	FSI #3 Sampling Event #3	<5.0	<5.0	<2.0	<5.0	<5.0	BRL
	Dup B		<5.0	<5.0	<2.0	<5.0	<5.0	BRL
MW 33	02/05/2019	FSI #3 Sampling Event #1	**28.9**	**61**	<5.0	<5.0	<2.0	BRL
	3/7/2019	FSI #3 Sampling Event #2	**46.0**	**71.1**	**5.6**	<5.0	<2.0	BRL
	03/28/2019	FSI #3 Sampling Event #3	**7.8**	**29.3**	<2.0	<5.0	<5.0	BRL
MW 33D	02/05/2019	FSI #3 Sampling Event #1	**21.1**	**114**	<5.0	<5.0	<2.0	BRL
	3/7/2019	FSI #3 Sampling Event #2	**35.4**	**97.3**	<5.0	<5.0	<2.0	BRL
	03/28/2019	FSI #3 Sampling Event #3	**17.1**	**59.9**	<2.0	<5.0	<5.0	BRL
TMW-1	02/06/2019	FSI #3 Sampling Event #1	<5.0	**11.2**	<5.0	<5.0	<2.0	BRL
	3/8/2019	FSI #3 Sampling Event #2	<5.0	**14.9**	<5.0	<5.0	<2.0	BRL
	03/26/2019	FSI #3 Sampling Event #3	<5.0	**7**	<5.0	<5.0	<2.0	BRL
TMW-1D	02/06/2019	FSI #3 Sampling Event #1	<5.0	**24.2**	**510**	**41.6**	<2.0	BRL
	3/8/2019	FSI #3 Sampling Event #2	<5.0	**19.8**	**660**	<5.0	<2.0	BRL
	03/26/2019	FSI #3 Sampling Event #3	<5.0	**11.9**	**829**	**41**	<2.0	BRL
TMW-2	02/06/2019	FSI #3 Sampling Event #1	<5.0	**94.1**	<5.0	<5.0	<2.0	BRL
	3/8/2019	FSI #3 Sampling Event #2	<5.0	**106**	<5.0	<5.0	<2.0	BRL
	03/26/2019	FSI #3 Sampling Event #3	<5.0	**73.7**	<5.0	<5.0	<2.0	BRL
TMW-2D	02/06/2019	FSI #3 Sampling Event #1	<5.0	**15.9**	**550**	**43.4**	<2.0	BRL
	3/8/2019	FSI #3 Sampling Event #2	<5.0	**40.9**	**250**	<5.0	<2.0	BRL
	03/26/2019	FSI #3 Sampling Event #3	<5.0	**13.7**	**683**	**49.6**	**2.3**	BRL
TMW-3	02/06/2019	FSI #3 Sampling Event #1	<5.0	**30.4**	<5.0	<5.0	<2.0	BRL
	3/8/2019	FSI #3 Sampling Event #2	<5.0	**37.3**	<5.0	<5.0	<2.0	BRL
	03/26/2019	FSI #3 Sampling Event #3	<5.0	**25.2**	<5.0	<5.0	<2.0	BRL
TMW-3D	02/06/2019	FSI #3 Sampling Event #1	<5.0	**383**	**1060**	**87.5**	<2.0	BRL
	3/8/2019	FSI #3 Sampling Event #2	<5.0	**152**	**539**	<5.0	<2.0	BRL
	03/26/2019	FSI #3 Sampling Event #3	<5.0	**288**	**904**	**78.4**	<2.0	BRL
TMW-4	02/07/2019	FSI #3 Sampling Event #1	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	3/8/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/26/2019	FSI #3 Sampling Event #3	<5.0	<5.0	<2.0	<5.0	<2.0	BRL

Sample Identification	Date Collected		Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	All Remaining VOCs
		IDEM RCG Residential TWSL's	**5**	**5**	**70**	**100**	**2**	**Varies**
		IDEM RCG Residential VESL's	**110**	**9.1**	**NE**	**NE**	**2.1**	**Varies**
		IDEM RCG Industrial VESL's	**470**	**38**	**NE**	**NE**	**35**	**Varies**
		Sampling Event						
TMW-4D	02/07/2019	FSI #3 Sampling Event #1	<5.0	**9.1**	**437**	**14.5**	<2.0	BRL
	03/05/2019	FSI #3 Sampling Event #2	<5.0	**7.3**	**270**	**9.8**	<2.0	BRL
	03/26/2019	FSI #3 Sampling Event #3	<5.0	**10.9**	**395**	<5.0	<2.0	BRL
TMW-5	02/08/2019	FSI #3 Sampling Event #1	<5.0	**479**	<5.0	<5.0	<2.0	BRL
	03/05/2019	FSI #3 Sampling Event #2	<5.0	**311**	<5.0	<5.0	<2.0	BRL
	03/26/2019	FSI #3 Sampling Event #3	<5.0	**244**	<5.0	<5.0	<2.0	BRL
TMW-5D	02/08/2019	FSI #3 Sampling Event #1	<5.0	**528**	**1560**	**139**	<2.0	BRL
	03/05/2019	FSI #3 Sampling Event #2	<5.0	**444**	**1040**	**80.9**	<2.0	BRL
	Dup A		<5.0	**272**	**1150**	**63.6**	<2.0	BRL
	03/26/2019	FSI #3Sampling Event #3	<5.0	**500**	**1220**	**112**	<2.0	BRL
	Dup A		<5.0	**510**	**1160**	<5.0	<2.0	BRL
TMW-6	02/08/2019	FSI #3 Sampling Event #1	<5.0	**14.7**	**24.4**	<5.0	<2.0	BRL
	03/05/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/27/2019	FSI #3 Sampling Event #3	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
TMW-6D	02/08/2019	FSI #3 Sampling Event #1	<5.0	<5.0	**8.3**	<5.0	<2.0	BRL
	03/05/2019	FSI #3 Sampling Event #2	<5.0	<5.0	**5.2**	<5.0	<2.0	BRL
	03/27/2019	FSI #3 Sampling Event #3	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
TMW-7	02/07/2019	FSI #3 Sampling Event #1	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/05/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/27/2019	FSI #3 Sampling Event #3	<5.0	<5.0	<2.0	<5.0	<2.0	BRL
TMW-7D	02/07/2019	FSI #3 Sampling Event #1	<5.0	<5.0	**780**	**38.2**	<2.0	BRL
	03/05/2019	FSI #3 Sampling Event #2	<5.0	**19.2**	**246**	**14.2**	<2.0	BRL
	03/27/2019	FSI #3 Sampling Event #3	<5.0	<5.0	**943**	**46**	<2.0	BRL
Trip Blank	02/05/2019	FSI #3 Sampling Event #1	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/04/2019	FSI #3 Sampling Event #2	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/27/2019	FSI #3 Sampling Event #3	<5.0	<5.0	<2.0	<5.0	<2.0	BRL

Notes

BOLD	= Constituent detected above Laboratory Reporting Limit	All results reported in micrograms per liter (ug/L)
BOLD	= Constituent detected above IDEM RCG Residential TWSL's	NE = No Screening Level Established for Constituent
BOLD	= Constituent detected above IDEM RCG Residential VESL's	NS = Well Not Sampled
BOLD	= Constituent detected above IDEM RCG Industrial VESL's	BRL - Below Laboratory Reporting Limit

TABLE 5
COMPREHENSIVE GROUNDWATER ANALYTICAL RESULTS
Former Houghland Tomato Cannery
1130 East Eastview Drive
Franklin, Indiana
Patriot Project Number 19-0096-01E

		Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	All Remaining VOCs
IDEM RCG Residential TWSL's		**5**	**5**	**70**	**100**	**2**	**Varies**
IDEM RCG Residential VESL's		**110**	**9.1**	**NE**	**NE**	**2.1**	**Varies**
IDEM RCG Industrial VESL's		**470**	**38**	**NE**	**NE**	**35**	**Varies**
Sample Identification	**Date Collected**	**Analytical Results in micrograms per liter (ug/L)**					
MW-10	9/24/2013	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/7/2014	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/11/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
MW-11	3/5/2014	**135**	**94.4**	< 5.0	< 5.0	< 2.0	BRL
	9/24/2013	**94.6**	**83.2**	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	**136**	**110**	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	**124**	**82.4**	< 5.0	< 5.0	< 2.0	BRL
	6/15/2018	**102**	**60.0**	< 5.0	< 5.0	< 2.0	BRL
	02/08/2019	**68.7**	**50.4**	<5.0	<5.0	<2.0	BRL
	03/05/2019	**39.6**	**29.5**	<5.0	<5.0	<2.0	BRL
	3/29/2019	**45.3**	**31.5**	<5.0	<5.0	<2.0	BRL
MW-11D	6/15/2018	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	02/08/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/05/2019	**7.2**	<5.0	<5.0	<5.0	<2.0	BRL
	3/29/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
MW 12	3/5/2014	< 5.0	**10.3**	< 5.0	< 5.0	< 2.0	BRL
	3/3/2014	< 5.0	**10.3**	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	< 5.0	**42.4**	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	02/05/2019	<5.0	**38.8**	<5.0	<5.0	<2.0	BRL
	3/7/2019	<5.0	**42.0**	<5.0	<5.0	<2.0	BRL
	4/1/2019	<5.0	**29.9**	<5.0	<5.0	<2.0	BRL
MW 12D	02/05/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	3/7/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	4/1/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
MW-13	9/24/2013	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/5/2014	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
MW-14	9/25/2013	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/7/2014	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	02/08/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	3/6/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	4/1/2019	<5.0	**495**	**7.7**	<5.0	<2.0	BRL
MW-14D	02/08/2019	<5.0	**583**	**26.4**	<5.0	<2.0	BRL
	3/6/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	4/1/2019	<5.0	**524**	**11**	<5.0	<2.0	BRL
MW-15	9/25/2013	< 5.0	**26.3**	< 5.0	< 5.0	< 2.0	BRL
	3/7/2014	< 5.0	**16.6**	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	< 5.0	**42.3**	< 5.0	< 5.0	< 2.0	BRL
	6/15/2018	< 5.0	**50.3**	< 5.0	< 5.0	< 2.0	BRL
	02/08/2019	<5.0	**49.3**	<5.0	<5.0	<2.0	BRL
	3/6/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	4/1/2019	<5.0	**6.7**	**579**	**18.1**	<2.0	BRL
MW-15D	6/15/2018	< 5.0	**120**	**384**	**42.3**	< 2.0	BRL
	02/08/2019	<5.0	**12.3**	**780**	**53.5**	<2.0	BRL
	3/6/2019	<5.0	**7.8**	**430**	**17.9**	<2.0	BRL
	4/1/2019	<5.0	<5.0	**557**	**29.5**	<2.0	BRL
MW-16	9/25/2013	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/7/2014	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/6/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
MW-17	9/25/2013	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/7/2014	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/6/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
MW-18	3/3/2014	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
MW-19	3/3/2014	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	3/12/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL

		Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	All Remaining VOCs
IDEM RCG Residential TWSL's		**5**	**5**	**70**	**100**	**2**	**Varies**
IDEM RCG Residential VESL's		**110**	**9.1**	**NE**	**NE**	**2.1**	**Varies**
IDEM RCG Industrial VESL's		**470**	**38**	**NE**	**NE**	**35**	**Varies**
Sample Identification	**Date Collected**	**Analytical Results in micrograms per liter (ug/L)**					
MW-20	3/3/2014	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/12/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
MW-21	3/3/2014	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/12/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
MW-22	3/5/2014	**8.5**	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	**8.4**	**89.5**	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	**9.6**	**86.4**	< 5.0	< 5.0	< 2.0	BRL
	6/14/2018	**8.9**	**73.9**	<5.0	<5.0	<2.0	BRL
	02/08/2019	**8.1**	**71.5**	**10.8**	<5.0	<2.0	BRL
	3/7/2019	**5.8**	**30**	<5.0	<5.0	<2.0	BRL
	3/27/2019	**6.7**	**30.8**	<5.0	<5.0	<2.0	BRL
MW-22D	6/14/2018	**7.4**	**34.6**	< 5.0	< 5.0	< 2.0	BRL
	02/08/2019	**9.1**	**42.6**	<5.0	<5.0	<2.0	BRL
	3/7/2019	**13.3**	**43.6**	<5.0	<5.0	<2.0	BRL
	3/27/2019	**7.4**	**32.1**	<5.0	<5.0	<2.0	BRL
MW-23	3/3/2014	**141**	**469**	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	**156**	**323**	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	**115**	**234**	<5.0	<5.0	<2.0	BRL
	3/11/2019	**15.7**	**21.9**	<5.0	<5.0	<2.0	BRL
MW-24	3/6/2014	**183**	**65.6**	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	**185**	**52.0**	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	**167**	**59.0**	<5.0	<5.0	<2.0	BRL
	3/12/2019	**55.2**	**60.2**	<5.0	<5.0	<2.0	BRL
MW-25	3/5/2014	< 5.0	**9.4**	< 5.0	< 5.0	< 2.0	BRL
MW-26	3/5/2014	**26.9**	**63.1**	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	**22.2**	**55.4**	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	**21.8**	**48.0**	<5.0	<5.0	<2.0	BRL
	6/14/2018	**22.3**	**39.8**	<5.0	<5.0	<2.0	BRL
	02/05/2019	**14.8**	**46.1**	<5.0	<5.0	<2.0	BRL
	3/11/2019	**12.5**	**35.5**	<5.0	<5.0	<2.0	BRL
	03/28/2019	**15.6**	**31**	<5.0	<5.0	<2.0	BRL
MW 32 (Deep Well paired with MW-26)	8/21/2017	**11.0**	**26.9**	**19.1**	< 5.0	< 2.0	BRL
	6/15/2018	**15.1**	**27.1**	**26.5**	< 5.0	< 2.0	BRL
	02/05/2019	**8.0**	**9.4**	**5.9**	<5.0	<2.0	BRL
	3/11/2019	**16.1**	**37.9**	<5.0	<5.0	<2.0	BRL
	03/28/2019	**15.8**	**29.5**	<5.0	<5.0	<5.0	BRL
MW-27	3/5/2014	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
	3/11/2019	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	BRL
MW-28	3/7/2014	< 5.0	< 5.0	**19.3**	< 5.0	< 2.0	BRL
	8/22/2017	< 5.0	< 5.0	**47.7**	< 5.0	< 2.0	BRL
	3/6/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
MW 29	3/7/2014	**14.5**	**153**	< 5.0	< 5.0	< 2.0	BRL
	9/1/2016	**13.6**	**128**	< 5.0	< 5.0	< 2.0	BRL
	8/21/2017	**13.4**	**106**	< 5.0	< 5.0	< 2.0	BRL
	6/14/2018	**14.0**	**97.6**	< 5.0	< 5.0	< 2.0	BRL
	02/05/2019	<5.0	**34.5**	<5.0	<5.0	<2.0	BRL
	3/7/2019	<5.0	**15.7**	<5.0	<5.0	<2.0	BRL
	3/27/2019	**6.8**	**40.6**	<5.0	<5.0	<2.0	BRL
MW 29D	6/14/2018	**12.9**	**148**	**33.6**	< 5.0	< 2.0	BRL
	02/05/2019	**13.4**	**149**	**25.7**	<5.0	<2.0	BRL
	3/7/2019	**14.4**	**124**	**21.2**	<5.0	<2.0	BRL
	3/27/2019	**9.8**	**106**	**21.4**	<5.0	<2.0	BRL
MW-30	9/1/2016	**695**	**386**	< 5.0	< 5.0	< 2.0	BRL
	8/22/2017	**475**	**253**	< 5.0	< 5.0	< 2.0	BRL
	6/15/18	**520**	**283**	< 5.0	< 5.0	< 2.0	BRL
	02/08/2019	**171**	**173**	<5.0	<5.0	<2.0	BRL
	3/11/2019	**293**	**163**	<5.0	<5.0	<2.0	BRL
	3/29/2019	**444**	**159**	<5.0	<5.0	<2.0	BRL

		Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	All Remaining VOCs
IDEM RCG Residential TWSL's		**5**	**5**	**70**	**100**	**2**	**Varies**
IDEM RCG Residential VESL's		**110**	**9.1**	**NE**	**NE**	**2.1**	**Varies**
IDEM RCG Industrial VESL's		**470**	**38**	**NE**	**NE**	**35**	**Varies**
Sample Identification	**Date Collected**	**Analytical Results in micrograms per liter (ug/L)**					
MW-31 (Deep well paired with MW-30)	8/22/2017	**5.7**	<5.0	< 5.0	< 5.0	< 2.0	BRL
	6/15/2018	< 5.0	<5.0	< 5.0	< 5.0	< 2.0	BRL
	02/08/2019	<5.0	<5.0	**5.4**	<5.0	<2.0	BRL
	3/11/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	3/29/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
MW 33	02/05/2019	**28.9**	**61**	<5.0	<5.0	<2.0	BRL
	3/7/2019	**46.0**	**71.1**	**5.6**	<5.0	<2.0	BRL
	03/28/2019	**7.8**	**29.3**	<5.0	<5.0	<2.0	BRL
MW 33D	02/05/2019	**21.1**	**114**	<5.0	<5.0	<2.0	BRL
	3/7/2019	**35.4**	**97.3**	<5.0	<5.0	<2.0	BRL
	03/28/2019	**17.1**	**59.9**	<2.0	<5.0	<2.0	BRL
TMW-1	02/06/2019	<5.0	**11.2**	<5.0	<5.0	<2.0	BRL
	3/8/2019	<5.0	**14.9**	<5.0	<5.0	<2.0	BRL
	03/26/2019	<5.0	**7**	<5.0	<5.0	<2.0	BRL
TMW-1D	02/06/2019	<5.0	**24.2**	**510**	**41.6**	<2.0	BRL
	3/8/2019	<5.0	**19.8**	**660**	<5.0	<2.0	BRL
	03/26/2019	<5.0	**11.9**	**829**	**41**	<2.0	BRL
TMW-2	02/06/2019	<5.0	**94.1**	<5.0	<5.0	<2.0	BRL
	3/8/2019	<5.0	**106**	<5.0	<5.0	<2.0	BRL
	03/26/2019	<5.0	**73.7**	<5.0	<5.0	<2.0	BRL
TMW-2D	02/06/2019	<5.0	**15.9**	**550**	**43.4**	<2.0	BRL
	3/8/2019	<5.0	**40.9**	**250**	<5.0	<2.0	BRL
	03/26/2019	<5.0	**13.7**	**683**	**49.6**	**2.3**	BRL
TMW-3	02/06/2019	<5.0	**30.4**	<5.0	<5.0	<2.0	BRL
	3/8/2019	<5.0	**37.3**	<5.0	<5.0	<2.0	BRL
	03/26/2019	<5.0	**25.2**	<5.0	<5.0	<2.0	BRL
TMW-3D	02/06/2019	<5.0	**383**	**1060**	**87.5**	<2.0	BRL
	3/8/2019	<5.0	**152**	**539**	<5.0	<2.0	BRL
	03/26/2019	<5.0	**288**	**904**	**78.4**	<2.0	BRL
TMW-4	02/07/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	3/8/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/26/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
TMW-4D	02/07/2019	<5.0	**9.1**	**437**	**14.5**	<2.0	BRL
	03/05/2019	<5.0	**7.3**	**270**	**9.8**	<2.0	BRL
	03/26/2019	<5.0	**10.9**	**395**	<5.0	<2.0	BRL
TMW-5	02/08/2019	<5.0	**479**	<5.0	<5.0	<2.0	BRL
	03/05/2019	<5.0	**311**	<5.0	<5.0	<2.0	BRL
	03/26/2019	<5.0	**244**	<5.0	<5.0	<2.0	BRL
TMW-5D	02/08/2019	<5.0	**528**	**1560**	**139**	<2.0	BRL
	03/05/2019	<5.0	**444**	**1040**	**80.9**	<2.0	BRL
	03/26/2019	<5.0	**500**	**1220**	**112**	<2.0	BRL
TMW-6	02/08/2019	<5.0	**14.7**	**24.4**	<5.0	<2.0	BRL
	03/05/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/27/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
TMW-6D	02/08/2019	<5.0	<5.0	**8.3**	<5.0	<2.0	BRL
	03/05/2019	<5.0	<5.0	**5.2**	<5.0	<2.0	BRL
	03/27/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
TMW-7	02/07/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/05/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/27/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
TMW-7D	02/07/2019	<5.0	<5.0	**780**	**38.2**	<2.0	BRL
	03/05/2019	<5.0	**19.2**	**246**	**14.2**	<2.0	BRL
	03/27/2019	<5.0	<5.0	**943**	**46**	<2.0	BRL
Trip Blank	02/05/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/04/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL
	03/27/2019	<5.0	<5.0	<5.0	<5.0	<2.0	BRL

Notes

BOLD	= Constituent detected above Laboratory Reporting Limit
BOLD	= Constituent detected above IDEM RCG Residential TWSL's
BOLD	= Constituent detected above IDEM RCG Residential VESL's
BOLD	= Constituent detected above IDEM RCG Industrial VESL's

NE = No Screening Level Established for Constituent

BRL - Below Laboratory Reporting Limit

APPENDIX D

GROUNDWATER SAMPLING DATA LOGS

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: TMW-1

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/6/2019	**START TIME:**	13:50
WELL ID:	TMW-1	**SAMPLE ID:**	TMW-1
CASING ELEVATION:	ft	**SCREEN DEPTH:**	5-15 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	9.42 ft	**WELL DEPTH:**	15.26 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	13.00 ft	**GALLONS PURGED:**	0.95

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid	**ODOR:**	none	**COLOR:**	brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
13:50	9.14	NA	120	12.31	8.54	194	0.65	1000	6.90	0.42
13:55	9.14	NA	120	11.97	8.35	201	0.64	1000	6.28	0.41
14:00	9.14	NA	120	11.78	8.21	208	0.64	1000	6.17	0.41
14:04	9.14	NA	120	11.66	8.07	219	0.65	944	5.39	0.41
14:10	9.14	NA	120	11.65	8.03	222	0.65	821	5.74	0.41
14:15	9.14	NA	120	11.73	8.01	223	0.64	800	5.91	0.41
14:20	9.14	NA	120	11.78	8.00	227	0.64	789	6.24	0.41
			Samples collected at:			**14:20**				
			Total purged:			**0.95 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI # 3

Well ID: TMD-1

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/6/2019	**START TIME:**	13:50
WELL ID:	TMD-1	**SAMPLE ID:**	TMD-1
CASING ELEVATION:	ft	**SCREEN DEPTH:**	55-60 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	8.21 ft	**WELL DEPTH:**	60.42 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	58.00 ft	**GALLONS PURGED:**	0.79

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
13:50	7.95	NA	100	13.27	7.64	179	0.70	140	8.68	0.45
13:55	7.95	NA	100	13.21	7.64	162	0.70	125	8.45	0.45
14:00	7.95	NA	100	13.00	7.61	142	0.69	141	7.60	0.45
14:04	7.95	NA	100	13.11	7.60	149	0.69	44.2	6.75	0.44
14:10	7.95	NA	100	13.08	7.60	147	0.68	54.2	6.55	0.44
14:15	7.95	NA	100	12.35	7.57	143	0.69	300	6.34	0.44
14:20	7.95	NA	100	12.50	7.57	140	0.69	400	5.95	0.44
			Samples collected at:			**14:20**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLI

PROJECT NAME: Houghland FSI #3

Well ID: TMW-2

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event
DATE:	2/6/2019	**START TIME:**	12:45
WELL ID:	TMW-2	**SAMPLE ID:**	TMW-2
CASING ELEVATION:	ft	**SCREEN DEPTH:**	5-15
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	8.05 ft	**WELL DEPTH:**	15.50
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with s controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	13.00 ft	**GALLONS PURGED:**	0.92

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brow

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***
12:45	17:45	NA	100	12.39	7.55	200	0.58	0	4.38
12:50	17:45	NA	100	12.46	7.57	198	0.57	0	4.10
12:55	17:45	NA	100	12.73	7.55	208	0.57	0	3.91
13:00	17:45	NA	100	12.84	7.55	212	0.57	0	3.84
13:05	17:45	NA	100	13.03	7.54	216	0.57	0	3.63
13:10	17:45	NA	100	13.18	7.54	219	0.57	0	3.39
13:15	17:45	NA	100	13.22	7.54	220	0.57	0	3.34
13:20	17:45	NA	100	13.26	7.54	222	0.57	0	3.34
			Samples collected at:			**13:20**			
			Total purged:			**0.92 gallons**			

NG LOG

P

#1

ft

ft

peed

HCL

n to clear

TDS *(g/L)*
0.37
0.37
0.37
0.37
0.37
0.36
0.36
0.36

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: TMW-2D

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/6/2019	**START TIME:**	12:45
WELL ID:	TMW-2D	**SAMPLE ID:**	TMW-2D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	55-60 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	8.01 ft	**WELL DEPTH:**	60.59 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	58.00 ft	**GALLONS PURGED:**	1.11

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	clear	**ODOR:**	none	**COLOR:**	clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
12:45	7.99	NA	120	13.10	8.55	325.0	0.75	472.0	12.84	0.48
12:50	7.99	NA	120	13.12	8.58	305.0	0.74	284.0	5.90	0.47
12:55	7.99	NA	120	13.00	8.48	116.0	0.74	263.0	2.03	0.48
13:00	7.99	NA	120	12.91	8.43	94.0	0.74	237.0	1.69	0.47
13:05	7.99	NA	120	12.83	8.38	86.0	0.73	227.0	1.08	0.47
13:10	7.99	NA	120	12.69	8.36	77.0	0.73	209.0	0.19	0.47
13:15	7.99	NA	120	12.61	8.35	77.0	0.73	208.0	0.30	0.47
13:20	7.99	NA	120	12.57	8.35	76.0	0.73	197.0	0.17	0.47
			Samples collected at:			**13:20**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-3

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/6/2019	**START TIME:**	11:35
WELL ID:	TMW-3	**SAMPLE ID:**	TMW-3
CASING ELEVATION:	ft	**SCREEN DEPTH:**	5-15 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	9.15 ft	**WELL DEPTH:**	15.43 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	13.00 ft	**GALLONS PURGED:**	1.06

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid	**ODOR:**	none	**COLOR:**	brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:35	8.91	NA	100	10.04	8.73	291	0.70	1000	10.25	0.45
11:40	8.91	NA	100	10.21	8.49	299	0.71	1000	6.86	0.45
11:45	8.91	NA	100	10.78	8.50	309	0.72	1000	6.17	0.46
11:50	8.91	NA	100	10.92	8.54	307	0.70	1000	7.96	0.46
11:55	8.91	NA	100	11.02	8.47	306	0.70	1000	7.32	0.45
12:00	8.91	NA	100	11.23	8.38	306	0.70	1000	6.86	0.45
12:05	8.91	NA	100	11.62	8.30	304	0.70	1000	6.48	0.45
12:10	8.91	NA	100	11.76	8.29	303	0.70	1000	6.32	0.45
12:15	8.91	NA	100	11.72	8.28	303	0.70	1000	6.28	0.45
			Samples collected at:			**12:15**				
			Total purged:			**1.06 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: TMW-3D

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/6/2019	**START TIME:**	11:40
WELL ID:	TMW-3D	**SAMPLE ID:**	TMW-3D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	50-55 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	9.19 ft	**WELL DEPTH:**	55.31 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	53.00 ft	**GALLONS PURGED:**	0.93

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	clear	**ODOR:**	none	**COLOR:**	clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:40	9.00	NA	100	13.50	7.78	86	0.68	0	1.76	0.43
11:45	9.00	NA	100	13.66	7.72	81	0.68	0	1.53	0.43
11:50	9.00	NA	100	13.42	7.54	74	0.67	0	0.99	0.43
11:55	9.00	NA	100	13.49	7.44	77	0.67	0	0.71	0.43
12:00	9.00	NA	100	14.02	7.43	69	0.67	800	0.49	0.43
12:05	9.00	NA	100	14.12	7.41	61	0.67	500	0.31	0.43
12:10	9.00	NA	100	13.77	7.40	60	0.67	350	0.26	0.43
12:15	9.00	NA	100	13.79	7.40	60	0.67	300	0.22	0.43
				Samples collected at:		**12:15**				
				Total purged:		**0.93 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-4

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/7/2019	**START TIME:**	10:45
WELL ID:	TMW-4	**SAMPLE ID:**	TMW-4
CASING ELEVATION:	ft	**SCREEN DEPTH:**	5-15 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	8.50 ft	**WELL DEPTH:**	15.44 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	13.00 ft	**GALLONS PURGED:**	0.66

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
10:45	8.01	NA	100	11.28	7.87	261	0.62	0	8.32	0.40
10:50	8.01	NA	100	11.41	7.74	261	0.62	0	5.40	0.40
10:55	8.01	NA	100	11.63	7.60	261	0.62	0	4.32	0.40
11:00	8.01	NA	100	12.75	7.55	259	0.61	0	1.13	0.39
11:05	8.01	NA	100	12.69	7.54	257	0.61	0	0.91	0.39
11:10	8.01	NA	100	12.70	7.54	257	0.61	0	0.79	0.39
			Samples collected at:			**11:10**				
			Total purged:			**0.66 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: TMW-4D

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/7/2019	**START TIME:**	10:45
WELL ID:	TMW-4D	**SAMPLE ID:**	TMW-4D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	57-62 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	8.09 ft	**WELL DEPTH:**	62.65 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	59.00 ft	**GALLONS PURGED:**	0.66

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
10:45	8.09	NA	100	13.45	8.22	91.0	0.99	88.0	2.21	0.64
10:50	8.09	NA	100	13.37	8.13	85.0	0.99	87.4	1.67	0.64
10:55	8.09	NA	100	13.20	8.05	72.0	0.99	87.9	0.95	0.64
11:00	8.09	NA	100	13.22	7.99	67.0	0.99	88.7	0.48	0.64
11:05	8.09	NA	100	13.15	7.89	66.0	0.99	84.4	0.00	0.64
11:10	8.09	NA	100	13.15	7.87	66.0	0.99	85.5	0.00	0.64
			Samples collected at:			**11:10**				
			Total purged:			**0.66 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: TMW-5

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	9:50
WELL ID:	TMW-5	**SAMPLE ID:**	TMW-5
CASING ELEVATION:	ft	**SCREEN DEPTH:**	5-15 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	7.70 ft	**WELL DEPTH:**	15.39 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	13.00 ft	**GALLONS PURGED:**	1.11

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
9:50	4.11	NA	120	10.05	7.88	220	0.61	0.0	1.92	0.39
9:55	4.11	NA	120	9.78	7.85	219	0.61	0.0	1.89	0.39
10:00	4.11	NA	120	9.44	7.80	219	0.61	0.0	1.87	0.39
10:05	4.11	NA	120	8.01	7.60	218	0.63	0.0	1.26	0.40
10:10	4.11	NA	120	11.01	7.48	216	0.62	0.0	1.03	0.39
10:15	4.11	NA	120	10.92	7.44	219	0.62	0.0	0.91	0.39
10:20	4.11	NA	120	10.93	7.43	218	0.62	0.0	0.80	0.39
10:25	4.11	NA	120	10.91	7.43	218	0.62	0.0	0.62	0.39
			Samples collected at:			**10:25**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: TMW-5D

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	9:45
WELL ID:	TMW-5D	**SAMPLE ID:**	TMW-5D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	55-60 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	8.85 ft	**WELL DEPTH:**	60.26 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	58.00 ft	**GALLONS PURGED:**	0.99

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbod	**ODOR:**	none	**COLOR:**	light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
9:45	5.21	NA	150	5.09	8.29	141	0.89	1000	20.11	0.57
9:50	5.21	NA	150	5.37	8.37	94	0.91	1000	10.26	0.58
9:55	5.21	NA	150	5.52	8.32	94	0.90	1000	8.16	0.58
10:00	5.21	NA	150	5.55	8.26	93	0.90	1000	6.78	0.58
10:05	5.21	NA	150	5.54	8.25	92	0.91	968	6.1	0.58
10:10	5.21	NA	150	5.55	8.24	90	0.91	854	5.97	0.58
			Samples collected at:			**10:10**				
			Total purged:			**0.99 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: TMW-6

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	10:45
WELL ID:	TMW-6	**SAMPLE ID:**	TMW-6
CASING ELEVATION:	ft	**SCREEN DEPTH:**	5-15 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	9.42 ft	**WELL DEPTH:**	15.49 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	13.00 ft	**GALLONS PURGED:**	0.66

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid	**ODOR:**	none	**COLOR:**	brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
10:45	5.96	NA	100	5.37	8.24	175	0.81	1000	3.64	0.52
10:50	5.96	NA	100	4.17	8.19	178	0.81	1000	2.55	0.52
10:55	5.96	NA	100	7.11	8.09	179	0.81	1000	2.76	0.52
11:00	5.96	NA	100	6.89	8.09	181	0.80	520	2.56	0.52
11:05	5.96	NA	100	6.69	8.09	183	0.80	1000	2.47	0.51
11:10	5.96	NA	100	6.26	8.09	185	0.80	932	2.29	0.51
			Samples collected at:			**11:10**				
			Total purged:			**0.66 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: TMW-6D

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	10:55
WELL ID:	TMW-6D	**SAMPLE ID:**	TMW-6d
CASING ELEVATION:	ft	**SCREEN DEPTH:**	40-45 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	9.38 ft	**WELL DEPTH:**	45.73 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	43.00 ft	**GALLONS PURGED:**	0.79

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	clear	**ODOR:**	none	**COLOR:**	clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
10:55	9.10	NA	100	8.45	7.46	42.0	0.68	0	0.82	0.43
11:00	9.10	NA	100	9.08	7.42	37.0	0.68	0	0.70	0.43
11:05	9.10	NA	100	12.16	7.35	27.0	0.67	800	0.26	0.43
11:10	9.10	NA	100	8.02	7.33	23.0	0.68	600	0.09	0.44
11:15	9.10	NA	100	6.97	7.32	20.0	0.69	400	0.00	0.44
11:20	9.10	NA	100	6.95	7.33	19.0	0.69	450	0.00	0.44
11:25	9.10	NA	100	6.91	7.33	17.0	0.69	458	0.00	0.44
				Samples collected at:		**11:25**				
				Total purged:		**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: TMW-7

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/7/2019	**START TIME:**	11:40
WELL ID:	TMW-7	**SAMPLE ID:**	TMW-7
CASING ELEVATION:	ft	**SCREEN DEPTH:**	5-15 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	8.41 ft	**WELL DEPTH:**	15.26 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	13.00 ft	**GALLONS PURGED:**	0.79

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:40	8.04	NA	100	10.92	8.03	175	0.67	0.0	0.61	0.43
11:45	8.04	NA	100	10.94	7.95	173	0.68	0.0	0.54	0.43
11:50	8.04	NA	100	10.95	7.95	171	0.68	0.0	0.49	0.44
11:55	8.04	NA	100	11.09	7.90	170	0.69	0.0	0.51	0.44
12:00	8.04	NA	100	11.53	7.84	169	0.69	0.0	0.52	0.44
12:05	8.04	NA	100	11.64	7.83	169	0.69	0.0	0.39	0.44
12:10	8.04	NA	100	11.61	7.83	169	0.69	0.0	0.25	0.44
			Samples collected at:			**12:10**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-7D

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/7/2019	**START TIME:**	11:40
WELL ID:	TMW-7D	**SAMPLE ID:**	TMW-7D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	60-65 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	8.90 ft	**WELL DEPTH:**	65.67 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	63.00 ft	**GALLONS PURGED:**	0.79

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:40	8.47	NA	100	12.92	7.77	149	0.83	800	6.42	0.53
11:45	8.47	NA	100	12.71	7.68	92	0.84	0.0	4.61	0.53
11:50	8.47	NA	100	12.52	7.59	77	0.84	0.0	2.52	0.54
11:55	8.47	NA	100	12.13	7.50	72	0.85	0.0	1.05	0.54
12:00	8.47	NA	100	12.92	7.35	65	0.85	0.0	0.32	0.54
12:05	8.47	NA	100	13.01	7.34	63	0.85	0.0	0.26	0.54
12:10	8.47	NA	100	12.94	7.34	63	0.85	0.0	0.18	0.54
			Samples collected at:			**12:10**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-11

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	14:00
WELL ID:	MW-11	**SAMPLE ID:**	MW-11
CASING ELEVATION:	ft	**SCREEN DEPTH:**	3-13 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	7.57 ft	**WELL DEPTH:**	13.81 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	10.00 ft	**GALLONS PURGED:**	0.66

SAMPLING DATA

SAMPLING METHOD:	Micro-purge evacuation and sample				
CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	slight turbid to clear	**ODOR:**	none	**COLOR:**	light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
14:00	6.18	NA	100	10.68	8.53	167	0.60	386	12.39	0.38
14:05	6.18	NA	100	11.38	8.32	183	0.61	285	9.95	0.39
14:10	6.18	NA	100	11.60	8.28	185	0.61	249	9.84	0.39
14:15	6.18	NA	100	12.07	8.20	189	0.61	175	9.46	0.39
14:20	6.18	NA	100	12.58	8.15	188	0.61	142	8.94	0.39
14:25	6.18	NA	100	12.55	8.13	185	0.62	112	8.95	0.39
			Samples collected at:			**14:25**				
			Total purged:			**0.66 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW11D

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	14:05
WELL ID:	MW-11D	**SAMPLE ID:**	MW-11D & MS/MSD-B
CASING ELEVATION:	ft	**SCREEN DEPTH:**	18-23 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	7.54 ft	**WELL DEPTH:**	23.67 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	21.00 ft	**GALLONS PURGED:**	0.93

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	Turbid to slight clear	**ODOR:**	none	**COLOR:**	bworn to slight clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
14:05	6.90	NA	100	11.79	7.49	63	0.69	1000	1.83	0.44
14:10	6.90	NA	100	11.80	7.45	69	0.69	800	1.29	0.44
14:15	6.90	NA	100	11.85	7.39	76	0.69	800	0.42	0.44
14:20	6.90	NA	100	12.49	7.36	88	0.69	800	0.27	0.44
14:25	6.90	NA	100	13.13	7.32	92	0.69	800	0.10	0.44
14:30	6.90	NA	100	13.55	7.28	96	0.69	800	0.09	0.44
14:35	6.90	NA	100	13.60	7.27	96	0.69	800	0.05	0.44
14:10	6.90	NA	100	13.54	7.27	97	0.69	800	0.06	0.44
			Samples collected at:			**14:40**				
			Total purged:			**0.93 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-12

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/5/2019	**START TIME:**	15:32
WELL ID:	MW-12	**SAMPLE ID:**	MW-12
CASING ELEVATION:	ft	**SCREEN DEPTH:**	5-15 ft
SAMPLING PERSONNEL:	James Cody		

EVACUATION DATA

DEPTH TO FP/WATER:	9.51 ft	**WELL DEPTH:**	15.00 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	13.00 ft	**GALLONS PURGED:**	0.95

SAMPLING DATA

SAMPLING METHOD:	Micro-purge evacuation and sample				
CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
15:32	12:14	NA	120	11.48	7.71	234	0.75	0.0	21.14	0.48
15:35	12:14	NA	120	11.31	7.76	232	0.74	68.8	2.55	0.47
15:38	12:14	NA	120	10.74	7.79	231	0.73	0.0	1.96	0.47
15:41	12:14	NA	120	10.04	7.80	231	0.75	1000	1.53	0.48
15:44	12:14	NA	120	11.24	7.79	231	0.75	786	1.48	0.48
15:47	12:14	NA	120	11.33	7.800	232	0.75	499	1.41	0.48
15:50	12:14	NA	120	10.78	7.81	233	0.76	326	1.36	0.49
15:53	12:14	NA	120	10.88	7.80	233	0.76	218	1.35	0.48
			Samples collected at:			**15:53**				
			Total purged:			**0.95 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: MW-12D

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/5/2019	**START TIME:**	15:45
WELL ID:	MW-12D	**SAMPLE ID:**	MW-12D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	21-26 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	9.22 ft	**WELL DEPTH:**	26.00 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	24.00 ft	**GALLONS PURGED:**	1.07

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:		**ODOR:**		**COLOR:**	

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
15:45	9.22	NA	150	12.05	7.36	171	0.84	0.0	1.21	0.53
15:48	9.22	NA	150	12.25	7.35	169	0.84	0.0	1.14	0.53
15:51	9.22	NA	150	12.34	7.36	168	0.83	0.0	1.08	0.53
15:54	9.22	NA	150	12.29	7.33	164	0.83	0.0	0.76	0.53
15:57	9.22	NA	150	12.64	7.31	157	0.83	0.0	0.46	0.53
16:00	9.22	NA	150	13.21	7.29	148	0.83	0.0	0.28	0.53
16:03	9.22	NA	150	13.59	7.27	146	0.83	0.0	0.28	0.53
16:06	9.22	NA	150	13.54	7.27	142	0.83	0.0	0.20	0.53
16:09	9.22	NA	150	13.52	7.27	140	0.83	0.0	0.18	0.53
16:12	9.22	NA	150	13.51	7.27	139	0.83	0.0	0.16	0.53
			Samples collected at:			**16:12**				
			Total purged:			**1.07 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-14

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	15:40
WELL ID:	MW-14	**SAMPLE ID:**	MW-14
CASING ELEVATION:	ft	**SCREEN DEPTH:**	21-26 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	9.15 ft	**WELL DEPTH:**	20.24 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	18.00 ft	**GALLONS PURGED:**	0.93

SAMPLING DATA

SAMPLING METHOD:	Micro-purge evacuation and sample				
CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
15:40	6.27	NA	100	8.25	7.94	233	0.24	1000	3.09	0.16
15:45	6.27	NA	100	9.70	8.02	124	0.23	535	0.27	0.15
15:50	6.27	NA	100	8.12	7.99	127	0.23	575	0.15	0.15
15:55	6.27	NA	100	7.10	7.96	130	0.23	595	0.06	0.15
16:00	6.27	NA	100	6.11	7.97	134	0.23	491	0.00	0.15
16:05	6.27	NA	100	9.19	7.97	130	0.23	160	0.01	0.15
16:10	6.27	NA	100	9.27	7.97	129	0.23	140	0.00	0.15
16:15	6.27	NA	100	9.32	7.97	130	0.23	130	0.00	0.15
			Samples collected at:			**16:15**				
			Total purged:			**0.93 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-14D

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	15:40
WELL ID:	MW-14D	**SAMPLE ID:**	MW-14D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	27-32 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	11.95 ft	**WELL DEPTH:**	32.95 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	30.00 ft	**GALLONS PURGED:**	1.11

SAMPLING DATA

SAMPLING METHOD:	Micro-purge evacuation and sample				
CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbod to clear	**ODOR:**	none	**COLOR:**	light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
15:40	9.08	NA	120	9.96	8.45	211	0.77	299	9.20	0.49
15:45	9.08	NA	120	9.68	8.39	191	0.71	1000	3.27	0.49
15:50	9.08	NA	120	9.29	8.22	163	0.70	1000	1.44	0.48
15:55	9.08	NA	120	9.24	8.15	157	0.75	1000	0.96	0.48
16:00	9.08	NA	120	9.23	8.08	138	0.75	1000	0.93	0.48
16:05	9.08	NA	120	9.72	8.00	132	0.75	1000	0.65	0.48
16:10	9.08	NA	120	9.71	8.00	127	0.75	1000	0.52	0.48
16:15	9.08	NA	120	9.72	8.00	125	0.75	1000	0.47	0.48
			Samples collected at:			**16:15**				
			Total purged:			**1.11 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-15

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	17:00
WELL ID:	MW-15	**SAMPLE ID:**	MW-15
CASING ELEVATION:	ft	**SCREEN DEPTH:**	17-22 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	12.94 ft	**WELL DEPTH:**	21.95 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	19.00 ft	**GALLONS PURGED:**	0.93

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbod to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
17:00	9.65	NA	100	8.51	8.18	111	0.68	232	2.92	0.44
17:05	9.65	NA	100	8.04	8.17	110	0.68	220	2.88	0.43
17:10	9.65	NA	100	8.64	8.17	112	0.68	205	2.62	0.44
17:15	9.65	NA	100	8.92	8.17	114	0.68	197	2.42	0.44
17:20	9.65	NA	100	9.39	8.15	115	0.68	188	2.07	0.43
17:25	9.65	NA	100	9.27	8.16	118	0.68	162	1.92	0.43
17:30	9.65	NA	100	9.42	8.15	118	0.68	150	1.87	0.43
17:35	9.65	NA	100	9.31	8.15	117	0.68	140	0.75	0.43
			Samples collected at:			**17:35**				
			Total purged:			**0.93 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID:

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	17:00
WELL ID:	MW-15D	**SAMPLE ID:**	MW-15D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	45-50 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	11.45 ft	**WELL DEPTH:**	50.44 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	48.00 ft	**GALLONS PURGED:**	1.39

SAMPLING DATA

SAMPLING METHOD:	Micro-purge evacuation and sample				
CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	Turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
17:00	9.15	NA	150	8.34	8.18	78	0.70	0.7	0.70	0.70
17:05	9.15	NA	150	8.72	8.20	73	0.70	0.0	2.97	0.44
17:10	9.15	NA	150	8.61	8.17	69	0.70	0.0	2.52	0.45
17:15	9.15	NA	150	8.91	8.16	68	0.70	0.0	1.81	0.44
17:20	9.15	NA	150	8.99	8.17	67	0.70	0.0	1.20	0.45
17:25	9.15	NA	150	9.10	8.160	66	0.70	0.0	0.75	0.45
17:30	9.15	NA	150	9.09	8.16	64	0.70	0.0	0.62	0.45
17:35	9.15	NA	150	9.10	8.16	62	0.70	0.0	0.50	0.45
			Samples collected at:			**17:35**				
			Total purged:			**1.39 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-22

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	11:55
WELL ID:	MW-22	**SAMPLE ID:**	MW-22
CASING ELEVATION:	ft	**SCREEN DEPTH:**	8-18 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	12.69 ft	**WELL DEPTH:**	18.56 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	16.00 ft	**GAL PURGED:**	0.66

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:55	11.78	NA	100	7.27	7.95	226	0.90	620	7.56	0.58
12:00	11.78	NA	100	9.27	7.94	222	0.85	407	5.84	0.54
12:05	11.78	NA	100	10.45	7.89	218	0.86	702	5.06	0.55
12:10	11.78	NA	100	12.06	7.86	215	0.83	516	4.86	0.53
12:15	11.78	NA	100	12.91	7.83	215	0.82	411	4.55	0.52
12:20	11.78	NA	100	12.89	7.830	214	0.82	386	4.32	5.26
			Samples collected at:			**12:20 PM**				
					Total purged:		**0.66 gallons**			

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-22D

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	11:50
WELL ID:	MW-22D	**SAMPLE ID:**	MW-22D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	23-28 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	13.03 ft	**WELL DEPTH:**	28.10 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	26.00 ft	**GALLONS PURGED:**	1.06

SAMPLING DATA

SAMPLING METHOD:	Micro-purge evacuation and sample				
CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:50	9.10	NA	100	11.18	7.47	85	0.66	0.0	2.92	0.41
11:55	9.10	NA	100	10.95	7.45	85	0.65	0.0	2.34	0.41
12:00	9.10	NA	100	10.78	7.43	83	6.42	0.0	1.89	0.41
12:05	9.10	NA	100	10.65	7.42	82	0.63	0.0	1.54	0.40
12:10	9.10	NA	100	9.65	7.39	86	0.62	0.0	0.70	0.40
12:15	9.10	NA	100	7.40	7.34	93	0.63	0.0	0.09	0.40
12:20	9.10	NA	100	7.29	7.33	94	0.63	0.0	0.07	0.40
12:25	9.10	NA	100	7.31	7.33	93	0.63	0.0	0.06	0.40
12:30	9.10	NA	100	7.33	7.33	98	0.64	0.0	0.23	0.41
			Samples collected at:			**12:30**				
			Total purged:			**1.06 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI #3

Well ID: MW-26

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/5/2019	**START TIME:**	11:30
WELL ID:	MW-26	**SAMPLE ID:**	MW-26
CASING ELEVATION:	ft	**SCREEN DEPTH:**	12 ft to 22 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	14.86 ft	**WELL DEPTH:**	22.90 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	20.00 ft	**GALLONS PURGED:**	0.63

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:30	14.91	NA	100	12.25	7.16	336	0.75	800	6.05	0.48
11:33	14.91	NA	100	11.55	7.16	330	0.70	740	5.50	0.49
11:36	14.91	NA	100	11.50	7.16	324	0.78	710	4.76	0.50
11:39	14.91	NA	100	11.45	7.16	324	0.78	660	4.73	0.50
11:42	14.91	NA	100	11.50	7.16	322	0.78	620	4.67	0.50
11:45	14.92	NA	100	11.59	7.16	321	0.78	450	4.65	0.50
11:48	14.92	NA	100	11.52	7.16	318	0.79	368	4.57	0.50
11:51	14.92	NA	100	11.62	7.16	314	0.79	292	4.52	0.50
11:54	14.92	NA	100	11.51	7.16	312	0.79	268	4.46	0.50
			Samples collected at:			**11:55**				
			Total purged:			**0.63 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-32

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/5/2019	**START TIME:**	11:50
WELL ID:	MW-32	**SAMPLE ID:**	MW-32
CASING ELEVATION:	ft	**SCREEN DEPTH:**	23-33 ft
SAMPLING PERSONNEL:	James Cody		

EVACUATION DATA

DEPTH TO FP/WATER:	15.28 ft	**WELL DEPTH:**	33.00 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	30.00 ft	**GALLONS PURGED:**	1.26

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	brwon to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:50	15.40	NA	200	7.98	9.04	282	0.73	267	22.30	0.45
11:53	15.40	NA	200	9.33	8.50	280	0.70	0.0	9.30	0.45
11:56	15.40	NA	200	10.80	8.04	282	0.66	0.0	4.77	0.45
11:59	15.40	NA	200	11.67	7.80	282	0.66	0.0	2.91	0.43
12:02	15.40	NA	200	11.71	7.76	282	0.66	0.0	2.70	0.42
12:05	15.40	NA	200	11.86	7.62	282	0.66	0.0	1.99	0.42
12:08	15.40	NA	200	12.29	7.53	282	0.65	0.0	1.50	0.42
12:11	15.40	NA	200	12.31	7.48	283	0.65	0.0	1.27	0.42
12:14	15.40	NA	200	12.34	7.41	284	0.66	0.0	0.90	0.42
			Samples collected at:			**12:14**				
			Total purged:			**1.26 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-29

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/5/2019	**START TIME:**	14:35
WELL ID:	MW-29	**SAMPLE ID:**	MW-29
CASING ELEVATION:	ft	**SCREEN DEPTH:**	7-17 ft
SAMPLING PERSONNEL:	James Cody		

EVACUATION DATA

DEPTH TO FP/WATER:	10.00 ft	**WELL DEPTH:**	17.60 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	15.00 ft	**GALLONS PURGED:**	0.83

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
14:35	10.00	NA	150	10.46	7.80	330	0.71	908	21.83	0.45
14:38	10.00	NA	150	9.92	7.69	212	0.71	47.4	1.34	0.45
14:41	10.00	NA	150	9.85	7.67	203	0.71	61.5	1.09	0.45
14:44	10.00	NA	150	9.71	7.64	191	0.71	36.6	0.80	0.45
14:47	10.00	NA	150	9.77	7.61	188	0.71	57.9	0.68	0.45
14:50	10.00	NA	150	10.03	7.590	186	0.70	60.2	0.67	0.45
14:53	10.00	NA	150	10.38	7.57	185	0.71	51.2	0.64	0.45
14:56	10.00	NA	150	10.40	7.58	184	0.71	46.2	0.64	0.45
			Samples collected at:			**14:56**				
			Total purged:			**0.83 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-29D

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/5/2019	**START TIME:**	14:46
WELL ID:	MW-29D	**SAMPLE ID:**	MW-29D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	31-41 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	10.21 ft	**WELL DEPTH:**	41.00 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	38.50 ft	**GALLONS PURGED:**	0.87

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	little turbid to clear	**ODOR:**	none	**COLOR:**	very light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
14:46	10.21	NA	150	13.52	7.45	76	0.62	0.0	0.47	0.40
14:49	10.21	NA	150	13.86	7.44	79	0.62	0.0	0.43	0.40
14:52	10.21	NA	150	14.05	7.41	86	0.62	0.0	0.31	0.40
14:55	10.21	NA	150	14.20	7.38	91	0.62	0.0	0.24	0.40
14:58	10.21	NA	150	14.21	7.35	100	0.63	800	0.11	0.40
15:01	10.21	NA	150	14.15	7.35	100	0.63	800	0.10	0.41
15:04	10.21	NA	150	13.40	7.34	105	0.63	800	0.09	0.41
15:07	10.21	NA	150	12.96	7.34	109	0.64	650	0.05	0.40
			Samples collected at:			**15:07**				
			Total purged:			**0.87 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-30

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	13:05
WELL ID:	MW-30	**SAMPLE ID:**	MW-30/Dup A
CASING ELEVATION:	ft	**SCREEN DEPTH:**	20-30 ft
SAMPLING PERSONNEL:	Mack Runyon		

EVACUATION DATA

DEPTH TO FP/WATER:	9.43 ft	**WELL DEPTH:**	29.90 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	26.00 ft	**GALLONS PURGED:**	0.79

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid	**ODOR:**	none	**COLOR:**	light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
13:05	10.31	NA	120	10.45	8.30	205	0.66	1000	10.26	0.42
13:10	10.49	NA	120	13.49	8.49	76.0	0.61	432	0.99	0.40
13:15	10.57	NA	120	13.53	8.46	50.0	0.61	159	0.50	0.40
13:20	10.72	NA	120	13.74	8.47	40.0	0.61	112	0.18	0.39
13:25	10.97	NA	120	13.84	8.47	36.0	0.61	98.3	0.12	0.39
13:30	11.25	NA	120	13.91	8.47	34.0	0.61	76.7	0.08	0.39
			Samples collected at:			**13:30**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-31

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/8/2019	**START TIME:**	13:00
WELL ID:	MW-31	**SAMPLE ID:**	MW-31 & MS/MSD A
CASING ELEVATION:	ft	**SCREEN DEPTH:**	4-14 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	9.25 ft	**WELL DEPTH:**	14.22 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	12.00 ft	**GALLONS PURGED:**	1.11

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
13:00	8.55	NA	120	10.75	7.46	257	0.61	0.0	11.20	0.37
13:05	8.55	NA	120	10.84	7.44	260	0.61	0.0	11.02	0.38
13:10	8.55	NA	120	10.93	7.43	263	0.60	0.0	10.82	0.39
13:15	8.55	NA	120	12.79	7.44	266	0.60	0.0	10.39	0.38
13:20	8.55	NA	120	13.13	7.41	269	0.60	800	10.31	0.39
13:25	8.55	NA	120	13.41	7.390	272	0.60	700	10.28	0.39
13:30	8.55	NA	120	13.42	7.40	272	0.60	630	10.25	0.39
13:35	8.55	NA	120	13.55	7.40	272	0.60	590	10.24	0.39
			Samples collected at:			**13:35**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-33

PROJECT NO/TASK:	19-0096-001E	**EVENT:**	Sampling Event #1
DATE:	2/5/2019	**START TIME:**	13:18
WELL ID:	MW-33	**SAMPLE ID:**	MW-33
CASING ELEVATION:	ft	**SCREEN DEPTH:**	15-20 ft
SAMPLING PERSONNEL:	James Cody		

EVACUATION DATA

DEPTH TO FP/WATER:	15.50 ft	**WELL DEPTH:**	20.00 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	18.00 ft	**GALLONS PURGED:**	0.95

SAMPLING DATA

SAMPLING METHOD:	Micro-purge evacuation and sample				
CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid	**ODOR:**	none	**COLOR:**	brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
13:18	15.50	NA	150	12.97	7.43	289	0.63	0.0	24.9	0.4
13:21	15.50	NA	150	11.56	7.50	294	0.61	0.0	8.5	0.4
13:24	15.50	NA	150	11.31	7.51	296	0.62	0.0	6.8	0.4
13:27	15.50	NA	150	11.75	7.56	298	0.63	0.0	6.1	0.4
13:30	15.50	NA	150	12.38	7.63	298	0.62	883	5.8	0.4
13:33	15.50	NA	150	12.23	7.77	293	0.63	923	5.4	0.4
13:36	15.50	NA	150	12.83	7.96	288	0.62	380	5.0	0.4
13:39	15.50	NA	150	12.98	7.95	286	0.62	205	5.2	0.4
13:42	15.50	NA	150	12.99	7.94	285	0.62	190	5.1	0.4
			Samples collected at:			**13:42**				
			Total purged:			**0.95 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-33D

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #1
DATE:	2/5/2019	**START TIME:**	13:25
WELL ID:	MW-33D	**SAMPLE ID:**	MW-33D
CASING ELEVATION:	ft	**SCREEN DEPTH:**	31 ft to 36 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	16.90 ft	**WELL DEPTH:**	36.11 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	34.00 ft	**GALLONS PURGED:**	1.55

SAMPLING DATA

SAMPLING METHOD:	Micro-purge evacuation and sample				
CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	turbid to clear	**ODOR:**	none	**COLOR:**	light brwon to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
13:25	16.90	NA	150	12.50	7.86	165	0.59	0.0	1.53	0.38
13:28	16.90	NA	150	12.38	7.77	154	0.59	0.0	1.21	0.38
13:31	16.90	NA	150	12.52	7.77	150	0.59	0.0	0.99	0.38
13:34	16.90	NA	150	12.70	7.77	147	0.59	0.0	0.90	0.38
13:37	16.90	NA	150	12.63	7.72	148	0.59	0.0	1.10	0.37
13:40	16.90	NA	150	12.88	7.64	148	0.57	0.0	1.00	0.37
13:43	16.90	NA	150	12.93	7.56	146	0.57	0.0	0.83	0.37
13:46	16.90	NA	150	13.08	7.52	144	0.57	0.0	0.80	0.37
13:49	16.90	NA	150	13.15	7.50	141	0.57	0.0	0.80	0.36
13:52	16.90	NA	150	13.41	7.48	138	0.57	800	0.85	0.36
13:55	16.90	NA	150	13.52	7.47	137	0.57	800	0.86	0.36
13:58	16.90	NA	150	13.53	7.46	136	0.57	750	0.86	0.36
14:01	16.90	NA	150	14.04	7.46	134	0.57	535	0.83	0.36
14:04	16.90	NA	150	13.80	7.46	133	0.57	475	0.75	0.36
			Samples collected at:			**14:04**				
			Total purged:			**1.55 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-1

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/8/2019
START TIME: 8:25
WELL ID: TMW-1
SAMPLE ID: TMW-1
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.69 ft
WELL DEPTH: 15.26 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE:
ODOR:
COLOR:

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	0.473 0.468
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
8:25	8.71	NA	120	8.57	7.38	20	0.712	0.0	7.92	0.452
8:30	8.71	NA	120	8.64	7.32	35	0.723	0.0	7.28	0.453
8:35	8.71	NA	120	8.52	7.27	47	0.727	0.0	6.99	0.468
8:40	8.71	NA	120	8.09	7.15	59	0.720	0.0	6.44	0.473
8:45	8.71	NA	120	7.92	7.10	67	0.722	0.0	6.08	0.462
8:50	8.71	NA	120	7.58	7.04	68	0.719	0.0	5.27	0.452
8:55	8.71	NA	120	7.53	7.04	70	0.718	0.0	5.27	0.454
9:00	8.71	NA	120	7.52	7.03	72	0.716	0.0	5.22	0.456
			Samples collected at:			**9:00**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-1D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/8/2019
START TIME: 9:20 AM
WELL ID: TMW-1D
SAMPLE ID: TMW-1D
CASING ELEVATION: ft
SCREEN DEPTH: 55-60 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.45 ft
WELL DEPTH: 60.42 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 58.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
9:20	7.54	NA	100	9.89	7.42	49	0.699	0.0	8.06	0.499
9:25	7.54	NA	100	9.67	7.31	38	0.712	0.0	7.19	0.505
9:30	7.54	NA	100	9.36	7.24	22	0.710	0.0	6.38	0.501
9:35	7.54	NA	100	9.03	7.16	8	0.704	0.0	4.05	0.503
9:40	7.54	NA	100	8.54	7.07	-6	0.689	0.0	2.10	0.500
9:45	7.54	NA	100	8.16	6.99	-9	0.696	0.0	1.30	0.500
9:50	7.54	NA	100	8.22	6.98	-13	0.695	0.0	1.23	0.503
9:55	7.54	NA	100	8.04	6.97	-18	0.693	0.0	1.18	0.508
			Samples collected at:			**9:55 AM**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-2

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/8/2019
START TIME: 10:15 AM
WELL ID: TMW-2
SAMPLE ID: TMW-2
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.24 ft
WELL DEPTH: 15.50 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: Turbid
ODOR: None
COLOR: Brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
10:15	7.36	NA	100	8.08	7.15	80	0.612	0.0	7.81	0.398
10:20	7.36	NA	100	8.42	7.14	87	0.610	0.0	6.75	0.395
10:25	7.36	NA	100	8.03	7.12	87	0.609	0.0	6.22	0.391
10:30	7.36	NA	100	7.81	7.12	92	0.602	0.0	5.99	0.390
10:35	7.36	NA	100	7.73	7.11	94	0.599	0.0	4.82	0.382
10:40	7.36	NA	100	7.59	7.10	98	0.587	0.0	3.51	0.378
10:45	7.36	NA	100	7.63	7.10	101	0.593	0.0	3.49	0.375
10:50	7.36	NA	100	7.56	7.10	103	0.589	0.0	3.44	0.372
			Samples collected at:			**10:50 AM**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-2D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/8/2019
START TIME: 11:05 AM
WELL ID: TMW-2D
SAMPLE ID: TMW-2D
CASING ELEVATION: ft
SCREEN DEPTH: 55-60 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.58 ft
WELL DEPTH: 60.59 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 58.00 ft
GALLONS PURGED: 1.38

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
11:05	7.65	NA	100	10.92	7.26	184	0.798	0.0	8.26	0.563
11:10	7.65	NA	100	10.08	7.20	172	0.789	0.0	5.19	0.542
11:15	7.65	NA	100	9.54	7.18	114	0.783	1000.0	2.18	0.550
11:20	7.65	NA	100	9.33	7.12	80	0.780	1000.0	1.30	0.544
11:25	7.65	NA	100	9.14	7.10	76	0.781	829.0	0.68	0.539
11:30	7.65	NA	100	8.98	7.04	62	0.784	651.0	0.20	0.541
11:35	7.65	NA	100	8.72	7.03	60	0.786	528.0	0.11	0.543
11:40	7.65	NA	100	8.87	7.03	58	0.787	486.0	0.09	0.547
			Samples collected at:			**11:40 AM**				
			Total purged:			**1.38 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-3

PROJECT NO/TASK:	19-0096-01E	**EVENT:**	Sampling Event #2
DATE:	3/8/2019	**START TIME:**	12:30
WELL ID:	TMW-3	**SAMPLE ID:**	TMW-3
CASING ELEVATION:	ft	**SCREEN DEPTH:**	5-15 ft
SAMPLING PERSONNEL:	Vishal Shah		

EVACUATION DATA

DEPTH TO FP/WATER:	8.39 ft	**WELL DEPTH:**	15.43 ft
EVACUATION METHOD:	Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing		
PUMP INTAKE SET AT:	13.00 ft	**GALLONS PURGED:**	0.92

SAMPLING DATA

SAMPLING METHOD: Micro-purge evacuation and sample

CONSTITUENT:	VOC's 8260	**CONTAINER:**	3 x 40ml vials	**PRESERVATIVE:**	HCL
APPEARANCE:	Turbid	**ODOR:**	none	**COLOR:**	Brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
12:30	8.44	NA	100	8.18	7.44	208	0.689	0.0	9.27	0.439
12:35	8.44	NA	100	7.93	7.42	251	0.697	0.0	9.09	0.422
12:40	8.44	NA	100	7.66	7.40	266	0.683	0.0	8.84	0.427
12:45	8.44	NA	100	7.43	7.38	297	0.682	0.0	7.73	0.429
12:50	8.44	NA	100	7.15	7.37	316	0.680	0.0	7.03	0.433
12:55	8.44	NA	100	6.96	7.31	324	0.689	0.0	6.67	0.436
13:05	8.44	NA	100	6.84	7.30	327	0.685	0.0	6.61	0.440
13:10	8.44	NA	100	6.71	7.29	333	0.681	0.0	6.53	0.444
			Samples collected at:			**13:10**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-3D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/8/2019
START TIME: 13:25
WELL ID: TMW-3D
SAMPLE ID: TMW-3D
CASING ELEVATION: ft
SCREEN DEPTH: 50-55 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.37 ft
WELL DEPTH: 55.31 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 53.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:25	8.53	NA	100	8.10	7.41	99	0.788	0.0	2.19	0.453
13:30	8.53	NA	100	7.88	7.37	84	0.763	0.0	2.08	0.459
13:35	8.53	NA	100	7.54	7.34	73	0.785	0.0	1.90	0.461
13:40	8.53	NA	100	7.31	7.33	76	0.753	0.0	1.72	0.452
13:45	8.53	NA	100	7.06	7.31	69	0.732	450	1.47	0.454
13:50	8.53	NA	100	6.28	7.29	62	0.705	782	0.22	0.452
13:55	8.53	NA	100	6.35	7.28	57	0.701	654	0.10	0.453
14:00	8.53	NA	100	6.39	7.28	54	0.699	351	0.08	0.455
			Samples collected at:			**14:00**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-4

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/8/2019
START TIME: 14:25
WELL ID: TMW-4
SAMPLE ID: TMW-4
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.92 ft
WELL DEPTH: 15.44 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: Turbid
ODOR: none
COLOR: brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
14:25	8.02	NA	120	6.38	7.44	72	0.666	0.0	2.93	0.401
14:30	8.02	NA	120	6.14	7.38	56	0.718	0.0	2.17	0.417
14:35	8.02	NA	120	5.83	7.27	47	0.709	0.0	1.03	0.420
14:40	8.02	NA	120	5.62	7.16	28	0.703	0.0	0.44	0.418
14:45	8.02	NA	120	5.51	7.09	19	0.701	0.0	0.12	0.413
14:50	8.02	NA	120	5.33	7.06	12	0.664	1000	0.06	0.409
14:55	8.02	NA	120	5.39	7.06	9	0.669	888	0.00	0.407
15:00	8.02	NA	120	5.44	7.07	8	0.662	754	0.00	0.404
			Samples collected at:			**15:00**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-4D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/5/2019
START TIME: 9:40
WELL ID: TMW-4D
SAMPLE ID: TMW-4D
CASING ELEVATION: ft
SCREEN DEPTH: 57-62 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.53 ft
WELL DEPTH: 62.65 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 59.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
9:40	7.71	NA	100	8.97	6.77	-8	0.996	0.0	7.82	0.648
9:45	7.71	NA	100	8.70	6.76	-12	0.984	0.0	6.54	0.634
9:50	7.71	NA	100	8.36	6.75	-16	0.975	0.0	4.10	0.624
9:55	7.71	NA	100	7.52	6.82	-28	0.959	0.0	2.13	0.605
10:00	7.71	NA	100	6.19	6.83	-36	0.935	0.0	0.20	0.593
10:05	7.71	NA	100	5.64	6.82	-38	0.903	0.0	0.05	0.588
10:10	7.71	NA	100	5.51	6.83	-41	0.901	0.0	0.00	0.576
10:15	7.71	NA	100	5.44	6.82	-42	0.900	0.0	0.00	0.569
			Samples collected at:			**10:15**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-5

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/5/2019
START TIME: 10:35
WELL ID: TMW-5
SAMPLE ID: TMW-5
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.08 ft
WELL DEPTH: 15.39 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
10:35	7.29	NA	120	7.29	7.23	-10	0.694	0.0	3.54	0.452
10:40	7.29	NA	120	6.99	7.16	2	0.701	0.0	3.32	0.451
10:45	7.29	NA	120	6.85	7.11	4	0.704	0.0	3.07	0.454
10:50	7.29	NA	120	6.16	7.06	9	0.705	0.0	2.53	0.453
10:55	7.29	NA	120	6.24	7.04	12	0.709	0.0	2.40	0.453
11:00	7.29	NA	120	6.29	7.03	15	0.707	0.0	2.43	0.453
11:05	7.29	NA	120	6.26	7.02	16	0.709	0.0	2.39	0.453
11:10	7.29	NA	120	6.22	7.03	17	0.706	0.0	2.44	0.453
			Samples collected at:			**11:10**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-5D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/5/2019
START TIME: 11:25
WELL ID: TMW-5D
SAMPLE ID: TMW-5D/DUP-A
CASING ELEVATION: ft
SCREEN DEPTH: 55-60 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.25 ft
WELL DEPTH: 60.26 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 58.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:25	8.46	NA	100	9.09	7.04	62	0.986	0.0	3.43	0.513
11:30	8.46	NA	100	8.93	7.03	50	0.875	0.0	2.67	0.516
11:35	8.46	NA	100	8.87	7.02	43	0.810	0.0	1.75	0.520
11:40	8.46	NA	100	7.60	7.02	31	0.703	0.0	0.20	0.452
11:45	8.46	NA	100	6.02	7.04	12	0.752	0.0	0.05	0.483
11:50	8.46	NA	100	5.94	7.02	8	0.757	0.0	0.00	0.487
11:55	8.46	NA	100	5.89	7.01	5	0.760	0.0	0.00	0.489
12:00	8.46	NA	100	5.96	7.01	4	0.761	0.0	0.00	0.486
			Samples collected at:			**12:00**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-6

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/5/2019
START TIME: 12:20 PM
WELL ID: TMW-6
SAMPLE ID: TMW-6
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.83 ft
WELL DEPTH: 15.49 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
12:20	9.01	NA	120	7.73	7.27	33	0.679	0.0	6.78	0.424
12:25	9.01	NA	120	8.09	7.25	37	0.654	0.0	5.42	0.423
12:30	9.01	NA	120	7.99	7.24	39	0.668	0.0	3.38	0.422
12:35	9.01	NA	120	6.81	7.20	44	0.649	0.0	1.92	0.421
12:40	9.01	NA	120	5.62	7.13	52	0.692	0.0	4.57	0.432
12:45	9.01	NA	120	5.48	7.11	54	0.695	0.0	4.46	0.446
12:50	9.01	NA	120	5.57	7.10	55	0.697	0.0	4.55	0.449
12:55	9.01	NA	120	5.48	7.09	56	0.696	0.0	1.49	0.447
			Samples collected at:			**12:55 PM**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-6D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/5/2019
START TIME: 13:15
WELL ID: TMW-6D
SAMPLE ID: TMW-6D
CASING ELEVATION: ft
SCREEN DEPTH: 40-45 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.78 ft
WELL DEPTH: 45.73 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 43.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear to light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:15	8.96	NA	100	9.96	7.09	-36	0.735	0.0	1.10	0.471
13:20	8.96	NA	100	9.73	7.06	-48	0.736	0.0	0.73	0.471
13:25	8.96	NA	100	9.54	7.04	-54	0.735	0.0	0.30	0.471
13:30	8.96	NA	100	9.18	7.02	-60	0.736	0.0	0.02	0.471
13:35	8.96	NA	100	9.03	7.01	-64	0.737	0.0	0.00	0.471
13:40	8.96	NA	100	9.09	6.99	-67	0.730	0.0	0.00	0.472
13:45	8.96	NA	100	8.97	6.98	-69	0.736	0.0	0.00	0.471
13:50	8.96	NA	100	9.03	6.98	-70	0.735	0.0	0.00	0.472
			Samples collected at:			**13:50**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-7

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/5/2019
START TIME: 14:15
WELL ID: TMW-7
SAMPLE ID: TMW-7
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.85 ft
WELL DEPTH: 15.26 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
14:15	8.09	NA	100	6.62	7.53	12	0.688	0.0	4.09	0.446
14:20	8.09	NA	100	6.43	7.36	18	0.679	0.0	3.96	0.438
14:25	8.09	NA	100	6.18	7.17	20	0.673	0.0	3.82	0.432
14:30	8.09	NA	100	6.61	7.04	33	0.653	0.0	4.23	0.416
14:35	8.09	NA	100	6.59	7.00	39	6.470	0.0	4.22	0.415
14:40	8.09	NA	100	6.65	6.99	45	0.649	0.0	4.17	0.414
14:45	8.09	NA	100	6.52	6.99	49	0.645	0.0	4.08	0.412
14:50	8.09	NA	100	6.66	6.98	53	0.647	0.0	4.23	0.410
			Samples collected at:			**14:50**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-7D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/5/2019
START TIME: 15:10
WELL ID: TMW-7D
SAMPLE ID: TMW-7D
CASING ELEVATION: ft
SCREEN DEPTH: 60-65 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.33 ft
WELL DEPTH: 65.67 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 63.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
15:10	8.57	NA	100	7.38	7.19	32	0.686	0.0	2.22	0.556
15:15	8.57	NA	100	7.29	7.14	27	0.692	0.0	0.47	0.562
15:20	8.57	NA	100	7.24	7.09	23	0.699	0.0	0.03	0.559
15:25	8.57	NA	100	7.21	7.00	19	0.674	0.0	0.00	0.552
15:30	8.57	NA	100	7.19	6.94	16	0.684	0.0	0.00	0.551
15:35	8.57	NA	100	7.18	6.90	15	0.682	0.0	0.00	0.552
15:40	8.57	NA	100	7.17	6.89	15	0.683	0.0	0.00	0.554
15:45	8.57	NA	100	7.17	6.89	13	0.681	0.0	0.00	0.553
			Samples collected at:			**15:45**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-10

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/11/2019
START TIME: 10:45
WELL ID: MW-10
SAMPLE ID: MW-10
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 4.09 ft
WELL DEPTH: 15.77 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
10:45	4.09	NA	120	12.39	9.09	103	0.653	591.0	8.54	0.416
10:50	4.09	NA	120	12.63	8.63	111	0.655	580.0	7.67	0.419
10:55	4.09	NA	120	12.85	8.10	120	0.654	575.0	6.89	0.418
11:00	4.09	NA	120	13.36	7.41	130	0.655	587.0	5.54	0.419
11:05	4.09	NA	120	13.55	7.29	138	0.653	603.0	4.14	0.418
11:10	4.09	NA	120	13.46	7.08	147	0.673	443.0	3.77	0.431
11:15	4.09	NA	120	13.52	7.07	149	0.675	411.0	3.64	0.432
11:20	4.09	NA	120	13.55	7.06	152	0.678	389.0	3.53	0.433
			Samples collected at:			**11:20**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-11

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/11/2019
START TIME: 15:45
WELL ID: MW-11
SAMPLE ID: MW-11
CASING ELEVATION: ft
SCREEN DEPTH: 3-13 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 6.53 ft
WELL DEPTH: 13.80 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 11.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: slight turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
15:45	6.52	NA	100	11.40	7.27	42	0.566	482.0	10.54	0.368
15:50	6.52	NA	100	11.18	7.24	55	0.586	561.0	10.10	0.376
15:55	6.52	NA	100	11.61	7.23	71	0.599	1000.0	9.44	0.383
16:00	6.52	NA	100	11.84	7.22	77	0.600	739.0	9.32	0.383
16:05	6.52	NA	100	12.03	7.19	81	0.602	672.0	9.08	0.387
16:10	6.52	NA	100	11.89	7.18	83	0.604	432.0	8.67	0.388
16:15	6.52	NA	100	12.05	7.18	86	0.606	415.0	8.59	0.389
16:20	6.52	NA	100	12.01	7.17	90	0.607	408.0	8.47	0.390
			Samples collected at:			**16:20**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-11D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/11/2019
START TIME: 15:00
WELL ID: MW-11D
SAMPLE ID: MW-11D
CASING ELEVATION: ft
SCREEN DEPTH: 18-23 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 6.40 ft
WELL DEPTH: 23.80 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 21.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
15:00	6.40	NA	100	14.30	7.58	36	0.799	0.0	7.92	0.479
15:05	6.40	NA	100	13.99	7.49	24	0.788	0.0	5.12	0.475
15:10	6.40	NA	100	13.78	7.28	10	0.780	0.0	2.09	0.471
15:15	6.40	NA	100	13.62	7.14	2	0.776	0.0	1.51	0.473
15:20	6.40	NA	100	13.01	7.07	-6	0.744	0.0	0.85	0.476
15:25	6.40	NA	100	13.70	7.02	-6	0.728	0.0	0.74	0.465
15:30	6.40	NA	100	13.94	7.01	-8	0.722	0.0	0.62	0.458
15:35	6.40	NA	100	13.82	7.01	-8	0.718	0.0	0.54	0.454
			Samples collected at:			**15:35**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-12

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/7/2019
START TIME: 8:25
WELL ID: MW-12
SAMPLE ID: MW-12
CASING ELEVATION: ft
SCREEN DEPTH: 6-16 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.78 ft
WELL DEPTH: 16.18 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 14.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: Turbid
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
8:25	8.90	NA	100	11.37	7.16	23	0.785	0.0	2.66	0.502
8:30	8.90	NA	100	10.92	7.11	29	0.786	0.0	2.14	0.503
8:35	8.90	NA	100	10.61	7.04	36	0.787	0.0	1.28	0.504
8:40	8.90	NA	100	11.13	7.00	40	0.799	0.0	1.15	0.509
8:45	8.90	NA	100	11.47	6.99	42	0.805	0.0	1.08	0.512
8:50	8.90	NA	100	11.38	6.99	43	0.812	0.0	0.99	0.519
8:55	8.90	NA	100	11.52	6.98	45	0.816	0.0	0.82	0.516
9:00	8.90	NA	100	11.44	6.98	47	0.817	0.0	0.77	0.518
			Samples collected at:			**9:00**				
			Total purged:			**0.92 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-12D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/7/2019
START TIME: 9:15
WELL ID: MW-12D
SAMPLE ID: MW-12D
CASING ELEVATION: ft
SCREEN DEPTH: 21-26 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.41 ft
WELL DEPTH: 26.11 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 24.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
9:15	8.55	NA	100	11.66	7.24	63	0.899	540.0	5.55	0.581
9:20	8.55	NA	100	11.79	7.12	42	0.894	609.0	3.63	0.572
9:25	8.55	NA	100	11.78	6.99	18	0.880	0.0	1.21	0.564
9:30	8.55	NA	100	11.44	6.96	4	0.879	0.0	0.72	0.563
9:35	8.55	NA	100	11.58	6.97	2	0.876	0.0	0.34	0.572
9:40	8.55	NA	100	11.47	6.97	0	0.862	0.0	0.29	0.569
9:45	8.55	NA	100	11.51	6.96	0	0.866	0.0	0.24	0.568
9:50	8.55	NA	100	11.34	6.96	-2	0.867	0.0	0.21	0.563
			Samples collected at:			**9:50**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-14

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/6/2019
START TIME: 15:00
WELL ID: MW-14
SAMPLE ID: MW-14
CASING ELEVATION: ft
SCREEN DEPTH: 10-20 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 11.28 ft
WELL DEPTH: 20.39 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 18.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
15:00	11.49	NA	100	9.98	8.35	242	0.759	0.0	6.30	0.572
15:05	11.49	NA	100	9.66	8.29	180	0.772	0.0	3.18	0.567
15:10	11.49	NA	100	9.19	8.21	162	0.741	0.0	1.38	0.558
15:15	11.49	NA	100	9.14	8.18	150	0.748	0.0	0.85	0.566
15:20	11.49	NA	100	9.03	8.15	143	0.762	0.0	0.74	0.547
15:25	11.49	NA	100	8.91	7.94	138	0.769	0.0	0.55	0.541
15:30	11.49	NA	100	8.82	7.93	132	0.763	0.0	0.42	0.539
			Samples collected at:			**15:30**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-14D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/6/2019
START TIME: 15:45
WELL ID: MW-14D
SAMPLE ID: MW-14D
CASING ELEVATION: ft
SCREEN DEPTH: 27-32 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.47 ft
WELL DEPTH: 32.95 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 30.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
15:45	8.66	NA	100	9.28	7.30	216	0.345	0.0	3.18	0.256
15:50	8.66	NA	100	9.07	7.29	174	0.349	0.0	1.06	0.255
15:55	8.66	NA	100	8.59	7.26	147	0.330	595.0	0.27	0.249
16:00	8.66	NA	100	8.45	7.24	132	0.338	440.0	0.14	0.249
16:05	8.66	NA	100	8.36	7.23	128	0.335	162.0	0.03	0.248
16:10	8.66	NA	100	8.41	7.23	124	0.338	150.0	0.00	0.247
16:15	8.66	NA	100	8.32	7.23	120	0.336	148.0	0.00	0.246
16:20	8.66	NA	100	8.49	7.22	115	0.333	143.0	0.00	0.243
			Samples collected at:			**16:20**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-15

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/6/2019
START TIME: 13:00
WELL ID: MW-15
SAMPLE ID: MW-15
CASING ELEVATION: ft
SCREEN DEPTH: 16-21 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 12.23 ft
WELL DEPTH: 21.52 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 19.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:00	12.42	NA	100	11.03	7.32	211	0.779	212.0	3.93	0.439
13:05	12.42	NA	100	10.88	7.31	184	0.802	202.0	3.03	0.451
13:10	12.42	NA	100	10.59	7.30	160	0.765	203.0	2.81	0.455
13:15	12.42	NA	100	10.41	7.29	142	0.772	187.0	2.48	0.449
13:20	12.42	NA	100	9.92	7.23	128	0.775	165.0	2.03	0.447
13:25	12.42	NA	100	9.67	7.20	119	0.773	152.0	0.77	0.446
13:30	12.42	NA	100	9.52	7.19	116	0.774	148.0	0.69	0.443
13:35	12.42	NA	100	9.63	7.18	117	0.776	140.0	0.63	0.444
			Samples collected at:			**13:35**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-15D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/6/2019
START TIME: 13:55
WELL ID: MW-15D
SAMPLE ID: MW-15D/DUP-B
CASING ELEVATION: ft
SCREEN DEPTH: 46-51 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 11.71 ft
WELL DEPTH: 51.20 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 49.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:55	11.92	NA	120	10.85	8.18	86	0.714	0.0	2.97	0.503
14:00	11.92	NA	120	11.03	7.93	94	0.719	0.0	2.43	0.512
14:05	11.92	NA	120	10.27	7.60	83	0.721	0.0	2.06	0.516
14:10	11.92	NA	120	9.01	7.44	79	0.722	0.0	1.53	0.515
14:15	11.92	NA	120	8.52	7.21	68	0.728	0.0	1.02	0.519
14:20	11.92	NA	120	8.37	7.08	59	0.749	0.0	0.56	0.514
14:25	11.92	NA	120	8.41	7.07	54	0.747	0.0	0.48	0.511
14:30	11.92	NA	120	8.33	7.07	51	0.742	0.0	0.41	0.508
			Samples collected at:			**14:30**				
			Total purged:			**1.11 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-16

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/6/2019
START TIME: 10:10
WELL ID: MW-16
SAMPLE ID: MW-16
CASING ELEVATION: ft
SCREEN DEPTH: 10-20 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 2.28 ft
WELL DEPTH: 20.11 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 18.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
10:10	2.46	NA	100	12.83	7.54	48	0.751	0.0	4.59	0.519
10:15	2.46	NA	100	12.02	7.46	30	0.773	0.0	3.86	0.515
10:20	2.46	NA	100	10.19	7.33	12	0.798	0.0	2.90	0.512
10:25	2.46	NA	100	9.28	7.21	-4	0.788	0.0	0.32	0.499
10:30	2.46	NA	100	8.75	7.05	-22	0.784	0.0	0.00	0.483
10:35	2.46	NA	100	8.58	6.99	-28	0.792	0.0	0.00	0.513
10:40	2.46	NA	100	8.42	6.98	-31	0.797	0.0	0.00	0.508
10:45	2.46	NA	100	8.53	6.96	-33	0.799	0.0	0.00	0.512
			Samples collected at:			**10:45**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-17

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/6/2019
START TIME: 12:00
WELL ID: MW-17
SAMPLE ID: MW-17
CASING ELEVATION: ft
SCREEN DEPTH: 14-24 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 11.40 ft
WELL DEPTH: 24.41 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 22.00 ft
GALLONS PURGED: 1.19

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
12:00	11.61	NA	150	11.09	7.39	81	0.938	205.0	3.86	0.597
12:05	11.61	NA	150	11.23	7.27	56	0.912	179.0	2.76	0.574
12:10	11.61	NA	150	11.39	7.03	29	0.818	73.5	0.83	0.518
12:15	11.61	NA	150	11.22	6.91	12	0.849	143.0	1.25	5.460
12:20	11.61	NA	150	10.85	6.84	8	0.868	145.0	1.30	0.552
12:25	11.61	NA	150	10.62	6.83	11	0.871	127.0	1.25	0.557
12:30	11.61	NA	150	10.51	6.82	12	0.874	144.0	1.30	0.553
			Samples collected at:			**12:30**				
			Total purged:			**1.19 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-18

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/12/2019
START TIME: 10:25
WELL ID: MW-18
SAMPLE ID: MW-18
CASING ELEVATION: ft
SCREEN DEPTH: 4-14 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 9.22 ft
WELL DEPTH: 14.77 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 12.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
10:25	9.22	NA	100	12.19	7.98	150	0.761	338	19.89	0.486
10:30	9.22	NA	100	12.38	7.74	154	0.763	363	14.16	0.489
10:35	9.22	NA	100	12.57	7.56	158	0.769	415	11.53	0.492
10:40	9.22	NA	100	12.31	7.33	161	0.771	185	9.87	0.494
10:45	9.22	NA	100	13.02	7.16	165	0.784	452	8.65	0.502
10:50	9.22	NA	100	13.59	7.11	167	0.785	414	8.51	0.503
10:55	9.22	NA	100	13.71	7.10	168	0.787	389	8.44	0.503
11:00	9.22	NA	100	13.62	7.09	169	0.783	406	8.38	0.503
			Samples collected at:			**11:00**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-19

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/12/2019
START TIME: 11:20
WELL ID: MW-19
SAMPLE ID: MW-19/MS-MSD-A
CASING ELEVATION: ft
SCREEN DEPTH: 2.4 - 12.4 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 6.30 ft
WELL DEPTH: 11.20 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 9.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:20	6.30	NA	120	12.48	7.52	174	0.509	485.0	10.28	0.396
11:25	6.30	NA	120	11.99	7.33	177	0.541	434.0	9.81	0.346
11:30	6.30	NA	120	12.33	7.18	177	0.603	382.0	8.99	0.389
11:35	6.30	NA	120	12.53	7.04	178	0.679	319.0	8.27	0.412
11:40	6.30	NA	120	12.99	6.98	181	0.720	221.0	7.90	0.434
11:45	6.30	NA	120	13.37	6.98	181	0.722	210.0	7.76	0.453
11:50	6.30	NA	120	13.54	6.97	182	0.725	189.0	7.58	0.460
11:55	6.30	NA	120	13.42	6.97	182	0.728	206.0	7.25	0.467
			Samples collected at:			**11:55**				
			Total purged:			**1.11 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-20

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/12/2019
START TIME: 12:25
WELL ID: MW-20
SAMPLE ID: MW-20/MS-MSD-B
CASING ELEVATION: ft
SCREEN DEPTH: 4-14 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 4.53 ft
WELL DEPTH: 14.64 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 12.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
12:25	4.53	NA	100	12.32	7.09	185	1.16	0.0	23.58	0.712
12:30	4.53	NA	100	12.06	7.06	187	1.12	0.0	10.55	0.714
12:35	4.53	NA	100	12.37	6.99	188	1.11	0.0	8.72	0.723
12:40	4.53	NA	100	12.29	6.95	190	1.13	0.0	8.67	0.725
12:45	4.53	NA	100	12.54	6.94	190	1.13	0.0	8.52	0.726
12:50	4.53	NA	100	12.81	6.92	187	1.13	0.0	8.48	0.728
12:55	4.53	NA	100	12.68	6.91	190	1.13	0.0	8.39	0.729
13:00	4.53	NA	100	12.75	6.91	190	1.13	0.0	8.32	0.729
			Samples collected at:			**13:00**				
			Total purged:			**1.11 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-21

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/12/2019
START TIME: 13:25
WELL ID: MW-21
SAMPLE ID: MW-21/MS-MSD-C
CASING ELEVATION: ft
SCREEN DEPTH: 3-13 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 4.74 ft
WELL DEPTH: 13.62 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 11.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:25	4.74	NA	100	11.13	7.64	204	0.703	0.0	12.12	0.451
13:30	4.74	NA	100	10.98	7.66	207	0.710	0.0	11.79	0.455
13:35	4.74	NA	100	10.86	7.68	209	0.713	0.0	11.30	0.457
13:40	4.74	NA	100	11.24	7.67	210	0.722	0.0	11.02	0.463
13:45	4.74	NA	100	12.14	7.68	208	0.718	0.0	10.74	0.460
13:50	4.74	NA	100	12.23	7.67	209	0.716	0.0	10.62	0.458
13:55	4.74	NA	100	12.38	7.68	208	0.713	0.0	10.53	0.456
14:00	4.74	NA	100	12.29	7.68	208	0.712	0.0	10.48	0.455
			Samples collected at:			**14:00**				
			Total purged:			**0.92 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-22

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/7/2019
START TIME: 11:55
WELL ID: MW-22
SAMPLE ID: MW-22
CASING ELEVATION: ft
SCREEN DEPTH: 8-18 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 11.84 ft
WELL DEPTH: 18.72 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 16.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
11:55	11.77	NA	100	12.81	7.05	54	0.897	0.0	8.03	0.548
12:00	11.77	NA	100	11.66	7.03	66	0.880	0.0	8.85	0.563
12:05	11.77	NA	100	10.75	7.01	71	0.883	0.0	7.99	0.577
12:10	11.77	NA	100	12.91	6.99	78	0.890	0.0	7.67	0.568
12:15	11.77	NA	100	9.58	6.96	84	0.873	619.0	4.09	0.572
12:20	11.77	NA	100	9.36	6.95	88	0.861	573.0	3.51	0.573
12:25	11.77	NA	100	9.48	6.94	89	0.859	521.0	3.44	0.570
12:30	11.77	NA	100	9.27	6.93	92	0.854	409.0	3.32	0.569
			Samples collected at:			**12:30**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-22D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/7/2019
START TIME: 12:45
WELL ID: MW-22D
SAMPLE ID: MW-22D
CASING ELEVATION: ft
SCREEN DEPTH: 22-27 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 12.12 ft
WELL DEPTH: 27.77 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 25.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: brown to light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
12:45	12.05	NA	100	11.81	7.16	32	0.704	0.0	1.32	0.451
12:50	12.05	NA	100	11.42	7.12	18	0.704	0.0	0.97	0.451
12:55	12.05	NA	100	11.74	7.09	5	0.704	0.0	0.40	0.451
13:00	12.05	NA	100	11.45	7.01	-12	0.705	0.0	0.12	0.451
13:05	12.05	NA	100	11.53	6.98	-16	0.713	0.0	0.08	0.457
13:10	12.05	NA	100	11.89	6.96	-15	0.715	0.0	0.06	0.457
13:15	12.05	NA	100	11.97	6.96	-14	0.717	0.0	0.08	0.458
13:20	12.05	NA	100	11.98	6.96	-14	0.718	0.0	0.08	0.457
			Samples collected at:			**13:20**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-23

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/11/2019
START TIME: 16:40
WELL ID: MW-23
SAMPLE ID: MW-23
CASING ELEVATION: ft
SCREEN DEPTH: 10-20 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 13.81 ft
WELL DEPTH: 20.91 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 18.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
16:40	13.81	NA	100	13.44	7.42	100	0.699	452	4.88	0.448
16:45	13.81	NA	100	13.49	7.23	101	0.692	458	3.59	0.445
16:50	13.81	NA	100	13.34	7.05	102	0.692	455	3.08	0.443
16:55	13.81	NA	100	13.30	6.98	104	0.686	471	2.26	0.439
17:00	13.81	NA	100	13.27	6.97	104	0.687	457	1.89	0.440
17:05	13.81	NA	100	13.18	6.98	105	0.688	431	1.72	0.442
17:10	13.81	NA	100	13.09	6.98	105	0.689	454	1.69	0.443
17:15	13.81	NA	100	13.16	6.98	106	0.689	434	1.66	0.444
			Samples collected at:			**17:15**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-24

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/12/2019
START TIME: 14:25
WELL ID: MW-24
SAMPLE ID: MW-24
CASING ELEVATION: ft
SCREEN DEPTH: 11-21 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 14.81 ft
WELL DEPTH: 21.25 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 19.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
14:25	14.81	NA	100	13.62	7.49	225	0.715	0.0	11.99	0.457
14:30	14.81	NA	100	13.75	7.34	228	0.719	0.0	10.65	0.460
14:35	14.81	NA	100	13.63	7.18	229	0.722	806.0	9.98	0.462
14:40	14.81	NA	100	13.38	7.04	230	0.727	496.0	9.20	0.465
14:45	14.81	NA	100	13.45	7.01	229	0.732	545.0	9.03	0.467
14:50	14.81	NA	100	14.30	6.97	228	0.733	1000.0	8.81	0.468
14:55	14.81	NA	100	14.54	6.96	226	0.733	1000.0	8.55	0.467
15:00	14.81	NA	100	14.37	6.95	226	0.733	1000.0	8.39	0.469
			Samples collected at:			**15:00**				
			Total purged:			**0.92 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-26

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/11/2019
START TIME: 12:35
WELL ID: MW-26
SAMPLE ID: MW-26
CASING ELEVATION: ft
SCREEN DEPTH: 12-22 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 13.92 ft
WELL DEPTH: 22.87 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 20.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
12:35	13.91	NA	100	13.52	7.37	208	0.848	0.0	8.90	0.538
12:40	13.91	NA	100	13.36	7.16	208	0.843	0.0	5.32	0.535
12:45	13.91	NA	100	13.24	7.01	209	0.835	0.0	4.73	0.531
12:50	13.91	NA	100	13.39	6.94	208	0.846	0.0	4.79	0.542
12:55	13.91	NA	100	13.98	6.91	205	0.844	0.0	4.67	0.540
13:00	13.91	NA	100	14.38	6.90	203	0.846	1000.0	4.60	0.542
13:05	13.91	NA	100	14.53	6.89	201	0.847	1000.0	4.59	0.542
13:10	13.91	NA	100	14.65	6.88	200	0.848	1000.0	4.63	0.542
			Samples collected at:			**13:10**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-27

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/11/2019
START TIME: 9:55
WELL ID: MW-27
SAMPLE ID: MW-27
CASING ELEVATION: ft
SCREEN DEPTH: 6-16 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.88 ft
WELL DEPTH: 16.75 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 14.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
9:55	7.89	NA	100	13.26	7.49	152	0.592	672.0	5.69	0.379
10:00	7.89	NA	100	13.15	7.41	158	0.589	664.0	4.82	0.377
10:05	7.89	NA	100	13.03	7.37	163	0.587	653.0	3.93	0.376
10:10	7.89	NA	100	12.99	7.24	165	0.584	626.0	2.31	0.374
10:15	7.89	NA	100	12.96	7.19	168	0.582	604.0	1.69	0.372
10:20	7.89	NA	100	12.80	7.17	167	0.584	597.0	1.63	0.377
10:25	7.89	NA	100	12.73	7.17	169	0.582	603.0	1.59	0.376
10:30	7.89	NA	100	12.88	7.16	168	0.581	604.0	1.56	0.379
			Samples collected at:			**10:30**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-28

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/6/2019
START TIME: 8:50
WELL ID: MW-28
SAMPLE ID: MW-28
CASING ELEVATION: ft
SCREEN DEPTH: 10-20 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 6.15 ft
WELL DEPTH: 21.39 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 18.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
8:50	6.36	NA	120	11.33	7.29	60	0.861	460.0	5.86	0.544
8:55	6.36	NA	120	10.52	7.15	42	0.888	424.0	4.43	0.548
9:00	6.36	NA	120	9.80	6.99	30	0.874	380.0	2.99	0.552
9:05	6.36	NA	120	9.52	6.84	14	0.863	195.0	1.53	0.536
9:10	6.36	NA	120	8.99	6.78	2	0.851	203.0	0.89	0.538
9:15	6.36	NA	120	8.72	6.72	-6	0.848	211.0	0.16	0.537
9:15	6.36	NA	120	8.61	6.72	-12	0.846	227.0	0.11	0.536
9:20	6.36	NA	120	8.57	6.71	-16	0.845	205.0	0.09	0.539
			Samples collected at:			**9:20**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-29

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/7/2019
START TIME: 10:15
WELL ID: MW-29
SAMPLE ID: MW-29
CASING ELEVATION: ft
SCREEN DEPTH: 2-12 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 9.21 ft
WELL DEPTH: 12.11 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 10.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear to light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
10:15	9.30	NA	100	10.81	7.23	-12	0.701	320.0	7.39	0.447
10:20	9.30	NA	100	10.30	7.14	8	0.708	280.0	6.98	0.455
10:25	9.30	NA	100	9.99	7.02	24	0.732	141.0	5.32	0.469
10:30	9.30	NA	100	10.31	6.93	35	0.729	100.0	4.58	0.469
10:35	9.30	NA	100	10.72	6.89	42	0.743	75.8	4.02	0.476
10:40	9.30	NA	100	10.60	6.84	48	0.749	103.0	3.88	0.478
10:45	9.30	NA	100	10.64	6.84	53	0.746	98.2	3.72	0.479
10:50	9.30	NA	100	10.53	6.83	56	0.747	92.0	3.64	0.481
			Samples collected at:			**10:50**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-29D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/7/2019
START TIME: 11:00
WELL ID: MW-29D
SAMPLE ID: MW-29D
CASING ELEVATION: ft
SCREEN DEPTH: 35-40 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 9.35 ft
WELL DEPTH: 41.72 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 38.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear to turbid
ODOR: none
COLOR: cleat to brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
11:00	9.42	NA	100	12.34	8.18	60	0.649	0.0	3.18	0.429
11:05	9.42	NA	100	11.95	7.93	30	0.671	0.0	2.29	0.431
11:10	9.42	NA	100	11.57	7.71	9	0.676	0.0	1.87	0.435
11:15	9.42	NA	100	11.61	7.42	-12	0.682	0.0	1.56	0.437
11:20	9.42	NA	100	11.51	7.28	-59	0.680	0.0	0.79	0.435
11:25	9.42	NA	100	11.72	7.20	-85	0.693	0.0	0.11	0.436
11:30	9.42	NA	100	11.84	7.19	-87	0.694	0.0	0.05	0.444
11:35	9.42	NA	100	11.98	7.18	-90	0.694	0.0	0.01	0.439
			Samples collected at:			**11:35**				
			Total purged:			**0.92 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-30

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/11/2019
START TIME: 14:15
WELL ID: MW-30
SAMPLE ID: MW-30/DUP-C
CASING ELEVATION: ft
SCREEN DEPTH: 19-29 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 10.35 ft
WELL DEPTH: 29.90 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 26.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
14:15	10.35	NA	100	14.33	7.42	283	0.629	0.0	1.98	0.400
14:20	10.35	NA	100	14.47	7.43	180	0.620	0.0	1.32	0.396
14:25	10.35	NA	100	14.62	7.46	122	0.612	0.0	0.44	0.391
14:30	10.35	NA	100	14.49	7.48	-29	0.619	579.0	0.13	0.396
14:35	10.35	NA	100	14.58	7.47	-67	0.621	1000.0	0.00	0.397
14:40	10.35	NA	100	14.69	7.47	-72	0.623	1000.0	0.00	0.950
14:45	10.35	NA	100	14.57	7.47	-76	0.622	1000.0	0.00	0.394
			Samples collected at:			**14:45**				
			Total purged:			**0.79 gallons**				

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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-31

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/11/2019
START TIME: 13:30
WELL ID: MW-31
SAMPLE ID: MW-31
CASING ELEVATION: ft
SCREEN DEPTH: 4-14 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.37 ft
WELL DEPTH: 14.27 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 12.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:30	8.37	NA	100	12.83	7.24	213	0.743	813.0	6.75	0.743
13:35	8.37	NA	100	12.96	7.18	214	0.745	825.0	5.93	0.475
13:40	8.37	NA	100	12.99	7.12	215	0.745	990.0	5.47	0.477
13:45	8.37	NA	100	13.18	7.05	218	0.750	1000.0	5.22	0.480
13:50	8.37	NA	100	13.71	7.05	214	0.747	1000.0	4.80	0.479
13:55	8.37	NA	100	14.64	7.04	213	0.744	990.0	4.57	0.475
14:00	8.37	NA	100	14.87	7.04	211	0.739	835.0	4.29	0.474
14:05	8.37	NA	100	15.01	7.04	210	0.738	805.0	4.11	0.471
			Samples collected at:			**14:05**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-32

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/11/2019
START TIME: 11:45
WELL ID: MW-32
SAMPLE ID: MW-32
CASING ELEVATION: ft
SCREEN DEPTH: 27-32 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 13.33 ft
WELL DEPTH: 32.75 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 30.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear to turbid
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
11:45	13.33	NA	100	14.26	7.78	192	0.776	0.0	7.36	0.489
11:50	13.33	NA	100	13.59	7.51	191	0.751	0.0	6.09	0.486
11:55	13.33	NA	100	13.60	7.36	191	0.762	0.0	5.43	0.483
12:00	13.33	NA	100	14.09	7.22	180	0.749	0.0	4.88	0.488
12:05	13.33	NA	100	14.03	7.09	167	0.748	0.0	3.62	0.499
12:10	13.33	NA	100	13.91	7.05	153	0.743	0.0	2.97	0.496
12:15	13.33	NA	100	13.84	7.04	159	0.738	0.0	2.90	0.489
12:20	13.33	NA	100	13.76	7.03	162	0.742	0.0	2.81	0.495
			Samples collected at:			**12:20**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-33

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/7/2019
START TIME: 14:45
WELL ID: MW-33
SAMPLE ID: MW-33
CASING ELEVATION: ft
SCREEN DEPTH: 16-26 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 15.49 ft
WELL DEPTH: 26.81 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 24.00 ft
GALLONS PURGED: 1.11

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
14:45	15.37	NA	120	12.09	7.19	107	0.755	0.0	2.23	0.489
14:50	15.37	NA	120	11.94	7.15	107	0.758	0.0	1.90	0.484
14:55	15.37	NA	120	11.58	7.10	108	0.760	0.0	1.73	0.486
15:00	15.37	NA	120	11.32	7.05	108	0.761	0.0	1.55	0.489
15:05	15.37	NA	120	10.99	6.99	111	0.766	553.0	1.44	0.492
15:10	15.37	NA	120	10.83	6.98	115	0.762	462.0	1.39	0.500
15:15	15.37	NA	120	10.87	6.97	115	0.769	315.0	1.36	0.500
15:20	15.37	NA	120	10.85	6.97	115	0.764	290.0	1.29	0.499
			Samples collected at:			**15:20**				
			Total purged:			**1.11 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-33D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #2
DATE: 3/7/2019
START TIME: 13:50
WELL ID: MW-33D
SAMPLE ID: MW-33D
CASING ELEVATION: ft
SCREEN DEPTH: 31-36 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 15.87 ft
WELL DEPTH: 36.22 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 34.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:50	15.71	NA	100	12.98	7.71	101	0.635	0.0	1.54	0.408
13:55	15.71	NA	100	12.87	7.53	101	0.639	0.0	1.02	0.409
14:00	15.71	NA	100	12.72	7.39	103	0.641	0.0	0.71	0.409
14:05	15.71	NA	100	12.57	7.26	103	0.642	0.0	0.25	0.411
14:10	15.71	NA	100	12.39	7.18	99	0.645	0.0	0.17	0.413
14:15	15.71	NA	100	12.21	7.16	99	0.650	0.0	0.19	0.415
14:20	15.71	NA	100	12.33	7.16	98	0.652	0.0	0.18	0.416
14:25	15.71	NA	100	12.15	7.15	98	0.653	0.0	0.17	0.419
			Samples collected at:			**14:25**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-

PROJECT NO/TASK: 19-0096-01E **EVENT:** 1Q2019

DATE: **START TIME:**

WELL ID: MW- **SAMPLE ID:** MW-

CASING ELEVATION: ft **SCREEN DEPTH:** ft

SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: ft **WELL DEPTH:** ft

EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing

PUMP INTAKE SET AT: ft **GALLONS PURGED:**

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample

CONSTITUENT: VOC's 8260 **CONTAINER:** 3 x 40ml vials **PRESERVATIVE:** HCL

APPEARANCE: **ODOR:** **COLOR:**

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
			Samples collected at:							
			Total purged:				**gallons**			

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-1

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/25/2019
START TIME: 14:45
WELL ID: TMW-1
SAMPLE ID: TMW-1
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 9.25 ft
WELL DEPTH: 15.26 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: Turbid to clear
ODOR: none
COLOR: brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
14:45	9.25	NA	100	9.99	7.26	152	0.699	0.00	23.01	0.449
14:50	9.25	NA	100	10.12	7.12	153	0.700	0.00	14.58	0.449
14:55	9.25	NA	100	9.87	7.03	154	0.700	0.00	12.66	0.447
15:00	9.25	NA	100	9.86	6.95	156	0.701	0.00	10.41	0.448
15:05	9.25	NA	100	10.30	6.90	156	0.699	0.00	9.55	0.448
15:10	9.25	NA	100	10.73	6.89	157	0.700	0.00	8.83	0.447
15:15	9.25	NA	100	11.05	6.88	157	0.698	0.00	8.72	0.448
15:20	6:00	NA	100	11.16	6.87	158	0.700	0.00	8.66	0.448
			Samples collected at:			**15:20**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-1D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/25/2019
START TIME: 15:45
WELL ID: TMW-1D
SAMPLE ID: TMW-1D
CASING ELEVATION: ft
SCREEN DEPTH: 55-60 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.98 ft
WELL DEPTH: 60.42 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 58.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: Turbid to clear
ODOR: none
COLOR: Light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
15:45	7.98	NA	100	11.18	6.83	-33	0.796	1000.0	3.02	0.507
15:50	7.98	NA	100	10.89	6.83	-35	0.790	0.0	1.20	0.505
15:55	7.98	NA	100	10.68	6.85	-37	0.782	0.0	0.72	0.500
16:00	7.98	NA	100	10.80	6.86	-40	0.777	0.0	0.54	0.495
16:05	7.98	NA	100	10.81	6.86	-41	7.680	0.0	0.32	0.491
16:10	7.98	NA	100	10.85	6.86	-42	0.763	0.0	0.24	0.489
16:15	7.98	NA	100	10.87	6.86	-42	0.761	0.0	0.18	0.486
			Samples collected at:			**16:15**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-2

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/26/2019
START TIME: 9:05
WELL ID: TMW-2
SAMPLE ID: TMW-2
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.72 ft
WELL DEPTH: 15.50 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: Turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
9:05	7.81	NA	100	7.83	7.39	76	0.679	0.0	16.20	0.438
9:10	7.81	NA	100	8.11	7.31	92	0.675	0.0	7.49	0.431
9:15	7.81	NA	100	9.25	7.25	99	0.671	0.0	5.38	0.429
9:20	7.81	NA	100	9.33	7.20	105	0.672	0.0	4.31	0.430
9:25	7.81	NA	100	9.46	7.17	108	0.670	0.0	2.90	0.430
9:30	7.81	NA	100	9.49	7.15	110	0.671	0.0	2.31	0.433
9:35	7.81	NA	100	9.68	7.14	112	0.675	0.0	2.16	0.433
9:40	7.81	NA	100	9.82	7.14	113	0.674	0.0	2.09	0.436
			Samples collected at:			**9:40**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-2D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/26/2019
START TIME: 9:50
WELL ID: TMW-2D
SAMPLE ID: TMW-2D
CASING ELEVATION: ft
SCREEN DEPTH: 55-60 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.03 ft
WELL DEPTH: 60.59 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 58.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
9:50	8.11	NA	100	9.51	7.32	-88	0.762	0.0	11.10	0.501
9:55	8.11	NA	100	9.28	7.20	-96	0.796	0.0	3.48	0.509
10:00	8.11	NA	100	9.03	7.10	-68	0.818	0.0	1.51	0.522
10:05	8.11	NA	100	9.04	7.09	-51	0.833	0.0	0.22	0.533
10:10	8.11	NA	100	9.00	7.09	-56	0.834	0.0	0.16	0.534
10:15	8.11	NA	100	8.99	7.08	-57	0.834	0.0	0.13	0.534
10:20	8.11	NA	100	8.86	7.07	-58	0.833	0.0	0.11	0.534
			Samples collected at:			**10:20**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-3

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/26/2019
START TIME: 10:40
WELL ID: TMW-3
SAMPLE ID: TMW-3
CASING ELEVATION: ft
SCREEN DEPTH: 5-+15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.78 ft
WELL DEPTH: 15.43 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: Turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
10:40	8.95	NA	100	7.86	8.40	135	0.701	0.0	24.71	0.449
10:45	8.95	NA	100	7.74	7.96	145	0.703	0.0	10.89	0.449
10:50	8.95	NA	100	7.62	7.61	150	0.700	0.0	8.54	0.448
10:55	8.95	NA	100	8.10	7.39	153	0.700	0.0	8.45	0.448
11:00	8.95	NA	100	8.68	7.28	155	0.690	0.0	8.03	0.441
11:05	8.95	NA	100	9.03	7.22	157	0.692	0.0	7.86	0.443
11:10	8.95	NA	100	9.05	7.21	158	0.692	0.0	7.75	0.444
11:15	8.95	NA	100	9.10	7.20	158	0.691	0.0	7.67	0.444
			Samples collected at:			**11:15**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-3D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/26/2019
START TIME: 11:30
WELL ID: TMW-3D
SAMPLE ID: TMW-3D
CASING ELEVATION: ft
SCREEN DEPTH: 50-55 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.79 ft
WELL DEPTH: 55.31 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 53.00 ft
GALLONS PURGED: 0.95

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:30	8.97	NA	100	10.35	7.10	205	0.729	0.0	9.29	0.471
11:35	8.97	NA	100	10.01	7.10	146	0.738	245.0	4.61	0.473
11:40	8.97	NA	100	9.19	7.11	45	0.746	1000.0	2.26	0.476
11:45	8.97	NA	100	8.14	7.08	19	0.732	0.0	0.82	0.467
11:50	8.97	NA	100	7.96	7.07	18	0.733	0.0	0.61	0.470
11:55	8.97	NA	100	7.83	7.06	18	0.736	0.0	0.46	0.472
12:00	8.97	NA	100	7.79	7.06	16	0.735	0.0	0.32	0.473
			Samples collected at:			**12:00**				
			Total purged:			**0.95 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-4

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/26/2019
START TIME: 12:50
WELL ID: TMW-4
SAMPLE ID: TMW-4
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.31 ft
WELL DEPTH: 15.44 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
12:50	8.25	NA	100	9.09	7.45	-39	0.564	0.0	3.52	0.360
12:55	8.25	NA	100	9.25	7.36	-33	0.564	0.0	2.79	0.361
13:00	8.25	NA	100	9.70	7.25	-28	0.563	0.0	0.98	0.360
13:05	8.25	NA	100	10.03	7.19	-23	0.654	0.0	0.77	0.362
13:10	8.25	NA	100	10.95	7.18	-19	0.566	0.0	0.63	0.363
13:15	8.25	NA	100	11.24	7.16	-16	0.566	0.0	0.56	0.362
13:20	8.25	NA	100	11.38	7.16	-15	0.568	0.0	0.49	0.363
13:25	8.25	NA	100	11.44	7.16	-13	0.567	0.0	0.47	0.362
			Samples collected at:			**13:25**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-4D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/26/2019
START TIME: 13:40
WELL ID: TMW-4D
SAMPLE ID: TMW-4D
CASING ELEVATION: ft
SCREEN DEPTH: 57-62 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.89 ft
WELL DEPTH: 62.65 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 60.00 ft
GALLONS PURGED: 0.95

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
13:40	7.86	NA	120	11.35	6.97	10	0.989	136.1	0.00	0.628
13:45	7.86	NA	120	11.03	6.89	-1	0.974	59.5	0.00	0.624
13:50	7.86	NA	120	10.85	6.88	-7	0.971	189.0	0.00	0.622
13:55	7.86	NA	120	10.72	6.86	-10	0.967	301.0	0.00	0.619
14:00	7.86	NA	120	10.66	6.85	-11	0.968	427.0	0.00	0.616
14:05	7.86	NA	120	10.55	6.84	-13	0.968	550.0	0.00	0.615
14:10	7.86	NA	120	10.39	6.84	-14	0.968	626.0	0.00	0.615
			Samples collected at:			**14:10**				
			Total purged:			**0.95 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-5

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/26/2019
START TIME: 14:25
WELL ID: TMW-5
SAMPLE ID: TMW-5
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 7.50 ft
WELL DEPTH: 15.39 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: Turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
14:25	7.47	NA	100	9.38	7.49	59	0.693	0.0	9.83	0.451
14:30	7.47	NA	100	9.60	7.35	68	0.706	0.0	6.01	0.452
14:35	7.47	NA	100	12.01	7.23	72	0.699	0.0	3.29	0.452
14:40	7.47	NA	100	12.41	7.14	76	0.705	0.0	1.82	0.458
14:45	7.47	NA	100	12.78	7.10	78	0.712	0.0	1.66	0.457
14:50	7.47	NA	100	13.34	7.08	80	0.713	0.0	1.83	0.457
14:55	7.47	NA	100	13.62	7.09	81	0.715	0.0	1.88	0.459
15:00	7.47	NA	100	13.75	7.08	84	0.717	0.0	1.92	0.460
			Samples collected at:			**15:00**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-5D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/26/2019
START TIME: 15:20
WELL ID: TMW-5D
SAMPLE ID: TMW-5D/DUP-A
CASING ELEVATION: ft
SCREEN DEPTH: 55-60 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.68 ft
WELL DEPTH: 60.26 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 58.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
15:20	8.66	NA	100	12.09	6.93	122	0.710	0.0	6.92	0.451
15:25	8.66	NA	100	11.88	6.95	106	0.712	98.8	3.24	0.455
15:30	8.66	NA	100	11.93	6.97	81	0.715	214	0.92	0.457
15:35	8.66	NA	100	11.81	6.98	73	0.717	263	0.54	0.457
15:40	8.66	NA	100	11.54	6.99	62	0.717	328	0.33	0.455
15:45	8.66	NA	100	11.42	6.99	51	0.718	392	0.21	0.456
15:50	8.66	NA	100	11.33	7.00	48	0.718	433	0.19	0.456
15:55	8.66	NA	100	11.20	7.00	44	0.720	478	0.16	0.457
			Samples collected at:			**15:55**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-6

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/27/2019
START TIME: 8:00
WELL ID: TMW-6
SAMPLE ID: TMW-6
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 9.17 ft
WELL DEPTH: 15.49 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: Turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
8:00	9.21	NA	100	10.54	7.82	126	0.689	0.0	16.01	0.439
8:05	9.21	NA	100	10.87	7.61	134	0.686	0.0	7.32	0.439
8:10	9.21	NA	100	10.81	7.42	142	0.681	0.0	2.93	0.435
8:15	9.21	NA	100	9.09	7.33	144	0.686	0.0	1.67	0.439
8:20	9.21	NA	100	8.96	7.28	147	0.691	0.0	1.42	0.442
8:25	9.21	NA	100	8.92	7.29	149	0.694	0.0	1.32	0.445
8:30	9.21	NA	100	8.95	7.28	150	0.699	0.0	1.29	0.447
			Samples collected at:			**8:30**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-6D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/27/2019
START TIME: 8:45
WELL ID: TMW-6D
SAMPLE ID: TMW-6D
CASING ELEVATION: ft
SCREEN DEPTH: 40-45 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 9.09 ft
WELL DEPTH: 45.73 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 43.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
8:45	9.15	NA	100	10.72	7.24	111	0.761	0.0	10.03	0.488
8:50	9.15	NA	100	10.88	7.24	85	0.760	0.0	7.64	0.486
8:55	9.15	NA	100	10.84	7.19	20	0.759	0.0	3.72	0.484
9:00	9.15	NA	100	10.86	7.17	-8	0.757	0.0	3.19	0.484
9:05	9.15	NA	100	10.80	7.14	-24	0.755	0.0	2.28	0.483
9:10	9.15	NA	100	10.62	7.13	-25	0.754	0.0	2.14	0.482
9:15	9.15	NA	100	10.47	7.12	-25	0.754	0.0	2.02	0.481
			Samples collected at:			**9:15**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-7

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/27/2019
START TIME: 9:45
WELL ID: TMW-7
SAMPLE ID: TMW-7/MS-MSD-A
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.37 ft
WELL DEPTH: 15.26 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
9:45	8.18	NA	100	8.99	7.39	53	0.682	0.0	7.3	0.439
9:50	8.18	NA	100	8.85	7.35	61	0.687	0.0	3.0	0.441
9:55	8.18	NA	100	8.67	7.27	66	0.693	0.0	2.7	0.444
10:00	8.18	NA	100	6.69	7.22	72	0.698	0.0	2.5	0.447
10:05	8.18	NA	100	9.15	7.16	86	0.693	0.0	2.8	0.443
10:10	8.18	NA	100	9.29	7.16	89	0.691	0.0	2.9	0.442
10:15	8.18	NA	100	9.18	7.15	90	0.690	0.0	2.9	0.442
			Samples collected at:			**10:15**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: TMW-7D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/27/2019
START TIME: 10:30
WELL ID: TMW-7D
SAMPLE ID: TMW-7D
CASING ELEVATION: ft
SCREEN DEPTH: 60-65 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.63 ft
WELL DEPTH: 65.67 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 63.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
10:30	8.47	NA	100	11.08	7.01	154	0.943	283	2.89	0.606
10:35	8.47	NA	100	11.19	7.05	117	0.954	117	2.43	0.611
10:40	8.47	NA	100	11.26	7.11	36	0.977	0.0	1.33	0.622
10:45	8.47	NA	100	11.22	7.00	-17	1.010	0.0	1.50	0.644
10:50	8.47	NA	100	11.26	7.00	-18	1.010	0.0	1.23	0.642
10:55	8.47	NA	100	11.39	6.99	-20	1.000	0.0	1.17	0.644
11:00	8.47	NA	100	11.24	6.99	-23	1.000	0.0	1.11	0.644
			Samples collected at:			**11:00**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-11

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/29/2019
START TIME: 9:45
WELL ID: MW-11
SAMPLE ID: MW-11
CASING ELEVATION: ft
SCREEN DEPTH: 3-13 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 6.61 ft
WELL DEPTH: 13.81 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 11.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
9:45	7.11	NA	100	11.87	7.22	73	0.600	1000	10.50	0.399
9:50	7.11	NA	100	11.72	7.22	86	0.607	1000	10.14	0.389
9:55	7.11	NA	100	12.16	7.22	98	0.611	825	9.45	0.392
10:00	7.11	NA	100	12.89	7.23	100	0.612	782	9.31	0.394
10:05	7.11	NA	100	13.10	7.23	101	0.616	721	9.14	0.396
10:10	7.11	NA	100	12.79	7.23	105	0.619	657	9.07	0.395
10:15	7.11	NA	100	12.90	7.23	109	0.621	633	9.00	0.397
			Samples collected at:			**10:15**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-11D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/29/2019
START TIME: 10:30
WELL ID: MW-11D
SAMPLE ID: MW-11D
CASING ELEVATION: ft
SCREEN DEPTH: 18-23 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 6.48 ft
WELL DEPTH: 23.67 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 21.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
10:30	6.87	NA	100	13.81	7.72	54	0.792	0.0	8.58	0.512
10:35	6.87	NA	100	13.60	7.50	32	0.794	0.0	3.49	0.510
10:40	6.87	NA	100	13.78	7.36	17	0.796	0.0	2.36	0.509
10:45	6.87	NA	100	13.49	7.28	15	0.801	0.0	2.37	0.512
10:50	6.87	NA	100	13.88	7.27	18	0.784	0.0	1.78	0.502
10:55	6.87	NA	100	13.67	7.26	19	0.792	0.0	1.69	0.507
11:00	6.87	NA	100	13.78	7.25	22	0.799	0.0	1.62	0.511
			Samples collected at:			**11:00**				
			Total purged:			**0.08 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-12

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/29/2019
START TIME: 14:10
WELL ID: MW-12
SAMPLE ID: MW-12
CASING ELEVATION: ft
SCREEN DEPTH: 5-15 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.67 ft
WELL DEPTH: 15.32 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 13.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
14:10	9.25	NA	100	12.29	7.49	80	0.808	0.0	5.38	0.513
14:15	9.25	NA	100	14.44	7.31	90	0.807	0.0	2.99	0.516
14:20	9.25	NA	100	12.53	7.22	95	0.808	0.0	2.44	0.517
14:25	9.25	NA	100	12.69	7.18	98	0.804	0.0	1.81	0.514
14:30	9.25	NA	100	13.25	7.14	101	0.797	0.0	1.47	0.510
14:35	9.25	NA	100	13.41	7.14	103	0.795	0.0	1.40	0.508
14:40	9.25	NA	100	13.52	7.13	104	0.794	0.0	1.33	0.506
			Samples collected at:			**14:40**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-12D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/29/2019
START TIME: 15:00
WELL ID: MW-12D
SAMPLE ID: MW-12D/MS-MSD-B
CASING ELEVATION: ft
SCREEN DEPTH: 12-26 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.53 ft
WELL DEPTH: 26.00 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 24.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
15:00	8.92	NA	100	13.91	7.39	76	0.891	0.0	3.68	0.571
15:05	8.92	NA	100	14.23	7.23	52	0.900	0.0	2.22	0.576
15:10	8.92	NA	100	14.04	7.15	38	0.907	0.0	0.98	0.581
15:15	8.92	NA	100	13.74	7.13	34	0.900	0.0	0.54	0.574
15:20	8.92	NA	100	13.96	7.13	32	0.904	0.0	0.49	0.569
15:25	8.92	NA	100	14.09	7.13	31	0.907	0.0	0.43	0.567
15:30	8.92	NA	100	13.87	7.12	30	0.908	0.0	0.38	0.563
			Samples collected at:			**15:30**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-14

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 4/1/2019
START TIME: 10:25
WELL ID: MW-14
SAMPLE ID: MW-14
CASING ELEVATION: ft
SCREEN DEPTH: 10-20 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 11.44 ft
WELL DEPTH: 20.24 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 18.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
10:25	11.31	NA	100	8.34	7.83	139	0.232	0.0	2.81	0.143
10:30	11.31	NA	100	8.62	7.61	128	0.235	0.0	0.33	0.136
10:35	11.31	NA	100	8.99	7.53	123	0.238	1000	0.24	0.129
10:40	11.31	NA	100	9.10	7.49	115	0.242	672	0.19	0.130
10:45	11.31	NA	100	9.32	7.42	106	0.245	591	0.03	0.126
10:50	11.31	NA	100	9.26	7.39	97	0.244	460	0.01	0.123
10:55	11.31	NA	100	9.17	7.38	93	0.246	349	0.00	0.120
11:00	11.31	NA	100	9.11	7.38	90	0.245	282	0.01	0.118
			Samples collected at:			**11:00**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-14D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 4/1/2019
START TIME: 11:45
WELL ID: MW-14D
SAMPLE ID: MW-14D
CASING ELEVATION: ft
SCREEN DEPTH: 27-32 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.56 ft
WELL DEPTH: 32.95 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 30.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
11:45	8.44	NA	100	9.54	8.29	148	0.752	0.0	10.66	0.479
11:50	8.44	NA	100	9.60	8.03	129	0.746	0.0	3.12	0.477
11:55	8.44	NA	100	9.68	7.88	114	0.740	0.0	2.50	0.473
12:00	8.44	NA	100	9.51	7.69	110	0.733	0.0	1.54	0.465
12:05	8.44	NA	100	9.45	7.62	101	0.721	0.0	1.40	0.460
12:10	8.44	NA	100	9.52	7.57	89	0.720	1000	0.85	0.461
12:15	8.44	NA	100	9.47	7.56	85	0.720	1000	0.81	0.460
12:20	8.44	NA	100	9.60	7.56	83	0.720	1000	0.73	0.461
			Samples collected at:			**12:20**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-15

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 4/1/2019
START TIME: 13:15
WELL ID: MW-15
SAMPLE ID: MW-15
CASING ELEVATION: ft
SCREEN DEPTH: 17-22 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 12.34 ft
WELL DEPTH: 21.95 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 19.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clar
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:15	12.25	NA	100	9.62	7.78	89	0.803	348	3.09	0.467
13:20	12.25	NA	100	11.89	7.72	98	0.810	387	1.93	0.469
13:25	12.25	NA	100	12.37	7.70	109	0.819	263	1.76	0.470
13:30	12.25	NA	100	12.48	7.68	115	0.822	278	1.55	0.472
13:35	12.25	NA	100	12.81	7.63	121	0.824	290	1.44	0.468
13:40	12.25	NA	100	12.96	7.60	126	0.826	252	0.81	0.473
13:45	12.25	NA	100	13.09	7.59	132	0.827	232	0.67	0.474
13:50	12.25	NA	100	13.23	7.59	139	0.829	220	0.44	0.475
			Samples collected at:			**13:50**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-15D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 4/1/2019
START TIME: 14:20
WELL ID: MW-15D
SAMPLE ID: MW-15D
CASING ELEVATION: ft
SCREEN DEPTH: 45-50 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 11.78 ft
WELL DEPTH: 50.44 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 48.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
14:20	11.71	NA	100	11.99	7.91	54	0.759	0.0	9.69	0.487
14:25	11.71	NA	100	12.66	7.68	32	0.760	0.0	3.18	0.487
14:30	11.71	NA	100	12.03	7.49	-3	0.761	0.0	1.41	0.487
14:35	11.71	NA	100	12.51	7.44	-18	0.777	0.0	0.89	0.491
14:40	11.71	NA	100	12.39	7.42	-29	0.783	0.0	0.66	0.489
14:45	11.71	NA	100	12.62	7.39	-38	0.786	0.0	0.52	0.488
14:50	11.71	NA	100	12.53	7.38	-44	0.790	0.0	0.43	0.487
14:55	11.71	NA	100	12.66	7.36	-48	0.792	0.0	0.38	0.486
			Samples collected at:			**14:55**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-22

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/27/2019
START TIME: 13:15
WELL ID: MW-22
SAMPLE ID: MW-22
CASING ELEVATION: ft
SCREEN DEPTH: 8-18 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 11.82 ft
WELL DEPTH: 18.56 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 16.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:15	11.29	NA	100	13.27	7.79	174	0.928	519.0	16.52	0.561
13:20	11.29	NA	100	14.09	7.62	159	0.916	430.0	8.89	0.548
13:25	11.29	NA	100	14.32	7.49	141	0.914	382.0	4.06	0.552
13:30	11.29	NA	100	14.45	7.47	133	0.920	363.0	3.87	0.549
13:35	11.29	NA	100	16.03	7.45	128	0.917	354.0	3.55	0.543
13:40	11.29	NA	100	15.92	7.44	122	0.915	346.0	3.45	0.539
13:45	11.29	NA	100	15.89	7.43	118	0.914	339.0	3.31	0.536
			Samples collected at:			**13:45**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-22D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/27/2019
START TIME: 14:00
WELL ID: MW-22D
SAMPLE ID: MW-22D
CASING ELEVATION: ft
SCREEN DEPTH: 23-28 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 12.09 ft
WELL DEPTH: 28.11 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 26.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
14:00	12.60	NA	100	14.44	7.33	46	0.744	0.0	5.18	0.478
14:05	12.60	NA	100	14.20	7.25	58	0.742	0.0	3.50	0.475
14:10	12.60	NA	100	14.87	7.21	60	0.740	0.0	2.99	0.474
14:15	12.60	NA	100	14.42	7.14	63	0.739	0.0	2.48	0.473
14:20	12.60	NA	100	15.09	7.11	65	0.737	0.0	2.31	0.470
14:25	12.60	NA	100	14.92	7.10	66	0.738	0.0	2.15	0.469
14:30	12.60	NA	100	14.97	7.10	66	0.736	0.0	2.02	0.469
			Samples collected at:			**14:30**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-26

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/28/2019
START TIME: 12:30
WELL ID: MW-26
SAMPLE ID: MW-26
CASING ELEVATION: ft
SCREEN DEPTH: 12-22 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 13.83 ft
WELL DEPTH: 22.89 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 20.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
12:30	14.40	NA	100	14.09	7.33	143	0.893	0.0	8.03	0.579
12:35	14.40	NA	100	14.25	7.21	149	0.883	0.0	6.50	0.565
12:40	14.40	NA	100	14.30	7.10	153	0.877	0.0	4.02	0.561
12:45	14.40	NA	100	14.70	7.06	155	0.856	0.0	3.62	0.564
12:50	14.40	NA	100	14.85	7.04	154	0.841	0.0	3.64	0.541
12:55	14.40	NA	100	15.01	7.03	154	0.849	0.0	3.55	0.537
13:00	14.40	NA	100	14.94	7.03	155	0.840	0.0	3.53	0.533
			Samples collected at:			**13:00**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
AND ENVIRONMENTAL CO. LLC

GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-29

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/27/2019
START TIME: 11:45
WELL ID: MW-29
SAMPLE ID: MW-29
CASING ELEVATION: ft
SCREEN DEPTH: 7-17 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 9.23 ft
WELL DEPTH: 17.60 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 15.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: clear
ODOR: none
COLOR: clear

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:45	9.74	NA	100	11.39	7.26	80	0.709	350.0	9.89	0.455
11:50	9.74	NA	100	11.58	7.13	90	0.714	270.0	4.99	0.457
11:55	9.74	NA	100	12.64	7.07	94	0.710	143.0	4.86	0.454
12:00	9.74	NA	100	12.81	7.07	95	0.709	127.0	4.77	0.453
12:05	9.74	NA	100	12.59	7.06	97	0.711	115.0	4.62	0.450
12:10	9.74	NA	100	12.72	7.05	98	0.710	108.0	4.54	0.450
12:15	9.74	NA	100	12.69	7.04	99	0.709	102.0	4.41	0.450
			Samples collected at:			**12:15**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-29D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/27/2019
START TIME: 12:30
WELL ID: MW-29D
SAMPLE ID: MW-29D
CASING ELEVATION: ft
SCREEN DEPTH: 35-40 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 9.28 ft
WELL DEPTH: 41.33 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 38.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: clear
COLOR: brown to dark brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
12:30	9.81	NA	100	13.19	7.32	-2	0.719	0.0	8.68	0.450
12:35	9.81	NA	100	13.55	7.21	-16	0.714	0.0	2.13	0.457
12:40	9.81	NA	100	13.73	7.15	-30	0.712	0.0	1.01	0.456
12:45	9.81	NA	100	14.08	7.16	-48	0.708	0.0	0.34	0.453
12:50	9.81	NA	100	13.97	7.20	-51	0.705	0.0	0.11	0.451
12:55	9.81	NA	100	14.12	7.20	-53	0.704	0.0	0.08	0.450
13:00	9.81	NA	100	13.98	7.20	-54	0.702	0.0	0.05	0.451
			Samples collected at:			**13:00**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-30

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/29/2019
START TIME: 11:30
WELL ID: MW-30
SAMPLE ID: MW-30/DUP-B
CASING ELEVATION: ft
SCREEN DEPTH: 4-14 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.30 ft
WELL DEPTH: 14.22 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 12.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: Turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
11:30	8.95	NA	100	13.29	7.36	95	0.653	678	6.86	0.418
11:35	8.95	NA	100	13.51	7.42	67	0.653	566	1.71	0.418
11:40	8.95	NA	100	13.62	7.48	43	0.653	430	1.33	0.419
11:45	8.95	NA	100	13.52	7.49	20	0.653	411	1.27	0.419
11:50	8.95	NA	100	13.46	7.49	-5	0.654	368	1.07	0.419
11:55	8.95	NA	100	13.33	7.50	-9	0.656	340	1.01	0.420
12:00	8.95	NA	100	13.51	7.50	-15	0.656	329	0.92	0.420
			Samples collected at:			**12:00**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-31

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/29/2019
START TIME: 13:00
WELL ID: MW-31
SAMPLE ID: MW-31
CASING ELEVATION: ft
SCREEN DEPTH: 24-29 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 8.29 ft
WELL DEPTH: 29.90 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 27.00 ft
GALLONS PURGED: 0.79

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:00	8.75	NA	100	11.37	7.68	129	0.728	1000	14.22	0.463
13:05	8.75	NA	100	11.85	7.52	132	0.733	1000	4.89	0.470
13:10	8.75	NA	100	12.36	7.39	135	0.735	1000	4.22	0.472
13:15	8.75	NA	100	13.54	7.28	137	0.739	1000	4.15	0.473
13:20	8.75	NA	100	13.27	7.21	138	0.741	1000	3.95	0.474
13:25	8.75	NA	100	13.40	7.20	138	0.744	1000	3.84	0.475
13:30	8.75	NA	100	13.12	7.20	138	0.749	1000	3.72	0.477
			Samples collected at:			**13:30**				
			Total purged:			**0.79 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-32

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/28/2019
START TIME: 13:25
WELL ID: MW-32
SAMPLE ID: MW-32
CASING ELEVATION: ft
SCREEN DEPTH: 28-33 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 13.31 ft
WELL DEPTH: 33.00 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 30.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: brown to clear

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
13:25	13.84	NA	100	13.98	7.94	182	0.872	0.0	2.82	0.434
13:30	13.84	NA	100	14.18	7.85	147	0.885	0.0	0.93	0.438
13:35	13.84	NA	100	14.29	7.72	133	0.891	0.0	0.81	0.441
13:40	13.84	NA	100	14.86	7.53	131	0.896	0.0	0.77	0.440
13:45	13.84	NA	100	14.71	7.53	130	0.900	0.0	0.62	0.439
13:50	13.84	NA	100	14.62	7.53	128	0.903	0.0	0.50	0.438
13:55	13.84	NA	100	14.50	7.52	123	0.903	0.0	0.47	0.436
14:00	13.84	NA	100	14.34	7.52	114	0.904	0.0	0.42	0.439
			Samples collected at:			**14:00**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-33

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/28/2019
START TIME: 10:25
WELL ID: MW-33
SAMPLE ID: MW-33
CASING ELEVATION: ft
SCREEN DEPTH: 15-20 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 15.38 ft
WELL DEPTH: 22.11 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 18.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid
ODOR: none
COLOR: brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
10:25	16.05	NA	100	13.97	7.32	288	0.618	0.0	11.12	0.416
10:30	16.05	NA	100	13.55	7.59	272	0.607	0.0	6.03	0.419
10:35	16.05	NA	100	13.74	7.63	272	0.621	0.0	5.54	0.412
10:40	16.05	NA	100	15.37	7.69	271	0.624	0.0	5.26	0.420
10:45	16.05	NA	100	15.23	7.71	270	0.619	0.0	5.01	0.416
10:50	16.05	NA	100	15.82	7.82	269	0.614	0.0	4.39	0.417
10:55	16.05	NA	100	15.89	7.82	266	0.612	0.0	4.26	0.418
11:00	16.05	NA	100	15.98	7.83	264	0.614	0.0	4.12	0.419
			Samples collected at:			**11:00**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-33D

PROJECT NO/TASK: 19-0096-01E
EVENT: Sampling Event #3
DATE: 3/28/2019
START TIME: 11:25
WELL ID: MW-33D
SAMPLE ID: MW-33D
CASING ELEVATION: ft
SCREEN DEPTH: 13-36 ft
SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: 15.83 ft
WELL DEPTH: 36.00 ft
EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing
PUMP INTAKE SET AT: 33.00 ft
GALLONS PURGED: 0.92

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample
CONSTITUENT: VOC's 8260
CONTAINER: 3 x 40ml vials
PRESERVATIVE: HCL
APPEARANCE: turbid to clear
ODOR: none
COLOR: light brown

FIELD PARAMETERS

TIME	Depth to Water (ft)	Variable Speed (v)	PURGE RATE (ml/min)	TEMP (Deg C)	pH	ORP (Mv)	COND (mS/cm)	TURB (NTU)	DO (ppm)	TDS (g/L)
				3%	*0.1*	*10*	*3%*	*10%*	*10%*	
11:25	16.48	NA	100	14.64	7.86	145	0.600	0.0	9.89	0.385
11:30	16.48	NA	100	14.88	7.73	148	0.605	0.0	3.28	0.389
11:35	16.48	NA	100	14.94	7.59	148	0.614	0.0	2.77	0.395
11:40	16.48	NA	100	14.67	7.40	148	0.628	0.0	2.32	0.402
11:45	16.48	NA	100	14.67	7.36	145	0.634	0.0	1.86	0.406
11:50	16.48	NA	100	14.52	7.34	140	0.636	0.0	1.58	0.410
11:55	16.48	NA	100	14.58	7.33	136	0.639	0.0	1.47	0.414
12:00	16.48	NA	100	14.63	7.33	133	0.642	0.0	1.32	0.416
			Samples collected at:			**12:00**				
			Total purged:			**0.92 gallons**				

PATRIOT ENGINEERING
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GROUNDWATER WELL SAMPLING LOG

PROJECT NAME: Houghland FSI#3

Well ID: MW-

PROJECT NO/TASK: 19-0096-01E **EVENT:** 1Q2019

DATE: **START TIME:**

WELL ID: MW- **SAMPLE ID:** MW-

CASING ELEVATION: ft **SCREEN DEPTH:** ft

SAMPLING PERSONNEL: Vishal Shah

EVACUATION DATA

DEPTH TO FP/WATER: ft **WELL DEPTH:** ft

EVACUATION METHOD: Micro-purge evacuation using a stainless steel Monsoon 12V submersible pump with speed controls and well specific Teflon-coated polyethlylene tubing

PUMP INTAKE SET AT: ft **GALLONS PURGED:**

SAMPLING DATA

SAMPLING METHOD Micro-purge evacuation and sample

CONSTITUENT: VOC's 8260 **CONTAINER:** 3 x 40ml vials **PRESERVATIVE:** HCL

APPEARANCE: **ODOR:** **COLOR:**

FIELD PARAMETERS

TIME	Depth to Water *(ft)*	Variable Speed *(v)*	PURGE RATE *(ml/min)*	TEMP *(Deg C)*	pH	ORP *(Mv)*	COND *(mS/cm)*	TURB *(NTU)*	DO *(ppm)*	TDS *(g/L)*
				3%	***0.1***	***10***	***3%***	***10%***	***10%***	
			Samples collected at:							
			Total purged:				**gallons**			

APPENDIX E

SOIL LABORATORY ANALYTICAL REPORT

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

February 05, 2019

Mr. James Cody
Patriot Engineering
6150 E 75th St
Indianapolis, IN 46250

RE: Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Dear Mr. Cody:
Enclosed are the analytical results for sample(s) received by the laboratory on January 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Mr. Mike Casper, Patriot Engineering

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CERTIFICATIONS

Project:	Houghland Canning FSI#3
Pace Project No.:	50215706

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #:E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #:98019
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355-18-12
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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SAMPLE SUMMARY

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50215706001	**SB300AD (3-5)**	Solid	01/28/19 08:45	01/29/19 09:20
50215706002	**SB300BD (3-5)**	Solid	01/28/19 10:30	01/29/19 09:20
50215706003	**SB300AD (62-63)**	Solid	01/28/19 11:00	01/29/19 09:20
50215706004	**SB300BD (42-43)**	Solid	01/28/19 14:15	01/29/19 09:20
50215706005	**TRIP BLANK**	Solid	01/28/19 14:15	01/29/19 09:20

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SAMPLE ANALYTE COUNT

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50215706001	**SB300AD (3-5)**	EPA 8260	LKC	75
		SM 2540G	MLS	1
50215706002	**SB300BD (3-5)**	EPA 8260	LKC	75
		SM 2540G	MLS	1
50215706003	**SB300AD (62-63)**	EPA 8260	LKC	75
		SM 2540G	MLS	1
50215706004	**SB300BD (42-43)**	EPA 8260	LKC	75
		SM 2540G	MLS	1
50215706005	**TRIP BLANK**	EPA 8260	LKC	75

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SUMMARY OF DETECTION

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50215706001	**SB300AD (3-5)**					
SM 2540G	Percent Moisture	13.1	%	0.10	01/30/19 10:29	
50215706002	**SB300BD (3-5)**					
SM 2540G	Percent Moisture	14.7	%	0.10	01/30/19 10:29	
50215706003	**SB300AD (62-63)**					
SM 2540G	Percent Moisture	9.8	%	0.10	01/30/19 10:44	
50215706004	**SB300BD (42-43)**					
SM 2540G	Percent Moisture	8.4	%	0.10	01/30/19 10:44	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Sample: SB300AD (3-5) **Lab ID: 50215706001** Collected: 01/28/19 08:45 Received: 01/29/19 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.090	1		02/02/19 03:15	67-64-1	M5
Acrolein	ND	mg/kg	0.090	1		02/02/19 03:15	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.090	1		02/02/19 03:15	107-13-1	M5
Benzene	ND	mg/kg	0.0045	1		02/02/19 03:15	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0045	1		02/02/19 03:15	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0045	1		02/02/19 03:15	75-27-4	M5
Bromoform	ND	mg/kg	0.0045	1		02/02/19 03:15	75-25-2	M5
Bromomethane	ND	mg/kg	0.0045	1		02/02/19 03:15	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.022	1		02/02/19 03:15	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0090	1		02/02/19 03:15	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0045	1		02/02/19 03:15	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	108-90-7	M5
Chloroethane	ND	mg/kg	0.0045	1		02/02/19 03:15	75-00-3	M5
Chloroform	ND	mg/kg	0.0045	1		02/02/19 03:15	67-66-3	M5
Chloromethane	ND	mg/kg	0.0045	1		02/02/19 03:15	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0045	1		02/02/19 03:15	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0045	1		02/02/19 03:15	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0045	1		02/02/19 03:15	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0045	1		02/02/19 03:15	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0045	1		02/02/19 03:15	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.090	1		02/02/19 03:15	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0045	1		02/02/19 03:15	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0045	1		02/02/19 03:15	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0045	1		02/02/19 03:15	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0045	1		02/02/19 03:15	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0045	1		02/02/19 03:15	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0045	1		02/02/19 03:15	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0045	1		02/02/19 03:15	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0045	1		02/02/19 03:15	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0045	1		02/02/19 03:15	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0045	1		02/02/19 03:15	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0045	1		02/02/19 03:15	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0045	1		02/02/19 03:15	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.090	1		02/02/19 03:15	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0045	1		02/02/19 03:15	87-68-3	M5
n-Hexane	ND	mg/kg	0.0045	1		02/02/19 03:15	110-54-3	M5
2-Hexanone	ND	mg/kg	0.090	1		02/02/19 03:15	591-78-6	M5
Iodomethane	ND	mg/kg	0.090	1		02/02/19 03:15	74-88-4	M5

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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Sample: SB300AD (3-5) **Lab ID: 50215706001** Collected: 01/28/19 08:45 Received: 01/29/19 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0045	1		02/02/19 03:15	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0045	1		02/02/19 03:15	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.018	1		02/02/19 03:15	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0090	1		02/02/19 03:15	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0090	1		02/02/19 03:15	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.022	1		02/02/19 03:15	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0045	1		02/02/19 03:15	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0045	1		02/02/19 03:15	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	103-65-1	M5
Styrene	ND	mg/kg	0.0045	1		02/02/19 03:15	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0045	1		02/02/19 03:15	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0045	1		02/02/19 03:15	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0045	1		02/02/19 03:15	127-18-4	M5
Toluene	ND	mg/kg	0.0045	1		02/02/19 03:15	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0045	1		02/02/19 03:15	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0045	1		02/02/19 03:15	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0045	1		02/02/19 03:15	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0045	1		02/02/19 03:15	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0045	1		02/02/19 03:15	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0045	1		02/02/19 03:15	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.090	1		02/02/19 03:15	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0045	1		02/02/19 03:15	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0090	1		02/02/19 03:15	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	101	%.	80-127	1		02/02/19 03:15	1868-53-7	M5
Toluene-d8 (S)	87	%.	72-136	1		02/02/19 03:15	2037-26-5	M5
4-Bromofluorobenzene (S)	94	%.	57-130	1		02/02/19 03:15	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**13.1**	%	0.10	1		01/30/19 10:29		

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Sample: SB300BD (3-5) **Lab ID: 50215706002** Collected: 01/28/19 10:30 Received: 01/29/19 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.084	1		02/02/19 03:49	67-64-1	M5
Acrolein	ND	mg/kg	0.084	1		02/02/19 03:49	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.084	1		02/02/19 03:49	107-13-1	M5
Benzene	ND	mg/kg	0.0042	1		02/02/19 03:49	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0042	1		02/02/19 03:49	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0042	1		02/02/19 03:49	75-27-4	M5
Bromoform	ND	mg/kg	0.0042	1		02/02/19 03:49	75-25-2	M5
Bromomethane	ND	mg/kg	0.0042	1		02/02/19 03:49	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.021	1		02/02/19 03:49	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0084	1		02/02/19 03:49	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0042	1		02/02/19 03:49	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	108-90-7	M5
Chloroethane	ND	mg/kg	0.0042	1		02/02/19 03:49	75-00-3	M5
Chloroform	ND	mg/kg	0.0042	1		02/02/19 03:49	67-66-3	M5
Chloromethane	ND	mg/kg	0.0042	1		02/02/19 03:49	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0042	1		02/02/19 03:49	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0042	1		02/02/19 03:49	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0042	1		02/02/19 03:49	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0042	1		02/02/19 03:49	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0042	1		02/02/19 03:49	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.084	1		02/02/19 03:49	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0042	1		02/02/19 03:49	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0042	1		02/02/19 03:49	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0042	1		02/02/19 03:49	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0042	1		02/02/19 03:49	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	1		02/02/19 03:49	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	1		02/02/19 03:49	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0042	1		02/02/19 03:49	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0042	1		02/02/19 03:49	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0042	1		02/02/19 03:49	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0042	1		02/02/19 03:49	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	1		02/02/19 03:49	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	1		02/02/19 03:49	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.084	1		02/02/19 03:49	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0042	1		02/02/19 03:49	87-68-3	M5
n-Hexane	ND	mg/kg	0.0042	1		02/02/19 03:49	110-54-3	M5
2-Hexanone	ND	mg/kg	0.084	1		02/02/19 03:49	591-78-6	M5
Iodomethane	ND	mg/kg	0.084	1		02/02/19 03:49	74-88-4	M5

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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Sample: SB300BD (3-5) **Lab ID: 50215706002** Collected: 01/28/19 10:30 Received: 01/29/19 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0042	1		02/02/19 03:49	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0042	1		02/02/19 03:49	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.017	1		02/02/19 03:49	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0084	1		02/02/19 03:49	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0084	1		02/02/19 03:49	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.021	1		02/02/19 03:49	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0042	1		02/02/19 03:49	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0042	1		02/02/19 03:49	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	103-65-1	M5
Styrene	ND	mg/kg	0.0042	1		02/02/19 03:49	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	1		02/02/19 03:49	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	1		02/02/19 03:49	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0042	1		02/02/19 03:49	127-18-4	M5
Toluene	ND	mg/kg	0.0042	1		02/02/19 03:49	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0042	1		02/02/19 03:49	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0042	1		02/02/19 03:49	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0042	1		02/02/19 03:49	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0042	1		02/02/19 03:49	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0042	1		02/02/19 03:49	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	1		02/02/19 03:49	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.084	1		02/02/19 03:49	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0042	1		02/02/19 03:49	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0084	1		02/02/19 03:49	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	100	%.	80-127	1		02/02/19 03:49	1868-53-7	M5
Toluene-d8 (S)	99	%.	72-136	1		02/02/19 03:49	2037-26-5	M5
4-Bromofluorobenzene (S)	95	%.	57-130	1		02/02/19 03:49	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**14.7**	%	0.10	1		01/30/19 10:29		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Sample: SB300AD (62-63) **Lab ID: 50215706003** Collected: 01/28/19 11:00 Received: 01/29/19 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.087	1		02/02/19 04:22	67-64-1	M5
Acrolein	ND	mg/kg	0.087	1		02/02/19 04:22	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.087	1		02/02/19 04:22	107-13-1	M5
Benzene	ND	mg/kg	0.0044	1		02/02/19 04:22	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0044	1		02/02/19 04:22	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0044	1		02/02/19 04:22	75-27-4	M5
Bromoform	ND	mg/kg	0.0044	1		02/02/19 04:22	75-25-2	M5
Bromomethane	ND	mg/kg	0.0044	1		02/02/19 04:22	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.022	1		02/02/19 04:22	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0087	1		02/02/19 04:22	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0044	1		02/02/19 04:22	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	108-90-7	M5
Chloroethane	ND	mg/kg	0.0044	1		02/02/19 04:22	75-00-3	M5
Chloroform	ND	mg/kg	0.0044	1		02/02/19 04:22	67-66-3	M5
Chloromethane	ND	mg/kg	0.0044	1		02/02/19 04:22	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0044	1		02/02/19 04:22	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0044	1		02/02/19 04:22	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0044	1		02/02/19 04:22	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0044	1		02/02/19 04:22	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0044	1		02/02/19 04:22	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.087	1		02/02/19 04:22	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0044	1		02/02/19 04:22	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0044	1		02/02/19 04:22	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0044	1		02/02/19 04:22	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0044	1		02/02/19 04:22	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	1		02/02/19 04:22	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	1		02/02/19 04:22	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0044	1		02/02/19 04:22	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0044	1		02/02/19 04:22	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0044	1		02/02/19 04:22	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0044	1		02/02/19 04:22	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	1		02/02/19 04:22	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	1		02/02/19 04:22	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.087	1		02/02/19 04:22	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0044	1		02/02/19 04:22	87-68-3	M5
n-Hexane	ND	mg/kg	0.0044	1		02/02/19 04:22	110-54-3	M5
2-Hexanone	ND	mg/kg	0.087	1		02/02/19 04:22	591-78-6	M5
Iodomethane	ND	mg/kg	0.087	1		02/02/19 04:22	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Sample: SB300AD (62-63) **Lab ID: 50215706003** Collected: 01/28/19 11:00 Received: 01/29/19 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0044	1		02/02/19 04:22	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0044	1		02/02/19 04:22	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.017	1		02/02/19 04:22	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0087	1		02/02/19 04:22	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0087	1		02/02/19 04:22	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.022	1		02/02/19 04:22	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0044	1		02/02/19 04:22	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0044	1		02/02/19 04:22	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	103-65-1	M5
Styrene	ND	mg/kg	0.0044	1		02/02/19 04:22	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	1		02/02/19 04:22	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	1		02/02/19 04:22	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0044	1		02/02/19 04:22	127-18-4	M5
Toluene	ND	mg/kg	0.0044	1		02/02/19 04:22	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0044	1		02/02/19 04:22	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0044	1		02/02/19 04:22	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0044	1		02/02/19 04:22	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0044	1		02/02/19 04:22	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0044	1		02/02/19 04:22	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	1		02/02/19 04:22	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.087	1		02/02/19 04:22	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0044	1		02/02/19 04:22	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0087	1		02/02/19 04:22	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	110	%.	80-127	1		02/02/19 04:22	1868-53-7	M5
Toluene-d8 (S)	109	%.	72-136	1		02/02/19 04:22	2037-26-5	M5
4-Bromofluorobenzene (S)	83	%.	57-130	1		02/02/19 04:22	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**9.8**	%	0.10	1		01/30/19 10:44		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Sample: SB300BD (42-43) **Lab ID: 50215706004** Collected: 01/28/19 14:15 Received: 01/29/19 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.079	1		02/02/19 04:55	67-64-1	M5
Acrolein	ND	mg/kg	0.079	1		02/02/19 04:55	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.079	1		02/02/19 04:55	107-13-1	M5
Benzene	ND	mg/kg	0.0040	1		02/02/19 04:55	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0040	1		02/02/19 04:55	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0040	1		02/02/19 04:55	75-27-4	M5
Bromoform	ND	mg/kg	0.0040	1		02/02/19 04:55	75-25-2	M5
Bromomethane	ND	mg/kg	0.0040	1		02/02/19 04:55	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.020	1		02/02/19 04:55	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0079	1		02/02/19 04:55	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0040	1		02/02/19 04:55	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	108-90-7	M5
Chloroethane	ND	mg/kg	0.0040	1		02/02/19 04:55	75-00-3	M5
Chloroform	ND	mg/kg	0.0040	1		02/02/19 04:55	67-66-3	M5
Chloromethane	ND	mg/kg	0.0040	1		02/02/19 04:55	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0040	1		02/02/19 04:55	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0040	1		02/02/19 04:55	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0040	1		02/02/19 04:55	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0040	1		02/02/19 04:55	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0040	1		02/02/19 04:55	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.079	1		02/02/19 04:55	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0040	1		02/02/19 04:55	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0040	1		02/02/19 04:55	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0040	1		02/02/19 04:55	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0040	1		02/02/19 04:55	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0040	1		02/02/19 04:55	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0040	1		02/02/19 04:55	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0040	1		02/02/19 04:55	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0040	1		02/02/19 04:55	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0040	1		02/02/19 04:55	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0040	1		02/02/19 04:55	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0040	1		02/02/19 04:55	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0040	1		02/02/19 04:55	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.079	1		02/02/19 04:55	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0040	1		02/02/19 04:55	87-68-3	M5
n-Hexane	ND	mg/kg	0.0040	1		02/02/19 04:55	110-54-3	M5
2-Hexanone	ND	mg/kg	0.079	1		02/02/19 04:55	591-78-6	M5
Iodomethane	ND	mg/kg	0.079	1		02/02/19 04:55	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Sample: SB300BD (42-43) **Lab ID: 50215706004** Collected: 01/28/19 14:15 Received: 01/29/19 09:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0040	1		02/02/19 04:55	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0040	1		02/02/19 04:55	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.016	1		02/02/19 04:55	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0079	1		02/02/19 04:55	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0079	1		02/02/19 04:55	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.020	1		02/02/19 04:55	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0040	1		02/02/19 04:55	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0040	1		02/02/19 04:55	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	103-65-1	M5
Styrene	ND	mg/kg	0.0040	1		02/02/19 04:55	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0040	1		02/02/19 04:55	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0040	1		02/02/19 04:55	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0040	1		02/02/19 04:55	127-18-4	M5
Toluene	ND	mg/kg	0.0040	1		02/02/19 04:55	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0040	1		02/02/19 04:55	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0040	1		02/02/19 04:55	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0040	1		02/02/19 04:55	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0040	1		02/02/19 04:55	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0040	1		02/02/19 04:55	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0040	1		02/02/19 04:55	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.079	1		02/02/19 04:55	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0040	1		02/02/19 04:55	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0079	1		02/02/19 04:55	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	98	%.	80-127	1		02/02/19 04:55	1868-53-7	M5
Toluene-d8 (S)	109	%.	72-136	1		02/02/19 04:55	2037-26-5	M5
4-Bromofluorobenzene (S)	86	%.	57-130	1		02/02/19 04:55	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**8.4**	%	0.10	1		01/30/19 10:44		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Sample: TRIP BLANK **Lab ID: 50215706005** Collected: 01/28/19 14:15 Received: 01/29/19 09:20 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.10	1		02/02/19 05:28	67-64-1	M5
Acrolein	ND	mg/kg	0.10	1		02/02/19 05:28	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.10	1		02/02/19 05:28	107-13-1	M5
Benzene	ND	mg/kg	0.0050	1		02/02/19 05:28	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0050	1		02/02/19 05:28	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0050	1		02/02/19 05:28	75-27-4	M5
Bromoform	ND	mg/kg	0.0050	1		02/02/19 05:28	75-25-2	M5
Bromomethane	ND	mg/kg	0.0050	1		02/02/19 05:28	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.025	1		02/02/19 05:28	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.010	1		02/02/19 05:28	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0050	1		02/02/19 05:28	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	108-90-7	M5
Chloroethane	ND	mg/kg	0.0050	1		02/02/19 05:28	75-00-3	M5
Chloroform	ND	mg/kg	0.0050	1		02/02/19 05:28	67-66-3	M5
Chloromethane	ND	mg/kg	0.0050	1		02/02/19 05:28	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0050	1		02/02/19 05:28	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0050	1		02/02/19 05:28	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0050	1		02/02/19 05:28	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0050	1		02/02/19 05:28	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0050	1		02/02/19 05:28	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.10	1		02/02/19 05:28	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0050	1		02/02/19 05:28	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0050	1		02/02/19 05:28	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0050	1		02/02/19 05:28	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0050	1		02/02/19 05:28	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	1		02/02/19 05:28	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	1		02/02/19 05:28	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0050	1		02/02/19 05:28	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0050	1		02/02/19 05:28	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0050	1		02/02/19 05:28	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0050	1		02/02/19 05:28	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	1		02/02/19 05:28	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	1		02/02/19 05:28	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.10	1		02/02/19 05:28	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0050	1		02/02/19 05:28	87-68-3	M5
n-Hexane	ND	mg/kg	0.0050	1		02/02/19 05:28	110-54-3	M5
2-Hexanone	ND	mg/kg	0.10	1		02/02/19 05:28	591-78-6	M5
Iodomethane	ND	mg/kg	0.10	1		02/02/19 05:28	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Sample: TRIP BLANK **Lab ID: 50215706005** Collected: 01/28/19 14:15 Received: 01/29/19 09:20 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0050	1		02/02/19 05:28	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0050	1		02/02/19 05:28	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.020	1		02/02/19 05:28	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.010	1		02/02/19 05:28	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.010	1		02/02/19 05:28	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.025	1		02/02/19 05:28	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0050	1		02/02/19 05:28	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0050	1		02/02/19 05:28	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	103-65-1	M5
Styrene	ND	mg/kg	0.0050	1		02/02/19 05:28	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	1		02/02/19 05:28	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	1		02/02/19 05:28	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0050	1		02/02/19 05:28	127-18-4	M5
Toluene	ND	mg/kg	0.0050	1		02/02/19 05:28	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0050	1		02/02/19 05:28	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0050	1		02/02/19 05:28	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0050	1		02/02/19 05:28	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0050	1		02/02/19 05:28	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0050	1		02/02/19 05:28	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	1		02/02/19 05:28	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.10	1		02/02/19 05:28	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0050	1		02/02/19 05:28	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.010	1		02/02/19 05:28	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	99	%.	80-127	1		02/02/19 05:28	1868-53-7	M5
Toluene-d8 (S)	97	%.	72-136	1		02/02/19 05:28	2037-26-5	M5
4-Bromofluorobenzene (S)	101	%.	57-130	1		02/02/19 05:28	460-00-4	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

QC Batch: 483161 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50215706001, 50215706002, 50215706003, 50215706004, 50215706005

METHOD BLANK: 2227895 | Matrix: Solid
Associated Lab Samples: 50215706001, 50215706002, 50215706003, 50215706004, 50215706005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,1,1-Trichloroethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,1,2,2-Tetrachloroethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,1,2-Trichloroethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,1-Dichloroethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,1-Dichloroethene	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,1-Dichloropropene	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,2,3-Trichlorobenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,2,3-Trichloropropane	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,2,4-Trichlorobenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,2,4-Trimethylbenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,2-Dibromoethane (EDB)	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,2-Dichlorobenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,2-Dichloroethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,2-Dichloropropane	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,3,5-Trimethylbenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,3-Dichlorobenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,3-Dichloropropane	mg/kg	ND	0.0050	02/02/19 02:42	M5
1,4-Dichlorobenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
1-Methylnaphthalene	mg/kg	ND	0.010	02/02/19 02:42	M5,N2
2,2-Dichloropropane	mg/kg	ND	0.0050	02/02/19 02:42	M5
2-Butanone (MEK)	mg/kg	ND	0.025	02/02/19 02:42	M5
2-Chlorotoluene	mg/kg	ND	0.0050	02/02/19 02:42	M5
2-Hexanone	mg/kg	ND	0.10	02/02/19 02:42	M5
2-Methylnaphthalene	mg/kg	ND	0.010	02/02/19 02:42	M5
4-Chlorotoluene	mg/kg	ND	0.0050	02/02/19 02:42	M5
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	0.025	02/02/19 02:42	M5
Acetone	mg/kg	ND	0.10	02/02/19 02:42	M5
Acrolein	mg/kg	ND	0.10	02/02/19 02:42	M5
Acrylonitrile	mg/kg	ND	0.10	02/02/19 02:42	M5
Benzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Bromobenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Bromochloromethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
Bromodichloromethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
Bromoform	mg/kg	ND	0.0050	02/02/19 02:42	M5
Bromomethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
Carbon disulfide	mg/kg	ND	0.010	02/02/19 02:42	M5
Carbon tetrachloride	mg/kg	ND	0.0050	02/02/19 02:42	M5
Chlorobenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Chloroethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
Chloroform	mg/kg	ND	0.0050	02/02/19 02:42	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

METHOD BLANK: 2227895 Matrix: Solid
Associated Lab Samples: 50215706001, 50215706002, 50215706003, 50215706004, 50215706005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
cis-1,2-Dichloroethene	mg/kg	ND	0.0050	02/02/19 02:42	M5
cis-1,3-Dichloropropene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Dibromochloromethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
Dibromomethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
Dichlorodifluoromethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
Ethyl methacrylate	mg/kg	ND	0.10	02/02/19 02:42	M5
Ethylbenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Hexachloro-1,3-butadiene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Iodomethane	mg/kg	ND	0.10	02/02/19 02:42	M5
Isopropylbenzene (Cumene)	mg/kg	ND	0.0050	02/02/19 02:42	M5
Methyl-tert-butyl ether	mg/kg	ND	0.0050	02/02/19 02:42	M5
Methylene Chloride	mg/kg	ND	0.020	02/02/19 02:42	M5
n-Butylbenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
n-Hexane	mg/kg	ND	0.0050	02/02/19 02:42	M5
n-Propylbenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Naphthalene	mg/kg	ND	0.0050	02/02/19 02:42	M5
p-Isopropyltoluene	mg/kg	ND	0.0050	02/02/19 02:42	M5
sec-Butylbenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Styrene	mg/kg	ND	0.0050	02/02/19 02:42	M5
tert-Butylbenzene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Tetrachloroethene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Toluene	mg/kg	ND	0.0050	02/02/19 02:42	M5
trans-1,2-Dichloroethene	mg/kg	ND	0.0050	02/02/19 02:42	M5
trans-1,3-Dichloropropene	mg/kg	ND	0.0050	02/02/19 02:42	M5
trans-1,4-Dichloro-2-butene	mg/kg	ND	0.10	02/02/19 02:42	M5
Trichloroethene	mg/kg	ND	0.0050	02/02/19 02:42	M5
Trichlorofluoromethane	mg/kg	ND	0.0050	02/02/19 02:42	M5
Vinyl acetate	mg/kg	ND	0.10	02/02/19 02:42	M5
Vinyl chloride	mg/kg	ND	0.0050	02/02/19 02:42	M5
Xylene (Total)	mg/kg	ND	0.010	02/02/19 02:42	M5
4-Bromofluorobenzene (S)	%.	97	57-130	02/02/19 02:42	M5
Dibromofluoromethane (S)	%.	108	80-127	02/02/19 02:42	M5
Toluene-d8 (S)	%.	94	72-136	02/02/19 02:42	M5

LABORATORY CONTROL SAMPLE: 2227896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.05	0.041	82	71-123	M5
1,1,2,2-Tetrachloroethane	mg/kg	0.05	0.054	108	74-121	M5
1,1-Dichloroethene	mg/kg	0.05	0.043	87	71-125	M5
1,2,4-Trimethylbenzene	mg/kg	0.05	0.042	84	73-111	M5
1,2-Dibromoethane (EDB)	mg/kg	0.05	0.054	108	82-120	M5
1,2-Dichloroethane	mg/kg	0.05	0.043	85	69-119	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

LABORATORY CONTROL SAMPLE: 2227896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	mg/kg	0.05	0.047	95	76-120	M5
Benzene	mg/kg	0.05	0.042	83	77-117	M5
Chlorobenzene	mg/kg	0.05	0.046	93	77-111	M5
Chloroform	mg/kg	0.05	0.040	81	74-114	M5
cis-1,2-Dichloroethene	mg/kg	0.05	0.043	86	74-118	M5
Ethylbenzene	mg/kg	0.05	0.045	90	73-114	M5
Isopropylbenzene (Cumene)	mg/kg	0.05	0.044	89	78-113	M5
Methyl-tert-butyl ether	mg/kg	0.05	0.048	95	75-119	M5
Naphthalene	mg/kg	0.05	0.046	92	70-115	M5
Tetrachloroethene	mg/kg	0.05	0.038	77	72-117	M5
Toluene	mg/kg	0.05	0.046	92	77-111	M5
trans-1,2-Dichloroethene	mg/kg	0.05	0.040	81	73-121	M5
Trichloroethene	mg/kg	0.05	0.042	83	73-119	M5
Vinyl chloride	mg/kg	0.05	0.033	67	57-160	M5
Xylene (Total)	mg/kg	0.15	0.14	91	74-111	M5
4-Bromofluorobenzene (S)	%.			101	57-130	M5
Dibromofluoromethane (S)	%.			86	80-127	M5
Toluene-d8 (S)	%.			99	72-136	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

QC Batch: 482698 | Analysis Method: SM 2540G
QC Batch Method: SM 2540G | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 50215706001, 50215706002, 50215706003, 50215706004

SAMPLE DUPLICATE: 2226327

Parameter	Units	50215731001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	25.4	25.6	1	5	

SAMPLE DUPLICATE: 2226481

Parameter	Units	50215803004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.6	7.2	8	5	R1

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QUALIFIERS

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 483161

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland Canning FSI#3
Pace Project No.: 50215706

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50215706001	**SB300AD (3-5)**	EPA 8260	483161		
50215706002	**SB300BD (3-5)**	EPA 8260	483161		
50215706003	**SB300AD (62-63)**	EPA 8260	483161		
50215706004	**SB300BD (42-43)**	EPA 8260	483161		
50215706005	**TRIP BLANK**	EPA 8260	483161		
50215706001	**SB300AD (3-5)**	SM 2540G	482698		
50215706002	**SB300BD (3-5)**	SM 2540G	482698		
50215706003	**SB300AD (62-63)**	SM 2540G	482698		
50215706004	**SB300BD (42-43)**	SM 2540G	482698		

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

S021 5706

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Company: PATRIOT ENGINEERING

Billing Information: AP@patrioteng.com

Address: 6150 E 75th St. INDIANAPOLIS

Report To: JAMES COOY

Email To:

Copy To: MIKE CASPER

Site Collection Info/Address:

Customer Project Name/Number: HOUGHLAND CANNING FSI #3

State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone:
Email: jcooy@patrioteng.com

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): JAMES COOY

Purchase Order #:
Quote #:

DW PWS ID #:
DW Location Code:

Collected By (signature): [signature]

Turnaround Date Required: STANDARD

Immediately Packed on Ice: [ ] Yes [ ] No

Sample Disposal:
[ ] Dispose as appropriate [ ] Return
[ ] Archive: _____
[ ] Hold: _____

Rush:
[ ] Same Day [ ] Next Day
[ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day
(Expedite Charges Apply)

Field Filtered (if applicable):
[ ] Yes [ ] No
Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	VOCs 8260	Lab Sample # / Comments
SB300AD (3-5)	SL	G	1/28	8:45					X	001
SB300BD (3-5)	"	"	"	10:30					X	002
SB300AD (62-63)	"	"	"	11:00					X	003
SB300BD (42-43)	"	"	"	14:15					X	004
TRIP BLANK			—	—					X	005

Lab Profile/Line:

Lab Sample Receipt Checklist: SGS SMR

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards: ABSOLUTE PRICING

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2356685

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: E
Cooler 1 Temp Upon Receipt: 0.8 oC
Cooler 1 Therm Corr. Factor: 0 oC
Cooler 1 Corrected Temp: 0.8 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
JAMES COOY / PATRIOT	1/28/19 16:25	VISHAL SHAH / Pat Int	1-28-19 16:25
VISHAL SHAH / PATRIOT	1-29-19 9:25	[signature]	1/29/19 0920

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50215706

Date/Time and Initials of person examining contents: PTH 1-29-17 9:30

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No Seals Intact: ☑ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer: 1 2 3 4 5 6 A B C D E F Ice Type: ☑ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☐ Yes ☐ No ☑ N/A

Cooler Temperature: 0.8/0.2 Ice Visible in Sample Containers?: ☐ Yes ☑ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☑ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		N	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			N
USDA Regulated Soils? (ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		N				
Chain of Custody Present:	N					
Chain of Custody Filled Out:	N		Dissolved Metals field filtered?:			N
Short Hold Time Analysis (<72hr)?: Analysis: TC	✓		Headspace Wisconsin Sulfide			N
Time 5035A TC placed in Freezer or Short Holds To Lab:				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			N
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			N
Rush TAT Requested:		N	Headspace in VOA Vials (>6mm):			N
Containers Intact?:	N		Trip Blank Present?:	N		
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	N		Trip Blank Custody Seals?:	N		

Comments:

Sample Container Count

WO# : 50215706

50215706

CLIENT: Patriot Eng.

COC PAGE ___ of ___

COC ID# 2356685

Project # 50215706

Sample Line Item	DG9H VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	Bulk SBS Kit R				Matrix Sl/ (Soil/Wat Aqueous	pH <2	pH >9	pH>12
1																	4				x			
2																	4							
3																	4							
4																	4							
5																	2							
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved amber vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved clear vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

February 05, 2019

Mr. James Cody
Patriot Engineering
6150 E 75th St
Indianapolis, IN 46250

RE: Project: Houghland CanningFSI#3
Pace Project No.: 50215653

Dear Mr. Cody:
Enclosed are the analytical results for sample(s) received by the laboratory on January 28, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Mr. Mike Casper, Patriot Engineering

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CERTIFICATIONS

Project:	Houghland CanningFSI#3
Pace Project No.:	50215653

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #:E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #:98019
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355-18-12
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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7726 Moller Road
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(317)228-3100

SAMPLE SUMMARY

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50215653001	**SB150AD 59-60**	Solid	01/26/19 14:00	01/28/19 08:30

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SAMPLE ANALYTE COUNT

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50215653001	**SB150AD 59-60**	EPA 8260	LKC	75
		SM 2540G	MLS	1

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SUMMARY OF DETECTION

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50215653001	**SB150AD 59-60**					
EPA 8260	cis-1,2-Dichloroethene	0.011	mg/kg	0.0038	02/02/19 07:26	M5
SM 2540G	Percent Moisture	9.8	%	0.10	01/29/19 07:31	

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ANALYTICAL RESULTS

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

Sample: SB150AD 59-60 **Lab ID: 50215653001** Collected: 01/26/19 14:00 Received: 01/28/19 08:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.077	1		02/02/19 07:26	67-64-1	M5
Acrolein	ND	mg/kg	0.077	1		02/02/19 07:26	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.077	1		02/02/19 07:26	107-13-1	M5
Benzene	ND	mg/kg	0.0038	1		02/02/19 07:26	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0038	1		02/02/19 07:26	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0038	1		02/02/19 07:26	75-27-4	M5
Bromoform	ND	mg/kg	0.0038	1		02/02/19 07:26	75-25-2	M5
Bromomethane	ND	mg/kg	0.0038	1		02/02/19 07:26	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.019	1		02/02/19 07:26	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0077	1		02/02/19 07:26	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0038	1		02/02/19 07:26	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	108-90-7	M5
Chloroethane	ND	mg/kg	0.0038	1		02/02/19 07:26	75-00-3	M5
Chloroform	ND	mg/kg	0.0038	1		02/02/19 07:26	67-66-3	M5
Chloromethane	ND	mg/kg	0.0038	1		02/02/19 07:26	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0038	1		02/02/19 07:26	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0038	1		02/02/19 07:26	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0038	1		02/02/19 07:26	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0038	1		02/02/19 07:26	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0038	1		02/02/19 07:26	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.077	1		02/02/19 07:26	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0038	1		02/02/19 07:26	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0038	1		02/02/19 07:26	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0038	1		02/02/19 07:26	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0038	1		02/02/19 07:26	75-35-4	M5
cis-1,2-Dichloroethene	**0.011**	mg/kg	0.0038	1		02/02/19 07:26	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0038	1		02/02/19 07:26	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0038	1		02/02/19 07:26	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0038	1		02/02/19 07:26	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0038	1		02/02/19 07:26	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0038	1		02/02/19 07:26	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0038	1		02/02/19 07:26	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0038	1		02/02/19 07:26	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.077	1		02/02/19 07:26	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0038	1		02/02/19 07:26	87-68-3	M5
n-Hexane	ND	mg/kg	0.0038	1		02/02/19 07:26	110-54-3	M5
2-Hexanone	ND	mg/kg	0.077	1		02/02/19 07:26	591-78-6	M5
Iodomethane	ND	mg/kg	0.077	1		02/02/19 07:26	74-88-4	M5

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

Sample: SB150AD 59-60 **Lab ID: 50215653001** Collected: 01/26/19 14:00 Received: 01/28/19 08:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0038	1		02/02/19 07:26	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0038	1		02/02/19 07:26	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.015	1		02/02/19 07:26	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0077	1		02/02/19 07:26	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0077	1		02/02/19 07:26	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.019	1		02/02/19 07:26	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0038	1		02/02/19 07:26	1634-04-4	L1,M5
Naphthalene	ND	mg/kg	0.0038	1		02/02/19 07:26	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	103-65-1	M5
Styrene	ND	mg/kg	0.0038	1		02/02/19 07:26	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0038	1		02/02/19 07:26	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0038	1		02/02/19 07:26	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0038	1		02/02/19 07:26	127-18-4	M5
Toluene	ND	mg/kg	0.0038	1		02/02/19 07:26	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0038	1		02/02/19 07:26	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0038	1		02/02/19 07:26	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0038	1		02/02/19 07:26	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0038	1		02/02/19 07:26	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0038	1		02/02/19 07:26	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0038	1		02/02/19 07:26	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.077	1		02/02/19 07:26	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0038	1		02/02/19 07:26	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0077	1		02/02/19 07:26	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	111	%.	80-127	1		02/02/19 07:26	1868-53-7	M5
Toluene-d8 (S)	120	%.	72-136	1		02/02/19 07:26	2037-26-5	M5
4-Bromofluorobenzene (S)	89	%.	57-130	1		02/02/19 07:26	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**9.8**	%	0.10	1		01/29/19 07:31		

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

QC Batch: 483163
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50215653001

METHOD BLANK: 2227905
Matrix: Solid
Associated Lab Samples: 50215653001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,1,1-Trichloroethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,1,2,2-Tetrachloroethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,1,2-Trichloroethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,1-Dichloroethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,1-Dichloroethene	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,1-Dichloropropene	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,2,3-Trichlorobenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,2,3-Trichloropropane	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,2,4-Trichlorobenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,2,4-Trimethylbenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,2-Dibromoethane (EDB)	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,2-Dichlorobenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,2-Dichloroethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,2-Dichloropropane	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,3,5-Trimethylbenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,3-Dichlorobenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,3-Dichloropropane	mg/kg	ND	0.0050	02/02/19 02:59	M5
1,4-Dichlorobenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
1-Methylnaphthalene	mg/kg	ND	0.010	02/02/19 02:59	M5,N2
2,2-Dichloropropane	mg/kg	ND	0.0050	02/02/19 02:59	M5
2-Butanone (MEK)	mg/kg	ND	0.025	02/02/19 02:59	M5
2-Chlorotoluene	mg/kg	ND	0.0050	02/02/19 02:59	M5
2-Hexanone	mg/kg	ND	0.10	02/02/19 02:59	M5
2-Methylnaphthalene	mg/kg	ND	0.010	02/02/19 02:59	M5
4-Chlorotoluene	mg/kg	ND	0.0050	02/02/19 02:59	M5
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	0.025	02/02/19 02:59	M5
Acetone	mg/kg	ND	0.10	02/02/19 02:59	M5
Acrolein	mg/kg	ND	0.10	02/02/19 02:59	M5
Acrylonitrile	mg/kg	ND	0.10	02/02/19 02:59	M5
Benzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Bromobenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Bromochloromethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
Bromodichloromethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
Bromoform	mg/kg	ND	0.0050	02/02/19 02:59	M5
Bromomethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
Carbon disulfide	mg/kg	ND	0.010	02/02/19 02:59	M5
Carbon tetrachloride	mg/kg	ND	0.0050	02/02/19 02:59	M5
Chlorobenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Chloroethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
Chloroform	mg/kg	ND	0.0050	02/02/19 02:59	M5

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

METHOD BLANK: 2227905 Matrix: Solid
Associated Lab Samples: 50215653001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
cis-1,2-Dichloroethene	mg/kg	ND	0.0050	02/02/19 02:59	M5
cis-1,3-Dichloropropene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Dibromochloromethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
Dibromomethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
Dichlorodifluoromethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
Ethyl methacrylate	mg/kg	ND	0.10	02/02/19 02:59	M5
Ethylbenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Hexachloro-1,3-butadiene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Iodomethane	mg/kg	ND	0.10	02/02/19 02:59	M5
Isopropylbenzene (Cumene)	mg/kg	ND	0.0050	02/02/19 02:59	M5
Methyl-tert-butyl ether	mg/kg	ND	0.0050	02/02/19 02:59	M5
Methylene Chloride	mg/kg	ND	0.020	02/02/19 02:59	M5
n-Butylbenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
n-Hexane	mg/kg	ND	0.0050	02/02/19 02:59	M5
n-Propylbenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Naphthalene	mg/kg	ND	0.0050	02/02/19 02:59	M5
p-Isopropyltoluene	mg/kg	ND	0.0050	02/02/19 02:59	M5
sec-Butylbenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Styrene	mg/kg	ND	0.0050	02/02/19 02:59	M5
tert-Butylbenzene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Tetrachloroethene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Toluene	mg/kg	ND	0.0050	02/02/19 02:59	M5
trans-1,2-Dichloroethene	mg/kg	ND	0.0050	02/02/19 02:59	M5
trans-1,3-Dichloropropene	mg/kg	ND	0.0050	02/02/19 02:59	M5
trans-1,4-Dichloro-2-butene	mg/kg	ND	0.10	02/02/19 02:59	M5
Trichloroethene	mg/kg	ND	0.0050	02/02/19 02:59	M5
Trichlorofluoromethane	mg/kg	ND	0.0050	02/02/19 02:59	M5
Vinyl acetate	mg/kg	ND	0.10	02/02/19 02:59	M5
Vinyl chloride	mg/kg	ND	0.0050	02/02/19 02:59	M5
Xylene (Total)	mg/kg	ND	0.010	02/02/19 02:59	M5
4-Bromofluorobenzene (S)	%.	101	57-130	02/02/19 02:59	M5
Dibromofluoromethane (S)	%.	108	80-127	02/02/19 02:59	M5
Toluene-d8 (S)	%.	101	72-136	02/02/19 02:59	M5

LABORATORY CONTROL SAMPLE: 2227906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.05	0.046	92	71-123	M5
1,1,2,2-Tetrachloroethane	mg/kg	0.05	0.051	101	74-121	M5
1,1-Dichloroethene	mg/kg	0.05	0.060	120	71-125	M5
1,2,4-Trimethylbenzene	mg/kg	0.05	0.040	80	73-111	M5
1,2-Dibromoethane (EDB)	mg/kg	0.05	0.047	94	82-120	M5
1,2-Dichloroethane	mg/kg	0.05	0.044	88	69-119	M5

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REPORT OF LABORATORY ANALYSIS

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

LABORATORY CONTROL SAMPLE: 2227906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	mg/kg	0.05	0.047	95	76-120	M5
Benzene	mg/kg	0.05	0.045	89	77-117	M5
Chlorobenzene	mg/kg	0.05	0.043	86	77-111	M5
Chloroform	mg/kg	0.05	0.045	91	74-114	M5
cis-1,2-Dichloroethene	mg/kg	0.05	0.045	90	74-118	M5
Ethylbenzene	mg/kg	0.05	0.043	86	73-114	M5
Isopropylbenzene (Cumene)	mg/kg	0.05	0.043	86	78-113	M5
Methyl-tert-butyl ether	mg/kg	0.05	0.065	131	75-119	L1,M5
Naphthalene	mg/kg	0.05	0.043	86	70-115	M5
Tetrachloroethene	mg/kg	0.05	0.040	80	72-117	M5
Toluene	mg/kg	0.05	0.046	91	77-111	M5
trans-1,2-Dichloroethene	mg/kg	0.05	0.055	110	73-121	M5
Trichloroethene	mg/kg	0.05	0.042	85	73-119	M5
Vinyl chloride	mg/kg	0.05	0.039	78	57-160	M5
Xylene (Total)	mg/kg	0.15	0.13	87	74-111	M5
4-Bromofluorobenzene (S)	%.			98	57-130	M5
Dibromofluoromethane (S)	%.			95	80-127	M5
Toluene-d8 (S)	%.			103	72-136	M5

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

QC Batch: 482498 | Analysis Method: SM 2540G
QC Batch Method: SM 2540G | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 50215653001

SAMPLE DUPLICATE: 2225513

Parameter	Units	50215698014 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.3	22.2	14	5	R1

SAMPLE DUPLICATE: 2225514

Parameter	Units	50215686007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.1	18.4	9	5	R1

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QUALIFIERS

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 483163

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland CanningFSI#3
Pace Project No.: 50215653

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50215653001	**SB150AD 59-60**	EPA 8260	483163		
50215653001	**SB150AD 59-60**	SM 2540G	482498		

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

50215653

ALL SHADED AREAS are for LAB USE ONLY

Company: PATRIOT ENGINEERING

Address: 6150 E 75th St INDIANAPOLIS

Billing Information: AP@patrioteng.com

Report To: JAMES CODY

Email To:

Copy To: MIKE CASPER

Site Collection Info/Address:

Customer Project Name/Number: 19-0096-01E HOUGHLAND CANNING FSI #3

State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone:
Email: jcody@patrioteng.com

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): JAMES CODY

Purchase Order #:
Quote #:

DW PWS ID #:
DW Location Code:

Collected By (signature):

Turnaround Date Required: STANDARD

Immediately Packed on Ice: [ ] Yes [ ] No

Sample Disposal:
[ ] Dispose as appropriate [ ] Return
[ ] Archive: _____
[ ] Hold: _____

Rush:
[ ] Same Day [ ] Next Day
[ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day
(Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	VOCs 8260	Lab Sample # / Comments
SB ~~300D~~ 150AD 59-60	SL	G	1/26	14:00					X	001

Customer Remarks / Special Conditions / Possible Hazards: ABSOLUTE PRICING

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2356684

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: E
Cooler 1 Temp Upon Receipt: 2.0 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 2.0 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
JAMES CODY / PATRIOT	1/28/19 8:30	VISHAL SHAH / Patriot	1-28-19 8:30
VISHAL SHAH / PATRIOT	1-28 907		
		JASON HUAD	1-28 907

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50215653

Date/Time and Initials of person examining contents: TR 1/25/19 0935

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No **Seals Intact:** ☒ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer: 1 2 3 4 5 6 A B C D E F Ice Type: ☒ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☐ Yes ☐ No ☒ N/A

Cooler Temperature: 20/20 Ice Visible in Sample Containers?: ☐ Yes ☒ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☒ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		✓	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			✓
USDA Regulated Soils? (ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓				
Chain of Custody Present:	✓					
Chain of Custody Filled Out:	✓		Dissolved Metals field filtered?:			✓
Short Hold Time Analysis (<72hr)?: Analysis: Tc	✓		Headspace Wisconsin Sulfide			✓
Time 5035A TC placed in Freezer or Short Holds To Lab: 0935				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Rush TAT Requested:		✓	Headspace in VOA Vials (>6mm):			✓
Containers Intact?:	✓		Trip Blank Present?:		✓	
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Custody Seals?:		✓	

Comments: Samples pre frozen JH 1-25

Sample Container Count

WO# : 50215653

50215653

CLIENT: Patrick

COC PAGE 1 of 1

COC ID# 23566684

Project # 50215653

Sample Line Item	DG9H VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	R				Matrix (Soil/W Aqueou	pH <2	pH >9	pH>12
1																	4				5L			
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved amber vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved clear vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

January 29, 2019

Mr. Mike Casper
Patriot Engineering
6150 E. 75th St.
Indianapolis, IN 46250

RE: Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Dear Mr. Casper:
Enclosed are the analytical results for sample(s) received by the laboratory on January 23, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Mr. James Cody, Patriot Engineering
Ms. Kendra Grossman, Patriot
Mr. Doug Lam, Patriot Engineering

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CERTIFICATIONS

Project:	Houghland Canning FSI #3
Pace Project No.:	50215354

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #:E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #:98019
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355-18-12
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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SAMPLE SUMMARY

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50215354001	**SB 150 D (4-6)**	Solid	01/22/19 13:00	01/23/19 12:00
50215354002	**SB150 D (59-60)**	Solid	01/22/19 14:00	01/23/19 12:00
50215354003	**SB 150A DEEP (3-5)**	Solid	01/22/19 13:15	01/23/19 12:00
50215354004	**SB 33D (16-18)**	Solid	01/22/19 16:10	01/23/19 12:00
50215354005	**SB 33D (37-38)**	Solid	01/22/19 16:30	01/23/19 12:00

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SAMPLE ANALYTE COUNT

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50215354001	**SB 150 D (4-6)**	EPA 8260	LKC	75
		SM 2540G	SKK	1
50215354002	**SB150 D (59-60)**	EPA 8260	LKC	75
		SM 2540G	SKK	1
50215354003	**SB 150A DEEP (3-5)**	EPA 8260	LKC	75
		SM 2540G	SKK	1
50215354004	**SB 33D (16-18)**	EPA 8260	LKC	75
		SM 2540G	SKK	1
50215354005	**SB 33D (37-38)**	EPA 8260	LKC	75
		SM 2540G	SKK	1

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SUMMARY OF DETECTION

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50215354001	**SB 150 D (4-6)**					
SM 2540G	Percent Moisture	12.7	%	0.10	01/25/19 13:40	
50215354002	**SB150 D (59-60)**					
SM 2540G	Percent Moisture	8.2	%	0.10	01/25/19 13:40	
50215354003	**SB 150A DEEP (3-5)**					
SM 2540G	Percent Moisture	16.5	%	0.10	01/25/19 13:40	
50215354004	**SB 33D (16-18)**					
EPA 8260	Tetrachloroethene	0.11	mg/kg	0.0047	01/24/19 22:12	M5
EPA 8260	Trichloroethene	0.11	mg/kg	0.0047	01/24/19 22:12	M5
SM 2540G	Percent Moisture	5.3	%	0.10	01/25/19 13:40	
50215354005	**SB 33D (37-38)**					
SM 2540G	Percent Moisture	8.9	%	0.10	01/25/19 13:40	

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7726 Moller Road
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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Sample: SB 150 D (4-6) **Lab ID: 50215354001** Collected: 01/22/19 13:00 Received: 01/23/19 12:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.073	1		01/24/19 20:31	67-64-1	M5
Acrolein	ND	mg/kg	0.073	1		01/24/19 20:31	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.073	1		01/24/19 20:31	107-13-1	M5
Benzene	ND	mg/kg	0.0036	1		01/24/19 20:31	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0036	1		01/24/19 20:31	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0036	1		01/24/19 20:31	75-27-4	M5
Bromoform	ND	mg/kg	0.0036	1		01/24/19 20:31	75-25-2	M5
Bromomethane	ND	mg/kg	0.0036	1		01/24/19 20:31	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.018	1		01/24/19 20:31	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0073	1		01/24/19 20:31	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0036	1		01/24/19 20:31	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	108-90-7	M5
Chloroethane	ND	mg/kg	0.0036	1		01/24/19 20:31	75-00-3	M5
Chloroform	ND	mg/kg	0.0036	1		01/24/19 20:31	67-66-3	M5
Chloromethane	ND	mg/kg	0.0036	1		01/24/19 20:31	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0036	1		01/24/19 20:31	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0036	1		01/24/19 20:31	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0036	1		01/24/19 20:31	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0036	1		01/24/19 20:31	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0036	1		01/24/19 20:31	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.073	1		01/24/19 20:31	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0036	1		01/24/19 20:31	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0036	1		01/24/19 20:31	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0036	1		01/24/19 20:31	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0036	1		01/24/19 20:31	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0036	1		01/24/19 20:31	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0036	1		01/24/19 20:31	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0036	1		01/24/19 20:31	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0036	1		01/24/19 20:31	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0036	1		01/24/19 20:31	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0036	1		01/24/19 20:31	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0036	1		01/24/19 20:31	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0036	1		01/24/19 20:31	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.073	1		01/24/19 20:31	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0036	1		01/24/19 20:31	87-68-3	M5
n-Hexane	ND	mg/kg	0.0036	1		01/24/19 20:31	110-54-3	M5
2-Hexanone	ND	mg/kg	0.073	1		01/24/19 20:31	591-78-6	M5
Iodomethane	ND	mg/kg	0.073	1		01/24/19 20:31	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Sample: SB 150 D (4-6) **Lab ID: 50215354001** Collected: 01/22/19 13:00 Received: 01/23/19 12:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0036	1		01/24/19 20:31	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0036	1		01/24/19 20:31	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.015	1		01/24/19 20:31	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0073	1		01/24/19 20:31	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0073	1		01/24/19 20:31	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.018	1		01/24/19 20:31	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0036	1		01/24/19 20:31	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0036	1		01/24/19 20:31	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	103-65-1	M5
Styrene	ND	mg/kg	0.0036	1		01/24/19 20:31	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0036	1		01/24/19 20:31	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0036	1		01/24/19 20:31	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0036	1		01/24/19 20:31	127-18-4	M5
Toluene	ND	mg/kg	0.0036	1		01/24/19 20:31	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0036	1		01/24/19 20:31	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0036	1		01/24/19 20:31	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0036	1		01/24/19 20:31	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0036	1		01/24/19 20:31	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0036	1		01/24/19 20:31	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0036	1		01/24/19 20:31	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.073	1		01/24/19 20:31	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0036	1		01/24/19 20:31	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0073	1		01/24/19 20:31	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	102	%.	80-127	1		01/24/19 20:31	1868-53-7	M5
Toluene-d8 (S)	109	%.	72-136	1		01/24/19 20:31	2037-26-5	M5
4-Bromofluorobenzene (S)	95	%.	57-130	1		01/24/19 20:31	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**12.7**	%	0.10	1		01/25/19 13:40		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Sample: SB150 D (59-60) **Lab ID: 50215354002** Collected: 01/22/19 14:00 Received: 01/23/19 12:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.079	1		01/24/19 21:05	67-64-1	M5
Acrolein	ND	mg/kg	0.079	1		01/24/19 21:05	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.079	1		01/24/19 21:05	107-13-1	M5
Benzene	ND	mg/kg	0.0039	1		01/24/19 21:05	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0039	1		01/24/19 21:05	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0039	1		01/24/19 21:05	75-27-4	M5
Bromoform	ND	mg/kg	0.0039	1		01/24/19 21:05	75-25-2	M5
Bromomethane	ND	mg/kg	0.0039	1		01/24/19 21:05	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.020	1		01/24/19 21:05	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0079	1		01/24/19 21:05	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0039	1		01/24/19 21:05	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	108-90-7	M5
Chloroethane	ND	mg/kg	0.0039	1		01/24/19 21:05	75-00-3	M5
Chloroform	ND	mg/kg	0.0039	1		01/24/19 21:05	67-66-3	M5
Chloromethane	ND	mg/kg	0.0039	1		01/24/19 21:05	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0039	1		01/24/19 21:05	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0039	1		01/24/19 21:05	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0039	1		01/24/19 21:05	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0039	1		01/24/19 21:05	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0039	1		01/24/19 21:05	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.079	1		01/24/19 21:05	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0039	1		01/24/19 21:05	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0039	1		01/24/19 21:05	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0039	1		01/24/19 21:05	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0039	1		01/24/19 21:05	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0039	1		01/24/19 21:05	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0039	1		01/24/19 21:05	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0039	1		01/24/19 21:05	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0039	1		01/24/19 21:05	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0039	1		01/24/19 21:05	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0039	1		01/24/19 21:05	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0039	1		01/24/19 21:05	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0039	1		01/24/19 21:05	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.079	1		01/24/19 21:05	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0039	1		01/24/19 21:05	87-68-3	M5
n-Hexane	ND	mg/kg	0.0039	1		01/24/19 21:05	110-54-3	M5
2-Hexanone	ND	mg/kg	0.079	1		01/24/19 21:05	591-78-6	M5
Iodomethane	ND	mg/kg	0.079	1		01/24/19 21:05	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Sample: SB150 D (59-60) **Lab ID: 50215354002** Collected: 01/22/19 14:00 Received: 01/23/19 12:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0039	1		01/24/19 21:05	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0039	1		01/24/19 21:05	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.016	1		01/24/19 21:05	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0079	1		01/24/19 21:05	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0079	1		01/24/19 21:05	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.020	1		01/24/19 21:05	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0039	1		01/24/19 21:05	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0039	1		01/24/19 21:05	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	103-65-1	M5
Styrene	ND	mg/kg	0.0039	1		01/24/19 21:05	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0039	1		01/24/19 21:05	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0039	1		01/24/19 21:05	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0039	1		01/24/19 21:05	127-18-4	M5
Toluene	ND	mg/kg	0.0039	1		01/24/19 21:05	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0039	1		01/24/19 21:05	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0039	1		01/24/19 21:05	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0039	1		01/24/19 21:05	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0039	1		01/24/19 21:05	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0039	1		01/24/19 21:05	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0039	1		01/24/19 21:05	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.079	1		01/24/19 21:05	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0039	1		01/24/19 21:05	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0079	1		01/24/19 21:05	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	116	%.	80-127	1		01/24/19 21:05	1868-53-7	M5
Toluene-d8 (S)	128	%.	72-136	1		01/24/19 21:05	2037-26-5	M5
4-Bromofluorobenzene (S)	78	%.	57-130	1		01/24/19 21:05	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**8.2**	%	0.10	1		01/25/19 13:40		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Sample: SB 150A DEEP (3-5) **Lab ID: 50215354003** Collected: 01/22/19 13:15 Received: 01/23/19 12:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.093	1		01/24/19 21:39	67-64-1	M5
Acrolein	ND	mg/kg	0.093	1		01/24/19 21:39	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.093	1		01/24/19 21:39	107-13-1	M5
Benzene	ND	mg/kg	0.0046	1		01/24/19 21:39	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0046	1		01/24/19 21:39	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0046	1		01/24/19 21:39	75-27-4	M5
Bromoform	ND	mg/kg	0.0046	1		01/24/19 21:39	75-25-2	M5
Bromomethane	ND	mg/kg	0.0046	1		01/24/19 21:39	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.023	1		01/24/19 21:39	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0093	1		01/24/19 21:39	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0046	1		01/24/19 21:39	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	108-90-7	M5
Chloroethane	ND	mg/kg	0.0046	1		01/24/19 21:39	75-00-3	M5
Chloroform	ND	mg/kg	0.0046	1		01/24/19 21:39	67-66-3	M5
Chloromethane	ND	mg/kg	0.0046	1		01/24/19 21:39	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0046	1		01/24/19 21:39	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0046	1		01/24/19 21:39	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0046	1		01/24/19 21:39	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0046	1		01/24/19 21:39	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0046	1		01/24/19 21:39	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.093	1		01/24/19 21:39	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0046	1		01/24/19 21:39	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0046	1		01/24/19 21:39	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0046	1		01/24/19 21:39	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0046	1		01/24/19 21:39	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	1		01/24/19 21:39	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	1		01/24/19 21:39	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0046	1		01/24/19 21:39	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0046	1		01/24/19 21:39	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0046	1		01/24/19 21:39	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0046	1		01/24/19 21:39	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	1		01/24/19 21:39	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	1		01/24/19 21:39	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.093	1		01/24/19 21:39	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0046	1		01/24/19 21:39	87-68-3	M5
n-Hexane	ND	mg/kg	0.0046	1		01/24/19 21:39	110-54-3	M5
2-Hexanone	ND	mg/kg	0.093	1		01/24/19 21:39	591-78-6	M5
Iodomethane	ND	mg/kg	0.093	1		01/24/19 21:39	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Sample: SB 150A DEEP (3-5) **Lab ID: 50215354003** Collected: 01/22/19 13:15 Received: 01/23/19 12:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0046	1		01/24/19 21:39	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0046	1		01/24/19 21:39	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.019	1		01/24/19 21:39	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0093	1		01/24/19 21:39	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0093	1		01/24/19 21:39	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.023	1		01/24/19 21:39	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0046	1		01/24/19 21:39	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0046	1		01/24/19 21:39	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	103-65-1	M5
Styrene	ND	mg/kg	0.0046	1		01/24/19 21:39	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	1		01/24/19 21:39	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	1		01/24/19 21:39	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0046	1		01/24/19 21:39	127-18-4	M5
Toluene	ND	mg/kg	0.0046	1		01/24/19 21:39	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0046	1		01/24/19 21:39	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0046	1		01/24/19 21:39	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0046	1		01/24/19 21:39	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0046	1		01/24/19 21:39	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0046	1		01/24/19 21:39	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	1		01/24/19 21:39	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.093	1		01/24/19 21:39	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0046	1		01/24/19 21:39	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0093	1		01/24/19 21:39	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	106	%.	80-127	1		01/24/19 21:39	1868-53-7	M5
Toluene-d8 (S)	111	%.	72-136	1		01/24/19 21:39	2037-26-5	M5
4-Bromofluorobenzene (S)	93	%.	57-130	1		01/24/19 21:39	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**16.5**	%	0.10	1		01/25/19 13:40		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Sample: SB 33D (16-18) **Lab ID: 50215354004** Collected: 01/22/19 16:10 Received: 01/23/19 12:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.093	1		01/24/19 22:12	67-64-1	M5
Acrolein	ND	mg/kg	0.093	1		01/24/19 22:12	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.093	1		01/24/19 22:12	107-13-1	M5
Benzene	ND	mg/kg	0.0047	1		01/24/19 22:12	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0047	1		01/24/19 22:12	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0047	1		01/24/19 22:12	75-27-4	M5
Bromoform	ND	mg/kg	0.0047	1		01/24/19 22:12	75-25-2	M5
Bromomethane	ND	mg/kg	0.0047	1		01/24/19 22:12	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.023	1		01/24/19 22:12	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0093	1		01/24/19 22:12	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0047	1		01/24/19 22:12	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	108-90-7	M5
Chloroethane	ND	mg/kg	0.0047	1		01/24/19 22:12	75-00-3	M5
Chloroform	ND	mg/kg	0.0047	1		01/24/19 22:12	67-66-3	M5
Chloromethane	ND	mg/kg	0.0047	1		01/24/19 22:12	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0047	1		01/24/19 22:12	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0047	1		01/24/19 22:12	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0047	1		01/24/19 22:12	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0047	1		01/24/19 22:12	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0047	1		01/24/19 22:12	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.093	1		01/24/19 22:12	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0047	1		01/24/19 22:12	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0047	1		01/24/19 22:12	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0047	1		01/24/19 22:12	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0047	1		01/24/19 22:12	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	1		01/24/19 22:12	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	1		01/24/19 22:12	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0047	1		01/24/19 22:12	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0047	1		01/24/19 22:12	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0047	1		01/24/19 22:12	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0047	1		01/24/19 22:12	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	1		01/24/19 22:12	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	1		01/24/19 22:12	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.093	1		01/24/19 22:12	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0047	1		01/24/19 22:12	87-68-3	M5
n-Hexane	ND	mg/kg	0.0047	1		01/24/19 22:12	110-54-3	M5
2-Hexanone	ND	mg/kg	0.093	1		01/24/19 22:12	591-78-6	M5
Iodomethane	ND	mg/kg	0.093	1		01/24/19 22:12	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Sample: SB 33D (16-18) **Lab ID: 50215354004** Collected: 01/22/19 16:10 Received: 01/23/19 12:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0047	1		01/24/19 22:12	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0047	1		01/24/19 22:12	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.019	1		01/24/19 22:12	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0093	1		01/24/19 22:12	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0093	1		01/24/19 22:12	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.023	1		01/24/19 22:12	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0047	1		01/24/19 22:12	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0047	1		01/24/19 22:12	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	103-65-1	M5
Styrene	ND	mg/kg	0.0047	1		01/24/19 22:12	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	1		01/24/19 22:12	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	1		01/24/19 22:12	79-34-5	M5
Tetrachloroethene	**0.11**	mg/kg	0.0047	1		01/24/19 22:12	127-18-4	M5
Toluene	ND	mg/kg	0.0047	1		01/24/19 22:12	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0047	1		01/24/19 22:12	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0047	1		01/24/19 22:12	79-00-5	M5
Trichloroethene	**0.11**	mg/kg	0.0047	1		01/24/19 22:12	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0047	1		01/24/19 22:12	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0047	1		01/24/19 22:12	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	1		01/24/19 22:12	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.093	1		01/24/19 22:12	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0047	1		01/24/19 22:12	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0093	1		01/24/19 22:12	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	103	%.	80-127	1		01/24/19 22:12	1868-53-7	M5
Toluene-d8 (S)	109	%.	72-136	1		01/24/19 22:12	2037-26-5	M5
4-Bromofluorobenzene (S)	94	%.	57-130	1		01/24/19 22:12	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**5.3**	%	0.10	1		01/25/19 13:40		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Sample: SB 33D (37-38) **Lab ID: 50215354005** Collected: 01/22/19 16:30 Received: 01/23/19 12:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.078	1		01/24/19 22:46	67-64-1	M5
Acrolein	ND	mg/kg	0.078	1		01/24/19 22:46	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.078	1		01/24/19 22:46	107-13-1	M5
Benzene	ND	mg/kg	0.0039	1		01/24/19 22:46	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0039	1		01/24/19 22:46	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0039	1		01/24/19 22:46	75-27-4	M5
Bromoform	ND	mg/kg	0.0039	1		01/24/19 22:46	75-25-2	M5
Bromomethane	ND	mg/kg	0.0039	1		01/24/19 22:46	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.019	1		01/24/19 22:46	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0078	1		01/24/19 22:46	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0039	1		01/24/19 22:46	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	108-90-7	M5
Chloroethane	ND	mg/kg	0.0039	1		01/24/19 22:46	75-00-3	M5
Chloroform	ND	mg/kg	0.0039	1		01/24/19 22:46	67-66-3	M5
Chloromethane	ND	mg/kg	0.0039	1		01/24/19 22:46	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0039	1		01/24/19 22:46	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0039	1		01/24/19 22:46	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0039	1		01/24/19 22:46	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0039	1		01/24/19 22:46	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0039	1		01/24/19 22:46	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.078	1		01/24/19 22:46	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0039	1		01/24/19 22:46	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0039	1		01/24/19 22:46	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0039	1		01/24/19 22:46	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0039	1		01/24/19 22:46	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0039	1		01/24/19 22:46	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0039	1		01/24/19 22:46	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0039	1		01/24/19 22:46	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0039	1		01/24/19 22:46	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0039	1		01/24/19 22:46	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0039	1		01/24/19 22:46	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0039	1		01/24/19 22:46	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0039	1		01/24/19 22:46	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.078	1		01/24/19 22:46	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0039	1		01/24/19 22:46	87-68-3	M5
n-Hexane	ND	mg/kg	0.0039	1		01/24/19 22:46	110-54-3	M5
2-Hexanone	ND	mg/kg	0.078	1		01/24/19 22:46	591-78-6	M5
Iodomethane	ND	mg/kg	0.078	1		01/24/19 22:46	74-88-4	M5

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Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Sample: SB 33D (37-38) **Lab ID: 50215354005** Collected: 01/22/19 16:30 Received: 01/23/19 12:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0039	1		01/24/19 22:46	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0039	1		01/24/19 22:46	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.016	1		01/24/19 22:46	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0078	1		01/24/19 22:46	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0078	1		01/24/19 22:46	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.019	1		01/24/19 22:46	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0039	1		01/24/19 22:46	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0039	1		01/24/19 22:46	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	103-65-1	M5
Styrene	ND	mg/kg	0.0039	1		01/24/19 22:46	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0039	1		01/24/19 22:46	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0039	1		01/24/19 22:46	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0039	1		01/24/19 22:46	127-18-4	M5
Toluene	ND	mg/kg	0.0039	1		01/24/19 22:46	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0039	1		01/24/19 22:46	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0039	1		01/24/19 22:46	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0039	1		01/24/19 22:46	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0039	1		01/24/19 22:46	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0039	1		01/24/19 22:46	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0039	1		01/24/19 22:46	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.078	1		01/24/19 22:46	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0039	1		01/24/19 22:46	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0078	1		01/24/19 22:46	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	122	%.	80-127	1		01/24/19 22:46	1868-53-7	M5
Toluene-d8 (S)	138	%.	72-136	1		01/24/19 22:46	2037-26-5	M5,S3
4-Bromofluorobenzene (S)	81	%.	57-130	1		01/24/19 22:46	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**8.9**	%	0.10	1		01/25/19 13:40		

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

QC Batch: 482009 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50215354001, 50215354002, 50215354003, 50215354004, 50215354005

METHOD BLANK: 2223426 | Matrix: Solid
Associated Lab Samples: 50215354001, 50215354002, 50215354003, 50215354004, 50215354005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,1,1-Trichloroethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,1,2,2-Tetrachloroethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,1,2-Trichloroethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,1-Dichloroethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,1-Dichloroethene	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,1-Dichloropropene	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,2,3-Trichlorobenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,2,3-Trichloropropane	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,2,4-Trichlorobenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,2,4-Trimethylbenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,2-Dibromoethane (EDB)	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,2-Dichlorobenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,2-Dichloroethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,2-Dichloropropane	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,3,5-Trimethylbenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,3-Dichlorobenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,3-Dichloropropane	mg/kg	ND	0.0050	01/24/19 15:30	M5
1,4-Dichlorobenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
1-Methylnaphthalene	mg/kg	ND	0.010	01/24/19 15:30	M5,N2
2,2-Dichloropropane	mg/kg	ND	0.0050	01/24/19 15:30	M5
2-Butanone (MEK)	mg/kg	ND	0.025	01/24/19 15:30	M5
2-Chlorotoluene	mg/kg	ND	0.0050	01/24/19 15:30	M5
2-Hexanone	mg/kg	ND	0.10	01/24/19 15:30	M5
2-Methylnaphthalene	mg/kg	ND	0.010	01/24/19 15:30	M5
4-Chlorotoluene	mg/kg	ND	0.0050	01/24/19 15:30	M5
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	0.025	01/24/19 15:30	M5
Acetone	mg/kg	ND	0.10	01/24/19 15:30	M5
Acrolein	mg/kg	ND	0.10	01/24/19 15:30	M5
Acrylonitrile	mg/kg	ND	0.10	01/24/19 15:30	M5
Benzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Bromobenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Bromochloromethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
Bromodichloromethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
Bromoform	mg/kg	ND	0.0050	01/24/19 15:30	M5
Bromomethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
Carbon disulfide	mg/kg	ND	0.010	01/24/19 15:30	M5
Carbon tetrachloride	mg/kg	ND	0.0050	01/24/19 15:30	M5
Chlorobenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Chloroethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
Chloroform	mg/kg	ND	0.0050	01/24/19 15:30	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

METHOD BLANK: 2223426 Matrix: Solid
Associated Lab Samples: 50215354001, 50215354002, 50215354003, 50215354004, 50215354005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
cis-1,2-Dichloroethene	mg/kg	ND	0.0050	01/24/19 15:30	M5
cis-1,3-Dichloropropene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Dibromochloromethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
Dibromomethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
Dichlorodifluoromethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
Ethyl methacrylate	mg/kg	ND	0.10	01/24/19 15:30	M5
Ethylbenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Hexachloro-1,3-butadiene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Iodomethane	mg/kg	ND	0.10	01/24/19 15:30	M5
Isopropylbenzene (Cumene)	mg/kg	ND	0.0050	01/24/19 15:30	M5
Methyl-tert-butyl ether	mg/kg	ND	0.0050	01/24/19 15:30	M5
Methylene Chloride	mg/kg	ND	0.020	01/24/19 15:30	M5
n-Butylbenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
n-Hexane	mg/kg	ND	0.0050	01/24/19 15:30	M5
n-Propylbenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Naphthalene	mg/kg	ND	0.0050	01/24/19 15:30	M5
p-Isopropyltoluene	mg/kg	ND	0.0050	01/24/19 15:30	M5
sec-Butylbenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Styrene	mg/kg	ND	0.0050	01/24/19 15:30	M5
tert-Butylbenzene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Tetrachloroethene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Toluene	mg/kg	ND	0.0050	01/24/19 15:30	M5
trans-1,2-Dichloroethene	mg/kg	ND	0.0050	01/24/19 15:30	M5
trans-1,3-Dichloropropene	mg/kg	ND	0.0050	01/24/19 15:30	M5
trans-1,4-Dichloro-2-butene	mg/kg	ND	0.10	01/24/19 15:30	M5
Trichloroethene	mg/kg	ND	0.0050	01/24/19 15:30	M5
Trichlorofluoromethane	mg/kg	ND	0.0050	01/24/19 15:30	M5
Vinyl acetate	mg/kg	ND	0.10	01/24/19 15:30	M5
Vinyl chloride	mg/kg	ND	0.0050	01/24/19 15:30	M5
Xylene (Total)	mg/kg	ND	0.010	01/24/19 15:30	M5
4-Bromofluorobenzene (S)	%.	102	57-130	01/24/19 15:30	M5
Dibromofluoromethane (S)	%.	109	80-127	01/24/19 15:30	M5
Toluene-d8 (S)	%.	104	72-136	01/24/19 15:30	M5

LABORATORY CONTROL SAMPLE: 2223427

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.05	0.049	97	71-123	M5
1,1,2,2-Tetrachloroethane	mg/kg	0.05	0.056	112	74-121	M5
1,1-Dichloroethene	mg/kg	0.05	0.042	84	71-125	M5
1,2,4-Trimethylbenzene	mg/kg	0.05	0.050	100	73-111	M5
1,2-Dibromoethane (EDB)	mg/kg	0.05	0.059	117	82-120	M5
1,2-Dichloroethane	mg/kg	0.05	0.051	103	69-119	M5

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

LABORATORY CONTROL SAMPLE: 2223427

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	mg/kg	0.05	0.047	95	76-120	M5
Benzene	mg/kg	0.05	0.046	92	77-117	M5
Chlorobenzene	mg/kg	0.05	0.051	102	77-111	M5
Chloroform	mg/kg	0.05	0.049	97	74-114	M5
cis-1,2-Dichloroethene	mg/kg	0.05	0.044	89	74-118	M5
Ethylbenzene	mg/kg	0.05	0.053	105	73-114	M5
Isopropylbenzene (Cumene)	mg/kg	0.05	0.052	104	78-113	M5
Methyl-tert-butyl ether	mg/kg	0.05	0.053	105	75-119	M5
Naphthalene	mg/kg	0.05	0.052	104	70-115	M5
Tetrachloroethene	mg/kg	0.05	0.048	96	72-117	M5
Toluene	mg/kg	0.05	0.048	96	77-111	M5
trans-1,2-Dichloroethene	mg/kg	0.05	0.043	87	73-121	M5
Trichloroethene	mg/kg	0.05	0.046	92	73-119	M5
Vinyl chloride	mg/kg	0.05	0.047	94	57-160	M5
Xylene (Total)	mg/kg	0.15	0.15	101	74-111	M5
4-Bromofluorobenzene (S)	%.			102	57-130	M5
Dibromofluoromethane (S)	%.			101	80-127	M5
Toluene-d8 (S)	%.			104	72-136	M5

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

QC Batch: 482151 | Analysis Method: SM 2540G
QC Batch Method: SM 2540G | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 50215354001, 50215354002, 50215354003, 50215354004, 50215354005

SAMPLE DUPLICATE: 2223939

Parameter	Units	50215457005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	66.6	68.1	2	5	

SAMPLE DUPLICATE: 2223940

Parameter	Units	50215457006 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	69.2	71.1	3	5	

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QUALIFIERS

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 482009

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland Canning FSI #3
Pace Project No.: 50215354

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50215354001	**SB 150 D (4-6)**	EPA 8260	482009		
50215354002	**SB150 D (59-60)**	EPA 8260	482009		
50215354003	**SB 150A DEEP (3-5)**	EPA 8260	482009		
50215354004	**SB 33D (16-18)**	EPA 8260	482009		
50215354005	**SB 33D (37-38)**	EPA 8260	482009		
50215354001	**SB 150 D (4-6)**	SM 2540G	482151		
50215354002	**SB150 D (59-60)**	SM 2540G	482151		
50215354003	**SB 150A DEEP (3-5)**	SM 2540G	482151		
50215354004	**SB 33D (16-18)**	SM 2540G	482151		
50215354005	**SB 33D (37-38)**	SM 2540G	482151		

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-In Number Here: 50215354

ALL SHADED AREAS are for LAB USE ONLY

Company: PATRIOT ENGINEERING

Billing Information: AP@patrioteng.com

Address: 6150 E 75th ST, INDIANAPOLIS

Report To: JAMES CODY

Email To:

Copy To: MIKE CASPER

Site Collection Info/Address:

Customer Project Name/Number: 19-0096-01E HOUCHLAND CANNING FSI #3

State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone: Email: jcody@patrioteng.com

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): JAMES CODY

Purchase Order #: Quote #:

DW PWS ID #: DW Location Code:

Collected By (signature): Jim Cody

Turnaround Date Required: NORMAL

Immediately Packed on Ice: [✓] Yes [ ] No

Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses: VOCs 8260

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	VOCs 8260	Lab Sample # / Comments
SB150 D (4-6)	SOIL	G	1/22	13:00					X	001
SB150 D (59-60)	"	"	"	14:00					X	002
SB150 A DEEP (3-5)	"	"	"	13:15					X	003
SB33D (16-18)	"	"	"	16:10					X	004
SB33D (37-38)	"	"	"	16:30					X	005

Lab Profile/Line:

Lab Sample Receipt Checklist: SBSCR

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	

LAB USE ONLY: Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards: ABSOLUTE PRICING

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2356693

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: 8
Cooler 1 Temp Upon Receipt: 1.1 oC
Cooler 1 Therm Corr. Factor: 0 oC
Cooler 1 Corrected Temp: 1.1 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Jim Cody/PATRIOT	1/23/19 9:15	Patriot	1/23/19 9:15
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	1/23/19 1200		1/23/19 1200
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50215354

Date/Time and Initials of person examining contents: MB 1/23/19 1204

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals Intact: ☑ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer: 1 2 3 4 5 6 A B C D E F Ice Type: ☑ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☐ Yes ☐ No ☑ N/A

Cooler Temperature: 1.1/1.1 Ice Visible in Sample Containers?: ☐ Yes ☑ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☑ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		✓	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			✓
USDA Regulated Soils? (ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓				
Chain of Custody Present:	✓		Dissolved Metals field filtered?:			✓
Chain of Custody Filled Out:	✓		Headspace Wisconsin Sulfide			✓
Short Hold Time Analysis (<72hr)?: Analysis: TC	✓			Present	Absent	N/A
Time 5035A TC placed in Freezer or Short Holds To Lab: 12:10			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Rush TAT Requested:		✓	Headspace in VOA Vials (>6mm):			✓
Containers Intact?:	✓		Trip Blank Present?:		✓	
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID		✓	Trip Blank Custody Seals?:		✓	

Comments: Vials = SB 33 (37-38) but COC = SB 33D (37-38) MB 1/23/19

Use ID on COC per Cody via email. 1/23/19 TMS

Sample Container Count

CLIENT: Patriot

COC PAGE 1 of 1
COC ID# 23566693

Project # 50215354

Sample Line Item	DG9H VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	R (Bulk / SBS / Kit / DI)				Matrix SI/WI/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1																	4				SL			
2																	↓				↓			
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved amber vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved clear vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

February 04, 2019

Mr. James Cody
Patriot Engineering
6150 E 75th St
Indianapolis, IN 46250

RE: Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Dear Mr. Cody:
Enclosed are the analytical results for sample(s) received by the laboratory on January 25, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

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(317)228-3100

CERTIFICATIONS

Project:	Houghland Canning FSI #3
Pace Project No.:	50215633

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #:E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #:98019
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355-18-12
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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SAMPLE SUMMARY

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50215633001	**SB12D (8-10)**	Solid	01/24/19 09:20	01/25/19 17:05
50215633002	**SB12D (29-30)**	Solid	01/24/19 09:35	01/25/19 17:05
50215633003	**DUP**	Solid	01/24/19 08:00	01/25/19 17:05
50215633004	**SB14D (10-12)**	Solid	01/24/19 12:20	01/25/19 17:05
50215633005	**SB14D (32-33)**	Solid	01/24/19 13:00	01/25/19 17:05
50215633006	**SB150B (5-7)**	Solid	01/24/19 14:20	01/25/19 17:05
50215633007	**SB150B (51-52)**	Solid	01/24/19 16:00	01/25/19 17:05
50215633008	**SB500D (4-5)**	Solid	01/25/19 11:15	01/25/19 17:05
50215633009	**SB300D (3-5)**	Solid	01/25/19 15:15	01/25/19 17:05
50215633010	**TRIP BLANK**	Solid	01/24/19 08:00	01/25/19 17:05
50215633011	**SB500D (61-62)**	Solid	01/25/19 15:40	01/25/19 17:05

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SAMPLE ANALYTE COUNT

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50215633001	**SB12D (8-10)**	EPA 8260	ALA	75
		SM 2540G	SKK	1
50215633002	**SB12D (29-30)**	EPA 8260	ALA	75
		SM 2540G	SKK	1
50215633003	**DUP**	EPA 8260	ALA	75
		SM 2540G	SKK	1
50215633004	**SB14D (10-12)**	EPA 8260	ALA	75
		SM 2540G	SKK	1
50215633005	**SB14D (32-33)**	EPA 8260	ALA	75
		SM 2540G	SKK	1
50215633006	**SB150B (5-7)**	EPA 8260	ALA	75
		SM 2540G	SKK	1
50215633007	**SB150B (51-52)**	EPA 8260	ALA	75
		SM 2540G	SKK	1
50215633008	**SB500D (4-5)**	EPA 8260	ALA	75
		SM 2540G	SKK	1
50215633009	**SB300D (3-5)**	EPA 8260	ALA	75
		SM 2540G	SKK	1
50215633010	**TRIP BLANK**	EPA 8260	ALA	75
50215633011	**SB500D (61-62)**	EPA 8260	ALA	75
		SM 2540G	SKK	1

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SUMMARY OF DETECTION

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50215633001	**SB12D (8-10)**					
SM 2540G	Percent Moisture	9.4	%	0.10	01/26/19 13:36	
50215633002	**SB12D (29-30)**					
SM 2540G	Percent Moisture	7.4	%	0.10	01/26/19 13:36	
50215633003	**DUP**					
SM 2540G	Percent Moisture	7.4	%	0.10	01/26/19 13:36	
50215633004	**SB14D (10-12)**					
SM 2540G	Percent Moisture	17.1	%	0.10	01/26/19 13:36	
50215633005	**SB14D (32-33)**					
SM 2540G	Percent Moisture	9.2	%	0.10	01/26/19 13:36	
50215633006	**SB150B (5-7)**					
EPA 8260	Trichloroethene	0.0052	mg/kg	0.0044	01/30/19 10:42	M5
SM 2540G	Percent Moisture	11.2	%	0.10	01/26/19 13:36	
50215633007	**SB150B (51-52)**					
EPA 8260	cis-1,2-Dichloroethene	4.0	mg/kg	0.25	01/31/19 20:51	M5
EPA 8260	trans-1,2-Dichloroethene	0.14	mg/kg	0.0053	01/30/19 11:20	M5
EPA 8260	Trichloroethene	0.0076	mg/kg	0.0053	01/30/19 11:20	M5
SM 2540G	Percent Moisture	13.1	%	0.10	01/26/19 13:36	
50215633008	**SB500D (4-5)**					
SM 2540G	Percent Moisture	16.3	%	0.10	01/26/19 13:36	
50215633009	**SB300D (3-5)**					
EPA 8260	Trichloroethene	0.052	mg/kg	0.0042	02/01/19 23:10	M5
SM 2540G	Percent Moisture	12.7	%	0.10	01/26/19 13:36	
50215633011	**SB500D (61-62)**					
SM 2540G	Percent Moisture	9.7	%	0.10	01/26/19 13:37	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB12D (8-10) **Lab ID: 50215633001** Collected: 01/24/19 09:20 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.12	1		01/30/19 08:09	67-64-1	M5
Acrolein	ND	mg/kg	0.12	1		01/30/19 08:09	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.12	1		01/30/19 08:09	107-13-1	M5
Benzene	ND	mg/kg	0.0061	1		01/30/19 08:09	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0061	1		01/30/19 08:09	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0061	1		01/30/19 08:09	75-27-4	M5
Bromoform	ND	mg/kg	0.0061	1		01/30/19 08:09	75-25-2	M5
Bromomethane	ND	mg/kg	0.0061	1		01/30/19 08:09	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.030	1		01/30/19 08:09	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.012	1		01/30/19 08:09	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0061	1		01/30/19 08:09	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	108-90-7	M5
Chloroethane	ND	mg/kg	0.0061	1		01/30/19 08:09	75-00-3	M5
Chloroform	ND	mg/kg	0.0061	1		01/30/19 08:09	67-66-3	M5
Chloromethane	ND	mg/kg	0.0061	1		01/30/19 08:09	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0061	1		01/30/19 08:09	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0061	1		01/30/19 08:09	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0061	1		01/30/19 08:09	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0061	1		01/30/19 08:09	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0061	1		01/30/19 08:09	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.12	1		01/30/19 08:09	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0061	1		01/30/19 08:09	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0061	1		01/30/19 08:09	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0061	1		01/30/19 08:09	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0061	1		01/30/19 08:09	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0061	1		01/30/19 08:09	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0061	1		01/30/19 08:09	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0061	1		01/30/19 08:09	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0061	1		01/30/19 08:09	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0061	1		01/30/19 08:09	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0061	1		01/30/19 08:09	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0061	1		01/30/19 08:09	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0061	1		01/30/19 08:09	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.12	1		01/30/19 08:09	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0061	1		01/30/19 08:09	87-68-3	M5
n-Hexane	ND	mg/kg	0.0061	1		01/30/19 08:09	110-54-3	M5
2-Hexanone	ND	mg/kg	0.12	1		01/30/19 08:09	591-78-6	M5
Iodomethane	ND	mg/kg	0.12	1		01/30/19 08:09	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB12D (8-10) **Lab ID: 50215633001** Collected: 01/24/19 09:20 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0061	1		01/30/19 08:09	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0061	1		01/30/19 08:09	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.024	1		01/30/19 08:09	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.012	1		01/30/19 08:09	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.012	1		01/30/19 08:09	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.030	1		01/30/19 08:09	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0061	1		01/30/19 08:09	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0061	1		01/30/19 08:09	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	103-65-1	M5
Styrene	ND	mg/kg	0.0061	1		01/30/19 08:09	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0061	1		01/30/19 08:09	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0061	1		01/30/19 08:09	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0061	1		01/30/19 08:09	127-18-4	M5
Toluene	ND	mg/kg	0.0061	1		01/30/19 08:09	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0061	1		01/30/19 08:09	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0061	1		01/30/19 08:09	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0061	1		01/30/19 08:09	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0061	1		01/30/19 08:09	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0061	1		01/30/19 08:09	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0061	1		01/30/19 08:09	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.12	1		01/30/19 08:09	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0061	1		01/30/19 08:09	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.012	1		01/30/19 08:09	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	110	%.	80-127	1		01/30/19 08:09	1868-53-7	M5
Toluene-d8 (S)	98	%.	72-136	1		01/30/19 08:09	2037-26-5	M5
4-Bromofluorobenzene (S)	101	%.	57-130	1		01/30/19 08:09	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**9.4**	%	0.10	1		01/26/19 13:36		

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Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB12D (29-30) **Lab ID: 50215633002** Collected: 01/24/19 09:35 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.075	1		02/01/19 06:42	67-64-1	M0
Acrolein	ND	mg/kg	0.075	1		02/01/19 06:42	107-02-8	
Acrylonitrile	ND	mg/kg	0.075	1		02/01/19 06:42	107-13-1	
Benzene	ND	mg/kg	0.0038	1		02/01/19 06:42	71-43-2	M1,R1
Bromobenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	108-86-1	
Bromochloromethane	ND	mg/kg	0.0038	1		02/01/19 06:42	74-97-5	
Bromodichloromethane	ND	mg/kg	0.0038	1		02/01/19 06:42	75-27-4	
Bromoform	ND	mg/kg	0.0038	1		02/01/19 06:42	75-25-2	
Bromomethane	ND	mg/kg	0.0038	1		02/01/19 06:42	74-83-9	
2-Butanone (MEK)	ND	mg/kg	0.019	1		02/01/19 06:42	78-93-3	
n-Butylbenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	104-51-8	
sec-Butylbenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	135-98-8	
tert-Butylbenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	98-06-6	
Carbon disulfide	ND	mg/kg	0.0075	1		02/01/19 06:42	75-15-0	
Carbon tetrachloride	ND	mg/kg	0.0038	1		02/01/19 06:42	56-23-5	
Chlorobenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	108-90-7	R1
Chloroethane	ND	mg/kg	0.0038	1		02/01/19 06:42	75-00-3	
Chloroform	ND	mg/kg	0.0038	1		02/01/19 06:42	67-66-3	M1,R1
Chloromethane	ND	mg/kg	0.0038	1		02/01/19 06:42	74-87-3	
2-Chlorotoluene	ND	mg/kg	0.0038	1		02/01/19 06:42	95-49-8	
4-Chlorotoluene	ND	mg/kg	0.0038	1		02/01/19 06:42	106-43-4	
Dibromochloromethane	ND	mg/kg	0.0038	1		02/01/19 06:42	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0038	1		02/01/19 06:42	106-93-4	M1,R1
Dibromomethane	ND	mg/kg	0.0038	1		02/01/19 06:42	74-95-3	
1,2-Dichlorobenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	95-50-1	
1,3-Dichlorobenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	541-73-1	
1,4-Dichlorobenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	106-46-7	
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.075	1		02/01/19 06:42	110-57-6	
Dichlorodifluoromethane	ND	mg/kg	0.0038	1		02/01/19 06:42	75-71-8	
1,1-Dichloroethane	ND	mg/kg	0.0038	1		02/01/19 06:42	75-34-3	
1,2-Dichloroethane	ND	mg/kg	0.0038	1		02/01/19 06:42	107-06-2	M1,R1
1,1-Dichloroethene	ND	mg/kg	0.0038	1		02/01/19 06:42	75-35-4	R1
cis-1,2-Dichloroethene	ND	mg/kg	0.0038	1		02/01/19 06:42	156-59-2	M1,R1
trans-1,2-Dichloroethene	ND	mg/kg	0.0038	1		02/01/19 06:42	156-60-5	R1
1,2-Dichloropropane	ND	mg/kg	0.0038	1		02/01/19 06:42	78-87-5	M1,R1
1,3-Dichloropropane	ND	mg/kg	0.0038	1		02/01/19 06:42	142-28-9	
2,2-Dichloropropane	ND	mg/kg	0.0038	1		02/01/19 06:42	594-20-7	
1,1-Dichloropropene	ND	mg/kg	0.0038	1		02/01/19 06:42	563-58-6	
cis-1,3-Dichloropropene	ND	mg/kg	0.0038	1		02/01/19 06:42	10061-01-5	M1,R1
trans-1,3-Dichloropropene	ND	mg/kg	0.0038	1		02/01/19 06:42	10061-02-6	M1,R1
Ethylbenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	100-41-4	R1
Ethyl methacrylate	ND	mg/kg	0.075	1		02/01/19 06:42	97-63-2	
Hexachloro-1,3-butadiene	ND	mg/kg	0.0038	1		02/01/19 06:42	87-68-3	
n-Hexane	ND	mg/kg	0.0038	1		02/01/19 06:42	110-54-3	
2-Hexanone	ND	mg/kg	0.075	1		02/01/19 06:42	591-78-6	
Iodomethane	ND	mg/kg	0.075	1		02/01/19 06:42	74-88-4	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB12D (29-30) **Lab ID: 50215633002** Collected: 01/24/19 09:35 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0038	1		02/01/19 06:42	98-82-8	R1
p-Isopropyltoluene	ND	mg/kg	0.0038	1		02/01/19 06:42	99-87-6	
Methylene Chloride	ND	mg/kg	0.015	1		02/01/19 06:42	75-09-2	
1-Methylnaphthalene	ND	mg/kg	0.0075	1		02/01/19 06:42	90-12-0	N2
2-Methylnaphthalene	ND	mg/kg	0.0075	1		02/01/19 06:42	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.019	1		02/01/19 06:42	108-10-1	
Methyl-tert-butyl ether	ND	mg/kg	0.0038	1		02/01/19 06:42	1634-04-4	R1
Naphthalene	ND	mg/kg	0.0038	1		02/01/19 06:42	91-20-3	M1
n-Propylbenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	103-65-1	
Styrene	ND	mg/kg	0.0038	1		02/01/19 06:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0038	1		02/01/19 06:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0038	1		02/01/19 06:42	79-34-5	M1,R1
Tetrachloroethene	ND	mg/kg	0.0038	1		02/01/19 06:42	127-18-4	L2,R1
Toluene	ND	mg/kg	0.0038	1		02/01/19 06:42	108-88-3	M1,R1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	87-61-6	
1,2,4-Trichlorobenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	120-82-1	
1,1,1-Trichloroethane	ND	mg/kg	0.0038	1		02/01/19 06:42	71-55-6	R1
1,1,2-Trichloroethane	ND	mg/kg	0.0038	1		02/01/19 06:42	79-00-5	
Trichloroethene	ND	mg/kg	0.0038	1		02/01/19 06:42	79-01-6	R1
Trichlorofluoromethane	ND	mg/kg	0.0038	1		02/01/19 06:42	75-69-4	
1,2,3-Trichloropropane	ND	mg/kg	0.0038	1		02/01/19 06:42	96-18-4	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	95-63-6	R1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0038	1		02/01/19 06:42	108-67-8	
Vinyl acetate	ND	mg/kg	0.075	1		02/01/19 06:42	108-05-4	
Vinyl chloride	ND	mg/kg	0.0038	1		02/01/19 06:42	75-01-4	R1
Xylene (Total)	ND	mg/kg	0.0075	1		02/01/19 06:42	1330-20-7	RS
Surrogates								
Dibromofluoromethane (S)	113	%.	80-127	1		02/01/19 06:42	1868-53-7	
Toluene-d8 (S)	97	%.	72-136	1		02/01/19 06:42	2037-26-5	
4-Bromofluorobenzene (S)	91	%.	57-130	1		02/01/19 06:42	460-00-4	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**7.4**	%	0.10	1		01/26/19 13:36		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: DUP **Lab ID: 50215633003** Collected: 01/24/19 08:00 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.12	1		01/30/19 08:47	67-64-1	M5
Acrolein	ND	mg/kg	0.12	1		01/30/19 08:47	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.12	1		01/30/19 08:47	107-13-1	M5
Benzene	ND	mg/kg	0.0060	1		01/30/19 08:47	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0060	1		01/30/19 08:47	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0060	1		01/30/19 08:47	75-27-4	M5
Bromoform	ND	mg/kg	0.0060	1		01/30/19 08:47	75-25-2	M5
Bromomethane	ND	mg/kg	0.0060	1		01/30/19 08:47	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.030	1		01/30/19 08:47	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.012	1		01/30/19 08:47	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0060	1		01/30/19 08:47	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	108-90-7	M5
Chloroethane	ND	mg/kg	0.0060	1		01/30/19 08:47	75-00-3	M5
Chloroform	ND	mg/kg	0.0060	1		01/30/19 08:47	67-66-3	M5
Chloromethane	ND	mg/kg	0.0060	1		01/30/19 08:47	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0060	1		01/30/19 08:47	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0060	1		01/30/19 08:47	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0060	1		01/30/19 08:47	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0060	1		01/30/19 08:47	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0060	1		01/30/19 08:47	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.12	1		01/30/19 08:47	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0060	1		01/30/19 08:47	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0060	1		01/30/19 08:47	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0060	1		01/30/19 08:47	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0060	1		01/30/19 08:47	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0060	1		01/30/19 08:47	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0060	1		01/30/19 08:47	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0060	1		01/30/19 08:47	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0060	1		01/30/19 08:47	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0060	1		01/30/19 08:47	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0060	1		01/30/19 08:47	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0060	1		01/30/19 08:47	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0060	1		01/30/19 08:47	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.12	1		01/30/19 08:47	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0060	1		01/30/19 08:47	87-68-3	M5
n-Hexane	ND	mg/kg	0.0060	1		01/30/19 08:47	110-54-3	M5
2-Hexanone	ND	mg/kg	0.12	1		01/30/19 08:47	591-78-6	M5
Iodomethane	ND	mg/kg	0.12	1		01/30/19 08:47	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: DUP **Lab ID: 50215633003** Collected: 01/24/19 08:00 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0060	1		01/30/19 08:47	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0060	1		01/30/19 08:47	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.024	1		01/30/19 08:47	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.012	1		01/30/19 08:47	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.012	1		01/30/19 08:47	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.030	1		01/30/19 08:47	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0060	1		01/30/19 08:47	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0060	1		01/30/19 08:47	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	103-65-1	M5
Styrene	ND	mg/kg	0.0060	1		01/30/19 08:47	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0060	1		01/30/19 08:47	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0060	1		01/30/19 08:47	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0060	1		01/30/19 08:47	127-18-4	M5
Toluene	ND	mg/kg	0.0060	1		01/30/19 08:47	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0060	1		01/30/19 08:47	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0060	1		01/30/19 08:47	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0060	1		01/30/19 08:47	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0060	1		01/30/19 08:47	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0060	1		01/30/19 08:47	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0060	1		01/30/19 08:47	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.12	1		01/30/19 08:47	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0060	1		01/30/19 08:47	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.012	1		01/30/19 08:47	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	108	%.	80-127	1		01/30/19 08:47	1868-53-7	M5
Toluene-d8 (S)	95	%.	72-136	1		01/30/19 08:47	2037-26-5	M5
4-Bromofluorobenzene (S)	99	%.	57-130	1		01/30/19 08:47	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**7.4**	%	0.10	1		01/26/19 13:36		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB14D (10-12) **Lab ID: 50215633004** Collected: 01/24/19 12:20 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.11	1		01/30/19 09:25	67-64-1	M5
Acrolein	ND	mg/kg	0.11	1		01/30/19 09:25	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.11	1		01/30/19 09:25	107-13-1	M5
Benzene	ND	mg/kg	0.0053	1		01/30/19 09:25	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0053	1		01/30/19 09:25	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0053	1		01/30/19 09:25	75-27-4	M5
Bromoform	ND	mg/kg	0.0053	1		01/30/19 09:25	75-25-2	M5
Bromomethane	ND	mg/kg	0.0053	1		01/30/19 09:25	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.027	1		01/30/19 09:25	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.011	1		01/30/19 09:25	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0053	1		01/30/19 09:25	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	108-90-7	M5
Chloroethane	ND	mg/kg	0.0053	1		01/30/19 09:25	75-00-3	M5
Chloroform	ND	mg/kg	0.0053	1		01/30/19 09:25	67-66-3	M5
Chloromethane	ND	mg/kg	0.0053	1		01/30/19 09:25	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0053	1		01/30/19 09:25	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0053	1		01/30/19 09:25	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0053	1		01/30/19 09:25	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0053	1		01/30/19 09:25	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0053	1		01/30/19 09:25	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.11	1		01/30/19 09:25	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0053	1		01/30/19 09:25	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0053	1		01/30/19 09:25	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0053	1		01/30/19 09:25	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0053	1		01/30/19 09:25	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0053	1		01/30/19 09:25	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0053	1		01/30/19 09:25	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0053	1		01/30/19 09:25	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0053	1		01/30/19 09:25	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0053	1		01/30/19 09:25	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0053	1		01/30/19 09:25	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0053	1		01/30/19 09:25	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0053	1		01/30/19 09:25	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.11	1		01/30/19 09:25	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0053	1		01/30/19 09:25	87-68-3	M5
n-Hexane	ND	mg/kg	0.0053	1		01/30/19 09:25	110-54-3	M5
2-Hexanone	ND	mg/kg	0.11	1		01/30/19 09:25	591-78-6	M5
Iodomethane	ND	mg/kg	0.11	1		01/30/19 09:25	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB14D (10-12) **Lab ID: 50215633004** Collected: 01/24/19 12:20 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0053	1		01/30/19 09:25	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0053	1		01/30/19 09:25	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.021	1		01/30/19 09:25	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.011	1		01/30/19 09:25	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.011	1		01/30/19 09:25	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.027	1		01/30/19 09:25	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0053	1		01/30/19 09:25	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0053	1		01/30/19 09:25	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	103-65-1	M5
Styrene	ND	mg/kg	0.0053	1		01/30/19 09:25	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0053	1		01/30/19 09:25	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0053	1		01/30/19 09:25	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0053	1		01/30/19 09:25	127-18-4	M5
Toluene	ND	mg/kg	0.0053	1		01/30/19 09:25	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0053	1		01/30/19 09:25	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0053	1		01/30/19 09:25	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0053	1		01/30/19 09:25	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0053	1		01/30/19 09:25	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0053	1		01/30/19 09:25	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0053	1		01/30/19 09:25	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.11	1		01/30/19 09:25	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0053	1		01/30/19 09:25	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.011	1		01/30/19 09:25	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	115	%.	80-127	1		01/30/19 09:25	1868-53-7	M5
Toluene-d8 (S)	94	%.	72-136	1		01/30/19 09:25	2037-26-5	M5
4-Bromofluorobenzene (S)	97	%.	57-130	1		01/30/19 09:25	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**17.1**	%	0.10	1		01/26/19 13:36		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB14D (32-33) **Lab ID: 50215633005** Collected: 01/24/19 13:00 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.087	1		01/30/19 10:04	67-64-1	M5
Acrolein	ND	mg/kg	0.087	1		01/30/19 10:04	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.087	1		01/30/19 10:04	107-13-1	M5
Benzene	ND	mg/kg	0.0043	1		01/30/19 10:04	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0043	1		01/30/19 10:04	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0043	1		01/30/19 10:04	75-27-4	M5
Bromoform	ND	mg/kg	0.0043	1		01/30/19 10:04	75-25-2	M5
Bromomethane	ND	mg/kg	0.0043	1		01/30/19 10:04	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.022	1		01/30/19 10:04	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0087	1		01/30/19 10:04	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0043	1		01/30/19 10:04	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	108-90-7	M5
Chloroethane	ND	mg/kg	0.0043	1		01/30/19 10:04	75-00-3	M5
Chloroform	ND	mg/kg	0.0043	1		01/30/19 10:04	67-66-3	M5
Chloromethane	ND	mg/kg	0.0043	1		01/30/19 10:04	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0043	1		01/30/19 10:04	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0043	1		01/30/19 10:04	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0043	1		01/30/19 10:04	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0043	1		01/30/19 10:04	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0043	1		01/30/19 10:04	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.087	1		01/30/19 10:04	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0043	1		01/30/19 10:04	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0043	1		01/30/19 10:04	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0043	1		01/30/19 10:04	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0043	1		01/30/19 10:04	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0043	1		01/30/19 10:04	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0043	1		01/30/19 10:04	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0043	1		01/30/19 10:04	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0043	1		01/30/19 10:04	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0043	1		01/30/19 10:04	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0043	1		01/30/19 10:04	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0043	1		01/30/19 10:04	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0043	1		01/30/19 10:04	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.087	1		01/30/19 10:04	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0043	1		01/30/19 10:04	87-68-3	M5
n-Hexane	ND	mg/kg	0.0043	1		01/30/19 10:04	110-54-3	M5
2-Hexanone	ND	mg/kg	0.087	1		01/30/19 10:04	591-78-6	M5
Iodomethane	ND	mg/kg	0.087	1		01/30/19 10:04	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB14D (32-33) **Lab ID: 50215633005** Collected: 01/24/19 13:00 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0043	1		01/30/19 10:04	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0043	1		01/30/19 10:04	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.017	1		01/30/19 10:04	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0087	1		01/30/19 10:04	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0087	1		01/30/19 10:04	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.022	1		01/30/19 10:04	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0043	1		01/30/19 10:04	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0043	1		01/30/19 10:04	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	103-65-1	M5
Styrene	ND	mg/kg	0.0043	1		01/30/19 10:04	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0043	1		01/30/19 10:04	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0043	1		01/30/19 10:04	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0043	1		01/30/19 10:04	127-18-4	M5
Toluene	ND	mg/kg	0.0043	1		01/30/19 10:04	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0043	1		01/30/19 10:04	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0043	1		01/30/19 10:04	79-00-5	M5
Trichloroethene	ND	mg/kg	0.0043	1		01/30/19 10:04	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0043	1		01/30/19 10:04	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0043	1		01/30/19 10:04	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0043	1		01/30/19 10:04	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.087	1		01/30/19 10:04	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0043	1		01/30/19 10:04	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0087	1		01/30/19 10:04	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	113	%.	80-127	1		01/30/19 10:04	1868-53-7	M5
Toluene-d8 (S)	94	%.	72-136	1		01/30/19 10:04	2037-26-5	M5
4-Bromofluorobenzene (S)	98	%.	57-130	1		01/30/19 10:04	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**9.2**	%	0.10	1		01/26/19 13:36		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB150B (5-7) **Lab ID: 50215633006** Collected: 01/24/19 14:20 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.088	1		01/30/19 10:42	67-64-1	M5
Acrolein	ND	mg/kg	0.088	1		01/30/19 10:42	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.088	1		01/30/19 10:42	107-13-1	M5
Benzene	ND	mg/kg	0.0044	1		01/30/19 10:42	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0044	1		01/30/19 10:42	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0044	1		01/30/19 10:42	75-27-4	M5
Bromoform	ND	mg/kg	0.0044	1		01/30/19 10:42	75-25-2	M5
Bromomethane	ND	mg/kg	0.0044	1		01/30/19 10:42	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.022	1		01/30/19 10:42	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0088	1		01/30/19 10:42	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0044	1		01/30/19 10:42	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	108-90-7	M5
Chloroethane	ND	mg/kg	0.0044	1		01/30/19 10:42	75-00-3	M5
Chloroform	ND	mg/kg	0.0044	1		01/30/19 10:42	67-66-3	M5
Chloromethane	ND	mg/kg	0.0044	1		01/30/19 10:42	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0044	1		01/30/19 10:42	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0044	1		01/30/19 10:42	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0044	1		01/30/19 10:42	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0044	1		01/30/19 10:42	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0044	1		01/30/19 10:42	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.088	1		01/30/19 10:42	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0044	1		01/30/19 10:42	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0044	1		01/30/19 10:42	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0044	1		01/30/19 10:42	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0044	1		01/30/19 10:42	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	1		01/30/19 10:42	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	1		01/30/19 10:42	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0044	1		01/30/19 10:42	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0044	1		01/30/19 10:42	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0044	1		01/30/19 10:42	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0044	1		01/30/19 10:42	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	1		01/30/19 10:42	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	1		01/30/19 10:42	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.088	1		01/30/19 10:42	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0044	1		01/30/19 10:42	87-68-3	M5
n-Hexane	ND	mg/kg	0.0044	1		01/30/19 10:42	110-54-3	M5
2-Hexanone	ND	mg/kg	0.088	1		01/30/19 10:42	591-78-6	M5
Iodomethane	ND	mg/kg	0.088	1		01/30/19 10:42	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB150B (5-7) **Lab ID: 50215633006** Collected: 01/24/19 14:20 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0044	1		01/30/19 10:42	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0044	1		01/30/19 10:42	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.018	1		01/30/19 10:42	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0088	1		01/30/19 10:42	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0088	1		01/30/19 10:42	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.022	1		01/30/19 10:42	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0044	1		01/30/19 10:42	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0044	1		01/30/19 10:42	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	103-65-1	M5
Styrene	ND	mg/kg	0.0044	1		01/30/19 10:42	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	1		01/30/19 10:42	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	1		01/30/19 10:42	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0044	1		01/30/19 10:42	127-18-4	M5
Toluene	ND	mg/kg	0.0044	1		01/30/19 10:42	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0044	1		01/30/19 10:42	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0044	1		01/30/19 10:42	79-00-5	M5
Trichloroethene	**0.0052**	mg/kg	0.0044	1		01/30/19 10:42	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0044	1		01/30/19 10:42	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0044	1		01/30/19 10:42	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	1		01/30/19 10:42	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.088	1		01/30/19 10:42	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0044	1		01/30/19 10:42	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0088	1		01/30/19 10:42	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	111	%.	80-127	1		01/30/19 10:42	1868-53-7	M5
Toluene-d8 (S)	94	%.	72-136	1		01/30/19 10:42	2037-26-5	M5
4-Bromofluorobenzene (S)	96	%.	57-130	1		01/30/19 10:42	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**11.2**	%	0.10	1		01/26/19 13:36		

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7726 Moller Road
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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB150B (51-52) **Lab ID: 50215633007** Collected: 01/24/19 16:00 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.11	1		01/30/19 11:20	67-64-1	M5
Acrolein	ND	mg/kg	0.11	1		01/30/19 11:20	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.11	1		01/30/19 11:20	107-13-1	M5
Benzene	ND	mg/kg	0.0053	1		01/30/19 11:20	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0053	1		01/30/19 11:20	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0053	1		01/30/19 11:20	75-27-4	M5
Bromoform	ND	mg/kg	0.0053	1		01/30/19 11:20	75-25-2	M5
Bromomethane	ND	mg/kg	0.0053	1		01/30/19 11:20	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.026	1		01/30/19 11:20	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.011	1		01/30/19 11:20	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0053	1		01/30/19 11:20	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	108-90-7	M5
Chloroethane	ND	mg/kg	0.0053	1		01/30/19 11:20	75-00-3	M5
Chloroform	ND	mg/kg	0.0053	1		01/30/19 11:20	67-66-3	M5
Chloromethane	ND	mg/kg	0.0053	1		01/30/19 11:20	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0053	1		01/30/19 11:20	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0053	1		01/30/19 11:20	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0053	1		01/30/19 11:20	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0053	1		01/30/19 11:20	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0053	1		01/30/19 11:20	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.11	1		01/30/19 11:20	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0053	1		01/30/19 11:20	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0053	1		01/30/19 11:20	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0053	1		01/30/19 11:20	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0053	1		01/30/19 11:20	75-35-4	M5
cis-1,2-Dichloroethene	**4.0**	mg/kg	0.25	50		01/31/19 20:51	156-59-2	M5
trans-1,2-Dichloroethene	**0.14**	mg/kg	0.0053	1		01/30/19 11:20	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0053	1		01/30/19 11:20	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0053	1		01/30/19 11:20	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0053	1		01/30/19 11:20	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0053	1		01/30/19 11:20	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0053	1		01/30/19 11:20	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0053	1		01/30/19 11:20	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.11	1		01/30/19 11:20	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0053	1		01/30/19 11:20	87-68-3	M5
n-Hexane	ND	mg/kg	0.0053	1		01/30/19 11:20	110-54-3	M5
2-Hexanone	ND	mg/kg	0.11	1		01/30/19 11:20	591-78-6	M5
Iodomethane	ND	mg/kg	0.11	1		01/30/19 11:20	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB150B (51-52) **Lab ID: 50215633007** Collected: 01/24/19 16:00 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0053	1		01/30/19 11:20	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0053	1		01/30/19 11:20	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.021	1		01/30/19 11:20	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.011	1		01/30/19 11:20	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.011	1		01/30/19 11:20	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.026	1		01/30/19 11:20	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0053	1		01/30/19 11:20	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0053	1		01/30/19 11:20	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	103-65-1	M5
Styrene	ND	mg/kg	0.0053	1		01/30/19 11:20	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0053	1		01/30/19 11:20	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0053	1		01/30/19 11:20	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0053	1		01/30/19 11:20	127-18-4	M5
Toluene	ND	mg/kg	0.0053	1		01/30/19 11:20	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0053	1		01/30/19 11:20	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0053	1		01/30/19 11:20	79-00-5	M5
Trichloroethene	**0.0076**	mg/kg	0.0053	1		01/30/19 11:20	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0053	1		01/30/19 11:20	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0053	1		01/30/19 11:20	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0053	1		01/30/19 11:20	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.11	1		01/30/19 11:20	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0053	1		01/30/19 11:20	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.011	1		01/30/19 11:20	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	111	%.	80-127	1		01/30/19 11:20	1868-53-7	M5
Toluene-d8 (S)	97	%.	72-136	1		01/30/19 11:20	2037-26-5	M5
4-Bromofluorobenzene (S)	94	%.	57-130	1		01/30/19 11:20	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**13.1**	%	0.10	1		01/26/19 13:36		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB500D (4-5) **Lab ID: 50215633008** Collected: 01/25/19 11:15 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.095	1		02/01/19 09:15	67-64-1	
Acrolein	ND	mg/kg	0.095	1		02/01/19 09:15	107-02-8	
Acrylonitrile	ND	mg/kg	0.095	1		02/01/19 09:15	107-13-1	
Benzene	ND	mg/kg	0.0048	1		02/01/19 09:15	71-43-2	
Bromobenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	108-86-1	
Bromochloromethane	ND	mg/kg	0.0048	1		02/01/19 09:15	74-97-5	
Bromodichloromethane	ND	mg/kg	0.0048	1		02/01/19 09:15	75-27-4	
Bromoform	ND	mg/kg	0.0048	1		02/01/19 09:15	75-25-2	
Bromomethane	ND	mg/kg	0.0048	1		02/01/19 09:15	74-83-9	
2-Butanone (MEK)	ND	mg/kg	0.024	1		02/01/19 09:15	78-93-3	
n-Butylbenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	104-51-8	
sec-Butylbenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	135-98-8	
tert-Butylbenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	98-06-6	
Carbon disulfide	ND	mg/kg	0.0095	1		02/01/19 09:15	75-15-0	
Carbon tetrachloride	ND	mg/kg	0.0048	1		02/01/19 09:15	56-23-5	
Chlorobenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	108-90-7	
Chloroethane	ND	mg/kg	0.0048	1		02/01/19 09:15	75-00-3	
Chloroform	ND	mg/kg	0.0048	1		02/01/19 09:15	67-66-3	
Chloromethane	ND	mg/kg	0.0048	1		02/01/19 09:15	74-87-3	
2-Chlorotoluene	ND	mg/kg	0.0048	1		02/01/19 09:15	95-49-8	
4-Chlorotoluene	ND	mg/kg	0.0048	1		02/01/19 09:15	106-43-4	
Dibromochloromethane	ND	mg/kg	0.0048	1		02/01/19 09:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0048	1		02/01/19 09:15	106-93-4	
Dibromomethane	ND	mg/kg	0.0048	1		02/01/19 09:15	74-95-3	
1,2-Dichlorobenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	95-50-1	
1,3-Dichlorobenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	541-73-1	
1,4-Dichlorobenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	106-46-7	
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.095	1		02/01/19 09:15	110-57-6	
Dichlorodifluoromethane	ND	mg/kg	0.0048	1		02/01/19 09:15	75-71-8	
1,1-Dichloroethane	ND	mg/kg	0.0048	1		02/01/19 09:15	75-34-3	
1,2-Dichloroethane	ND	mg/kg	0.0048	1		02/01/19 09:15	107-06-2	
1,1-Dichloroethene	ND	mg/kg	0.0048	1		02/01/19 09:15	75-35-4	
cis-1,2-Dichloroethene	ND	mg/kg	0.0048	1		02/01/19 09:15	156-59-2	
trans-1,2-Dichloroethene	ND	mg/kg	0.0048	1		02/01/19 09:15	156-60-5	
1,2-Dichloropropane	ND	mg/kg	0.0048	1		02/01/19 09:15	78-87-5	
1,3-Dichloropropane	ND	mg/kg	0.0048	1		02/01/19 09:15	142-28-9	
2,2-Dichloropropane	ND	mg/kg	0.0048	1		02/01/19 09:15	594-20-7	
1,1-Dichloropropene	ND	mg/kg	0.0048	1		02/01/19 09:15	563-58-6	
cis-1,3-Dichloropropene	ND	mg/kg	0.0048	1		02/01/19 09:15	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/kg	0.0048	1		02/01/19 09:15	10061-02-6	
Ethylbenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	100-41-4	
Ethyl methacrylate	ND	mg/kg	0.095	1		02/01/19 09:15	97-63-2	
Hexachloro-1,3-butadiene	ND	mg/kg	0.0048	1		02/01/19 09:15	87-68-3	
n-Hexane	ND	mg/kg	0.0048	1		02/01/19 09:15	110-54-3	
2-Hexanone	ND	mg/kg	0.095	1		02/01/19 09:15	591-78-6	
Iodomethane	ND	mg/kg	0.095	1		02/01/19 09:15	74-88-4	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB500D (4-5) **Lab ID: 50215633008** Collected: 01/25/19 11:15 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0048	1		02/01/19 09:15	98-82-8	
p-Isopropyltoluene	ND	mg/kg	0.0048	1		02/01/19 09:15	99-87-6	
Methylene Chloride	ND	mg/kg	0.019	1		02/01/19 09:15	75-09-2	
1-Methylnaphthalene	ND	mg/kg	0.0095	1		02/01/19 09:15	90-12-0	N2
2-Methylnaphthalene	ND	mg/kg	0.0095	1		02/01/19 09:15	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.024	1		02/01/19 09:15	108-10-1	
Methyl-tert-butyl ether	ND	mg/kg	0.0048	1		02/01/19 09:15	1634-04-4	
Naphthalene	ND	mg/kg	0.0048	1		02/01/19 09:15	91-20-3	
n-Propylbenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	103-65-1	
Styrene	ND	mg/kg	0.0048	1		02/01/19 09:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0048	1		02/01/19 09:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0048	1		02/01/19 09:15	79-34-5	
Tetrachloroethene	ND	mg/kg	0.0048	1		02/01/19 09:15	127-18-4	L2
Toluene	ND	mg/kg	0.0048	1		02/01/19 09:15	108-88-3	
1,2,3-Trichlorobenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	87-61-6	
1,2,4-Trichlorobenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	120-82-1	
1,1,1-Trichloroethane	ND	mg/kg	0.0048	1		02/01/19 09:15	71-55-6	
1,1,2-Trichloroethane	ND	mg/kg	0.0048	1		02/01/19 09:15	79-00-5	
Trichloroethene	ND	mg/kg	0.0048	1		02/01/19 09:15	79-01-6	
Trichlorofluoromethane	ND	mg/kg	0.0048	1		02/01/19 09:15	75-69-4	
1,2,3-Trichloropropane	ND	mg/kg	0.0048	1		02/01/19 09:15	96-18-4	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0048	1		02/01/19 09:15	108-67-8	
Vinyl acetate	ND	mg/kg	0.095	1		02/01/19 09:15	108-05-4	
Vinyl chloride	ND	mg/kg	0.0048	1		02/01/19 09:15	75-01-4	
Xylene (Total)	ND	mg/kg	0.0095	1		02/01/19 09:15	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	115	%.	80-127	1		02/01/19 09:15	1868-53-7	
Toluene-d8 (S)	94	%.	72-136	1		02/01/19 09:15	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	57-130	1		02/01/19 09:15	460-00-4	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**16.3**	%	0.10	1		01/26/19 13:36		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB300D (3-5) **Lab ID: 50215633009** Collected: 01/25/19 15:15 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.083	1		02/01/19 23:10	67-64-1	M5
Acrolein	ND	mg/kg	0.083	1		02/01/19 23:10	107-02-8	M5
Acrylonitrile	ND	mg/kg	0.083	1		02/01/19 23:10	107-13-1	M5
Benzene	ND	mg/kg	0.0042	1		02/01/19 23:10	71-43-2	M5
Bromobenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	108-86-1	M5
Bromochloromethane	ND	mg/kg	0.0042	1		02/01/19 23:10	74-97-5	M5
Bromodichloromethane	ND	mg/kg	0.0042	1		02/01/19 23:10	75-27-4	M5
Bromoform	ND	mg/kg	0.0042	1		02/01/19 23:10	75-25-2	M5
Bromomethane	ND	mg/kg	0.0042	1		02/01/19 23:10	74-83-9	M5
2-Butanone (MEK)	ND	mg/kg	0.021	1		02/01/19 23:10	78-93-3	M5
n-Butylbenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	104-51-8	M5
sec-Butylbenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	135-98-8	M5
tert-Butylbenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	98-06-6	M5
Carbon disulfide	ND	mg/kg	0.0083	1		02/01/19 23:10	75-15-0	M5
Carbon tetrachloride	ND	mg/kg	0.0042	1		02/01/19 23:10	56-23-5	M5
Chlorobenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	108-90-7	M5
Chloroethane	ND	mg/kg	0.0042	1		02/01/19 23:10	75-00-3	M5
Chloroform	ND	mg/kg	0.0042	1		02/01/19 23:10	67-66-3	M5
Chloromethane	ND	mg/kg	0.0042	1		02/01/19 23:10	74-87-3	M5
2-Chlorotoluene	ND	mg/kg	0.0042	1		02/01/19 23:10	95-49-8	M5
4-Chlorotoluene	ND	mg/kg	0.0042	1		02/01/19 23:10	106-43-4	M5
Dibromochloromethane	ND	mg/kg	0.0042	1		02/01/19 23:10	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0042	1		02/01/19 23:10	106-93-4	M5
Dibromomethane	ND	mg/kg	0.0042	1		02/01/19 23:10	74-95-3	M5
1,2-Dichlorobenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	95-50-1	M5
1,3-Dichlorobenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	541-73-1	M5
1,4-Dichlorobenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.083	1		02/01/19 23:10	110-57-6	M5
Dichlorodifluoromethane	ND	mg/kg	0.0042	1		02/01/19 23:10	75-71-8	M5
1,1-Dichloroethane	ND	mg/kg	0.0042	1		02/01/19 23:10	75-34-3	M5
1,2-Dichloroethane	ND	mg/kg	0.0042	1		02/01/19 23:10	107-06-2	M5
1,1-Dichloroethene	ND	mg/kg	0.0042	1		02/01/19 23:10	75-35-4	M5
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	1		02/01/19 23:10	156-59-2	M5
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	1		02/01/19 23:10	156-60-5	M5
1,2-Dichloropropane	ND	mg/kg	0.0042	1		02/01/19 23:10	78-87-5	M5
1,3-Dichloropropane	ND	mg/kg	0.0042	1		02/01/19 23:10	142-28-9	M5
2,2-Dichloropropane	ND	mg/kg	0.0042	1		02/01/19 23:10	594-20-7	M5
1,1-Dichloropropene	ND	mg/kg	0.0042	1		02/01/19 23:10	563-58-6	M5
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	1		02/01/19 23:10	10061-01-5	M5
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	1		02/01/19 23:10	10061-02-6	M5
Ethylbenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	100-41-4	M5
Ethyl methacrylate	ND	mg/kg	0.083	1		02/01/19 23:10	97-63-2	M5
Hexachloro-1,3-butadiene	ND	mg/kg	0.0042	1		02/01/19 23:10	87-68-3	M5
n-Hexane	ND	mg/kg	0.0042	1		02/01/19 23:10	110-54-3	M5
2-Hexanone	ND	mg/kg	0.083	1		02/01/19 23:10	591-78-6	M5
Iodomethane	ND	mg/kg	0.083	1		02/01/19 23:10	74-88-4	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB300D (3-5) **Lab ID: 50215633009** Collected: 01/25/19 15:15 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0042	1		02/01/19 23:10	98-82-8	M5
p-Isopropyltoluene	ND	mg/kg	0.0042	1		02/01/19 23:10	99-87-6	M5
Methylene Chloride	ND	mg/kg	0.017	1		02/01/19 23:10	75-09-2	M5
1-Methylnaphthalene	ND	mg/kg	0.0083	1		02/01/19 23:10	90-12-0	M5,N2
2-Methylnaphthalene	ND	mg/kg	0.0083	1		02/01/19 23:10	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.021	1		02/01/19 23:10	108-10-1	M5
Methyl-tert-butyl ether	ND	mg/kg	0.0042	1		02/01/19 23:10	1634-04-4	M5
Naphthalene	ND	mg/kg	0.0042	1		02/01/19 23:10	91-20-3	M5
n-Propylbenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	103-65-1	M5
Styrene	ND	mg/kg	0.0042	1		02/01/19 23:10	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	1		02/01/19 23:10	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	1		02/01/19 23:10	79-34-5	M5
Tetrachloroethene	ND	mg/kg	0.0042	1		02/01/19 23:10	127-18-4	M5
Toluene	ND	mg/kg	0.0042	1		02/01/19 23:10	108-88-3	M5
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	87-61-6	M5
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	120-82-1	M5
1,1,1-Trichloroethane	ND	mg/kg	0.0042	1		02/01/19 23:10	71-55-6	M5
1,1,2-Trichloroethane	ND	mg/kg	0.0042	1		02/01/19 23:10	79-00-5	M5
Trichloroethene	**0.052**	mg/kg	0.0042	1		02/01/19 23:10	79-01-6	M5
Trichlorofluoromethane	ND	mg/kg	0.0042	1		02/01/19 23:10	75-69-4	M5
1,2,3-Trichloropropane	ND	mg/kg	0.0042	1		02/01/19 23:10	96-18-4	M5
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	95-63-6	M5
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	1		02/01/19 23:10	108-67-8	M5
Vinyl acetate	ND	mg/kg	0.083	1		02/01/19 23:10	108-05-4	M5
Vinyl chloride	ND	mg/kg	0.0042	1		02/01/19 23:10	75-01-4	M5
Xylene (Total)	ND	mg/kg	0.0083	1		02/01/19 23:10	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	105	%.	80-127	1		02/01/19 23:10	1868-53-7	M5
Toluene-d8 (S)	95	%.	72-136	1		02/01/19 23:10	2037-26-5	M5
4-Bromofluorobenzene (S)	96	%.	57-130	1		02/01/19 23:10	460-00-4	M5
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**12.7**	%	0.10	1		01/26/19 13:36		

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: TRIP BLANK **Lab ID: 50215633010** Collected: 01/24/19 08:00 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.10	1		02/01/19 08:37	67-64-1	
Acrolein	ND	mg/kg	0.10	1		02/01/19 08:37	107-02-8	
Acrylonitrile	ND	mg/kg	0.10	1		02/01/19 08:37	107-13-1	
Benzene	ND	mg/kg	0.0050	1		02/01/19 08:37	71-43-2	
Bromobenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	108-86-1	
Bromochloromethane	ND	mg/kg	0.0050	1		02/01/19 08:37	74-97-5	
Bromodichloromethane	ND	mg/kg	0.0050	1		02/01/19 08:37	75-27-4	
Bromoform	ND	mg/kg	0.0050	1		02/01/19 08:37	75-25-2	
Bromomethane	ND	mg/kg	0.0050	1		02/01/19 08:37	74-83-9	
2-Butanone (MEK)	ND	mg/kg	0.025	1		02/01/19 08:37	78-93-3	
n-Butylbenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	104-51-8	
sec-Butylbenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	135-98-8	
tert-Butylbenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	98-06-6	
Carbon disulfide	ND	mg/kg	0.010	1		02/01/19 08:37	75-15-0	
Carbon tetrachloride	ND	mg/kg	0.0050	1		02/01/19 08:37	56-23-5	
Chlorobenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	108-90-7	
Chloroethane	ND	mg/kg	0.0050	1		02/01/19 08:37	75-00-3	
Chloroform	ND	mg/kg	0.0050	1		02/01/19 08:37	67-66-3	
Chloromethane	ND	mg/kg	0.0050	1		02/01/19 08:37	74-87-3	
2-Chlorotoluene	ND	mg/kg	0.0050	1		02/01/19 08:37	95-49-8	
4-Chlorotoluene	ND	mg/kg	0.0050	1		02/01/19 08:37	106-43-4	
Dibromochloromethane	ND	mg/kg	0.0050	1		02/01/19 08:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0050	1		02/01/19 08:37	106-93-4	
Dibromomethane	ND	mg/kg	0.0050	1		02/01/19 08:37	74-95-3	
1,2-Dichlorobenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	95-50-1	
1,3-Dichlorobenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	541-73-1	
1,4-Dichlorobenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	106-46-7	
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.10	1		02/01/19 08:37	110-57-6	
Dichlorodifluoromethane	ND	mg/kg	0.0050	1		02/01/19 08:37	75-71-8	
1,1-Dichloroethane	ND	mg/kg	0.0050	1		02/01/19 08:37	75-34-3	
1,2-Dichloroethane	ND	mg/kg	0.0050	1		02/01/19 08:37	107-06-2	
1,1-Dichloroethene	ND	mg/kg	0.0050	1		02/01/19 08:37	75-35-4	
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	1		02/01/19 08:37	156-59-2	
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	1		02/01/19 08:37	156-60-5	
1,2-Dichloropropane	ND	mg/kg	0.0050	1		02/01/19 08:37	78-87-5	
1,3-Dichloropropane	ND	mg/kg	0.0050	1		02/01/19 08:37	142-28-9	
2,2-Dichloropropane	ND	mg/kg	0.0050	1		02/01/19 08:37	594-20-7	
1,1-Dichloropropene	ND	mg/kg	0.0050	1		02/01/19 08:37	563-58-6	
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	1		02/01/19 08:37	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	1		02/01/19 08:37	10061-02-6	
Ethylbenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	100-41-4	
Ethyl methacrylate	ND	mg/kg	0.10	1		02/01/19 08:37	97-63-2	
Hexachloro-1,3-butadiene	ND	mg/kg	0.0050	1		02/01/19 08:37	87-68-3	
n-Hexane	ND	mg/kg	0.0050	1		02/01/19 08:37	110-54-3	
2-Hexanone	ND	mg/kg	0.10	1		02/01/19 08:37	591-78-6	
Iodomethane	ND	mg/kg	0.10	1		02/01/19 08:37	74-88-4	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: TRIP BLANK **Lab ID: 50215633010** Collected: 01/24/19 08:00 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0050	1		02/01/19 08:37	98-82-8	
p-Isopropyltoluene	ND	mg/kg	0.0050	1		02/01/19 08:37	99-87-6	
Methylene Chloride	ND	mg/kg	0.020	1		02/01/19 08:37	75-09-2	
1-Methylnaphthalene	ND	mg/kg	0.010	1		02/01/19 08:37	90-12-0	N2
2-Methylnaphthalene	ND	mg/kg	0.010	1		02/01/19 08:37	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.025	1		02/01/19 08:37	108-10-1	
Methyl-tert-butyl ether	ND	mg/kg	0.0050	1		02/01/19 08:37	1634-04-4	
Naphthalene	ND	mg/kg	0.0050	1		02/01/19 08:37	91-20-3	
n-Propylbenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	103-65-1	
Styrene	ND	mg/kg	0.0050	1		02/01/19 08:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	1		02/01/19 08:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	1		02/01/19 08:37	79-34-5	
Tetrachloroethene	ND	mg/kg	0.0050	1		02/01/19 08:37	127-18-4	L2
Toluene	ND	mg/kg	0.0050	1		02/01/19 08:37	108-88-3	
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	87-61-6	
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	120-82-1	
1,1,1-Trichloroethane	ND	mg/kg	0.0050	1		02/01/19 08:37	71-55-6	
1,1,2-Trichloroethane	ND	mg/kg	0.0050	1		02/01/19 08:37	79-00-5	
Trichloroethene	ND	mg/kg	0.0050	1		02/01/19 08:37	79-01-6	
Trichlorofluoromethane	ND	mg/kg	0.0050	1		02/01/19 08:37	75-69-4	
1,2,3-Trichloropropane	ND	mg/kg	0.0050	1		02/01/19 08:37	96-18-4	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	1		02/01/19 08:37	108-67-8	
Vinyl acetate	ND	mg/kg	0.10	1		02/01/19 08:37	108-05-4	
Vinyl chloride	ND	mg/kg	0.0050	1		02/01/19 08:37	75-01-4	
Xylene (Total)	ND	mg/kg	0.010	1		02/01/19 08:37	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	113	%.	80-127	1		02/01/19 08:37	1868-53-7	
Toluene-d8 (S)	95	%.	72-136	1		02/01/19 08:37	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	57-130	1		02/01/19 08:37	460-00-4	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB500D (61-62) **Lab ID: 50215633011** Collected: 01/25/19 15:40 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.078	1		02/01/19 10:31	67-64-1	
Acrolein	ND	mg/kg	0.078	1		02/01/19 10:31	107-02-8	
Acrylonitrile	ND	mg/kg	0.078	1		02/01/19 10:31	107-13-1	
Benzene	ND	mg/kg	0.0039	1		02/01/19 10:31	71-43-2	
Bromobenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	108-86-1	
Bromochloromethane	ND	mg/kg	0.0039	1		02/01/19 10:31	74-97-5	
Bromodichloromethane	ND	mg/kg	0.0039	1		02/01/19 10:31	75-27-4	
Bromoform	ND	mg/kg	0.0039	1		02/01/19 10:31	75-25-2	
Bromomethane	ND	mg/kg	0.0039	1		02/01/19 10:31	74-83-9	
2-Butanone (MEK)	ND	mg/kg	0.020	1		02/01/19 10:31	78-93-3	
n-Butylbenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	104-51-8	
sec-Butylbenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	135-98-8	
tert-Butylbenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	98-06-6	
Carbon disulfide	ND	mg/kg	0.0078	1		02/01/19 10:31	75-15-0	
Carbon tetrachloride	ND	mg/kg	0.0039	1		02/01/19 10:31	56-23-5	
Chlorobenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	108-90-7	
Chloroethane	ND	mg/kg	0.0039	1		02/01/19 10:31	75-00-3	
Chloroform	ND	mg/kg	0.0039	1		02/01/19 10:31	67-66-3	
Chloromethane	ND	mg/kg	0.0039	1		02/01/19 10:31	74-87-3	
2-Chlorotoluene	ND	mg/kg	0.0039	1		02/01/19 10:31	95-49-8	
4-Chlorotoluene	ND	mg/kg	0.0039	1		02/01/19 10:31	106-43-4	
Dibromochloromethane	ND	mg/kg	0.0039	1		02/01/19 10:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0039	1		02/01/19 10:31	106-93-4	
Dibromomethane	ND	mg/kg	0.0039	1		02/01/19 10:31	74-95-3	
1,2-Dichlorobenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	95-50-1	
1,3-Dichlorobenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	541-73-1	
1,4-Dichlorobenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	106-46-7	
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.078	1		02/01/19 10:31	110-57-6	
Dichlorodifluoromethane	ND	mg/kg	0.0039	1		02/01/19 10:31	75-71-8	
1,1-Dichloroethane	ND	mg/kg	0.0039	1		02/01/19 10:31	75-34-3	
1,2-Dichloroethane	ND	mg/kg	0.0039	1		02/01/19 10:31	107-06-2	
1,1-Dichloroethene	ND	mg/kg	0.0039	1		02/01/19 10:31	75-35-4	
cis-1,2-Dichloroethene	ND	mg/kg	0.0039	1		02/01/19 10:31	156-59-2	
trans-1,2-Dichloroethene	ND	mg/kg	0.0039	1		02/01/19 10:31	156-60-5	
1,2-Dichloropropane	ND	mg/kg	0.0039	1		02/01/19 10:31	78-87-5	
1,3-Dichloropropane	ND	mg/kg	0.0039	1		02/01/19 10:31	142-28-9	
2,2-Dichloropropane	ND	mg/kg	0.0039	1		02/01/19 10:31	594-20-7	
1,1-Dichloropropene	ND	mg/kg	0.0039	1		02/01/19 10:31	563-58-6	
cis-1,3-Dichloropropene	ND	mg/kg	0.0039	1		02/01/19 10:31	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/kg	0.0039	1		02/01/19 10:31	10061-02-6	
Ethylbenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	100-41-4	
Ethyl methacrylate	ND	mg/kg	0.078	1		02/01/19 10:31	97-63-2	
Hexachloro-1,3-butadiene	ND	mg/kg	0.0039	1		02/01/19 10:31	87-68-3	
n-Hexane	ND	mg/kg	0.0039	1		02/01/19 10:31	110-54-3	
2-Hexanone	ND	mg/kg	0.078	1		02/01/19 10:31	591-78-6	
Iodomethane	ND	mg/kg	0.078	1		02/01/19 10:31	74-88-4	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Sample: SB500D (61-62) **Lab ID: 50215633011** Collected: 01/25/19 15:40 Received: 01/25/19 17:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	mg/kg	0.0039	1		02/01/19 10:31	98-82-8	
p-Isopropyltoluene	ND	mg/kg	0.0039	1		02/01/19 10:31	99-87-6	
Methylene Chloride	ND	mg/kg	0.016	1		02/01/19 10:31	75-09-2	
1-Methylnaphthalene	ND	mg/kg	0.0078	1		02/01/19 10:31	90-12-0	N2
2-Methylnaphthalene	ND	mg/kg	0.0078	1		02/01/19 10:31	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.020	1		02/01/19 10:31	108-10-1	
Methyl-tert-butyl ether	ND	mg/kg	0.0039	1		02/01/19 10:31	1634-04-4	
Naphthalene	ND	mg/kg	0.0039	1		02/01/19 10:31	91-20-3	
n-Propylbenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	103-65-1	
Styrene	ND	mg/kg	0.0039	1		02/01/19 10:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0039	1		02/01/19 10:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0039	1		02/01/19 10:31	79-34-5	
Tetrachloroethene	ND	mg/kg	0.0039	1		02/01/19 10:31	127-18-4	L2
Toluene	ND	mg/kg	0.0039	1		02/01/19 10:31	108-88-3	
1,2,3-Trichlorobenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	87-61-6	
1,2,4-Trichlorobenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	120-82-1	
1,1,1-Trichloroethane	ND	mg/kg	0.0039	1		02/01/19 10:31	71-55-6	
1,1,2-Trichloroethane	ND	mg/kg	0.0039	1		02/01/19 10:31	79-00-5	
Trichloroethene	ND	mg/kg	0.0039	1		02/01/19 10:31	79-01-6	
Trichlorofluoromethane	ND	mg/kg	0.0039	1		02/01/19 10:31	75-69-4	
1,2,3-Trichloropropane	ND	mg/kg	0.0039	1		02/01/19 10:31	96-18-4	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0039	1		02/01/19 10:31	108-67-8	
Vinyl acetate	ND	mg/kg	0.078	1		02/01/19 10:31	108-05-4	
Vinyl chloride	ND	mg/kg	0.0039	1		02/01/19 10:31	75-01-4	
Xylene (Total)	ND	mg/kg	0.0078	1		02/01/19 10:31	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	114	%.	80-127	1		02/01/19 10:31	1868-53-7	
Toluene-d8 (S)	95	%.	72-136	1		02/01/19 10:31	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	57-130	1		02/01/19 10:31	460-00-4	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**9.7**	%	0.10	1		01/26/19 13:37		

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

QC Batch: 482658 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50215633001, 50215633003, 50215633004, 50215633005, 50215633006, 50215633007

METHOD BLANK: 2226105 | Matrix: Solid
Associated Lab Samples: 50215633001, 50215633003, 50215633004, 50215633005, 50215633006, 50215633007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,1,1-Trichloroethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,1,2,2-Tetrachloroethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,1,2-Trichloroethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,1-Dichloroethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,1-Dichloroethene	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,1-Dichloropropene	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,2,3-Trichlorobenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,2,3-Trichloropropane	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,2,4-Trichlorobenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,2,4-Trimethylbenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,2-Dibromoethane (EDB)	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,2-Dichlorobenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,2-Dichloroethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,2-Dichloropropane	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,3,5-Trimethylbenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,3-Dichlorobenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,3-Dichloropropane	mg/kg	ND	0.0050	01/30/19 01:47	M5
1,4-Dichlorobenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
1-Methylnaphthalene	mg/kg	ND	0.010	01/30/19 01:47	M5,N2
2,2-Dichloropropane	mg/kg	ND	0.0050	01/30/19 01:47	M5
2-Butanone (MEK)	mg/kg	ND	0.025	01/30/19 01:47	M5
2-Chlorotoluene	mg/kg	ND	0.0050	01/30/19 01:47	M5
2-Hexanone	mg/kg	ND	0.10	01/30/19 01:47	M5
2-Methylnaphthalene	mg/kg	ND	0.010	01/30/19 01:47	M5
4-Chlorotoluene	mg/kg	ND	0.0050	01/30/19 01:47	M5
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	0.025	01/30/19 01:47	M5
Acetone	mg/kg	ND	0.10	01/30/19 01:47	M5
Acrolein	mg/kg	ND	0.10	01/30/19 01:47	M5
Acrylonitrile	mg/kg	ND	0.10	01/30/19 01:47	M5
Benzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Bromobenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Bromochloromethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
Bromodichloromethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
Bromoform	mg/kg	ND	0.0050	01/30/19 01:47	M5
Bromomethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
Carbon disulfide	mg/kg	ND	0.010	01/30/19 01:47	M5
Carbon tetrachloride	mg/kg	ND	0.0050	01/30/19 01:47	M5
Chlorobenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Chloroethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
Chloroform	mg/kg	ND	0.0050	01/30/19 01:47	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

METHOD BLANK: 2226105 Matrix: Solid
Associated Lab Samples: 50215633001, 50215633003, 50215633004, 50215633005, 50215633006, 50215633007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
cis-1,2-Dichloroethene	mg/kg	ND	0.0050	01/30/19 01:47	M5
cis-1,3-Dichloropropene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Dibromochloromethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
Dibromomethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
Dichlorodifluoromethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
Ethyl methacrylate	mg/kg	ND	0.10	01/30/19 01:47	M5
Ethylbenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Hexachloro-1,3-butadiene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Iodomethane	mg/kg	ND	0.10	01/30/19 01:47	M5
Isopropylbenzene (Cumene)	mg/kg	ND	0.0050	01/30/19 01:47	M5
Methyl-tert-butyl ether	mg/kg	ND	0.0050	01/30/19 01:47	M5
Methylene Chloride	mg/kg	ND	0.020	01/30/19 01:47	M5
n-Butylbenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
n-Hexane	mg/kg	ND	0.0050	01/30/19 01:47	M5
n-Propylbenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Naphthalene	mg/kg	ND	0.0050	01/30/19 01:47	M5
p-Isopropyltoluene	mg/kg	ND	0.0050	01/30/19 01:47	M5
sec-Butylbenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Styrene	mg/kg	ND	0.0050	01/30/19 01:47	M5
tert-Butylbenzene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Tetrachloroethene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Toluene	mg/kg	ND	0.0050	01/30/19 01:47	M5
trans-1,2-Dichloroethene	mg/kg	ND	0.0050	01/30/19 01:47	M5
trans-1,3-Dichloropropene	mg/kg	ND	0.0050	01/30/19 01:47	M5
trans-1,4-Dichloro-2-butene	mg/kg	ND	0.10	01/30/19 01:47	M5
Trichloroethene	mg/kg	ND	0.0050	01/30/19 01:47	M5
Trichlorofluoromethane	mg/kg	ND	0.0050	01/30/19 01:47	M5
Vinyl acetate	mg/kg	ND	0.10	01/30/19 01:47	M5
Vinyl chloride	mg/kg	ND	0.0050	01/30/19 01:47	M5
Xylene (Total)	mg/kg	ND	0.010	01/30/19 01:47	M5
4-Bromofluorobenzene (S)	%.	99	57-130	01/30/19 01:47	M5
Dibromofluoromethane (S)	%.	101	80-127	01/30/19 01:47	M5
Toluene-d8 (S)	%.	98	72-136	01/30/19 01:47	M5

LABORATORY CONTROL SAMPLE: 2226106

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.05	0.042	83	71-123	M5
1,1,2,2-Tetrachloroethane	mg/kg	0.05	0.045	91	74-121	M5
1,1-Dichloroethene	mg/kg	0.05	0.045	89	71-125	M5
1,2,4-Trimethylbenzene	mg/kg	0.05	0.037	73	73-111	M5
1,2-Dibromoethane (EDB)	mg/kg	0.05	0.049	97	82-120	M5
1,2-Dichloroethane	mg/kg	0.05	0.040	80	69-119	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

LABORATORY CONTROL SAMPLE: 2226106

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	mg/kg	0.05	0.048	96	76-120	M5
Benzene	mg/kg	0.05	0.045	90	77-117	M5
Chlorobenzene	mg/kg	0.05	0.042	85	77-111	M5
Chloroform	mg/kg	0.05	0.042	83	74-114	M5
cis-1,2-Dichloroethene	mg/kg	0.05	0.045	91	74-118	M5
cis-1,3-Dichloropropene	mg/kg	0.05	0.042	85	77-119	M5
Ethylbenzene	mg/kg	0.05	0.040	79	73-114	M5
Isopropylbenzene (Cumene)	mg/kg	0.05	0.040	81	78-113	M5
Methyl-tert-butyl ether	mg/kg	0.05	0.046	93	75-119	M5
Naphthalene	mg/kg	0.05	0.043	85	70-115	M5
Tetrachloroethene	mg/kg	0.05	0.036	73	72-117	M5
Toluene	mg/kg	0.05	0.042	83	77-111	M5
trans-1,2-Dichloroethene	mg/kg	0.05	0.043	85	73-121	M5
trans-1,3-Dichloropropene	mg/kg	0.05	0.040	79	76-121	M5
Trichloroethene	mg/kg	0.05	0.044	89	73-119	M5
Vinyl chloride	mg/kg	0.05	0.046	91	57-160	M5
Xylene (Total)	mg/kg	0.15	0.12	81	74-111	M5
4-Bromofluorobenzene (S)	%.			102	57-130	M5
Dibromofluoromethane (S)	%.			92	80-127	M5
Toluene-d8 (S)	%.			101	72-136	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

QC Batch: 482859 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50215633002, 50215633008, 50215633010, 50215633011

METHOD BLANK: 2226954 | Matrix: Solid
Associated Lab Samples: 50215633002, 50215633008, 50215633010, 50215633011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	ND	0.0050	02/01/19 00:58	
1,1,1-Trichloroethane	mg/kg	ND	0.0050	02/01/19 00:58	
1,1,2,2-Tetrachloroethane	mg/kg	ND	0.0050	02/01/19 00:58	
1,1,2-Trichloroethane	mg/kg	ND	0.0050	02/01/19 00:58	
1,1-Dichloroethane	mg/kg	ND	0.0050	02/01/19 00:58	
1,1-Dichloroethene	mg/kg	ND	0.0050	02/01/19 00:58	
1,1-Dichloropropene	mg/kg	ND	0.0050	02/01/19 00:58	
1,2,3-Trichlorobenzene	mg/kg	ND	0.0050	02/01/19 00:58	
1,2,3-Trichloropropane	mg/kg	ND	0.0050	02/01/19 00:58	
1,2,4-Trichlorobenzene	mg/kg	ND	0.0050	02/01/19 00:58	
1,2,4-Trimethylbenzene	mg/kg	ND	0.0050	02/01/19 00:58	
1,2-Dibromoethane (EDB)	mg/kg	ND	0.0050	02/01/19 00:58	
1,2-Dichlorobenzene	mg/kg	ND	0.0050	02/01/19 00:58	
1,2-Dichloroethane	mg/kg	ND	0.0050	02/01/19 00:58	
1,2-Dichloropropane	mg/kg	ND	0.0050	02/01/19 00:58	
1,3,5-Trimethylbenzene	mg/kg	ND	0.0050	02/01/19 00:58	
1,3-Dichlorobenzene	mg/kg	ND	0.0050	02/01/19 00:58	
1,3-Dichloropropane	mg/kg	ND	0.0050	02/01/19 00:58	
1,4-Dichlorobenzene	mg/kg	ND	0.0050	02/01/19 00:58	
1-Methylnaphthalene	mg/kg	ND	0.010	02/01/19 00:58	N2
2,2-Dichloropropane	mg/kg	ND	0.0050	02/01/19 00:58	
2-Butanone (MEK)	mg/kg	ND	0.025	02/01/19 00:58	
2-Chlorotoluene	mg/kg	ND	0.0050	02/01/19 00:58	
2-Hexanone	mg/kg	ND	0.10	02/01/19 00:58	
2-Methylnaphthalene	mg/kg	ND	0.010	02/01/19 00:58	
4-Chlorotoluene	mg/kg	ND	0.0050	02/01/19 00:58	
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	0.025	02/01/19 00:58	
Acetone	mg/kg	ND	0.10	02/01/19 00:58	
Acrolein	mg/kg	ND	0.10	02/01/19 00:58	
Acrylonitrile	mg/kg	ND	0.10	02/01/19 00:58	
Benzene	mg/kg	ND	0.0050	02/01/19 00:58	
Bromobenzene	mg/kg	ND	0.0050	02/01/19 00:58	
Bromochloromethane	mg/kg	ND	0.0050	02/01/19 00:58	
Bromodichloromethane	mg/kg	ND	0.0050	02/01/19 00:58	
Bromoform	mg/kg	ND	0.0050	02/01/19 00:58	
Bromomethane	mg/kg	ND	0.0050	02/01/19 00:58	
Carbon disulfide	mg/kg	ND	0.010	02/01/19 00:58	
Carbon tetrachloride	mg/kg	ND	0.0050	02/01/19 00:58	
Chlorobenzene	mg/kg	ND	0.0050	02/01/19 00:58	
Chloroethane	mg/kg	ND	0.0050	02/01/19 00:58	
Chloroform	mg/kg	ND	0.0050	02/01/19 00:58	

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

METHOD BLANK: 2226954 Matrix: Solid
Associated Lab Samples: 50215633002, 50215633008, 50215633010, 50215633011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	mg/kg	ND	0.0050	02/01/19 00:58	
cis-1,2-Dichloroethene	mg/kg	ND	0.0050	02/01/19 00:58	
cis-1,3-Dichloropropene	mg/kg	ND	0.0050	02/01/19 00:58	
Dibromochloromethane	mg/kg	ND	0.0050	02/01/19 00:58	
Dibromomethane	mg/kg	ND	0.0050	02/01/19 00:58	
Dichlorodifluoromethane	mg/kg	ND	0.0050	02/01/19 00:58	
Ethyl methacrylate	mg/kg	ND	0.10	02/01/19 00:58	
Ethylbenzene	mg/kg	ND	0.0050	02/01/19 00:58	
Hexachloro-1,3-butadiene	mg/kg	ND	0.0050	02/01/19 00:58	
Iodomethane	mg/kg	ND	0.10	02/01/19 00:58	
Isopropylbenzene (Cumene)	mg/kg	ND	0.0050	02/01/19 00:58	
Methyl-tert-butyl ether	mg/kg	ND	0.0050	02/01/19 00:58	
Methylene Chloride	mg/kg	ND	0.020	02/01/19 00:58	
n-Butylbenzene	mg/kg	ND	0.0050	02/01/19 00:58	
n-Hexane	mg/kg	ND	0.0050	02/01/19 00:58	
n-Propylbenzene	mg/kg	ND	0.0050	02/01/19 00:58	
Naphthalene	mg/kg	ND	0.0050	02/01/19 00:58	
p-Isopropyltoluene	mg/kg	ND	0.0050	02/01/19 00:58	
sec-Butylbenzene	mg/kg	ND	0.0050	02/01/19 00:58	
Styrene	mg/kg	ND	0.0050	02/01/19 00:58	
tert-Butylbenzene	mg/kg	ND	0.0050	02/01/19 00:58	
Tetrachloroethene	mg/kg	ND	0.0050	02/01/19 00:58	
Toluene	mg/kg	ND	0.0050	02/01/19 00:58	
trans-1,2-Dichloroethene	mg/kg	ND	0.0050	02/01/19 00:58	
trans-1,3-Dichloropropene	mg/kg	ND	0.0050	02/01/19 00:58	
trans-1,4-Dichloro-2-butene	mg/kg	ND	0.10	02/01/19 00:58	
Trichloroethene	mg/kg	ND	0.0050	02/01/19 00:58	
Trichlorofluoromethane	mg/kg	ND	0.0050	02/01/19 00:58	
Vinyl acetate	mg/kg	ND	0.10	02/01/19 00:58	
Vinyl chloride	mg/kg	ND	0.0050	02/01/19 00:58	
Xylene (Total)	mg/kg	ND	0.010	02/01/19 00:58	
4-Bromofluorobenzene (S)	%.	101	57-130	02/01/19 00:58	
Dibromofluoromethane (S)	%.	105	80-127	02/01/19 00:58	
Toluene-d8 (S)	%.	97	72-136	02/01/19 00:58	

LABORATORY CONTROL SAMPLE: 2226955

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.05	0.045	89	71-123	
1,1,2,2-Tetrachloroethane	mg/kg	0.05	0.046	91	74-121	
1,1-Dichloroethene	mg/kg	0.05	0.048	97	71-125	
1,2,4-Trimethylbenzene	mg/kg	0.05	0.037	74	73-111	
1,2-Dibromoethane (EDB)	mg/kg	0.05	0.047	94	82-120	
1,2-Dichloroethane	mg/kg	0.05	0.041	83	69-119	

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

LABORATORY CONTROL SAMPLE: 2226955

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	mg/kg	0.05	0.049	97	76-120	
Benzene	mg/kg	0.05	0.046	91	77-117	
Chlorobenzene	mg/kg	0.05	0.042	83	77-111	
Chloroform	mg/kg	0.05	0.045	90	74-114	
cis-1,2-Dichloroethene	mg/kg	0.05	0.046	92	74-118	
cis-1,3-Dichloropropene	mg/kg	0.05	0.042	84	77-119	
Ethylbenzene	mg/kg	0.05	0.039	78	73-114	
Isopropylbenzene (Cumene)	mg/kg	0.05	0.040	80	78-113	
Methyl-tert-butyl ether	mg/kg	0.05	0.047	93	75-119	
Naphthalene	mg/kg	0.05	0.043	86	70-115	
Tetrachloroethene	mg/kg	0.05	0.035	70	72-117	L2
Toluene	mg/kg	0.05	0.040	81	77-111	
trans-1,2-Dichloroethene	mg/kg	0.05	0.046	92	73-121	
trans-1,3-Dichloropropene	mg/kg	0.05	0.040	79	76-121	
Trichloroethene	mg/kg	0.05	0.044	88	73-119	
Vinyl chloride	mg/kg	0.05	0.049	97	57-160	
Xylene (Total)	mg/kg	0.15	0.12	78	74-111	
4-Bromofluorobenzene (S)	%.			102	57-130	
Dibromofluoromethane (S)	%.			98	80-127	
Toluene-d8 (S)	%.			100	72-136	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2226956 2226957

Parameter	Units	50215633002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	mg/kg	ND	0.039	0.038	0.027	0.040	71	103	51-139	37	20	R1
1,1,2,2-Tetrachloroethane	mg/kg	ND	0.039	0.038	0.0073	0.029	19	76	22-173	120	20	M1,R1
1,1-Dichloroethene	mg/kg	ND	0.039	0.038	0.029	0.040	75	104	52-144	33	20	R1
1,2,4-Trimethylbenzene	mg/kg	ND	0.039	0.038	0.0072	0.029	19	74	10-163	120	20	R1
1,2-Dibromoethane (EDB)	mg/kg	ND	0.039	0.038	0.0094	0.030	25	78	40-144	104	20	M1,R1
1,2-Dichloroethane	mg/kg	ND	0.039	0.038	0.017	0.035	45	92	48-128	68	20	M1,R1
1,2-Dichloropropane	mg/kg	ND	0.039	0.038	0.015	0.036	40	95	47-136	82	20	M1,R1
Benzene	mg/kg	ND	0.039	0.038	0.017	0.035	45	92	46-136	68	20	M1,R1
Chlorobenzene	mg/kg	ND	0.039	0.038	0.0086	0.029	22	76	22-138	109	20	R1
Chloroform	mg/kg	ND	0.039	0.038	0.018	0.035	48	91	53-129	62	20	M1,R1
cis-1,2-Dichloroethene	mg/kg	ND	0.039	0.038	0.018	0.034	47	90	52-131	62	20	M1,R1
cis-1,3-Dichloropropene	mg/kg	ND	0.039	0.038	0.010	0.028	27	74	38-141	92	20	M1,R1
Ethylbenzene	mg/kg	ND	0.039	0.038	0.0096	0.031	25	80	20-142	105	20	R1
Isopropylbenzene (Cumene)	mg/kg	ND	0.039	0.038	0.011	0.033	28	87	14-149	104	20	R1
Methyl-tert-butyl ether	mg/kg	ND	0.039	0.038	0.028	0.042	72	109	64-135	41	20	R1
Naphthalene	mg/kg	ND	0.039	0.038	.002J	0.017	5	44	10-128		20	M1
Tetrachloroethene	mg/kg	ND	0.039	0.038	0.015	0.033	38	85	24-151	76	20	R1
Toluene	mg/kg	ND	0.039	0.038	0.013	0.031	33	82	36-140	84	20	M1,R1
trans-1,2-Dichloroethene	mg/kg	ND	0.039	0.038	0.022	0.036	57	95	53-135	50	20	R1
trans-1,3-Dichloropropene	mg/kg	ND	0.039	0.038	0.0090	0.026	23	69	31-141	98	20	M1,R1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2226956 2226957

Parameter	Units	50215633002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Trichloroethene	mg/kg	ND	0.039	0.038	0.017	0.036	43	94	31-149	73	20	R1
Vinyl chloride	mg/kg	ND	0.039	0.038	0.032	0.040	83	105	46-171	23	20	R1
Xylene (Total)	mg/kg	ND	0.12	0.12	0.027	0.093	24	81	16-142	109	20	RS
4-Bromofluorobenzene (S)	%.						102	102	57-130			
Dibromofluoromethane (S)	%.						101	99	80-127			
Toluene-d8 (S)	%.						104	100	72-136			

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

QC Batch: 483186
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50215633009

METHOD BLANK: 2227986
Matrix: Solid
Associated Lab Samples: 50215633009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,1,1-Trichloroethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,1,2,2-Tetrachloroethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,1,2-Trichloroethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,1-Dichloroethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,1-Dichloroethene	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,1-Dichloropropene	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,2,3-Trichlorobenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,2,3-Trichloropropane	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,2,4-Trichlorobenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,2,4-Trimethylbenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,2-Dibromoethane (EDB)	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,2-Dichlorobenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,2-Dichloroethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,2-Dichloropropane	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,3,5-Trimethylbenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,3-Dichlorobenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,3-Dichloropropane	mg/kg	ND	0.0050	02/01/19 13:39	M5
1,4-Dichlorobenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
1-Methylnaphthalene	mg/kg	ND	0.010	02/01/19 13:39	M5,N2
2,2-Dichloropropane	mg/kg	ND	0.0050	02/01/19 13:39	M5
2-Butanone (MEK)	mg/kg	ND	0.025	02/01/19 13:39	M5
2-Chlorotoluene	mg/kg	ND	0.0050	02/01/19 13:39	M5
2-Hexanone	mg/kg	ND	0.10	02/01/19 13:39	M5
2-Methylnaphthalene	mg/kg	ND	0.010	02/01/19 13:39	M5
4-Chlorotoluene	mg/kg	ND	0.0050	02/01/19 13:39	M5
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	0.025	02/01/19 13:39	M5
Acetone	mg/kg	ND	0.10	02/01/19 13:39	M5
Acrolein	mg/kg	ND	0.10	02/01/19 13:39	M5
Acrylonitrile	mg/kg	ND	0.10	02/01/19 13:39	M5
Benzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Bromobenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Bromochloromethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
Bromodichloromethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
Bromoform	mg/kg	ND	0.0050	02/01/19 13:39	M5
Bromomethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
Carbon disulfide	mg/kg	ND	0.010	02/01/19 13:39	M5
Carbon tetrachloride	mg/kg	ND	0.0050	02/01/19 13:39	M5
Chlorobenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Chloroethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
Chloroform	mg/kg	ND	0.0050	02/01/19 13:39	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

METHOD BLANK: 2227986 Matrix: Solid
Associated Lab Samples: 50215633009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
cis-1,2-Dichloroethene	mg/kg	ND	0.0050	02/01/19 13:39	M5
cis-1,3-Dichloropropene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Dibromochloromethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
Dibromomethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
Dichlorodifluoromethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
Ethyl methacrylate	mg/kg	ND	0.10	02/01/19 13:39	M5
Ethylbenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Hexachloro-1,3-butadiene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Iodomethane	mg/kg	ND	0.10	02/01/19 13:39	M5
Isopropylbenzene (Cumene)	mg/kg	ND	0.0050	02/01/19 13:39	M5
Methyl-tert-butyl ether	mg/kg	ND	0.0050	02/01/19 13:39	M5
Methylene Chloride	mg/kg	ND	0.020	02/01/19 13:39	M5
n-Butylbenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
n-Hexane	mg/kg	ND	0.0050	02/01/19 13:39	M5
n-Propylbenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Naphthalene	mg/kg	ND	0.0050	02/01/19 13:39	M5
p-Isopropyltoluene	mg/kg	ND	0.0050	02/01/19 13:39	M5
sec-Butylbenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Styrene	mg/kg	ND	0.0050	02/01/19 13:39	M5
tert-Butylbenzene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Tetrachloroethene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Toluene	mg/kg	ND	0.0050	02/01/19 13:39	M5
trans-1,2-Dichloroethene	mg/kg	ND	0.0050	02/01/19 13:39	M5
trans-1,3-Dichloropropene	mg/kg	ND	0.0050	02/01/19 13:39	M5
trans-1,4-Dichloro-2-butene	mg/kg	ND	0.10	02/01/19 13:39	M5
Trichloroethene	mg/kg	ND	0.0050	02/01/19 13:39	M5
Trichlorofluoromethane	mg/kg	ND	0.0050	02/01/19 13:39	M5
Vinyl acetate	mg/kg	ND	0.10	02/01/19 13:39	M5
Vinyl chloride	mg/kg	ND	0.0050	02/01/19 13:39	M5
Xylene (Total)	mg/kg	ND	0.010	02/01/19 13:39	M5
4-Bromofluorobenzene (S)	%.	103	57-130	02/01/19 13:39	M5
Dibromofluoromethane (S)	%.	111	80-127	02/01/19 13:39	M5
Toluene-d8 (S)	%.	97	72-136	02/01/19 13:39	M5

LABORATORY CONTROL SAMPLE: 2227987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/kg	0.05	0.047	93	71-123	M5
1,1,2,2-Tetrachloroethane	mg/kg	0.05	0.046	92	74-121	M5
1,1-Dichloroethene	mg/kg	0.05	0.048	96	71-125	M5
1,2,4-Trimethylbenzene	mg/kg	0.05	0.041	82	73-111	M5
1,2-Dibromoethane (EDB)	mg/kg	0.05	0.051	102	82-120	M5
1,2-Dichloroethane	mg/kg	0.05	0.050	100	69-119	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

LABORATORY CONTROL SAMPLE: 2227987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	mg/kg	0.05	0.049	97	76-120	M5
Benzene	mg/kg	0.05	0.045	90	77-117	M5
Chlorobenzene	mg/kg	0.05	0.045	90	77-111	M5
Chloroform	mg/kg	0.05	0.045	90	74-114	M5
cis-1,2-Dichloroethene	mg/kg	0.05	0.046	92	74-118	M5
cis-1,3-Dichloropropene	mg/kg	0.05	0.044	88	77-119	M5
Ethylbenzene	mg/kg	0.05	0.042	85	73-114	M5
Isopropylbenzene (Cumene)	mg/kg	0.05	0.044	88	78-113	M5
Methyl-tert-butyl ether	mg/kg	0.05	0.053	105	75-119	M5
Naphthalene	mg/kg	0.05	0.047	95	70-115	M5
Tetrachloroethene	mg/kg	0.05	0.041	82	72-117	M5
Toluene	mg/kg	0.05	0.041	83	77-111	M5
trans-1,2-Dichloroethene	mg/kg	0.05	0.045	89	73-121	M5
trans-1,3-Dichloropropene	mg/kg	0.05	0.045	90	76-121	M5
Trichloroethene	mg/kg	0.05	0.047	94	73-119	M5
Vinyl chloride	mg/kg	0.05	0.046	92	57-160	M5
Xylene (Total)	mg/kg	0.15	0.13	86	74-111	M5
4-Bromofluorobenzene (S)	%.			103	57-130	M5
Dibromofluoromethane (S)	%.			99	80-127	M5
Toluene-d8 (S)	%.			100	72-136	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

QC Batch: 482266 | Analysis Method: SM 2540G
QC Batch Method: SM 2540G | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 50215633001, 50215633002, 50215633003, 50215633004, 50215633005, 50215633006, 50215633007, 50215633008, 50215633009, 50215633011

SAMPLE DUPLICATE: 2224627

Parameter	Units	50215559011 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	5.6	5.8	3	5	

SAMPLE DUPLICATE: 2224709

Parameter	Units	50215633002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.4	7.4	0	5	

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QUALIFIERS

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 482658

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 483186

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
RS	The RPD value in one of the constituent analytes was outside the control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland Canning FSI #3
Pace Project No.: 50215633

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50215633001	**SB12D (8-10)**	EPA 8260	482658		
50215633002	**SB12D (29-30)**	EPA 8260	482859		
50215633003	**DUP**	EPA 8260	482658		
50215633004	**SB14D (10-12)**	EPA 8260	482658		
50215633005	**SB14D (32-33)**	EPA 8260	482658		
50215633006	**SB150B (5-7)**	EPA 8260	482658		
50215633007	**SB150B (51-52)**	EPA 8260	482658		
50215633008	**SB500D (4-5)**	EPA 8260	482859		
50215633009	**SB300D (3-5)**	EPA 8260	483186		
50215633010	**TRIP BLANK**	EPA 8260	482859		
50215633011	**SB500D (61-62)**	EPA 8260	482859		
50215633001	**SB12D (8-10)**	SM 2540G	482266		
50215633002	**SB12D (29-30)**	SM 2540G	482266		
50215633003	**DUP**	SM 2540G	482266		
50215633004	**SB14D (10-12)**	SM 2540G	482266		
50215633005	**SB14D (32-33)**	SM 2540G	482266		
50215633006	**SB150B (5-7)**	SM 2540G	482266		
50215633007	**SB150B (51-52)**	SM 2540G	482266		
50215633008	**SB500D (4-5)**	SM 2540G	482266		
50215633009	**SB300D (3-5)**	SM 2540G	482266		
50215633011	**SB500D (61-62)**	SM 2540G	482266		

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CHAIN-OF-CUSTODY Analytical Request Document

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LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

50215633

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Company: PATRIOT ENGINEERING	Billing Information: AP@patrioteng.com
Address: 6150 E 75th ST INDIANAPOLIS	
Report To: JAMES CODY	Email To:
Copy To: MIKE CASPER	Site Collection Info/Address:
Customer Project Name/Number: 19-0096-01E HOUGHLAND CANNING FSI #3	State: IN / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Phone: Email: jcody@patrioteng.com	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): JAMES CODY	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature): Jas Cody	Turnaround Date Required: STANDARD Immediately Packed on Ice: [✓] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: ____ [ ] Hold: ____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis: ____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____

Lab Profile/Line:

Lab Sample Receipt Checklist: See Scan

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils ?	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: ____	
Sample pH Acceptable	Y N NA
pH Strips: ____	
Sulfide Present	Y N NA
Lead Acetate Strips: ____	

LAB USE ONLY: Lab Sample # / Comments:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	VOCs 8260	MS/MSD	Lab Sample # / Comments
SB120 (8-10)	SL	G	1/24	9:20					X		001
SB120 (29-30)	"	"	"	9:35					X	X	002
DUP 140	"	"	"	—					X		003
SB 140 (10-12)	"	"	"	12:20					X		004
SB 140 (32-33)	"	"	"	13:00					X		005
SB 150 B (5-7)	"	"	"	14:20					X		006
SB 150 B (51-52)	"	"	"	16:00					X		007
SB 500 (4-5)	"	"	1/25	11:15					X		008
SB 300D (3-5)	"	"	"	15:15					X		009
TRIP BLANK	—	—	—	—					X		010

Customer Remarks / Special Conditions / Possible Hazards: ABSOLUTE PRICING

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2356692

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y (N) NA
Therm ID#: H5
Cooler 1 Temp Upon Receipt: 5.5 oC
Cooler 1 Therm Corr. Factor: +0.3 oC
Cooler 1 Corrected Temp: 5.8 oC
Comments:

Relinquished by/Company: (Signature) JAMES CODY/PATRIOT	Date/Time: 1/25 16:14	Received by/Company: (Signature) [signature]/Patriot	Date/Time: 1-25 16:14
Relinquished by/Company: (Signature) [signature]/Patriot	Date/Time: 1/25/19 17:05	Received by/Company: (Signature) [signature]	Date/Time: 1/25/19 17:05
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y (N) NA
HCL (MeOH) TSP Other

Non Conformance(s): YES / NO

Page: ____ of ____

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

502156 33

ALL SHADED AREAS are for LAB USE ONLY

Company: PATRIOT ENGINEERING

Billing Information: AP@patriotengs.com

Address: 6150 E 75th St, INDIANAPOLIS

Report To: JAMES CODY

Email To:

Copy To: MIKE CASPER

Site Collection Info/Address:

Customer Project Name/Number: 19-0096-01E HOUGHLAND CANNING FSI #3

State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone: Email: jack@patriotengs.com

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): JAMES CODY

Purchase Order #: Quote #:

DW PWS ID #: DW Location Code:

Collected By (signature):

Turnaround Date Required: STANDARD

Immediately Packed on Ice: [✓] Yes [ ] No

Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses: VOCs 8260

Lab Profile/Line:

Lab Sample Receipt Checklist: Seal Scur

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	

LAB USE ONLY: Lab Sample # / Comments:

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Lab Sample # / Comments
SB5000 (01-02)	SL	G	1/25	15:40					001

Customer Remarks / Special Conditions / Possible Hazards: ABSOLUTE PRICING

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2356691

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:

Temp Blank Received: Y (N) NA

Therm ID#: 4

Cooler 1 Temp Upon Receipt: 5.5 oC

Cooler 1 Therm Corr. Factor: 0.3 oC

Cooler 1 Corrected Temp: 5.8 oC

Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
JAMES CODY / PATRIOT	1/25 16:14	V.K. Shah / Patriot	1-25-16:14
V.K. Shah / Patriot	1-25 17:05	Lucas W. Carpenter	1/25/19 17:05

MTJL LAB USE ONLY

Table #:

Acctnum:

Template:

Prelogin:

PM:

PB:

Trip Blank Received: (Y) N NA

HCL (MeOH) TSP Other

Non Conformance(s): YES / NO

Page: ____ of ____

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50215633

Date/Time and Initials of person examining contents: LWG 1/25/19 17:45

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No **Seals Intact:** ☑ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer: 1 2 3 4 (5) 6 A B C D E F **Ice Type:** ☑ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☑ Yes ☐ No ☐ N/A

Cooler Temperature: 5.3/5.8 Ice Visible in Sample Containers?: ☐ Yes ☑ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☑ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		✓	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			✓
USDA Regulated Soils? (ID, NY, WA, OR, CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓				
Chain of Custody Present:	✓					
Chain of Custody Filled Out:	✓		Dissolved Metals field filtered?:			✓
Short Hold Time Analysis (<72hr)?: **Analysis:** TC	✓		Headspace Wisconsin Sulfide			✓
Time 5035A TC placed in Freezer or Short Holds To Lab: 1750				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Rush TAT Requested:		✓	Headspace in VOA Vials (>6mm):			✓
Containers Intact?:	✓		Trip Blank Present?:		✓	
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Custody Seals?:		✓	

Comments:

Sample Container Count

CLIENT: Patriot ENG

COC PAGE 1 of 2

COC ID# 2356692

Project # 50215633

Sample Line Item	DG9H VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	SBS ~~Bulk~~ Kit R				Matrix SI/Wt/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1																	4				SL			
2																	12							
3																	4							
4																								
5																								
6																								
7																								
8																								
9																								
10																	3							
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

Sample Container Count

WO# : 50215633

50215633

CLIENT: Patriot ENG

COC PAGE 2 of 2

COC ID# 2356691

Project # 50215633

SBS Bulk Kit

Sample Line Item	DG9H VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	R				Matrix SI/ (Soil/Wat Aqueous	pH <2	pH >9	pH>12
1																	4				SL			
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

APPENDIX F

GROUNDWATER LABORATORY ANALYTICAL REPORT

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

February 15, 2019

Mr. James Cody
Patriot Engineering
6150 E 75th St
Indianapolis, IN 46250

RE: Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Dear Mr. Cody:
Enclosed are the analytical results for sample(s) received by the laboratory on February 09, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Mr. Mike Casper, Patriot Engineering

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project:	Houghland Canning FSI #3
Pace Project No.:	50216680

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #:E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #:98019
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355-18-12
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50216680001	**MW 26**	Water	02/05/19 11:54	02/09/19 12:25
50216680002	**MW 32**	Water	02/05/19 12:14	02/09/19 12:25
50216680003	**MW 33**	Water	02/05/19 13:42	02/09/19 12:25
50216680004	**MW 33D**	Water	02/05/19 14:04	02/09/19 12:25
50216680005	**MW 29**	Water	02/05/19 14:56	02/09/19 12:25
50216680006	**MW 29D**	Water	02/05/19 15:07	02/09/19 12:25
50216680007	**MW 12**	Water	02/05/19 15:53	02/09/19 12:25
50216680008	**MW 12D**	Water	02/05/19 16:12	02/09/19 12:25
50216680009	**DUP A**	Water	02/08/19 08:00	02/09/19 12:25
50216680010	**DUP B**	Water	02/08/19 08:00	02/09/19 12:25
50216680011	**TMW-3**	Water	02/06/19 12:15	02/09/19 12:25
50216680012	**TMW-3D**	Water	02/06/19 12:15	02/09/19 12:25
50216680013	**TMW-2**	Water	02/06/19 13:20	02/09/19 12:25
50216680014	**TMW-2D**	Water	02/06/19 13:20	02/09/19 12:25
50216680015	**TMW-1**	Water	02/06/19 14:20	02/09/19 12:25
50216680016	**TMW-1D**	Water	02/06/19 14:20	02/09/19 12:25
50216680017	**TMW-4**	Water	02/07/19 11:10	02/09/19 12:25
50216680018	**TMW-4D**	Water	02/07/19 11:10	02/09/19 12:25
50216680019	**TMW-7**	Water	02/07/19 12:10	02/09/19 12:25
50216680020	**TMW-7D**	Water	02/07/19 12:10	02/09/19 12:25
50216680021	**TMW-5**	Water	02/08/19 10:25	02/09/19 12:25
50216680022	**TMW-5D**	Water	02/08/19 10:10	02/09/19 12:25
50216680023	**TMW-6**	Water	02/08/19 11:10	02/09/19 12:25
50216680024	**TMW-6D**	Water	02/08/19 11:25	02/09/19 12:25
50216680025	**MW-22**	Water	02/08/19 12:20	02/09/19 12:25
50216680026	**MW-22D**	Water	02/08/19 12:30	02/09/19 12:25
50216680027	**MW-31**	Water	02/08/19 13:35	02/09/19 12:25
50216680028	**MW-30**	Water	02/08/19 13:30	02/09/19 12:25
50216680029	**MW-11**	Water	02/08/19 14:25	02/09/19 12:25
50216680030	**MW-11D**	Water	02/08/19 14:40	02/09/19 12:25
50216680031	**MW-14**	Water	02/08/19 16:15	02/09/19 12:25
50216680032	**MW-14D**	Water	02/08/19 16:15	02/09/19 12:25
50216680033	**MW-15**	Water	02/08/19 17:35	02/09/19 12:25
50216680034	**MW-15D**	Water	02/08/19 17:35	02/09/19 12:25
50216680035	**Trip Blank**	Water	02/05/19 08:00	02/09/19 12:25

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50216680001	**MW 26**	EPA 5030/8260	LKC	75
50216680002	**MW 32**	EPA 5030/8260	LKC	75
50216680003	**MW 33**	EPA 5030/8260	LKC	75
50216680004	**MW 33D**	EPA 5030/8260	LKC	75
50216680005	**MW 29**	EPA 5030/8260	LKC	75
50216680006	**MW 29D**	EPA 5030/8260	LKC	75
50216680007	**MW 12**	EPA 5030/8260	LKC	75
50216680008	**MW 12D**	EPA 5030/8260	LKC	75
50216680009	**DUP A**	EPA 5030/8260	LKC	75
50216680010	**DUP B**	EPA 5030/8260	LKC	75
50216680011	**TMW-3**	EPA 5030/8260	LKC	75
50216680012	**TMW-3D**	EPA 5030/8260	LKC	75
50216680013	**TMW-2**	EPA 5030/8260	LKC	75
50216680014	**TMW-2D**	EPA 5030/8260	LKC	75
50216680015	**TMW-1**	EPA 5030/8260	LKC	75
50216680016	**TMW-1D**	EPA 5030/8260	LKC	75
50216680017	**TMW-4**	EPA 5030/8260	LKC	75
50216680018	**TMW-4D**	EPA 5030/8260	LKC	75
50216680019	**TMW-7**	EPA 5030/8260	LKC	75
50216680020	**TMW-7D**	EPA 5030/8260	LKC	75
50216680021	**TMW-5**	EPA 5030/8260	LKC	75
50216680022	**TMW-5D**	EPA 5030/8260	LKC	75
50216680023	**TMW-6**	EPA 5030/8260	LKC	75
50216680024	**TMW-6D**	EPA 5030/8260	LKC	75
50216680025	**MW-22**	EPA 5030/8260	LKC	75
50216680026	**MW-22D**	EPA 5030/8260	LKC	75
50216680027	**MW-31**	EPA 5030/8260	LKC	75
50216680028	**MW-30**	EPA 5030/8260	LKC	75
50216680029	**MW-11**	EPA 5030/8260	LKC	75
50216680030	**MW-11D**	EPA 5030/8260	LKC	75
50216680031	**MW-14**	EPA 5030/8260	LKC	75
50216680032	**MW-14D**	EPA 5030/8260	LKC	75
50216680033	**MW-15**	EPA 5030/8260	LKC	75
50216680034	**MW-15D**	EPA 5030/8260	LKC	75
50216680035	**Trip Blank**	EPA 5030/8260	LKC	75

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50216680001	**MW 26**					
EPA 5030/8260	Tetrachloroethene	14.8	ug/L	5.0	02/13/19 07:59	
EPA 5030/8260	Trichloroethene	46.1	ug/L	5.0	02/13/19 07:59	
50216680002	**MW 32**					
EPA 5030/8260	cis-1,2-Dichloroethene	5.9	ug/L	5.0	02/13/19 08:33	
EPA 5030/8260	Tetrachloroethene	8.0	ug/L	5.0	02/13/19 08:33	
EPA 5030/8260	Trichloroethene	9.4	ug/L	5.0	02/13/19 08:33	
50216680003	**MW 33**					
EPA 5030/8260	Tetrachloroethene	28.9	ug/L	5.0	02/13/19 09:06	
EPA 5030/8260	Trichloroethene	61.0	ug/L	5.0	02/13/19 09:06	
50216680004	**MW 33D**					
EPA 5030/8260	Tetrachloroethene	21.1	ug/L	5.0	02/13/19 09:40	
EPA 5030/8260	Trichloroethene	114	ug/L	5.0	02/13/19 09:40	
50216680005	**MW 29**					
EPA 5030/8260	Trichloroethene	34.5	ug/L	5.0	02/13/19 10:14	
50216680006	**MW 29D**					
EPA 5030/8260	cis-1,2-Dichloroethene	25.7	ug/L	5.0	02/13/19 10:47	
EPA 5030/8260	Tetrachloroethene	13.4	ug/L	5.0	02/13/19 10:47	
EPA 5030/8260	Trichloroethene	149	ug/L	5.0	02/13/19 10:47	
50216680007	**MW 12**					
EPA 5030/8260	Trichloroethene	38.8	ug/L	5.0	02/13/19 15:35	M5
50216680010	**DUP B**					
EPA 5030/8260	Tetrachloroethene	69.7	ug/L	5.0	02/13/19 17:50	M5
EPA 5030/8260	Trichloroethene	55.9	ug/L	5.0	02/13/19 17:50	M5
50216680011	**TMW-3**					
EPA 5030/8260	Trichloroethene	30.4	ug/L	5.0	02/13/19 18:56	M5
50216680012	**TMW-3D**					
EPA 5030/8260	cis-1,2-Dichloroethene	1060	ug/L	50.0	02/15/19 03:48	M5
EPA 5030/8260	trans-1,2-Dichloroethene	87.5	ug/L	5.0	02/13/19 19:30	M5
EPA 5030/8260	Trichloroethene	383	ug/L	50.0	02/15/19 03:48	M5
50216680013	**TMW-2**					
EPA 5030/8260	Trichloroethene	94.1	ug/L	5.0	02/13/19 20:04	M5
50216680014	**TMW-2D**					
EPA 5030/8260	cis-1,2-Dichloroethene	550	ug/L	50.0	02/15/19 04:22	M5
EPA 5030/8260	trans-1,2-Dichloroethene	43.4	ug/L	5.0	02/13/19 20:38	M5
EPA 5030/8260	Trichloroethene	15.9	ug/L	5.0	02/13/19 20:38	M5
50216680015	**TMW-1**					
EPA 5030/8260	Trichloroethene	11.2	ug/L	5.0	02/13/19 21:11	M5
50216680016	**TMW-1D**					
EPA 5030/8260	cis-1,2-Dichloroethene	510	ug/L	50.0	02/15/19 04:56	M5

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(317)228-3100

SUMMARY OF DETECTION

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50216680016	**TMW-1D**					
EPA 5030/8260	trans-1,2-Dichloroethene	41.6	ug/L	5.0	02/13/19 21:44	M5
EPA 5030/8260	Trichloroethene	24.2	ug/L	5.0	02/13/19 21:44	M5
50216680018	**TMW-4D**					
EPA 5030/8260	cis-1,2-Dichloroethene	437	ug/L	50.0	02/15/19 05:29	M5
EPA 5030/8260	trans-1,2-Dichloroethene	14.5	ug/L	5.0	02/13/19 22:52	M5
EPA 5030/8260	Trichloroethene	9.1	ug/L	5.0	02/13/19 22:52	M5
50216680020	**TMW-7D**					
EPA 5030/8260	cis-1,2-Dichloroethene	780	ug/L	50.0	02/15/19 06:03	M5
EPA 5030/8260	trans-1,2-Dichloroethene	38.2	ug/L	5.0	02/13/19 23:59	M5
50216680021	**TMW-5**					
EPA 5030/8260	Trichloroethene	479	ug/L	50.0	02/15/19 06:37	M5
50216680022	**TMW-5D**					
EPA 5030/8260	cis-1,2-Dichloroethene	1560	ug/L	50.0	02/15/19 07:11	M5
EPA 5030/8260	trans-1,2-Dichloroethene	139	ug/L	5.0	02/14/19 01:06	M5
EPA 5030/8260	Trichloroethene	528	ug/L	50.0	02/15/19 07:11	M5
50216680023	**TMW-6**					
EPA 5030/8260	cis-1,2-Dichloroethene	24.4	ug/L	5.0	02/13/19 15:52	
EPA 5030/8260	Trichloroethene	14.7	ug/L	5.0	02/13/19 15:52	
50216680024	**TMW-6D**					
EPA 5030/8260	cis-1,2-Dichloroethene	8.3	ug/L	5.0	02/13/19 16:26	
50216680025	**MW-22**					
EPA 5030/8260	cis-1,2-Dichloroethene	10.8	ug/L	5.0	02/13/19 17:00	
EPA 5030/8260	Tetrachloroethene	8.1	ug/L	5.0	02/13/19 17:00	
EPA 5030/8260	Trichloroethene	71.5	ug/L	5.0	02/13/19 17:00	
50216680026	**MW-22D**					
EPA 5030/8260	Tetrachloroethene	9.1	ug/L	5.0	02/13/19 17:33	
EPA 5030/8260	Trichloroethene	42.6	ug/L	5.0	02/13/19 17:33	
50216680027	**MW-31**					
EPA 5030/8260	Tetrachloroethene	171	ug/L	5.0	02/13/19 11:21	M1
EPA 5030/8260	Trichloroethene	173	ug/L	5.0	02/13/19 11:21	M1
50216680028	**MW-30**					
EPA 5030/8260	cis-1,2-Dichloroethene	5.4	ug/L	5.0	02/13/19 18:07	
50216680029	**MW-11**					
EPA 5030/8260	Tetrachloroethene	68.7	ug/L	5.0	02/13/19 19:13	
EPA 5030/8260	Trichloroethene	50.4	ug/L	5.0	02/13/19 19:13	
50216680032	**MW-14D**					
EPA 5030/8260	cis-1,2-Dichloroethene	26.4	ug/L	5.0	02/13/19 22:02	
EPA 5030/8260	Trichloroethene	583	ug/L	50.0	02/15/19 03:14	

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SUMMARY OF DETECTION

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50216680033	**MW-15**					
EPA 5030/8260	Trichloroethene	49.3	ug/L	5.0	02/13/19 22:35	
50216680034	**MW-15D**					
EPA 5030/8260	cis-1,2-Dichloroethene	780	ug/L	50.0	02/13/19 23:42	
EPA 5030/8260	trans-1,2-Dichloroethene	53.5	ug/L	5.0	02/13/19 23:09	
EPA 5030/8260	Trichloroethene	12.3	ug/L	5.0	02/13/19 23:09	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 26 **Lab ID: 50216680001** Collected: 02/05/19 11:54 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 07:59	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 07:59	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 07:59	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 07:59	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 07:59	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 07:59	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 07:59	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 07:59	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 07:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 07:59	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 07:59	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 07:59	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 07:59	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 07:59	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 07:59	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 07:59	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 07:59	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 07:59	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 07:59	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 07:59	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 07:59	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 07:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 07:59	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 07:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 07:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 07:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 07:59	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 07:59	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 07:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 07:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 07:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 07:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 07:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 07:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 07:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 07:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 07:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 07:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 07:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 07:59	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 07:59	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 07:59	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 07:59	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 07:59	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 07:59	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 07:59	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 07:59	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 26 **Lab ID: 50216680001** Collected: 02/05/19 11:54 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 07:59	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 07:59	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 07:59	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 07:59	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 07:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 07:59	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 07:59	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 07:59	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 07:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 07:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 07:59	79-34-5	
Tetrachloroethene	**14.8**	ug/L	5.0	1		02/13/19 07:59	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 07:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 07:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 07:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 07:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 07:59	79-00-5	
Trichloroethene	**46.1**	ug/L	5.0	1		02/13/19 07:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 07:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 07:59	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 07:59	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 07:59	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 07:59	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 07:59	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 07:59	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	89-116	1		02/13/19 07:59	1868-53-7	
4-Bromofluorobenzene (S)	91	%.	85-111	1		02/13/19 07:59	460-00-4	
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 07:59	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 32 **Lab ID: 50216680002** Collected: 02/05/19 12:14 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 08:33	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 08:33	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 08:33	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 08:33	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 08:33	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 08:33	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 08:33	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 08:33	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 08:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 08:33	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 08:33	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 08:33	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 08:33	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 08:33	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 08:33	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 08:33	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 08:33	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 08:33	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 08:33	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 08:33	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 08:33	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 08:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 08:33	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 08:33	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 08:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 08:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 08:33	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 08:33	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 08:33	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 08:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 08:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 08:33	75-35-4	
cis-1,2-Dichloroethene	**5.9**	ug/L	5.0	1		02/13/19 08:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 08:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 08:33	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 08:33	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 08:33	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 08:33	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 08:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 08:33	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 08:33	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 08:33	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 08:33	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 08:33	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 08:33	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 08:33	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 08:33	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 32 **Lab ID: 50216680002** Collected: 02/05/19 12:14 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 08:33	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 08:33	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 08:33	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 08:33	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 08:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 08:33	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 08:33	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 08:33	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 08:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 08:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 08:33	79-34-5	
Tetrachloroethene	**8.0**	ug/L	5.0	1		02/13/19 08:33	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 08:33	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 08:33	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 08:33	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 08:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 08:33	79-00-5	
Trichloroethene	**9.4**	ug/L	5.0	1		02/13/19 08:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 08:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 08:33	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 08:33	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 08:33	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 08:33	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 08:33	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 08:33	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	89-116	1		02/13/19 08:33	1868-53-7	
4-Bromofluorobenzene (S)	93	%.	85-111	1		02/13/19 08:33	460-00-4	
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 08:33	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 33 **Lab ID: 50216680003** Collected: 02/05/19 13:42 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 09:06	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 09:06	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 09:06	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 09:06	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 09:06	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 09:06	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 09:06	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 09:06	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 09:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 09:06	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 09:06	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 09:06	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 09:06	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 09:06	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 09:06	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 09:06	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 09:06	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 09:06	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 09:06	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 09:06	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 09:06	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 09:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 09:06	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 09:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 09:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 09:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 09:06	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 09:06	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 09:06	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 09:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 09:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 09:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 09:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 09:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 09:06	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 09:06	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 09:06	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 09:06	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 09:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 09:06	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 09:06	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 09:06	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 09:06	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 09:06	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 09:06	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 09:06	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 09:06	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 33 **Lab ID: 50216680003** Collected: 02/05/19 13:42 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 09:06	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 09:06	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 09:06	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 09:06	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 09:06	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 09:06	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 09:06	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 09:06	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 09:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 09:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 09:06	79-34-5	
Tetrachloroethene	**28.9**	ug/L	5.0	1		02/13/19 09:06	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 09:06	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 09:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 09:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 09:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 09:06	79-00-5	
Trichloroethene	**61.0**	ug/L	5.0	1		02/13/19 09:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 09:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 09:06	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 09:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 09:06	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 09:06	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 09:06	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 09:06	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	89-116	1		02/13/19 09:06	1868-53-7	
4-Bromofluorobenzene (S)	93	%.	85-111	1		02/13/19 09:06	460-00-4	
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 09:06	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 33D **Lab ID: 50216680004** Collected: 02/05/19 14:04 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 09:40	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 09:40	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 09:40	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 09:40	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 09:40	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 09:40	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 09:40	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 09:40	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 09:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 09:40	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 09:40	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 09:40	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 09:40	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 09:40	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 09:40	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 09:40	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 09:40	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 09:40	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 09:40	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 09:40	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 09:40	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 09:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 09:40	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 09:40	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 09:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 09:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 09:40	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 09:40	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 09:40	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 09:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 09:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 09:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 09:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 09:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 09:40	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 09:40	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 09:40	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 09:40	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 09:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 09:40	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 09:40	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 09:40	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 09:40	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 09:40	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 09:40	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 09:40	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 09:40	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 33D **Lab ID: 50216680004** Collected: 02/05/19 14:04 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 09:40	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 09:40	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 09:40	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 09:40	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 09:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 09:40	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 09:40	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 09:40	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 09:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 09:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 09:40	79-34-5	
Tetrachloroethene	**21.1**	ug/L	5.0	1		02/13/19 09:40	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 09:40	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 09:40	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 09:40	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 09:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 09:40	79-00-5	
Trichloroethene	**114**	ug/L	5.0	1		02/13/19 09:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 09:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 09:40	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 09:40	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 09:40	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 09:40	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 09:40	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 09:40	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	89-116	1		02/13/19 09:40	1868-53-7	
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 09:40	460-00-4	
Toluene-d8 (S)	96	%.	87-110	1		02/13/19 09:40	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 29 **Lab ID: 50216680005** Collected: 02/05/19 14:56 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 10:14	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 10:14	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 10:14	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 10:14	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 10:14	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 10:14	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 10:14	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 10:14	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 10:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 10:14	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 10:14	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 10:14	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 10:14	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 10:14	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 10:14	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 10:14	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 10:14	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 10:14	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 10:14	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 10:14	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 10:14	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 10:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 10:14	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 10:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 10:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 10:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 10:14	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 10:14	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 10:14	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 10:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 10:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 10:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 10:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 10:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 10:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 10:14	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 10:14	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 10:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 10:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 10:14	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 10:14	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 10:14	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 10:14	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 10:14	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 10:14	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 10:14	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 10:14	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 29 **Lab ID: 50216680005** Collected: 02/05/19 14:56 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 10:14	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 10:14	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 10:14	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 10:14	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 10:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 10:14	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 10:14	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 10:14	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 10:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 10:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 10:14	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 10:14	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 10:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 10:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 10:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 10:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 10:14	79-00-5	
Trichloroethene	**34.5**	ug/L	5.0	1		02/13/19 10:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 10:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 10:14	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 10:14	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 10:14	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 10:14	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 10:14	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 10:14	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101	%.	89-116	1		02/13/19 10:14	1868-53-7	
4-Bromofluorobenzene (S)	93	%.	85-111	1		02/13/19 10:14	460-00-4	
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 10:14	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 29D **Lab ID: 50216680006** Collected: 02/05/19 15:07 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 10:47	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 10:47	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 10:47	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 10:47	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 10:47	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 10:47	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 10:47	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 10:47	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 10:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 10:47	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 10:47	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 10:47	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 10:47	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 10:47	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 10:47	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 10:47	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 10:47	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 10:47	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 10:47	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 10:47	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 10:47	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 10:47	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 10:47	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 10:47	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 10:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 10:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 10:47	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 10:47	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 10:47	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 10:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 10:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 10:47	75-35-4	
cis-1,2-Dichloroethene	**25.7**	ug/L	5.0	1		02/13/19 10:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 10:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 10:47	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 10:47	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 10:47	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 10:47	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 10:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 10:47	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 10:47	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 10:47	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 10:47	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 10:47	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 10:47	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 10:47	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 10:47	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 29D **Lab ID: 50216680006** Collected: 02/05/19 15:07 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 10:47	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 10:47	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 10:47	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 10:47	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 10:47	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 10:47	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 10:47	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 10:47	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 10:47	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 10:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 10:47	79-34-5	
Tetrachloroethene	**13.4**	ug/L	5.0	1		02/13/19 10:47	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 10:47	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 10:47	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 10:47	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 10:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 10:47	79-00-5	
Trichloroethene	**149**	ug/L	5.0	1		02/13/19 10:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 10:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 10:47	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 10:47	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 10:47	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 10:47	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 10:47	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 10:47	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	89-116	1		02/13/19 10:47	1868-53-7	
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 10:47	460-00-4	
Toluene-d8 (S)	97	%.	87-110	1		02/13/19 10:47	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 12 **Lab ID: 50216680007** Collected: 02/05/19 15:53 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 15:35	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 15:35	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 15:35	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 15:35	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 15:35	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 15:35	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 15:35	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 15:35	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 15:35	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 15:35	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 15:35	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 15:35	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 15:35	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 15:35	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 15:35	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 15:35	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 15:35	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 15:35	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 15:35	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 15:35	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 15:35	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 15:35	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 15:35	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 15:35	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 15:35	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 15:35	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 15:35	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 15:35	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 15:35	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 15:35	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 15:35	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 15:35	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 15:35	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 15:35	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 15:35	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 15:35	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 15:35	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 15:35	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 15:35	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 15:35	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 15:35	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 15:35	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 15:35	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 15:35	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 15:35	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 15:35	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 15:35	98-82-8	L1,M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 12 **Lab ID: 50216680007** Collected: 02/05/19 15:53 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 15:35	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 15:35	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 15:35	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 15:35	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 15:35	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 15:35	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 15:35	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 15:35	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 15:35	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 15:35	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 15:35	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 15:35	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 15:35	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 15:35	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 15:35	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 15:35	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 15:35	79-00-5	M5
Trichloroethene	**38.8**	ug/L	5.0	1		02/13/19 15:35	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 15:35	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 15:35	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 15:35	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 15:35	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 15:35	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 15:35	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 15:35	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	103	%.	89-116	1		02/13/19 15:35	1868-53-7	M5
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 15:35	460-00-4	M5
Toluene-d8 (S)	94	%.	87-110	1		02/13/19 15:35	2037-26-5	M5

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 12D **Lab ID: 50216680008** Collected: 02/05/19 16:12 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 16:09	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 16:09	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 16:09	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 16:09	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 16:09	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 16:09	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 16:09	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 16:09	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 16:09	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 16:09	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 16:09	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 16:09	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 16:09	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 16:09	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 16:09	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 16:09	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 16:09	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 16:09	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 16:09	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 16:09	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 16:09	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 16:09	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 16:09	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 16:09	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:09	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:09	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:09	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 16:09	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 16:09	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 16:09	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 16:09	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 16:09	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 16:09	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 16:09	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 16:09	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 16:09	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 16:09	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 16:09	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 16:09	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 16:09	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 16:09	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 16:09	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 16:09	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 16:09	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 16:09	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 16:09	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 16:09	98-82-8	L1,M5

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Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW 12D **Lab ID: 50216680008** Collected: 02/05/19 16:12 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 16:09	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 16:09	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 16:09	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 16:09	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 16:09	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 16:09	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 16:09	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 16:09	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 16:09	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 16:09	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 16:09	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 16:09	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 16:09	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:09	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:09	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 16:09	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 16:09	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		02/13/19 16:09	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 16:09	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 16:09	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 16:09	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 16:09	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 16:09	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 16:09	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 16:09	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	107	%.	89-116	1		02/13/19 16:09	1868-53-7	M5
4-Bromofluorobenzene (S)	92	%.	85-111	1		02/13/19 16:09	460-00-4	M5
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 16:09	2037-26-5	M5

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Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: DUP A **Lab ID: 50216680009** Collected: 02/08/19 08:00 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 16:43	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 16:43	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 16:43	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 16:43	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 16:43	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 16:43	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 16:43	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 16:43	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 16:43	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 16:43	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 16:43	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 16:43	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 16:43	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 16:43	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 16:43	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 16:43	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 16:43	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 16:43	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 16:43	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 16:43	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 16:43	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 16:43	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 16:43	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 16:43	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:43	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:43	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:43	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 16:43	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 16:43	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 16:43	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 16:43	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 16:43	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 16:43	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 16:43	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 16:43	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 16:43	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 16:43	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 16:43	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 16:43	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 16:43	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 16:43	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 16:43	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 16:43	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 16:43	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 16:43	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 16:43	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 16:43	98-82-8	L1,M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: DUP A **Lab ID: 50216680009** Collected: 02/08/19 08:00 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 16:43	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 16:43	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 16:43	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 16:43	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 16:43	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 16:43	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 16:43	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 16:43	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 16:43	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 16:43	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 16:43	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 16:43	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 16:43	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:43	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:43	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 16:43	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 16:43	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		02/13/19 16:43	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 16:43	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 16:43	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 16:43	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 16:43	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 16:43	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 16:43	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 16:43	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	102	%.	89-116	1		02/13/19 16:43	1868-53-7	M5
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 16:43	460-00-4	M5
Toluene-d8 (S)	96	%.	87-110	1		02/13/19 16:43	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: DUP B **Lab ID: 50216680010** Collected: 02/08/19 08:00 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 17:50	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 17:50	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 17:50	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 17:50	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 17:50	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 17:50	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 17:50	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 17:50	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 17:50	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 17:50	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 17:50	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 17:50	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 17:50	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 17:50	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 17:50	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 17:50	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 17:50	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 17:50	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 17:50	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 17:50	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 17:50	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 17:50	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 17:50	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 17:50	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:50	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:50	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:50	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 17:50	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 17:50	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 17:50	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 17:50	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 17:50	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 17:50	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 17:50	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 17:50	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 17:50	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 17:50	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 17:50	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 17:50	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 17:50	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 17:50	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 17:50	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 17:50	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 17:50	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 17:50	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 17:50	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 17:50	98-82-8	L1,M5

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: DUP B **Lab ID: 50216680010** Collected: 02/08/19 08:00 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 17:50	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 17:50	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 17:50	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 17:50	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 17:50	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 17:50	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 17:50	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 17:50	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 17:50	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 17:50	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 17:50	79-34-5	M5
Tetrachloroethene	**69.7**	ug/L	5.0	1		02/13/19 17:50	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 17:50	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:50	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:50	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 17:50	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 17:50	79-00-5	M5
Trichloroethene	**55.9**	ug/L	5.0	1		02/13/19 17:50	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 17:50	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 17:50	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 17:50	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 17:50	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 17:50	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 17:50	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 17:50	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	102	%.	89-116	1		02/13/19 17:50	1868-53-7	M5
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 17:50	460-00-4	M5
Toluene-d8 (S)	94	%.	87-110	1		02/13/19 17:50	2037-26-5	M5

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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-3 **Lab ID: 50216680011** Collected: 02/06/19 12:15 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 18:56	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 18:56	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 18:56	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 18:56	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 18:56	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 18:56	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 18:56	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 18:56	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 18:56	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 18:56	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 18:56	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 18:56	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 18:56	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 18:56	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 18:56	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 18:56	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 18:56	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 18:56	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 18:56	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 18:56	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 18:56	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 18:56	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 18:56	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 18:56	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 18:56	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 18:56	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 18:56	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 18:56	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 18:56	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 18:56	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 18:56	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 18:56	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 18:56	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 18:56	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 18:56	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 18:56	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 18:56	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 18:56	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 18:56	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 18:56	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 18:56	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 18:56	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 18:56	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 18:56	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 18:56	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 18:56	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 18:56	98-82-8	L1,M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-3 **Lab ID: 50216680011** Collected: 02/06/19 12:15 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 18:56	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 18:56	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 18:56	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 18:56	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 18:56	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 18:56	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 18:56	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 18:56	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 18:56	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 18:56	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 18:56	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 18:56	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 18:56	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 18:56	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 18:56	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 18:56	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 18:56	79-00-5	M5
Trichloroethene	**30.4**	ug/L	5.0	1		02/13/19 18:56	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 18:56	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 18:56	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 18:56	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 18:56	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 18:56	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 18:56	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 18:56	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	104	%.	89-116	1		02/13/19 18:56	1868-53-7	M5
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 18:56	460-00-4	M5
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 18:56	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-3D **Lab ID: 50216680012** Collected: 02/06/19 12:15 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 19:30	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 19:30	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 19:30	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 19:30	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 19:30	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 19:30	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 19:30	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 19:30	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 19:30	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 19:30	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 19:30	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 19:30	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 19:30	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 19:30	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 19:30	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 19:30	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 19:30	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 19:30	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 19:30	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 19:30	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 19:30	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 19:30	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 19:30	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 19:30	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:30	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:30	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:30	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 19:30	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 19:30	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 19:30	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 19:30	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 19:30	75-35-4	M5
cis-1,2-Dichloroethene	**1060**	ug/L	50.0	10		02/15/19 03:48	156-59-2	M5
trans-1,2-Dichloroethene	**87.5**	ug/L	5.0	1		02/13/19 19:30	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 19:30	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 19:30	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 19:30	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 19:30	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 19:30	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 19:30	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 19:30	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 19:30	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 19:30	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 19:30	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 19:30	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 19:30	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 19:30	98-82-8	L1,M5

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-3D **Lab ID: 50216680012** Collected: 02/06/19 12:15 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 19:30	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 19:30	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 19:30	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 19:30	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 19:30	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 19:30	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 19:30	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 19:30	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 19:30	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 19:30	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 19:30	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 19:30	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 19:30	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:30	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:30	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 19:30	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 19:30	79-00-5	M5
Trichloroethene	**383**	ug/L	50.0	10		02/15/19 03:48	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 19:30	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 19:30	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 19:30	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 19:30	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 19:30	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 19:30	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 19:30	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	102	%.	89-116	1		02/13/19 19:30	1868-53-7	M5
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 19:30	460-00-4	M5
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 19:30	2037-26-5	M5

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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-2 **Lab ID: 50216680013** Collected: 02/06/19 13:20 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 20:04	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 20:04	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 20:04	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 20:04	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 20:04	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 20:04	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 20:04	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 20:04	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 20:04	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 20:04	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 20:04	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 20:04	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 20:04	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 20:04	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 20:04	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 20:04	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 20:04	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 20:04	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 20:04	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 20:04	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 20:04	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 20:04	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 20:04	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 20:04	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 20:04	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 20:04	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 20:04	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 20:04	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 20:04	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 20:04	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 20:04	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 20:04	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 20:04	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 20:04	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 20:04	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 20:04	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 20:04	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 20:04	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 20:04	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 20:04	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 20:04	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 20:04	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 20:04	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 20:04	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 20:04	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 20:04	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 20:04	98-82-8	L1,M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-2 **Lab ID: 50216680013** Collected: 02/06/19 13:20 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 20:04	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 20:04	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 20:04	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 20:04	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 20:04	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 20:04	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 20:04	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 20:04	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 20:04	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 20:04	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 20:04	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 20:04	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 20:04	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 20:04	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 20:04	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 20:04	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 20:04	79-00-5	M5
Trichloroethene	**94.1**	ug/L	5.0	1		02/13/19 20:04	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 20:04	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 20:04	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 20:04	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 20:04	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 20:04	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 20:04	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 20:04	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	104	%.	89-116	1		02/13/19 20:04	1868-53-7	M5
4-Bromofluorobenzene (S)	92	%.	85-111	1		02/13/19 20:04	460-00-4	M5
Toluene-d8 (S)	94	%.	87-110	1		02/13/19 20:04	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-2D **Lab ID: 50216680014** Collected: 02/06/19 13:20 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 20:38	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 20:38	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 20:38	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 20:38	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 20:38	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 20:38	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 20:38	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 20:38	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 20:38	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 20:38	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 20:38	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 20:38	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 20:38	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 20:38	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 20:38	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 20:38	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 20:38	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 20:38	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 20:38	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 20:38	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 20:38	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 20:38	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 20:38	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 20:38	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 20:38	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 20:38	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 20:38	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 20:38	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 20:38	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 20:38	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 20:38	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 20:38	75-35-4	M5
cis-1,2-Dichloroethene	**550**	ug/L	50.0	10		02/15/19 04:22	156-59-2	M5
trans-1,2-Dichloroethene	**43.4**	ug/L	5.0	1		02/13/19 20:38	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 20:38	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 20:38	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 20:38	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 20:38	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 20:38	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 20:38	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 20:38	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 20:38	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 20:38	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 20:38	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 20:38	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 20:38	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 20:38	98-82-8	L1,M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-2D **Lab ID: 50216680014** Collected: 02/06/19 13:20 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 20:38	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 20:38	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 20:38	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 20:38	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 20:38	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 20:38	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 20:38	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 20:38	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 20:38	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 20:38	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 20:38	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 20:38	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 20:38	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 20:38	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 20:38	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 20:38	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 20:38	79-00-5	M5
Trichloroethene	**15.9**	ug/L	5.0	1		02/13/19 20:38	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 20:38	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 20:38	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 20:38	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 20:38	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 20:38	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 20:38	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 20:38	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	104	%.	89-116	1		02/13/19 20:38	1868-53-7	M5
4-Bromofluorobenzene (S)	96	%.	85-111	1		02/13/19 20:38	460-00-4	M5
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 20:38	2037-26-5	M5

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-1 **Lab ID: 50216680015** Collected: 02/06/19 14:20 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 21:11	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 21:11	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 21:11	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 21:11	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 21:11	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 21:11	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 21:11	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 21:11	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 21:11	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 21:11	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 21:11	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 21:11	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 21:11	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 21:11	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 21:11	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 21:11	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 21:11	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 21:11	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 21:11	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 21:11	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 21:11	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 21:11	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 21:11	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 21:11	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:11	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:11	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:11	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 21:11	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 21:11	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 21:11	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 21:11	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 21:11	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 21:11	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 21:11	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 21:11	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 21:11	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 21:11	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 21:11	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 21:11	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 21:11	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 21:11	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 21:11	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 21:11	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 21:11	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 21:11	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 21:11	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 21:11	98-82-8	L1,M5

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-1 **Lab ID: 50216680015** Collected: 02/06/19 14:20 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 21:11	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 21:11	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 21:11	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 21:11	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 21:11	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 21:11	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 21:11	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 21:11	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 21:11	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 21:11	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 21:11	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 21:11	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 21:11	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:11	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:11	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 21:11	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 21:11	79-00-5	M5
Trichloroethene	**11.2**	ug/L	5.0	1		02/13/19 21:11	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 21:11	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 21:11	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 21:11	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 21:11	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 21:11	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 21:11	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 21:11	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	103	%.	89-116	1		02/13/19 21:11	1868-53-7	M5
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 21:11	460-00-4	M5
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 21:11	2037-26-5	M5

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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-1D **Lab ID: 50216680016** Collected: 02/06/19 14:20 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 21:44	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 21:44	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 21:44	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 21:44	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 21:44	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 21:44	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 21:44	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 21:44	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 21:44	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 21:44	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 21:44	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 21:44	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 21:44	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 21:44	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 21:44	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 21:44	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 21:44	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 21:44	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 21:44	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 21:44	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 21:44	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 21:44	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 21:44	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 21:44	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:44	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:44	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:44	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 21:44	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 21:44	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 21:44	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 21:44	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 21:44	75-35-4	M5
cis-1,2-Dichloroethene	**510**	ug/L	50.0	10		02/15/19 04:56	156-59-2	M5
trans-1,2-Dichloroethene	**41.6**	ug/L	5.0	1		02/13/19 21:44	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 21:44	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 21:44	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 21:44	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 21:44	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 21:44	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 21:44	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 21:44	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 21:44	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 21:44	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 21:44	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 21:44	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 21:44	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 21:44	98-82-8	L1,M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-1D **Lab ID: 50216680016** Collected: 02/06/19 14:20 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 21:44	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 21:44	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 21:44	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 21:44	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 21:44	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 21:44	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 21:44	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 21:44	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 21:44	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 21:44	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 21:44	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 21:44	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 21:44	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:44	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:44	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 21:44	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 21:44	79-00-5	M5
Trichloroethene	**24.2**	ug/L	5.0	1		02/13/19 21:44	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 21:44	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 21:44	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 21:44	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 21:44	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 21:44	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 21:44	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 21:44	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	103	%.	89-116	1		02/13/19 21:44	1868-53-7	M5
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 21:44	460-00-4	M5
Toluene-d8 (S)	94	%.	87-110	1		02/13/19 21:44	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-4 **Lab ID: 50216680017** Collected: 02/07/19 11:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 22:18	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 22:18	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 22:18	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 22:18	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 22:18	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 22:18	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 22:18	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 22:18	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 22:18	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 22:18	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:18	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:18	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:18	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 22:18	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 22:18	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 22:18	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 22:18	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 22:18	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 22:18	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 22:18	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 22:18	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 22:18	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 22:18	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 22:18	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:18	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:18	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:18	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 22:18	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 22:18	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 22:18	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 22:18	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 22:18	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 22:18	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 22:18	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:18	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:18	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:18	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:18	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:18	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:18	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 22:18	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 22:18	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 22:18	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 22:18	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 22:18	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 22:18	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 22:18	98-82-8	L1,M5

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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-4 **Lab ID: 50216680017** Collected: 02/07/19 11:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 22:18	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 22:18	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 22:18	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 22:18	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 22:18	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 22:18	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 22:18	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 22:18	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 22:18	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 22:18	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 22:18	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 22:18	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 22:18	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:18	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:18	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 22:18	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 22:18	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		02/13/19 22:18	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 22:18	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 22:18	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 22:18	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 22:18	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 22:18	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 22:18	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 22:18	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	104	%.	89-116	1		02/13/19 22:18	1868-53-7	M5
4-Bromofluorobenzene (S)	96	%.	85-111	1		02/13/19 22:18	460-00-4	M5
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 22:18	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-4D **Lab ID: 50216680018** Collected: 02/07/19 11:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 22:52	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 22:52	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 22:52	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 22:52	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 22:52	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 22:52	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 22:52	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 22:52	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 22:52	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 22:52	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:52	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:52	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:52	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 22:52	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 22:52	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 22:52	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 22:52	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 22:52	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 22:52	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 22:52	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 22:52	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 22:52	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 22:52	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 22:52	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:52	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:52	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:52	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 22:52	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 22:52	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 22:52	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 22:52	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 22:52	75-35-4	M5
cis-1,2-Dichloroethene	**437**	ug/L	50.0	10		02/15/19 05:29	156-59-2	M5
trans-1,2-Dichloroethene	**14.5**	ug/L	5.0	1		02/13/19 22:52	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:52	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:52	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:52	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:52	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:52	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:52	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 22:52	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 22:52	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 22:52	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 22:52	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 22:52	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 22:52	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 22:52	98-82-8	L1,M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-4D **Lab ID: 50216680018** Collected: 02/07/19 11:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 22:52	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 22:52	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 22:52	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 22:52	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 22:52	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 22:52	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 22:52	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 22:52	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 22:52	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 22:52	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 22:52	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 22:52	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 22:52	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:52	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:52	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 22:52	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 22:52	79-00-5	M5
Trichloroethene	**9.1**	ug/L	5.0	1		02/13/19 22:52	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 22:52	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 22:52	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 22:52	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 22:52	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 22:52	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 22:52	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 22:52	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	105	%.	89-116	1		02/13/19 22:52	1868-53-7	M5
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 22:52	460-00-4	M5
Toluene-d8 (S)	94	%.	87-110	1		02/13/19 22:52	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-7 **Lab ID: 50216680019** Collected: 02/07/19 12:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 23:25	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 23:25	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 23:25	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 23:25	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 23:25	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 23:25	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 23:25	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 23:25	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 23:25	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 23:25	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 23:25	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 23:25	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 23:25	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 23:25	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 23:25	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 23:25	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 23:25	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 23:25	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 23:25	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 23:25	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 23:25	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 23:25	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 23:25	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 23:25	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:25	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:25	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:25	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 23:25	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 23:25	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 23:25	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 23:25	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 23:25	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 23:25	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 23:25	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 23:25	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 23:25	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 23:25	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 23:25	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 23:25	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 23:25	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 23:25	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 23:25	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 23:25	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 23:25	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 23:25	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 23:25	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 23:25	98-82-8	L1,M5

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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-7 **Lab ID: 50216680019** Collected: 02/07/19 12:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 23:25	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 23:25	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 23:25	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 23:25	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 23:25	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 23:25	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 23:25	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 23:25	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 23:25	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 23:25	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 23:25	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 23:25	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 23:25	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:25	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:25	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 23:25	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 23:25	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		02/13/19 23:25	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 23:25	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 23:25	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 23:25	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 23:25	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 23:25	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 23:25	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 23:25	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	103	%.	89-116	1		02/13/19 23:25	1868-53-7	M5
4-Bromofluorobenzene (S)	93	%.	85-111	1		02/13/19 23:25	460-00-4	M5
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 23:25	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-7D **Lab ID: 50216680020** Collected: 02/07/19 12:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 23:59	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/13/19 23:59	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/13/19 23:59	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/13/19 23:59	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/13/19 23:59	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 23:59	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 23:59	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/13/19 23:59	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/13/19 23:59	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 23:59	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 23:59	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 23:59	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 23:59	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 23:59	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 23:59	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 23:59	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/13/19 23:59	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/13/19 23:59	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/13/19 23:59	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 23:59	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 23:59	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 23:59	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 23:59	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/13/19 23:59	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:59	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:59	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:59	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 23:59	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 23:59	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 23:59	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 23:59	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 23:59	75-35-4	M5
cis-1,2-Dichloroethene	**780**	ug/L	50.0	10		02/15/19 06:03	156-59-2	M5
trans-1,2-Dichloroethene	**38.2**	ug/L	5.0	1		02/13/19 23:59	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 23:59	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 23:59	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 23:59	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 23:59	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 23:59	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 23:59	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 23:59	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 23:59	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 23:59	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/13/19 23:59	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/13/19 23:59	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/13/19 23:59	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 23:59	98-82-8	L1,M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-7D **Lab ID: 50216680020** Collected: 02/07/19 12:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 23:59	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 23:59	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 23:59	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 23:59	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 23:59	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 23:59	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/13/19 23:59	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 23:59	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/13/19 23:59	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 23:59	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 23:59	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 23:59	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/13/19 23:59	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:59	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:59	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 23:59	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 23:59	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		02/13/19 23:59	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 23:59	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 23:59	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 23:59	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 23:59	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 23:59	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 23:59	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 23:59	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	106	%.	89-116	1		02/13/19 23:59	1868-53-7	M5
4-Bromofluorobenzene (S)	93	%.	85-111	1		02/13/19 23:59	460-00-4	M5
Toluene-d8 (S)	96	%.	87-110	1		02/13/19 23:59	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-5 **Lab ID: 50216680021** Collected: 02/08/19 10:25 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/14/19 00:33	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/14/19 00:33	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/14/19 00:33	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/14/19 00:33	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/14/19 00:33	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/14/19 00:33	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/14/19 00:33	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/14/19 00:33	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/14/19 00:33	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/14/19 00:33	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/14/19 00:33	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/14/19 00:33	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/14/19 00:33	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/14/19 00:33	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/14/19 00:33	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/14/19 00:33	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/14/19 00:33	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/14/19 00:33	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/14/19 00:33	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/14/19 00:33	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/14/19 00:33	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/14/19 00:33	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/14/19 00:33	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/14/19 00:33	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/14/19 00:33	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/14/19 00:33	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/14/19 00:33	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/14/19 00:33	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/14/19 00:33	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/14/19 00:33	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/14/19 00:33	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/14/19 00:33	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/14/19 00:33	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/14/19 00:33	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/14/19 00:33	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/14/19 00:33	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/14/19 00:33	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/14/19 00:33	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/14/19 00:33	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/14/19 00:33	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/14/19 00:33	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/14/19 00:33	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/14/19 00:33	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/14/19 00:33	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/14/19 00:33	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/14/19 00:33	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/14/19 00:33	98-82-8	L1,M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-5 **Lab ID: 50216680021** Collected: 02/08/19 10:25 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/14/19 00:33	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/14/19 00:33	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/14/19 00:33	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/14/19 00:33	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/14/19 00:33	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/14/19 00:33	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/14/19 00:33	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/14/19 00:33	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/14/19 00:33	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/14/19 00:33	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/14/19 00:33	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/14/19 00:33	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/14/19 00:33	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/14/19 00:33	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/14/19 00:33	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/14/19 00:33	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/14/19 00:33	79-00-5	M5
Trichloroethene	**479**	ug/L	50.0	10		02/15/19 06:37	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/14/19 00:33	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/14/19 00:33	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/14/19 00:33	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/14/19 00:33	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/14/19 00:33	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/14/19 00:33	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/14/19 00:33	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	102	%.	89-116	1		02/14/19 00:33	1868-53-7	M5
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/14/19 00:33	460-00-4	M5
Toluene-d8 (S)	96	%.	87-110	1		02/14/19 00:33	2037-26-5	M5

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-5D **Lab ID: 50216680022** Collected: 02/08/19 10:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/14/19 01:06	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		02/14/19 01:06	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		02/14/19 01:06	107-13-1	M5
Benzene	ND	ug/L	5.0	1		02/14/19 01:06	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		02/14/19 01:06	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		02/14/19 01:06	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		02/14/19 01:06	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		02/14/19 01:06	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		02/14/19 01:06	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		02/14/19 01:06	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		02/14/19 01:06	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		02/14/19 01:06	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		02/14/19 01:06	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		02/14/19 01:06	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		02/14/19 01:06	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		02/14/19 01:06	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		02/14/19 01:06	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		02/14/19 01:06	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		02/14/19 01:06	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		02/14/19 01:06	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		02/14/19 01:06	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		02/14/19 01:06	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/14/19 01:06	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		02/14/19 01:06	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/14/19 01:06	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/14/19 01:06	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/14/19 01:06	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/14/19 01:06	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/14/19 01:06	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		02/14/19 01:06	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		02/14/19 01:06	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		02/14/19 01:06	75-35-4	M5
cis-1,2-Dichloroethene	**1560**	ug/L	50.0	10		02/15/19 07:11	156-59-2	M5
trans-1,2-Dichloroethene	**139**	ug/L	5.0	1		02/14/19 01:06	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		02/14/19 01:06	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		02/14/19 01:06	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		02/14/19 01:06	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		02/14/19 01:06	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/14/19 01:06	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/14/19 01:06	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		02/14/19 01:06	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		02/14/19 01:06	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/14/19 01:06	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		02/14/19 01:06	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		02/14/19 01:06	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		02/14/19 01:06	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/14/19 01:06	98-82-8	L1,M5

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-5D **Lab ID: 50216680022** Collected: 02/08/19 10:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/14/19 01:06	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		02/14/19 01:06	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		02/14/19 01:06	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/14/19 01:06	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/14/19 01:06	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/14/19 01:06	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		02/14/19 01:06	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		02/14/19 01:06	103-65-1	M5
Styrene	ND	ug/L	5.0	1		02/14/19 01:06	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/14/19 01:06	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/14/19 01:06	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		02/14/19 01:06	127-18-4	M5
Toluene	ND	ug/L	5.0	1		02/14/19 01:06	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/14/19 01:06	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/14/19 01:06	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/14/19 01:06	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/14/19 01:06	79-00-5	M5
Trichloroethene	**528**	ug/L	50.0	10		02/15/19 07:11	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		02/14/19 01:06	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/14/19 01:06	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/14/19 01:06	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/14/19 01:06	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		02/14/19 01:06	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		02/14/19 01:06	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		02/14/19 01:06	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	102	%.	89-116	1		02/14/19 01:06	1868-53-7	M5
4-Bromofluorobenzene (S)	96	%.	85-111	1		02/14/19 01:06	460-00-4	M5
Toluene-d8 (S)	95	%.	87-110	1		02/14/19 01:06	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-6 **Lab ID: 50216680023** Collected: 02/08/19 11:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 15:52	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 15:52	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 15:52	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 15:52	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 15:52	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 15:52	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 15:52	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 15:52	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 15:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 15:52	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 15:52	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 15:52	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 15:52	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 15:52	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 15:52	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 15:52	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 15:52	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 15:52	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 15:52	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 15:52	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 15:52	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 15:52	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 15:52	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 15:52	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 15:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 15:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 15:52	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 15:52	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 15:52	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 15:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 15:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 15:52	75-35-4	
cis-1,2-Dichloroethene	**24.4**	ug/L	5.0	1		02/13/19 15:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 15:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 15:52	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 15:52	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 15:52	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 15:52	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 15:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 15:52	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 15:52	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 15:52	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 15:52	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 15:52	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 15:52	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 15:52	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 15:52	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-6 **Lab ID: 50216680023** Collected: 02/08/19 11:10 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 15:52	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 15:52	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 15:52	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 15:52	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 15:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 15:52	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 15:52	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 15:52	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 15:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 15:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 15:52	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 15:52	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 15:52	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 15:52	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 15:52	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 15:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 15:52	79-00-5	
Trichloroethene	**14.7**	ug/L	5.0	1		02/13/19 15:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 15:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 15:52	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 15:52	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 15:52	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 15:52	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 15:52	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 15:52	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	109	%.	89-116	1		02/13/19 15:52	1868-53-7	
4-Bromofluorobenzene (S)	93	%.	85-111	1		02/13/19 15:52	460-00-4	
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 15:52	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-6D **Lab ID: 50216680024** Collected: 02/08/19 11:25 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 16:26	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 16:26	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 16:26	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 16:26	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 16:26	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 16:26	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 16:26	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 16:26	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 16:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 16:26	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 16:26	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 16:26	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 16:26	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 16:26	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 16:26	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 16:26	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 16:26	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 16:26	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 16:26	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 16:26	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 16:26	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 16:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 16:26	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 16:26	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:26	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 16:26	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 16:26	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 16:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 16:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 16:26	75-35-4	
cis-1,2-Dichloroethene	**8.3**	ug/L	5.0	1		02/13/19 16:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 16:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 16:26	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 16:26	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 16:26	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 16:26	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 16:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 16:26	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 16:26	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 16:26	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 16:26	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 16:26	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 16:26	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 16:26	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 16:26	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: TMW-6D **Lab ID: 50216680024** Collected: 02/08/19 11:25 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 16:26	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 16:26	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 16:26	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 16:26	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 16:26	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 16:26	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 16:26	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 16:26	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 16:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 16:26	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 16:26	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 16:26	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 16:26	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:26	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 16:26	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 16:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 16:26	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		02/13/19 16:26	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 16:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 16:26	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 16:26	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 16:26	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 16:26	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 16:26	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 16:26	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	111	%.	89-116	1		02/13/19 16:26	1868-53-7	
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 16:26	460-00-4	
Toluene-d8 (S)	94	%.	87-110	1		02/13/19 16:26	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-22 **Lab ID: 50216680025** Collected: 02/08/19 12:20 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 17:00	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 17:00	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 17:00	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 17:00	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 17:00	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 17:00	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 17:00	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 17:00	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 17:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 17:00	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 17:00	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 17:00	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 17:00	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 17:00	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 17:00	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 17:00	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 17:00	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 17:00	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 17:00	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 17:00	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 17:00	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 17:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 17:00	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 17:00	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:00	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 17:00	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 17:00	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 17:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 17:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 17:00	75-35-4	
cis-1,2-Dichloroethene	**10.8**	ug/L	5.0	1		02/13/19 17:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 17:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 17:00	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 17:00	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 17:00	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 17:00	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 17:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 17:00	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 17:00	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 17:00	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 17:00	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 17:00	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 17:00	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 17:00	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 17:00	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-22 **Lab ID: 50216680025** Collected: 02/08/19 12:20 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 17:00	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 17:00	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 17:00	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 17:00	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 17:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 17:00	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 17:00	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 17:00	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 17:00	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 17:00	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 17:00	79-34-5	
Tetrachloroethene	**8.1**	ug/L	5.0	1		02/13/19 17:00	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 17:00	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:00	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 17:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 17:00	79-00-5	
Trichloroethene	**71.5**	ug/L	5.0	1		02/13/19 17:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 17:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 17:00	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 17:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 17:00	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 17:00	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 17:00	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 17:00	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	109	%.	89-116	1		02/13/19 17:00	1868-53-7	
4-Bromofluorobenzene (S)	91	%.	85-111	1		02/13/19 17:00	460-00-4	
Toluene-d8 (S)	94	%.	87-110	1		02/13/19 17:00	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-22D **Lab ID: 50216680026** Collected: 02/08/19 12:30 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 17:33	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 17:33	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 17:33	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 17:33	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 17:33	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 17:33	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 17:33	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 17:33	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 17:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 17:33	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 17:33	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 17:33	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 17:33	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 17:33	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 17:33	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 17:33	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 17:33	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 17:33	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 17:33	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 17:33	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 17:33	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 17:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 17:33	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 17:33	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:33	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 17:33	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 17:33	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 17:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 17:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 17:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 17:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 17:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 17:33	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 17:33	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 17:33	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 17:33	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 17:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 17:33	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 17:33	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 17:33	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 17:33	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 17:33	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 17:33	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 17:33	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 17:33	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-22D **Lab ID: 50216680026** Collected: 02/08/19 12:30 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 17:33	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 17:33	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 17:33	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 17:33	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 17:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 17:33	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 17:33	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 17:33	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 17:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 17:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 17:33	79-34-5	
Tetrachloroethene	**9.1**	ug/L	5.0	1		02/13/19 17:33	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 17:33	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:33	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 17:33	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 17:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 17:33	79-00-5	
Trichloroethene	**42.6**	ug/L	5.0	1		02/13/19 17:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 17:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 17:33	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 17:33	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 17:33	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 17:33	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 17:33	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 17:33	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	110	%.	89-116	1		02/13/19 17:33	1868-53-7	
4-Bromofluorobenzene (S)	93	%.	85-111	1		02/13/19 17:33	460-00-4	
Toluene-d8 (S)	93	%.	87-110	1		02/13/19 17:33	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-31 **Lab ID: 50216680027** Collected: 02/08/19 13:35 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 11:21	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 11:21	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 11:21	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 11:21	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 11:21	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 11:21	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 11:21	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 11:21	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 11:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 11:21	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 11:21	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 11:21	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 11:21	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 11:21	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 11:21	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 11:21	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 11:21	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 11:21	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 11:21	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 11:21	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 11:21	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 11:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 11:21	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 11:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 11:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 11:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 11:21	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 11:21	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 11:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 11:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 11:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 11:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 11:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 11:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 11:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 11:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 11:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 11:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 11:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 11:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 11:21	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 11:21	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 11:21	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 11:21	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 11:21	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 11:21	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 11:21	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-31 **Lab ID: 50216680027** Collected: 02/08/19 13:35 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 11:21	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 11:21	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 11:21	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 11:21	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 11:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 11:21	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 11:21	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 11:21	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 11:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 11:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 11:21	79-34-5	
Tetrachloroethene	**171**	ug/L	5.0	1		02/13/19 11:21	127-18-4	M1
Toluene	ND	ug/L	5.0	1		02/13/19 11:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 11:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 11:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 11:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 11:21	79-00-5	
Trichloroethene	**173**	ug/L	5.0	1		02/13/19 11:21	79-01-6	M1
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 11:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 11:21	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 11:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 11:21	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 11:21	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 11:21	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 11:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100	%.	89-116	1		02/13/19 11:21	1868-53-7	
4-Bromofluorobenzene (S)	93	%.	85-111	1		02/13/19 11:21	460-00-4	
Toluene-d8 (S)	96	%.	87-110	1		02/13/19 11:21	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-30 **Lab ID: 50216680028** Collected: 02/08/19 13:30 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 18:07	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 18:07	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 18:07	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 18:07	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 18:07	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 18:07	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 18:07	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 18:07	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 18:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 18:07	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 18:07	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 18:07	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 18:07	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 18:07	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 18:07	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 18:07	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 18:07	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 18:07	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 18:07	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 18:07	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 18:07	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 18:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 18:07	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 18:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 18:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 18:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 18:07	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 18:07	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 18:07	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 18:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 18:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 18:07	75-35-4	
cis-1,2-Dichloroethene	**5.4**	ug/L	5.0	1		02/13/19 18:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 18:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 18:07	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 18:07	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 18:07	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 18:07	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 18:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 18:07	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 18:07	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 18:07	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 18:07	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 18:07	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 18:07	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 18:07	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 18:07	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-30 **Lab ID: 50216680028** Collected: 02/08/19 13:30 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 18:07	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 18:07	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 18:07	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 18:07	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 18:07	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 18:07	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 18:07	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 18:07	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 18:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 18:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 18:07	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 18:07	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 18:07	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 18:07	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 18:07	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 18:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 18:07	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		02/13/19 18:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 18:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 18:07	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 18:07	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 18:07	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 18:07	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 18:07	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 18:07	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108	%.	89-116	1		02/13/19 18:07	1868-53-7	
4-Bromofluorobenzene (S)	92	%.	85-111	1		02/13/19 18:07	460-00-4	
Toluene-d8 (S)	94	%.	87-110	1		02/13/19 18:07	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-11 **Lab ID: 50216680029** Collected: 02/08/19 14:25 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 19:13	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 19:13	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 19:13	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 19:13	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 19:13	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 19:13	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 19:13	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 19:13	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 19:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 19:13	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 19:13	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 19:13	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 19:13	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 19:13	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 19:13	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 19:13	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 19:13	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 19:13	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 19:13	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 19:13	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 19:13	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 19:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 19:13	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 19:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:13	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 19:13	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 19:13	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 19:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 19:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 19:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 19:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 19:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 19:13	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 19:13	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 19:13	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 19:13	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 19:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 19:13	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 19:13	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 19:13	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 19:13	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 19:13	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 19:13	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 19:13	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 19:13	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-11 **Lab ID: 50216680029** Collected: 02/08/19 14:25 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 19:13	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 19:13	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 19:13	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 19:13	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 19:13	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 19:13	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 19:13	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 19:13	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 19:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 19:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 19:13	79-34-5	
Tetrachloroethene	**68.7**	ug/L	5.0	1		02/13/19 19:13	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 19:13	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:13	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:13	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 19:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 19:13	79-00-5	
Trichloroethene	**50.4**	ug/L	5.0	1		02/13/19 19:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 19:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 19:13	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 19:13	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 19:13	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 19:13	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 19:13	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 19:13	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	89-116	1		02/13/19 19:13	1868-53-7	
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 19:13	460-00-4	
Toluene-d8 (S)	97	%.	87-110	1		02/13/19 19:13	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-11D **Lab ID: 50216680030** Collected: 02/08/19 14:40 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 19:47	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 19:47	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 19:47	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 19:47	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 19:47	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 19:47	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 19:47	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 19:47	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 19:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 19:47	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 19:47	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 19:47	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 19:47	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 19:47	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 19:47	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 19:47	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 19:47	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 19:47	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 19:47	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 19:47	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 19:47	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 19:47	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 19:47	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 19:47	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:47	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 19:47	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 19:47	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 19:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 19:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 19:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 19:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 19:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 19:47	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 19:47	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 19:47	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 19:47	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 19:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 19:47	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 19:47	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 19:47	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 19:47	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 19:47	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 19:47	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 19:47	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 19:47	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-11D **Lab ID: 50216680030** Collected: 02/08/19 14:40 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 19:47	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 19:47	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 19:47	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 19:47	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 19:47	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 19:47	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 19:47	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 19:47	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 19:47	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 19:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 19:47	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 19:47	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 19:47	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:47	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 19:47	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 19:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 19:47	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		02/13/19 19:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 19:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 19:47	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 19:47	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 19:47	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 19:47	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 19:47	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 19:47	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108	%.	89-116	1		02/13/19 19:47	1868-53-7	
4-Bromofluorobenzene (S)	96	%.	85-111	1		02/13/19 19:47	460-00-4	
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 19:47	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-14 **Lab ID: 50216680031** Collected: 02/08/19 16:15 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 21:28	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 21:28	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 21:28	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 21:28	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 21:28	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 21:28	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 21:28	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 21:28	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 21:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 21:28	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 21:28	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 21:28	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 21:28	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 21:28	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 21:28	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 21:28	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 21:28	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 21:28	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 21:28	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 21:28	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 21:28	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 21:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 21:28	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 21:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:28	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 21:28	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 21:28	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 21:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 21:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 21:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 21:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 21:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 21:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 21:28	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 21:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 21:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 21:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 21:28	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 21:28	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 21:28	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 21:28	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 21:28	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 21:28	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 21:28	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 21:28	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-14 **Lab ID: 50216680031** Collected: 02/08/19 16:15 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 21:28	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 21:28	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 21:28	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 21:28	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 21:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 21:28	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 21:28	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 21:28	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 21:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 21:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 21:28	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 21:28	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 21:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:28	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 21:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 21:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 21:28	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		02/13/19 21:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 21:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 21:28	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 21:28	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 21:28	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 21:28	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 21:28	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 21:28	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	89-116	1		02/13/19 21:28	1868-53-7	
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/13/19 21:28	460-00-4	
Toluene-d8 (S)	93	%.	87-110	1		02/13/19 21:28	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-14D **Lab ID: 50216680032** Collected: 02/08/19 16:15 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 22:02	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 22:02	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 22:02	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 22:02	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 22:02	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 22:02	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 22:02	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 22:02	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 22:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 22:02	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:02	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:02	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:02	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 22:02	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 22:02	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 22:02	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 22:02	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 22:02	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 22:02	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 22:02	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 22:02	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 22:02	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 22:02	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 22:02	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:02	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 22:02	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 22:02	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 22:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 22:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 22:02	75-35-4	
cis-1,2-Dichloroethene	**26.4**	ug/L	5.0	1		02/13/19 22:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 22:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:02	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:02	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:02	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:02	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:02	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 22:02	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 22:02	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 22:02	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 22:02	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 22:02	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 22:02	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 22:02	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-14D **Lab ID: 50216680032** Collected: 02/08/19 16:15 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 22:02	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 22:02	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 22:02	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 22:02	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 22:02	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 22:02	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 22:02	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 22:02	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 22:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 22:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 22:02	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 22:02	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 22:02	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:02	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:02	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 22:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 22:02	79-00-5	
Trichloroethene	**583**	ug/L	50.0	10		02/15/19 03:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 22:02	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 22:02	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 22:02	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 22:02	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 22:02	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 22:02	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 22:02	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	89-116	1		02/13/19 22:02	1868-53-7	
4-Bromofluorobenzene (S)	95	%.	85-111	1		02/13/19 22:02	460-00-4	
Toluene-d8 (S)	95	%.	87-110	1		02/13/19 22:02	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-15 **Lab ID: 50216680033** Collected: 02/08/19 17:35 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 22:35	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 22:35	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 22:35	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 22:35	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 22:35	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 22:35	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 22:35	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 22:35	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 22:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 22:35	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:35	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:35	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 22:35	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 22:35	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 22:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 22:35	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 22:35	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 22:35	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 22:35	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 22:35	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 22:35	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 22:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 22:35	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 22:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:35	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 22:35	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 22:35	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 22:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 22:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 22:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 22:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/13/19 22:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:35	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:35	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 22:35	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 22:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 22:35	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 22:35	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 22:35	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 22:35	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 22:35	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 22:35	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 22:35	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-15 **Lab ID: 50216680033** Collected: 02/08/19 17:35 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 22:35	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 22:35	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 22:35	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 22:35	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 22:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 22:35	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 22:35	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 22:35	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 22:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 22:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 22:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 22:35	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 22:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 22:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 22:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 22:35	79-00-5	
Trichloroethene	**49.3**	ug/L	5.0	1		02/13/19 22:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 22:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 22:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 22:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 22:35	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 22:35	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 22:35	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 22:35	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	110	%.	89-116	1		02/13/19 22:35	1868-53-7	
4-Bromofluorobenzene (S)	95	%.	85-111	1		02/13/19 22:35	460-00-4	
Toluene-d8 (S)	94	%.	87-110	1		02/13/19 22:35	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-15D **Lab ID: 50216680034** Collected: 02/08/19 17:35 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/13/19 23:09	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/13/19 23:09	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/13/19 23:09	107-13-1	
Benzene	ND	ug/L	5.0	1		02/13/19 23:09	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/13/19 23:09	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/13/19 23:09	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/13/19 23:09	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/13/19 23:09	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/13/19 23:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/13/19 23:09	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/13/19 23:09	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/13/19 23:09	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/13/19 23:09	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/13/19 23:09	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/13/19 23:09	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/13/19 23:09	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/13/19 23:09	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/13/19 23:09	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/13/19 23:09	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 23:09	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/13/19 23:09	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/13/19 23:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/13/19 23:09	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/13/19 23:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:09	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/13/19 23:09	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/13/19 23:09	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/13/19 23:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/13/19 23:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/13/19 23:09	75-35-4	
cis-1,2-Dichloroethene	**780**	ug/L	50.0	10		02/13/19 23:42	156-59-2	
trans-1,2-Dichloroethene	**53.5**	ug/L	5.0	1		02/13/19 23:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 23:09	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/13/19 23:09	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/13/19 23:09	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/13/19 23:09	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 23:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/13/19 23:09	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/13/19 23:09	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/13/19 23:09	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/13/19 23:09	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/13/19 23:09	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/13/19 23:09	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/13/19 23:09	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/13/19 23:09	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: MW-15D **Lab ID: 50216680034** Collected: 02/08/19 17:35 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/13/19 23:09	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/13/19 23:09	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 23:09	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/13/19 23:09	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/13/19 23:09	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/13/19 23:09	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/13/19 23:09	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/13/19 23:09	103-65-1	
Styrene	ND	ug/L	5.0	1		02/13/19 23:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 23:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/13/19 23:09	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/13/19 23:09	127-18-4	
Toluene	ND	ug/L	5.0	1		02/13/19 23:09	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:09	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/13/19 23:09	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/13/19 23:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/13/19 23:09	79-00-5	
Trichloroethene	**12.3**	ug/L	5.0	1		02/13/19 23:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/13/19 23:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/13/19 23:09	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 23:09	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/13/19 23:09	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/13/19 23:09	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/13/19 23:09	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/13/19 23:09	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	107	%.	89-116	1		02/13/19 23:09	1868-53-7	
4-Bromofluorobenzene (S)	95	%.	85-111	1		02/13/19 23:09	460-00-4	
Toluene-d8 (S)	94	%.	87-110	1		02/13/19 23:09	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: Trip Blank **Lab ID: 50216680035** Collected: 02/05/19 08:00 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		02/14/19 00:16	67-64-1	
Acrolein	ND	ug/L	50.0	1		02/14/19 00:16	107-02-8	
Acrylonitrile	ND	ug/L	100	1		02/14/19 00:16	107-13-1	
Benzene	ND	ug/L	5.0	1		02/14/19 00:16	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		02/14/19 00:16	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		02/14/19 00:16	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		02/14/19 00:16	75-27-4	
Bromoform	ND	ug/L	5.0	1		02/14/19 00:16	75-25-2	
Bromomethane	ND	ug/L	5.0	1		02/14/19 00:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		02/14/19 00:16	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		02/14/19 00:16	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		02/14/19 00:16	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		02/14/19 00:16	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		02/14/19 00:16	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		02/14/19 00:16	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		02/14/19 00:16	108-90-7	
Chloroethane	ND	ug/L	5.0	1		02/14/19 00:16	75-00-3	
Chloroform	ND	ug/L	5.0	1		02/14/19 00:16	67-66-3	
Chloromethane	ND	ug/L	5.0	1		02/14/19 00:16	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		02/14/19 00:16	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		02/14/19 00:16	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		02/14/19 00:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		02/14/19 00:16	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		02/14/19 00:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		02/14/19 00:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		02/14/19 00:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		02/14/19 00:16	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		02/14/19 00:16	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		02/14/19 00:16	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/14/19 00:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/14/19 00:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/14/19 00:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		02/14/19 00:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/14/19 00:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		02/14/19 00:16	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		02/14/19 00:16	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		02/14/19 00:16	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		02/14/19 00:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		02/14/19 00:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		02/14/19 00:16	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		02/14/19 00:16	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		02/14/19 00:16	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		02/14/19 00:16	87-68-3	
n-Hexane	ND	ug/L	5.0	1		02/14/19 00:16	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		02/14/19 00:16	591-78-6	
Iodomethane	ND	ug/L	10.0	1		02/14/19 00:16	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		02/14/19 00:16	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Sample: Trip Blank **Lab ID: 50216680035** Collected: 02/05/19 08:00 Received: 02/09/19 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		02/14/19 00:16	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		02/14/19 00:16	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		02/14/19 00:16	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		02/14/19 00:16	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		02/14/19 00:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		02/14/19 00:16	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		02/14/19 00:16	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		02/14/19 00:16	103-65-1	
Styrene	ND	ug/L	5.0	1		02/14/19 00:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		02/14/19 00:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		02/14/19 00:16	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		02/14/19 00:16	127-18-4	
Toluene	ND	ug/L	5.0	1		02/14/19 00:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		02/14/19 00:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		02/14/19 00:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/14/19 00:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		02/14/19 00:16	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		02/14/19 00:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		02/14/19 00:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		02/14/19 00:16	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		02/14/19 00:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		02/14/19 00:16	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		02/14/19 00:16	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		02/14/19 00:16	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/14/19 00:16	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	89-116	1		02/14/19 00:16	1868-53-7	
4-Bromofluorobenzene (S)	94	%.	85-111	1		02/14/19 00:16	460-00-4	
Toluene-d8 (S)	96	%.	87-110	1		02/14/19 00:16	2037-26-5	

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

QC Batch: 484553 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50216680001, 50216680002, 50216680003, 50216680004, 50216680005, 50216680006, 50216680027

METHOD BLANK: 2234191 | Matrix: Water
Associated Lab Samples: 50216680001, 50216680002, 50216680003, 50216680004, 50216680005, 50216680006, 50216680027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	02/13/19 02:22	
1,1,1-Trichloroethane	ug/L	ND	5.0	02/13/19 02:22	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	02/13/19 02:22	
1,1,2-Trichloroethane	ug/L	ND	5.0	02/13/19 02:22	
1,1-Dichloroethane	ug/L	ND	5.0	02/13/19 02:22	
1,1-Dichloroethene	ug/L	ND	5.0	02/13/19 02:22	
1,1-Dichloropropene	ug/L	ND	5.0	02/13/19 02:22	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	02/13/19 02:22	
1,2,3-Trichloropropane	ug/L	ND	5.0	02/13/19 02:22	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	02/13/19 02:22	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	02/13/19 02:22	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	02/13/19 02:22	
1,2-Dichlorobenzene	ug/L	ND	5.0	02/13/19 02:22	
1,2-Dichloroethane	ug/L	ND	5.0	02/13/19 02:22	
1,2-Dichloropropane	ug/L	ND	5.0	02/13/19 02:22	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	02/13/19 02:22	
1,3-Dichlorobenzene	ug/L	ND	5.0	02/13/19 02:22	
1,3-Dichloropropane	ug/L	ND	5.0	02/13/19 02:22	
1,4-Dichlorobenzene	ug/L	ND	5.0	02/13/19 02:22	
1-Methylnaphthalene	ug/L	ND	10.0	02/13/19 02:22	N2
2,2-Dichloropropane	ug/L	ND	5.0	02/13/19 02:22	
2-Butanone (MEK)	ug/L	ND	25.0	02/13/19 02:22	
2-Chlorotoluene	ug/L	ND	5.0	02/13/19 02:22	
2-Hexanone	ug/L	ND	25.0	02/13/19 02:22	
2-Methylnaphthalene	ug/L	ND	10.0	02/13/19 02:22	
4-Chlorotoluene	ug/L	ND	5.0	02/13/19 02:22	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	02/13/19 02:22	
Acetone	ug/L	ND	100	02/13/19 02:22	
Acrolein	ug/L	ND	50.0	02/13/19 02:22	
Acrylonitrile	ug/L	ND	100	02/13/19 02:22	
Benzene	ug/L	ND	5.0	02/13/19 02:22	
Bromobenzene	ug/L	ND	5.0	02/13/19 02:22	
Bromochloromethane	ug/L	ND	5.0	02/13/19 02:22	
Bromodichloromethane	ug/L	ND	5.0	02/13/19 02:22	
Bromoform	ug/L	ND	5.0	02/13/19 02:22	
Bromomethane	ug/L	ND	5.0	02/13/19 02:22	
Carbon disulfide	ug/L	ND	10.0	02/13/19 02:22	
Carbon tetrachloride	ug/L	ND	5.0	02/13/19 02:22	
Chlorobenzene	ug/L	ND	5.0	02/13/19 02:22	
Chloroethane	ug/L	ND	5.0	02/13/19 02:22	
Chloroform	ug/L	ND	5.0	02/13/19 02:22	

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

METHOD BLANK: 2234191 Matrix: Water
Associated Lab Samples: 50216680001, 50216680002, 50216680003, 50216680004, 50216680005, 50216680006, 50216680027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	02/13/19 02:22	
cis-1,2-Dichloroethene	ug/L	ND	5.0	02/13/19 02:22	
cis-1,3-Dichloropropene	ug/L	ND	5.0	02/13/19 02:22	
Dibromochloromethane	ug/L	ND	5.0	02/13/19 02:22	
Dibromomethane	ug/L	ND	5.0	02/13/19 02:22	
Dichlorodifluoromethane	ug/L	ND	5.0	02/13/19 02:22	
Ethyl methacrylate	ug/L	ND	100	02/13/19 02:22	
Ethylbenzene	ug/L	ND	5.0	02/13/19 02:22	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	02/13/19 02:22	
Iodomethane	ug/L	ND	10.0	02/13/19 02:22	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	02/13/19 02:22	
Methyl-tert-butyl ether	ug/L	ND	4.0	02/13/19 02:22	
Methylene Chloride	ug/L	ND	5.0	02/13/19 02:22	
n-Butylbenzene	ug/L	ND	5.0	02/13/19 02:22	
n-Hexane	ug/L	ND	5.0	02/13/19 02:22	
n-Propylbenzene	ug/L	ND	5.0	02/13/19 02:22	
Naphthalene	ug/L	ND	1.7	02/13/19 02:22	
p-Isopropyltoluene	ug/L	ND	5.0	02/13/19 02:22	
sec-Butylbenzene	ug/L	ND	5.0	02/13/19 02:22	
Styrene	ug/L	ND	5.0	02/13/19 02:22	
tert-Butylbenzene	ug/L	ND	5.0	02/13/19 02:22	
Tetrachloroethene	ug/L	ND	5.0	02/13/19 02:22	
Toluene	ug/L	ND	5.0	02/13/19 02:22	
trans-1,2-Dichloroethene	ug/L	ND	5.0	02/13/19 02:22	
trans-1,3-Dichloropropene	ug/L	ND	5.0	02/13/19 02:22	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	02/13/19 02:22	
Trichloroethene	ug/L	ND	5.0	02/13/19 02:22	
Trichlorofluoromethane	ug/L	ND	5.0	02/13/19 02:22	
Vinyl acetate	ug/L	ND	50.0	02/13/19 02:22	
Vinyl chloride	ug/L	ND	2.0	02/13/19 02:22	
Xylene (Total)	ug/L	ND	10.0	02/13/19 02:22	
4-Bromofluorobenzene (S)	%.	93	85-111	02/13/19 02:22	
Dibromofluoromethane (S)	%.	101	89-116	02/13/19 02:22	
Toluene-d8 (S)	%.	100	87-110	02/13/19 02:22	

LABORATORY CONTROL SAMPLE: 2234192

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	54.0	108	74-126	
1,1,2,2-Tetrachloroethane	ug/L	50	51.2	102	73-117	
1,1-Dichloroethene	ug/L	50	54.9	110	72-123	
1,2,4-Trimethylbenzene	ug/L	50	52.8	106	76-118	
1,2-Dibromoethane (EDB)	ug/L	50	58.0	116	80-120	
1,2-Dichloroethane	ug/L	50	53.2	106	69-122	

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

LABORATORY CONTROL SAMPLE: 2234192

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	ug/L	50	55.6	111	75-124	
Benzene	ug/L	50	53.4	107	78-117	
Chlorobenzene	ug/L	50	53.1	106	79-112	
Chloroform	ug/L	50	51.7	103	76-118	
cis-1,2-Dichloroethene	ug/L	50	52.5	105	75-117	
Ethylbenzene	ug/L	50	54.7	109	80-118	
Isopropylbenzene (Cumene)	ug/L	50	57.5	115	81-117	
Methyl-tert-butyl ether	ug/L	50	56.5	113	71-124	
Naphthalene	ug/L	50	50.1	100	67-126	
Tetrachloroethene	ug/L	50	51.8	104	76-116	
Toluene	ug/L	50	50.7	101	77-115	
trans-1,2-Dichloroethene	ug/L	50	57.2	114	75-121	
Trichloroethene	ug/L	50	53.9	108	76-120	
Vinyl chloride	ug/L	50	50.5	101	64-155	
Xylene (Total)	ug/L	150	171	114	78-118	
4-Bromofluorobenzene (S)	%.			109	85-111	
Dibromofluoromethane (S)	%.			94	89-116	
Toluene-d8 (S)	%.			98	87-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2234193 2234194

Parameter	Units	50216680027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	46.2	48.1	92	96	50-141	4	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	51.8	53.0	104	106	52-131	2	20	
1,1-Dichloroethene	ug/L	ND	50	50	46.8	50.0	94	100	51-138	7	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	22.0	20.5	44	41	19-148	7	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	52.5	53.4	105	107	57-134	2	20	
1,2-Dichloroethane	ug/L	ND	50	50	51.2	51.8	102	104	46-139	1	20	
1,2-Dichloropropane	ug/L	ND	50	50	48.8	49.7	98	99	54-135	2	20	
Benzene	ug/L	ND	50	50	43.6	45.1	87	90	50-135	3	20	
Chlorobenzene	ug/L	ND	50	50	33.2	33.0	66	66	39-135	1	20	
Chloroform	ug/L	ND	50	50	46.2	48.2	92	96	52-134	4	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	45.4	47.0	91	94	48-133	3	20	
Ethylbenzene	ug/L	ND	50	50	27.8	27.3	56	55	31-147	2	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	25.0	24.4	50	49	25-151	3	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	57.8	59.7	116	119	51-142	3	20	
Naphthalene	ug/L	ND	50	50	39.3	39.1	79	78	40-135	1	20	
Tetrachloroethene	ug/L	171	50	50	138	142	-65	-57	34-140	3	20	M1
Toluene	ug/L	ND	50	50	33.7	33.7	67	67	43-134	0	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	46.2	47.5	92	95	51-135	3	20	
Trichloroethene	ug/L	173	50	50	167	169	-14	-8	40-141	2	20	M1
Vinyl chloride	ug/L	ND	50	50	45.3	48.3	91	97	46-164	6	20	
Xylene (Total)	ug/L	ND	150	150	86.5	83.8	58	56	29-145	3	20	
4-Bromofluorobenzene (S)	%.						107	108	85-111			

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REPORT OF LABORATORY ANALYSIS

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Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2234193 2234194

Parameter	Units	50216680027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						98	98	89-116			
Toluene-d8 (S)	%.						96	95	87-110			

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

QC Batch: 484694 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50216680007, 50216680008, 50216680009, 50216680010, 50216680011, 50216680012, 50216680013, 50216680014, 50216680015, 50216680016, 50216680017, 50216680018, 50216680019, 50216680020, 50216680021, 50216680022

METHOD BLANK: 2234946 | Matrix: Water
Associated Lab Samples: 50216680007, 50216680008, 50216680009, 50216680010, 50216680011, 50216680012, 50216680013, 50216680014, 50216680015, 50216680016, 50216680017, 50216680018, 50216680019, 50216680020, 50216680021, 50216680022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	02/13/19 15:02	M5
1,1,1-Trichloroethane	ug/L	ND	5.0	02/13/19 15:02	M5
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	02/13/19 15:02	M5
1,1,2-Trichloroethane	ug/L	ND	5.0	02/13/19 15:02	M5
1,1-Dichloroethane	ug/L	ND	5.0	02/13/19 15:02	M5
1,1-Dichloroethene	ug/L	ND	5.0	02/13/19 15:02	M5
1,1-Dichloropropene	ug/L	ND	5.0	02/13/19 15:02	M5
1,2,3-Trichlorobenzene	ug/L	ND	5.0	02/13/19 15:02	M5
1,2,3-Trichloropropane	ug/L	ND	5.0	02/13/19 15:02	M5
1,2,4-Trichlorobenzene	ug/L	ND	5.0	02/13/19 15:02	M5
1,2,4-Trimethylbenzene	ug/L	ND	5.0	02/13/19 15:02	M5
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	02/13/19 15:02	M5
1,2-Dichlorobenzene	ug/L	ND	5.0	02/13/19 15:02	M5
1,2-Dichloroethane	ug/L	ND	5.0	02/13/19 15:02	M5
1,2-Dichloropropane	ug/L	ND	5.0	02/13/19 15:02	M5
1,3,5-Trimethylbenzene	ug/L	ND	5.0	02/13/19 15:02	M5
1,3-Dichlorobenzene	ug/L	ND	5.0	02/13/19 15:02	M5
1,3-Dichloropropane	ug/L	ND	5.0	02/13/19 15:02	M5
1,4-Dichlorobenzene	ug/L	ND	5.0	02/13/19 15:02	M5
1-Methylnaphthalene	ug/L	ND	10.0	02/13/19 15:02	M5,N2
2,2-Dichloropropane	ug/L	ND	5.0	02/13/19 15:02	M5
2-Butanone (MEK)	ug/L	ND	25.0	02/13/19 15:02	M5
2-Chlorotoluene	ug/L	ND	5.0	02/13/19 15:02	M5
2-Hexanone	ug/L	ND	25.0	02/13/19 15:02	M5
2-Methylnaphthalene	ug/L	ND	10.0	02/13/19 15:02	M5
4-Chlorotoluene	ug/L	ND	5.0	02/13/19 15:02	M5
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	02/13/19 15:02	M5
Acetone	ug/L	ND	100	02/13/19 15:02	M5
Acrolein	ug/L	ND	50.0	02/13/19 15:02	M5
Acrylonitrile	ug/L	ND	100	02/13/19 15:02	M5
Benzene	ug/L	ND	5.0	02/13/19 15:02	M5
Bromobenzene	ug/L	ND	5.0	02/13/19 15:02	M5
Bromochloromethane	ug/L	ND	5.0	02/13/19 15:02	M5
Bromodichloromethane	ug/L	ND	5.0	02/13/19 15:02	M5
Bromoform	ug/L	ND	5.0	02/13/19 15:02	M5
Bromomethane	ug/L	ND	5.0	02/13/19 15:02	M5
Carbon disulfide	ug/L	ND	10.0	02/13/19 15:02	M5
Carbon tetrachloride	ug/L	ND	5.0	02/13/19 15:02	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

METHOD BLANK: 2234946 Matrix: Water

Associated Lab Samples: 50216680007, 50216680008, 50216680009, 50216680010, 50216680011, 50216680012, 50216680013, 50216680014, 50216680015, 50216680016, 50216680017, 50216680018, 50216680019, 50216680020, 50216680021, 50216680022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlorobenzene	ug/L	ND	5.0	02/13/19 15:02	M5
Chloroethane	ug/L	ND	5.0	02/13/19 15:02	M5
Chloroform	ug/L	ND	5.0	02/13/19 15:02	M5
Chloromethane	ug/L	ND	5.0	02/13/19 15:02	M5
cis-1,2-Dichloroethene	ug/L	ND	5.0	02/13/19 15:02	M5
cis-1,3-Dichloropropene	ug/L	ND	5.0	02/13/19 15:02	M5
Dibromochloromethane	ug/L	ND	5.0	02/13/19 15:02	M5
Dibromomethane	ug/L	ND	5.0	02/13/19 15:02	M5
Dichlorodifluoromethane	ug/L	ND	5.0	02/13/19 15:02	M5
Ethyl methacrylate	ug/L	ND	100	02/13/19 15:02	M5
Ethylbenzene	ug/L	ND	5.0	02/13/19 15:02	M5
Hexachloro-1,3-butadiene	ug/L	ND	5.0	02/13/19 15:02	M5
Iodomethane	ug/L	ND	10.0	02/13/19 15:02	M5
Isopropylbenzene (Cumene)	ug/L	ND	5.0	02/13/19 15:02	M5
Methyl-tert-butyl ether	ug/L	ND	4.0	02/13/19 15:02	M5
Methylene Chloride	ug/L	ND	5.0	02/13/19 15:02	M5
n-Butylbenzene	ug/L	ND	5.0	02/13/19 15:02	M5
n-Hexane	ug/L	ND	5.0	02/13/19 15:02	M5
n-Propylbenzene	ug/L	ND	5.0	02/13/19 15:02	M5
Naphthalene	ug/L	ND	1.7	02/13/19 15:02	M5
p-Isopropyltoluene	ug/L	ND	5.0	02/13/19 15:02	M5
sec-Butylbenzene	ug/L	ND	5.0	02/13/19 15:02	M5
Styrene	ug/L	ND	5.0	02/13/19 15:02	M5
tert-Butylbenzene	ug/L	ND	5.0	02/13/19 15:02	M5
Tetrachloroethene	ug/L	ND	5.0	02/13/19 15:02	M5
Toluene	ug/L	ND	5.0	02/13/19 15:02	M5
trans-1,2-Dichloroethene	ug/L	ND	5.0	02/13/19 15:02	M5
trans-1,3-Dichloropropene	ug/L	ND	5.0	02/13/19 15:02	M5
trans-1,4-Dichloro-2-butene	ug/L	ND	100	02/13/19 15:02	M5
Trichloroethene	ug/L	ND	5.0	02/13/19 15:02	M5
Trichlorofluoromethane	ug/L	ND	5.0	02/13/19 15:02	M5
Vinyl acetate	ug/L	ND	50.0	02/13/19 15:02	M5
Vinyl chloride	ug/L	ND	2.0	02/13/19 15:02	M5
Xylene (Total)	ug/L	ND	10.0	02/13/19 15:02	M5
4-Bromofluorobenzene (S)	%.	95	85-111	02/13/19 15:02	M5
Dibromofluoromethane (S)	%.	103	89-116	02/13/19 15:02	M5
Toluene-d8 (S)	%.	95	87-110	02/13/19 15:02	M5

LABORATORY CONTROL SAMPLE: 2234947

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	58.2	116	80-120	M5

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

LABORATORY CONTROL SAMPLE: 2234947

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	57.1	114	74-126	M5
1,1,2,2-Tetrachloroethane	ug/L	50	51.9	104	73-117	M5
1,1,2-Trichloroethane	ug/L	50	59.2	118	74-119	M5
1,1-Dichloroethane	ug/L	50	56.3	113	72-119	M5
1,1-Dichloroethene	ug/L	50	57.4	115	72-123	M5
1,1-Dichloropropene	ug/L	50	55.8	112	77-125	M5
1,2,3-Trichlorobenzene	ug/L	50	52.6	105	74-125	M5
1,2,3-Trichloropropane	ug/L	50	53.5	107	82-121	M5
1,2,4-Trichlorobenzene	ug/L	50	50.4	101	70-125	M5
1,2,4-Trimethylbenzene	ug/L	50	55.7	111	76-118	M5
1,2-Dibromoethane (EDB)	ug/L	50	59.4	119	80-120	M5
1,2-Dichlorobenzene	ug/L	50	55.9	112	77-117	M5
1,2-Dichloroethane	ug/L	50	53.3	107	69-122	M5
1,2-Dichloropropane	ug/L	50	57.1	114	75-124	M5
1,3,5-Trimethylbenzene	ug/L	50	52.7	105	75-117	M5
1,3-Dichlorobenzene	ug/L	50	54.8	110	76-116	M5
1,3-Dichloropropane	ug/L	50	55.9	112	82-118	M5
1,4-Dichlorobenzene	ug/L	50	55.0	110	74-115	M5
1-Methylnaphthalene	ug/L	50	52.0	104	70-130	M5,N2
2,2-Dichloropropane	ug/L	50	53.8	108	51-133	M5
2-Butanone (MEK)	ug/L	250	382	153	72-147	L1,M5
2-Chlorotoluene	ug/L	50	52.6	105	73-113	M5
2-Hexanone	ug/L	250	315	126	71-132	M5
2-Methylnaphthalene	ug/L	50	50.2	100	69-123	M5
4-Chlorotoluene	ug/L	50	53.2	106	78-118	M5
4-Methyl-2-pentanone (MIBK)	ug/L	250	279	112	89-128	M5
Acetone	ug/L	250	449	179	46-170	L1,M5
Acrolein	ug/L	1000	1040	104	13-200	M5
Acrylonitrile	ug/L	200	231	116	65-130	M5
Benzene	ug/L	50	54.8	110	78-117	M5
Bromobenzene	ug/L	50	60.2	120	66-126	M5
Bromochloromethane	ug/L	50	54.6	109	76-120	M5
Bromodichloromethane	ug/L	50	53.6	107	76-120	M5
Bromoform	ug/L	50	53.6	107	70-124	M5
Bromomethane	ug/L	50	60.5	121	29-181	M5
Carbon disulfide	ug/L	50	57.6	115	66-123	M5
Carbon tetrachloride	ug/L	50	56.1	112	73-132	M5
Chlorobenzene	ug/L	50	55.8	112	79-112	M5
Chloroethane	ug/L	50	54.8	110	59-156	M5
Chloroform	ug/L	50	52.7	105	76-118	M5
Chloromethane	ug/L	50	50.5	101	45-142	M5
cis-1,2-Dichloroethene	ug/L	50	53.3	107	75-117	M5
cis-1,3-Dichloropropene	ug/L	50	54.3	109	77-120	M5
Dibromochloromethane	ug/L	50	56.6	113	78-123	M5
Dibromomethane	ug/L	50	56.6	113	78-122	M5
Dichlorodifluoromethane	ug/L	50	55.7	111	41-168	M5
Ethyl methacrylate	ug/L	200	234	117	75-128	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

LABORATORY CONTROL SAMPLE: 2234947

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethylbenzene	ug/L	50	56.6	113	80-118	M5
Hexachloro-1,3-butadiene	ug/L	50	53.3	107	73-125	M5
Iodomethane	ug/L	100	117	117	35-174	M5
Isopropylbenzene (Cumene)	ug/L	50	60.2	120	81-117	L1,M5
Methyl-tert-butyl ether	ug/L	50	55.5	111	71-124	M5
Methylene Chloride	ug/L	50	53.6	107	59-136	M5
n-Butylbenzene	ug/L	50	53.5	107	72-118	M5
n-Hexane	ug/L	50	64.2	128	60-128	M5
n-Propylbenzene	ug/L	50	49.6	99	75-120	M5
Naphthalene	ug/L	50	52.5	105	67-126	M5
p-Isopropyltoluene	ug/L	50	54.7	109	75-115	M5
sec-Butylbenzene	ug/L	50	53.5	107	76-120	M5
Styrene	ug/L	50	60.3	121	74-121	M5
tert-Butylbenzene	ug/L	50	47.4	95	55-109	M5
Tetrachloroethene	ug/L	50	54.3	109	76-116	M5
Toluene	ug/L	50	50.6	101	77-115	M5
trans-1,2-Dichloroethene	ug/L	50	58.4	117	75-121	M5
trans-1,3-Dichloropropene	ug/L	50	52.8	106	77-121	M5
trans-1,4-Dichloro-2-butene	ug/L	200	231	116	42-128	M5
Trichloroethene	ug/L	50	55.3	111	76-120	M5
Trichlorofluoromethane	ug/L	50	51.8	104	81-141	M5
Vinyl acetate	ug/L	200	211	106	67-131	M5
Vinyl chloride	ug/L	50	54.8	110	64-155	M5
Xylene (Total)	ug/L	150	178	119	78-118	LS,M5
4-Bromofluorobenzene (S)	%.			110	85-111	M5
Dibromofluoromethane (S)	%.			96	89-116	M5
Toluene-d8 (S)	%.			95	87-110	M5

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QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

QC Batch: 484695 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50216680023, 50216680024, 50216680025, 50216680026, 50216680028, 50216680029, 50216680030, 50216680031, 50216680032, 50216680033, 50216680034, 50216680035

METHOD BLANK: 2234960 | Matrix: Water
Associated Lab Samples: 50216680023, 50216680024, 50216680025, 50216680026, 50216680028, 50216680029, 50216680030, 50216680031, 50216680032, 50216680033, 50216680034, 50216680035

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	02/13/19 15:18	
1,1,1-Trichloroethane	ug/L	ND	5.0	02/13/19 15:18	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	02/13/19 15:18	
1,1,2-Trichloroethane	ug/L	ND	5.0	02/13/19 15:18	
1,1-Dichloroethane	ug/L	ND	5.0	02/13/19 15:18	
1,1-Dichloroethene	ug/L	ND	5.0	02/13/19 15:18	
1,1-Dichloropropene	ug/L	ND	5.0	02/13/19 15:18	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	02/13/19 15:18	
1,2,3-Trichloropropane	ug/L	ND	5.0	02/13/19 15:18	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	02/13/19 15:18	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	02/13/19 15:18	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	02/13/19 15:18	
1,2-Dichlorobenzene	ug/L	ND	5.0	02/13/19 15:18	
1,2-Dichloroethane	ug/L	ND	5.0	02/13/19 15:18	
1,2-Dichloropropane	ug/L	ND	5.0	02/13/19 15:18	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	02/13/19 15:18	
1,3-Dichlorobenzene	ug/L	ND	5.0	02/13/19 15:18	
1,3-Dichloropropane	ug/L	ND	5.0	02/13/19 15:18	
1,4-Dichlorobenzene	ug/L	ND	5.0	02/13/19 15:18	
1-Methylnaphthalene	ug/L	ND	10.0	02/13/19 15:18	N2
2,2-Dichloropropane	ug/L	ND	5.0	02/13/19 15:18	
2-Butanone (MEK)	ug/L	ND	25.0	02/13/19 15:18	
2-Chlorotoluene	ug/L	ND	5.0	02/13/19 15:18	
2-Hexanone	ug/L	ND	25.0	02/13/19 15:18	
2-Methylnaphthalene	ug/L	ND	10.0	02/13/19 15:18	
4-Chlorotoluene	ug/L	ND	5.0	02/13/19 15:18	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	02/13/19 15:18	
Acetone	ug/L	ND	100	02/13/19 15:18	
Acrolein	ug/L	ND	50.0	02/13/19 15:18	
Acrylonitrile	ug/L	ND	100	02/13/19 15:18	
Benzene	ug/L	ND	5.0	02/13/19 15:18	
Bromobenzene	ug/L	ND	5.0	02/13/19 15:18	
Bromochloromethane	ug/L	ND	5.0	02/13/19 15:18	
Bromodichloromethane	ug/L	ND	5.0	02/13/19 15:18	
Bromoform	ug/L	ND	5.0	02/13/19 15:18	
Bromomethane	ug/L	ND	5.0	02/13/19 15:18	
Carbon disulfide	ug/L	ND	10.0	02/13/19 15:18	
Carbon tetrachloride	ug/L	ND	5.0	02/13/19 15:18	
Chlorobenzene	ug/L	ND	5.0	02/13/19 15:18	
Chloroethane	ug/L	ND	5.0	02/13/19 15:18	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

METHOD BLANK: 2234960 Matrix: Water

Associated Lab Samples: 50216680023, 50216680024, 50216680025, 50216680026, 50216680028, 50216680029, 50216680030, 50216680031, 50216680032, 50216680033, 50216680034, 50216680035

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	5.0	02/13/19 15:18	
Chloromethane	ug/L	ND	5.0	02/13/19 15:18	
cis-1,2-Dichloroethene	ug/L	ND	5.0	02/13/19 15:18	
cis-1,3-Dichloropropene	ug/L	ND	5.0	02/13/19 15:18	
Dibromochloromethane	ug/L	ND	5.0	02/13/19 15:18	
Dibromomethane	ug/L	ND	5.0	02/13/19 15:18	
Dichlorodifluoromethane	ug/L	ND	5.0	02/13/19 15:18	
Ethyl methacrylate	ug/L	ND	100	02/13/19 15:18	
Ethylbenzene	ug/L	ND	5.0	02/13/19 15:18	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	02/13/19 15:18	
Iodomethane	ug/L	ND	10.0	02/13/19 15:18	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	02/13/19 15:18	
Methyl-tert-butyl ether	ug/L	ND	4.0	02/13/19 15:18	
Methylene Chloride	ug/L	ND	5.0	02/13/19 15:18	
n-Butylbenzene	ug/L	ND	5.0	02/13/19 15:18	
n-Hexane	ug/L	ND	5.0	02/13/19 15:18	
n-Propylbenzene	ug/L	ND	5.0	02/13/19 15:18	
Naphthalene	ug/L	ND	1.7	02/13/19 15:18	
p-Isopropyltoluene	ug/L	ND	5.0	02/13/19 15:18	
sec-Butylbenzene	ug/L	ND	5.0	02/13/19 15:18	
Styrene	ug/L	ND	5.0	02/13/19 15:18	
tert-Butylbenzene	ug/L	ND	5.0	02/13/19 15:18	
Tetrachloroethene	ug/L	ND	5.0	02/13/19 15:18	
Toluene	ug/L	ND	5.0	02/13/19 15:18	
trans-1,2-Dichloroethene	ug/L	ND	5.0	02/13/19 15:18	
trans-1,3-Dichloropropene	ug/L	ND	5.0	02/13/19 15:18	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	02/13/19 15:18	
Trichloroethene	ug/L	ND	5.0	02/13/19 15:18	
Trichlorofluoromethane	ug/L	ND	5.0	02/13/19 15:18	
Vinyl acetate	ug/L	ND	50.0	02/13/19 15:18	
Vinyl chloride	ug/L	ND	2.0	02/13/19 15:18	
Xylene (Total)	ug/L	ND	10.0	02/13/19 15:18	
4-Bromofluorobenzene (S)	%.	93	85-111	02/13/19 15:18	
Dibromofluoromethane (S)	%.	106	89-116	02/13/19 15:18	
Toluene-d8 (S)	%.	93	87-110	02/13/19 15:18	

LABORATORY CONTROL SAMPLE: 2234961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	49.9	100	74-126	
1,1,2,2-Tetrachloroethane	ug/L	50	53.2	106	73-117	
1,1-Dichloroethene	ug/L	50	49.8	100	72-123	
1,2,4-Trimethylbenzene	ug/L	50	49.9	100	76-118	

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

LABORATORY CONTROL SAMPLE: 2234961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	50	54.9	110	80-120	
1,2-Dichloroethane	ug/L	50	48.2	96	69-122	
1,2-Dichloropropane	ug/L	50	49.8	100	75-124	
Benzene	ug/L	50	46.5	93	78-117	
Chlorobenzene	ug/L	50	50.8	102	79-112	
Chloroform	ug/L	50	45.2	90	76-118	
cis-1,2-Dichloroethene	ug/L	50	49.2	98	75-117	
Ethylbenzene	ug/L	50	48.2	96	80-118	
Isopropylbenzene (Cumene)	ug/L	50	52.9	106	81-117	
Methyl-tert-butyl ether	ug/L	50	54.2	108	71-124	
Naphthalene	ug/L	50	46.5	93	67-126	
Tetrachloroethene	ug/L	50	49.9	100	76-116	
Toluene	ug/L	50	46.6	93	77-115	
trans-1,2-Dichloroethene	ug/L	50	51.3	103	75-121	
Trichloroethene	ug/L	50	49.0	98	76-120	
Vinyl chloride	ug/L	50	52.1	104	64-155	
Xylene (Total)	ug/L	150	156	104	78-118	
4-Bromofluorobenzene (S)	%.			107	85-111	
Dibromofluoromethane (S)	%.			90	89-116	
Toluene-d8 (S)	%.			91	87-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2234962 2234963

Parameter	Units	50216680030 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	53.6	53.8	107	108	50-141	0	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	59.7	59.0	119	118	52-131	1	20	
1,1-Dichloroethene	ug/L	ND	50	50	52.1	52.1	104	104	51-138	0	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	41.7	39.4	83	79	19-148	6	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	57.5	58.5	115	117	57-134	2	20	
1,2-Dichloroethane	ug/L	ND	50	50	55.5	55.0	111	110	46-139	1	20	
1,2-Dichloropropane	ug/L	ND	50	50	54.6	55.3	109	111	54-135	1	20	
Benzene	ug/L	ND	50	50	49.6	49.3	99	99	50-135	1	20	
Chlorobenzene	ug/L	ND	50	50	47.4	47.3	95	95	39-135	0	20	
Chloroform	ug/L	ND	50	50	50.8	51.5	102	103	52-134	1	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	54.4	54.9	109	110	48-133	1	20	
Ethylbenzene	ug/L	ND	50	50	43.5	41.9	87	84	31-147	4	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	45.5	43.5	91	87	25-151	4	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	63.0	63.2	126	126	51-142	0	20	
Naphthalene	ug/L	ND	50	50	47.0	47.2	94	94	40-135	1	20	
Tetrachloroethene	ug/L	ND	50	50	45.9	45.7	88	87	34-140	1	20	
Toluene	ug/L	ND	50	50	46.4	46.1	93	92	43-134	1	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	54.8	54.7	110	109	51-135	0	20	
Trichloroethene	ug/L	ND	50	50	52.0	50.9	99	97	40-141	2	20	
Vinyl chloride	ug/L	ND	50	50	50.0	51.6	100	103	46-164	3	20	

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REPORT OF LABORATORY ANALYSIS

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2234962 2234963

Parameter	Units	50216680030 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Xylene (Total)	ug/L	ND	150	150	138	137	92	92	29-145	1	20	
4-Bromofluorobenzene (S)	%.						110	109	85-111			
Dibromofluoromethane (S)	%.						96	94	89-116			
Toluene-d8 (S)	%.						93	95	87-110			

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(317)228-3100

QUALIFIERS

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 484694

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
LS	Analyte recovery in the laboratory control sample (LCS) was outside QC limits for one or more of the constituent analytes used in the calculated result.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland Canning FSI #3
Pace Project No.: 50216680

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50216680001	**MW 26**	EPA 5030/8260	484553		
50216680002	**MW 32**	EPA 5030/8260	484553		
50216680003	**MW 33**	EPA 5030/8260	484553		
50216680004	**MW 33D**	EPA 5030/8260	484553		
50216680005	**MW 29**	EPA 5030/8260	484553		
50216680006	**MW 29D**	EPA 5030/8260	484553		
50216680007	**MW 12**	EPA 5030/8260	484694		
50216680008	**MW 12D**	EPA 5030/8260	484694		
50216680009	**DUP A**	EPA 5030/8260	484694		
50216680010	**DUP B**	EPA 5030/8260	484694		
50216680011	**TMW-3**	EPA 5030/8260	484694		
50216680012	**TMW-3D**	EPA 5030/8260	484694		
50216680013	**TMW-2**	EPA 5030/8260	484694		
50216680014	**TMW-2D**	EPA 5030/8260	484694		
50216680015	**TMW-1**	EPA 5030/8260	484694		
50216680016	**TMW-1D**	EPA 5030/8260	484694		
50216680017	**TMW-4**	EPA 5030/8260	484694		
50216680018	**TMW-4D**	EPA 5030/8260	484694		
50216680019	**TMW-7**	EPA 5030/8260	484694		
50216680020	**TMW-7D**	EPA 5030/8260	484694		
50216680021	**TMW-5**	EPA 5030/8260	484694		
50216680022	**TMW-5D**	EPA 5030/8260	484694		
50216680023	**TMW-6**	EPA 5030/8260	484695		
50216680024	**TMW-6D**	EPA 5030/8260	484695		
50216680025	**MW-22**	EPA 5030/8260	484695		
50216680026	**MW-22D**	EPA 5030/8260	484695		
50216680027	**MW-31**	EPA 5030/8260	484553		
50216680028	**MW-30**	EPA 5030/8260	484695		
50216680029	**MW-11**	EPA 5030/8260	484695		
50216680030	**MW-11D**	EPA 5030/8260	484695		
50216680031	**MW-14**	EPA 5030/8260	484695		
50216680032	**MW-14D**	EPA 5030/8260	484695		
50216680033	**MW-15**	EPA 5030/8260	484695		
50216680034	**MW-15D**	EPA 5030/8260	484695		
50216680035	**Trip Blank**	EPA 5030/8260	484695		

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

502166680

ALL SHADED AREAS are for LAB USE ONLY

Company: PATRIOT ENGINEERING

Address: 6150 E 75th St INDIANAPOLIS

Billing Information: AP@patrioteng.com

Report To: JAMES CODY

Email To:

Copy To: MIKE CASPER

Site Collection Info/Address:

Customer Project Name/Number: 19-0096-01E HOUGHLAND CANNING FSI #3

State: IN County/City: Franklin

Time Zone Collected: [ ] PT [ ] MT [ ] CT [X] ET

Phone:

Email:

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [X] No

Collected By (print): JAMES CODY

Purchase Order #:

Quote #:

DW PWS ID #:

DW Location Code:

Collected By (signature): [signature]

Turnaround Date Required: NORMAL

Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: ____ [ ] Hold: ____

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [X] No

Analysis: ____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **: 3

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____

Lab Project Manager:

Analyses: VOCs 8260

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: ____	
Sample pH Acceptable	Y N NA
pH Strips: ____	
Sulfide Present	Y N NA
Lead Acetate Strips: ____	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	VOCs 8260	Lab Sample #
MW 26	GW	G	2/5/19	11:54				3	X	001
MW 32	"	"	2/5/19	12:14				3	X	002
MW 33	"	"	"	13:42				3	X	003
MW 33D	"	"	"	14:04				3	X	004
MW 29	"	"	"	14:56				3	X	005
MW 29D	"	"	"	15:07				3	X	006
MW 12	"	"	"	15:53				3	X	007
MW 12D	"	"	"	16:12				3	X	008
DUP A	"	"	2-8-19	—				3	X	009
DUP B	"	"	2-8-19	—				9	X	010

Customer Remarks / Special Conditions / Possible Hazards: ABSOLUTE PRICING

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2356686

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: (Y) N NA
Therm ID#: E
Cooler 1 Temp Upon Receipt: 0.5 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 0.5 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
JAMES CODY / PATRIOT	2-8-19/17:45	Macklin Lumyon / Patriot	2-8-19/17:45
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Macklin Lumyon / Patriot	2-9-19/ 1225	[signature]	2/9/19 1225
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: 1

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

50216680

ALL SHADED AREAS are for LAB USE ONLY

Company: PATRIOT ENGG.

Billing Information: AP @ patrioteng.com

Address: 6150 E 75th ST, Indianapolis

Report To: JAMES CODY

Email To:

Copy To: MIKE CASPER

Site Collection Info/Address:

Customer Project Name/Number: 19-0096-01E Houghland Canning FSI #3

State: IN / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [X] ET

Phone:
Email:

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [X] No

Collected By (print): MACK / VISHAL SHAH

Purchase Order #:
Quote #:

DW PWS ID #:
DW Location Code:

Collected By (signature):

Turnaround Date Required: NORMAL

Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: ____ [ ] Hold: ____

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [X] No

Analysis: ____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **: 3

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____

Lab Project Manager:

Analyses: VOC'S 8260

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	VOC'S 8260	Lab Sample # / Comments
TMW-3	GW	G	2-6-19	12:15				3	X	011
TMW-3D	"	"	"	12:15				3	X	012
TMW-2	"	"	"	13:20				3	X	013
TMW-2D	"	"	"	13:20				3	X	014
TMW-1	"	"	"	14:20				3	X	015
TMW-1D	"	"	"	14:20				3	X	016
TMW-4	"	"	2-7-19	11:10				3	X	017
TMW-4D	"	"	"	11:10				3	X	018
TMW-7	"	"	"	12:10				3	X	019
TMW-7D	"	"	"	12:10				3	X	020

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: ____	
Sample pH Acceptable	Y N NA
pH Strips: ____	
Sulfide Present	Y N NA
Lead Acetate Strips: ____	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

ABSOLUTE PRICING

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2356690

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: E
Cooler 1 Temp Upon Receipt: 0.5 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 0.5 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
VISHAL SHAH / PATRIOT	2-8-19 / 17:45	Mackie Lunyon / Patriot	2-8-19 / 17:45
Mackie Lunyon / Patriot	2-9-19 / 1225	[signature]	2/9/19 1225

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 2 Of: 4

Pace Analytical®

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

50216680

ALL SHADED AREAS are for LAB USE ONLY

Company: PATRIOT ENGINEERING

Billing Information: AP @ patriot eng - com

Address: 6150 E 75th ST Indianapolis

Report To: JAMES CODY

Email To:

Copy To: MIKE CASPER

Site Collection Info/Address:

Customer Project Name/Number: 19-0096-01E Houghland Canning FSI #3

State: IN / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [X] ET

Phone:
Email:

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [X] No

Collected By (print): MACK / VISHAL SHAH

Purchase Order #:
Quote #:

DW PWS ID #:
DW Location Code:

Collected By (signature):

Turnaround Date Required: NORMAL

Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [X] No

Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **: 3 3 3

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Lab Project Manager:

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	VOCS 8260	MS/MSD - A	MS/MSD - B								Lab Sample # / Comments
TMW-5	GW	G	2-8-19	10:25				3	X										021
TMW-5D	"	"	"	10:10				3	X										022
TMW-6	"	"	"	11:10				3	X										023
TMW-6D	"	"	"	11:25				3	X										024
TMW-22	"	"	"	12:20				3	X										025
TMW-22D	"	"	"	12:30				3	X										026
MW-31	"	"	"	13:35				9	X	X									027
MW-30	"	"	"	13:30				3	X										028
MW-11	"	"	"	14:25				3	X										029
MW-11D	"	"	"	14:40				9	X	X	X								030

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards: ABSOLUTE PACINA

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2356689

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: E
Cooler 1 Temp Upon Receipt: 0.5 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 0.5 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
VISHAL SHAH / PATRIOT	2-8-19/17:45	Mackli Kumyan / Patriot	2-8-19/17:45
Mackli Kumyan / Patriot	2-9-19/1225		2/9/19 1225

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 3 of: 9

Pace Analytical®

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

502166680

ALL SHADED AREAS are for LAB USE ONLY

Company: PATRIOT ENGINEERING

Billing Information: AP@patriot eng.com

Address: 6150 E 75th ST Indianapolis

Report To: JAMES CODY

Email To:

Copy To: MIKE CASPER

Site Collection Info/Address:

Customer Project Name/Number: 19-0096-01E Houghland Canning FSI#3

State: IN County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [X] ET

Phone:
Email:

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [X] No

Collected By (print): MACK/VISHAL SHAH

Purchase Order #:
Quote #:

DW PWS ID #:
DW Location Code:

Collected By (signature): Mshah

Turnaround Date Required: NORMAL

Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: ____ [ ] Hold: ____

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [X] No

Analysis: ____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **: 3

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____

Lab Project Manager:

Analyses: VOCs 8260

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: ____	
Sample pH Acceptable	Y N NA
pH Strips: ____	
Sulfide Present	Y N NA
Lead Acetate Strips: ____	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	VOCs 8260	Lab Sample # / Comments
MW-14	GW	G	2-8-19	16:15				3	X	031
MW-14D	"	"	2-8-19	16:15				3	X	032
MW-15	"	"	"	17:35				3	X	033
MW-15D	"	"	"	17:35				3	X	034

Customer Remarks / Special Conditions / Possible Hazards: ABSOLUTE PRICING

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2356688

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: E
Cooler 1 Temp Upon Receipt: 0.5 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 0.5 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
VISHAL SHAH / PATRIOT	2-8-19/17:45	Mackli Runyon / Patriot	2-8-19/17:45
Mackli Runyon / Patriot	2-9-19/1225		2/9/19 1225

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 9 of 9

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50216680

Date/Time and Initials of person examining contents: 2/9/19 gc 1500

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No **Seals Intact:** ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer: 1 2 3 4 5 6 A B C D E F Ice Type: ☒ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☐ Yes ☒ No ☐ N/A

Cooler Temperature: 0.5/0.5 Ice Visible in Sample Containers?: ☐ Yes ☒ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☒ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		X	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			X
USDA Regulated Soils? (ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		X				
Chain of Custody Present:	X					
Chain of Custody Filled Out:	X		Dissolved Metals field filtered?:			X
Short Hold Time Analysis (<72hr)?: Analysis:		X	Headspace Wisconsin Sulfide			X
Time 5035A TC placed in Freezer or Short Holds To Lab:				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			X
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			X
Rush TAT Requested:		X	Headspace in VOA Vials (>6mm):		X	
Containers Intact?:	X		Trip Blank Present?:	X		
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	X		Trip Blank Custody Seals?:	X		

Comments: Received 3/3 Tripblanks not on COC. gc 2/9/19

Analyze Trip Blank per J. Cody via email. 2/11/19 tms

Sample Container Count

CLIENT: Patriot

COC PAGE 1 of 4

COC ID#

Project # 50216680

Sample Line Item	DG9H / VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	Bulk SBS Di Kit R				Matrix SI/Wt/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1	3																				WT			
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

Sample Container Count

CLIENT: Patriot

COC PAGE 2 of 4

COC ID#

Project # 50216680

Sample Line Item	DG9H / VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	Bulk SBS Di Kit R				Matrix SI/Wt/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1	3																				Wt			
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved amber vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved clear vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Sample Container Count

CLIENT: Patriot

COC PAGE 3 of 4

COC ID#

Project # 50216680

Sample Line Item	DG9H	VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	R (Bulk SBS Di Kit)				Matrix SI/Wt/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1	3																					Wt			
2																									
3																									
4																									
5																									
6																									
7	9																								
8	3																								
9	3																								
10	9																								
11																									
12																									

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Sample Container Count

WO# : 50216680

50216680

CLIENT: Patriot

COC PAGE 4 of 4

COC ID#

Project # 50216680

Sample Line Item	DG9H	DG9A	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	Bulk Kit R				Matrix SL (Soil/Wat Aqueous	pH <2	pH >9	pH>12
1	3																					WT			
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

March 21, 2019

Mr. James Cody
Patriot Engineering
6150 E 75th St
Indianapolis, IN 46250

RE: Project: Houghland FSI #3
Pace Project No.: 50218636

Dear Mr. Cody:
Enclosed are the analytical results for sample(s) received by the laboratory on March 06, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project:	Houghland FSI #3
Pace Project No.:	50218636

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #:E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #:98019
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355-18-12
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: Houghland FSI #3
Pace Project No.: 50218636

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50218636008	**TMW-4D**	Water	03/05/19 10:15	03/06/19 17:50
50218636009	**TMW-5**	Water	03/05/19 11:10	03/06/19 17:50
50218636010	**TMW-5D**	Water	03/05/19 12:00	03/06/19 17:50
50218636011	**TMW-6**	Water	03/05/19 12:55	03/06/19 17:50
50218636012	**TMW-6D**	Water	03/05/19 13:50	03/06/19 17:50
50218636013	**TMW-7**	Water	03/05/19 14:50	03/06/19 17:50
50218636014	**TMW-7D**	Water	03/05/19 15:45	03/06/19 17:50
50218636015	**DUP-A**	Water	03/05/19 08:00	03/06/19 17:50
50218636016	**MW-16**	Water	03/06/19 10:45	03/06/19 17:50
50218636017	**MW-28**	Water	03/06/19 09:25	03/06/19 17:50
50218636018	**MW-17**	Water	03/06/19 12:30	03/06/19 17:50
50218636019	**MW-15**	Water	03/06/19 13:35	03/06/19 17:50
50218636020	**MW-15D**	Water	03/06/19 14:30	03/06/19 17:50
50218636021	**MW-14**	Water	03/06/19 15:30	03/06/19 17:50
50218636022	**MW-14D**	Water	03/06/19 16:20	03/06/19 17:50
50218636023	**DUP-B**	Water	03/06/19 08:00	03/06/19 17:50
50218636024	**Trip Blank**	Water	03/04/19 08:00	03/06/19 17:50

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SAMPLE ANALYTE COUNT

Project: Houghland FSI #3
Pace Project No.: 50218636

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50218636008	**TMW-4D**	EPA 5030/8260	KRM	75
50218636009	**TMW-5**	EPA 5030/8260	KRM	75
50218636010	**TMW-5D**	EPA 5030/8260	KRM	75
50218636011	**TMW-6**	EPA 5030/8260	KRM	75
50218636012	**TMW-6D**	EPA 5030/8260	KRM	75
50218636013	**TMW-7**	EPA 5030/8260	KRM	75
50218636014	**TMW-7D**	EPA 5030/8260	KRM	75
50218636015	**DUP-A**	EPA 5030/8260	ALA, KRM	75
50218636016	**MW-16**	EPA 5030/8260	KRM	75
50218636017	**MW-28**	EPA 5030/8260	KRM	75
50218636018	**MW-17**	EPA 5030/8260	KRM	75
50218636019	**MW-15**	EPA 5030/8260	KRM	75
50218636020	**MW-15D**	EPA 5030/8260	KRM	75
50218636021	**MW-14**	EPA 5030/8260	KRM	75
50218636022	**MW-14D**	EPA 5030/8260	KRM	75
50218636023	**DUP-B**	EPA 5030/8260	RSW	75
50218636024	**Trip Blank**	EPA 5030/8260	KRM	75

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SUMMARY OF DETECTION

Project: Houghland FSI #3
Pace Project No.: 50218636

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50218636008	**TMW-4D**					
EPA 5030/8260	cis-1,2-Dichloroethene	270	ug/L	5.0	03/14/19 05:22	
EPA 5030/8260	trans-1,2-Dichloroethene	9.8	ug/L	5.0	03/14/19 05:22	
EPA 5030/8260	Trichloroethene	7.3	ug/L	5.0	03/14/19 05:22	
50218636009	**TMW-5**					
EPA 5030/8260	Trichloroethene	311	ug/L	50.0	03/14/19 06:59	
50218636010	**TMW-5D**					
EPA 5030/8260	cis-1,2-Dichloroethene	1040	ug/L	50.0	03/14/19 08:03	
EPA 5030/8260	trans-1,2-Dichloroethene	80.9	ug/L	5.0	03/14/19 07:31	
EPA 5030/8260	Trichloroethene	444	ug/L	50.0	03/14/19 08:03	
50218636012	**TMW-6D**					
EPA 5030/8260	cis-1,2-Dichloroethene	5.2	ug/L	5.0	03/14/19 12:24	M5
50218636014	**TMW-7D**					
EPA 5030/8260	cis-1,2-Dichloroethene	246	ug/L	5.0	03/14/19 13:28	M5
EPA 5030/8260	trans-1,2-Dichloroethene	14.2	ug/L	5.0	03/14/19 13:28	M5
EPA 5030/8260	Trichloroethene	19.2	ug/L	5.0	03/14/19 13:28	M5
50218636015	**DUP-A**					
EPA 5030/8260	cis-1,2-Dichloroethene	1150	ug/L	50.0	03/19/19 01:48	M5
EPA 5030/8260	trans-1,2-Dichloroethene	63.6	ug/L	5.0	03/14/19 14:32	M5
EPA 5030/8260	Trichloroethene	272	ug/L	5.0	03/14/19 14:32	M5
50218636020	**MW-15D**					
EPA 5030/8260	cis-1,2-Dichloroethene	430	ug/L	50.0	03/14/19 17:44	M5
EPA 5030/8260	trans-1,2-Dichloroethene	17.9	ug/L	5.0	03/14/19 17:12	M5
EPA 5030/8260	Trichloroethene	7.8	ug/L	5.0	03/14/19 17:12	M5
50218636023	**DUP-B**					
EPA 5030/8260	cis-1,2-Dichloroethene	473	ug/L	50.0	03/20/19 20:46	
EPA 5030/8260	trans-1,2-Dichloroethene	29.1	ug/L	5.0	03/20/19 07:45	
EPA 5030/8260	Trichloroethene	11.3	ug/L	5.0	03/20/19 07:45	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-4D **Lab ID: 50218636008** Collected: 03/05/19 10:15 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 05:22	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/14/19 05:22	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/14/19 05:22	107-13-1	
Benzene	ND	ug/L	5.0	1		03/14/19 05:22	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/14/19 05:22	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 05:22	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 05:22	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/14/19 05:22	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/14/19 05:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 05:22	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 05:22	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 05:22	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 05:22	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 05:22	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 05:22	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 05:22	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/14/19 05:22	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/14/19 05:22	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/14/19 05:22	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 05:22	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 05:22	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 05:22	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 05:22	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/14/19 05:22	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 05:22	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 05:22	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 05:22	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 05:22	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 05:22	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 05:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 05:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 05:22	75-35-4	
cis-1,2-Dichloroethene	**270**	ug/L	5.0	1		03/14/19 05:22	156-59-2	
trans-1,2-Dichloroethene	**9.8**	ug/L	5.0	1		03/14/19 05:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 05:22	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 05:22	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 05:22	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 05:22	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 05:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 05:22	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 05:22	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 05:22	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 05:22	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/14/19 05:22	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/14/19 05:22	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/14/19 05:22	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 05:22	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-4D **Lab ID: 50218636008** Collected: 03/05/19 10:15 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 05:22	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 05:22	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 05:22	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 05:22	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 05:22	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 05:22	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/14/19 05:22	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 05:22	103-65-1	
Styrene	ND	ug/L	5.0	1		03/14/19 05:22	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 05:22	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 05:22	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 05:22	127-18-4	
Toluene	ND	ug/L	5.0	1		03/14/19 05:22	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 05:22	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 05:22	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 05:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 05:22	79-00-5	
Trichloroethene	**7.3**	ug/L	5.0	1		03/14/19 05:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 05:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 05:22	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 05:22	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 05:22	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 05:22	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 05:22	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 05:22	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	91	%.	89-116	1		03/14/19 05:22	1868-53-7	
4-Bromofluorobenzene (S)	109	%.	85-111	1		03/14/19 05:22	460-00-4	
Toluene-d8 (S)	88	%.	87-110	1		03/14/19 05:22	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-5 **Lab ID: 50218636009** Collected: 03/05/19 11:10 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 06:27	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/14/19 06:27	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/14/19 06:27	107-13-1	
Benzene	ND	ug/L	5.0	1		03/14/19 06:27	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/14/19 06:27	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 06:27	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 06:27	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/14/19 06:27	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/14/19 06:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 06:27	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 06:27	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 06:27	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 06:27	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 06:27	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 06:27	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 06:27	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/14/19 06:27	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/14/19 06:27	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/14/19 06:27	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 06:27	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 06:27	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 06:27	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 06:27	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/14/19 06:27	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 06:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 06:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 06:27	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 06:27	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 06:27	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 06:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 06:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 06:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 06:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 06:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 06:27	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 06:27	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 06:27	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 06:27	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 06:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 06:27	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 06:27	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 06:27	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 06:27	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/14/19 06:27	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/14/19 06:27	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/14/19 06:27	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 06:27	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-5 **Lab ID: 50218636009** Collected: 03/05/19 11:10 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 06:27	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 06:27	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 06:27	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 06:27	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 06:27	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 06:27	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/14/19 06:27	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 06:27	103-65-1	
Styrene	ND	ug/L	5.0	1		03/14/19 06:27	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 06:27	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 06:27	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 06:27	127-18-4	
Toluene	ND	ug/L	5.0	1		03/14/19 06:27	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 06:27	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 06:27	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 06:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 06:27	79-00-5	
Trichloroethene	**311**	ug/L	50.0	10		03/14/19 06:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 06:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 06:27	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 06:27	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 06:27	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 06:27	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 06:27	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 06:27	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	95	%.	89-116	1		03/14/19 06:27	1868-53-7	
4-Bromofluorobenzene (S)	107	%.	85-111	1		03/14/19 06:27	460-00-4	
Toluene-d8 (S)	89	%.	87-110	1		03/14/19 06:27	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-5D **Lab ID: 50218636010** Collected: 03/05/19 12:00 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 07:31	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/14/19 07:31	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/14/19 07:31	107-13-1	
Benzene	ND	ug/L	5.0	1		03/14/19 07:31	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/14/19 07:31	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 07:31	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 07:31	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/14/19 07:31	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/14/19 07:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 07:31	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 07:31	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 07:31	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 07:31	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 07:31	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 07:31	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 07:31	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/14/19 07:31	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/14/19 07:31	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/14/19 07:31	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 07:31	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 07:31	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 07:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 07:31	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/14/19 07:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 07:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 07:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 07:31	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 07:31	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 07:31	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 07:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 07:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 07:31	75-35-4	
cis-1,2-Dichloroethene	**1040**	ug/L	50.0	10		03/14/19 08:03	156-59-2	
trans-1,2-Dichloroethene	**80.9**	ug/L	5.0	1		03/14/19 07:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 07:31	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 07:31	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 07:31	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 07:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 07:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 07:31	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 07:31	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 07:31	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 07:31	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/14/19 07:31	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/14/19 07:31	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/14/19 07:31	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 07:31	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-5D **Lab ID: 50218636010** Collected: 03/05/19 12:00 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 07:31	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 07:31	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 07:31	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 07:31	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 07:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 07:31	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/14/19 07:31	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 07:31	103-65-1	
Styrene	ND	ug/L	5.0	1		03/14/19 07:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 07:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 07:31	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 07:31	127-18-4	
Toluene	ND	ug/L	5.0	1		03/14/19 07:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 07:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 07:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 07:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 07:31	79-00-5	
Trichloroethene	**444**	ug/L	50.0	10		03/14/19 08:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 07:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 07:31	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 07:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 07:31	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 07:31	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 07:31	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 07:31	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	91	%.	89-116	1		03/14/19 07:31	1868-53-7	
4-Bromofluorobenzene (S)	107	%.	85-111	1		03/14/19 07:31	460-00-4	
Toluene-d8 (S)	88	%.	87-110	1		03/14/19 07:31	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-6 **Lab ID: 50218636011** Collected: 03/05/19 12:55 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 08:35	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/14/19 08:35	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/14/19 08:35	107-13-1	
Benzene	ND	ug/L	5.0	1		03/14/19 08:35	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/14/19 08:35	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 08:35	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 08:35	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/14/19 08:35	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/14/19 08:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 08:35	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 08:35	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 08:35	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 08:35	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 08:35	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 08:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 08:35	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/14/19 08:35	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/14/19 08:35	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/14/19 08:35	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 08:35	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 08:35	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 08:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 08:35	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/14/19 08:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 08:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 08:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 08:35	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 08:35	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 08:35	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 08:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 08:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 08:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 08:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 08:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 08:35	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 08:35	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 08:35	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 08:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 08:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 08:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 08:35	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 08:35	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 08:35	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/14/19 08:35	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/14/19 08:35	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/14/19 08:35	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 08:35	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-6 **Lab ID: 50218636011** Collected: 03/05/19 12:55 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 08:35	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 08:35	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 08:35	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 08:35	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 08:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 08:35	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/14/19 08:35	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 08:35	103-65-1	
Styrene	ND	ug/L	5.0	1		03/14/19 08:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 08:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 08:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 08:35	127-18-4	
Toluene	ND	ug/L	5.0	1		03/14/19 08:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 08:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 08:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 08:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 08:35	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/14/19 08:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 08:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 08:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 08:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 08:35	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 08:35	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 08:35	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 08:35	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	95	%.	89-116	1		03/14/19 08:35	1868-53-7	
4-Bromofluorobenzene (S)	107	%.	85-111	1		03/14/19 08:35	460-00-4	
Toluene-d8 (S)	88	%.	87-110	1		03/14/19 08:35	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-6D **Lab ID: 50218636012** Collected: 03/05/19 13:50 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 12:24	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 12:24	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 12:24	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 12:24	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 12:24	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 12:24	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 12:24	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 12:24	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 12:24	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 12:24	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 12:24	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 12:24	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 12:24	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 12:24	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 12:24	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 12:24	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 12:24	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 12:24	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 12:24	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 12:24	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 12:24	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 12:24	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 12:24	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 12:24	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 12:24	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 12:24	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 12:24	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 12:24	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 12:24	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 12:24	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 12:24	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 12:24	75-35-4	M5
cis-1,2-Dichloroethene	**5.2**	ug/L	5.0	1		03/14/19 12:24	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 12:24	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 12:24	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 12:24	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 12:24	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 12:24	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 12:24	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 12:24	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 12:24	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 12:24	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 12:24	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 12:24	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 12:24	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 12:24	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 12:24	98-82-8	M5

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7726 Moller Road
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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-6D **Lab ID: 50218636012** Collected: 03/05/19 13:50 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 12:24	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 12:24	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 12:24	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 12:24	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 12:24	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 12:24	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 12:24	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 12:24	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 12:24	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 12:24	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 12:24	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 12:24	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 12:24	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 12:24	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 12:24	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 12:24	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 12:24	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		03/14/19 12:24	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 12:24	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 12:24	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 12:24	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 12:24	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 12:24	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 12:24	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 12:24	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	94	%.	89-116	1		03/14/19 12:24	1868-53-7	M5
4-Bromofluorobenzene (S)	106	%.	85-111	1		03/14/19 12:24	460-00-4	M5
Toluene-d8 (S)	90	%.	87-110	1		03/14/19 12:24	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-7 **Lab ID: 50218636013** Collected: 03/05/19 14:50 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 12:56	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 12:56	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 12:56	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 12:56	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 12:56	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 12:56	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 12:56	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 12:56	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 12:56	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 12:56	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 12:56	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 12:56	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 12:56	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 12:56	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 12:56	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 12:56	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 12:56	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 12:56	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 12:56	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 12:56	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 12:56	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 12:56	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 12:56	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 12:56	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 12:56	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 12:56	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 12:56	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 12:56	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 12:56	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 12:56	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 12:56	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 12:56	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 12:56	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 12:56	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 12:56	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 12:56	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 12:56	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 12:56	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 12:56	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 12:56	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 12:56	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 12:56	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 12:56	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 12:56	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 12:56	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 12:56	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 12:56	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-7 **Lab ID: 50218636013** Collected: 03/05/19 14:50 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 12:56	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 12:56	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 12:56	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 12:56	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 12:56	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 12:56	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 12:56	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 12:56	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 12:56	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 12:56	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 12:56	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 12:56	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 12:56	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 12:56	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 12:56	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 12:56	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 12:56	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		03/14/19 12:56	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 12:56	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 12:56	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 12:56	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 12:56	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 12:56	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 12:56	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 12:56	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	97	%.	89-116	1		03/14/19 12:56	1868-53-7	M5
4-Bromofluorobenzene (S)	107	%.	85-111	1		03/14/19 12:56	460-00-4	M5
Toluene-d8 (S)	88	%.	87-110	1		03/14/19 12:56	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-7D **Lab ID: 50218636014** Collected: 03/05/19 15:45 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 13:28	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 13:28	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 13:28	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 13:28	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 13:28	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 13:28	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 13:28	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 13:28	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 13:28	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 13:28	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 13:28	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 13:28	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 13:28	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 13:28	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 13:28	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 13:28	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 13:28	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 13:28	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 13:28	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 13:28	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 13:28	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 13:28	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 13:28	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 13:28	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 13:28	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 13:28	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 13:28	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 13:28	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 13:28	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 13:28	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 13:28	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 13:28	75-35-4	M5
cis-1,2-Dichloroethene	**246**	ug/L	5.0	1		03/14/19 13:28	156-59-2	M5
trans-1,2-Dichloroethene	**14.2**	ug/L	5.0	1		03/14/19 13:28	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 13:28	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 13:28	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 13:28	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 13:28	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 13:28	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 13:28	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 13:28	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 13:28	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 13:28	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 13:28	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 13:28	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 13:28	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 13:28	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: TMW-7D **Lab ID: 50218636014** Collected: 03/05/19 15:45 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 13:28	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 13:28	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 13:28	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 13:28	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 13:28	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 13:28	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 13:28	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 13:28	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 13:28	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 13:28	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 13:28	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 13:28	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 13:28	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 13:28	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 13:28	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 13:28	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 13:28	79-00-5	M5
Trichloroethene	**19.2**	ug/L	5.0	1		03/14/19 13:28	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 13:28	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 13:28	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 13:28	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 13:28	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 13:28	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 13:28	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 13:28	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	94	%.	89-116	1		03/14/19 13:28	1868-53-7	M5
4-Bromofluorobenzene (S)	107	%.	85-111	1		03/14/19 13:28	460-00-4	M5
Toluene-d8 (S)	89	%.	87-110	1		03/14/19 13:28	2037-26-5	M5

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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: DUP-A **Lab ID: 50218636015** Collected: 03/05/19 08:00 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 14:32	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 14:32	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 14:32	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 14:32	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 14:32	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 14:32	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 14:32	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 14:32	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 14:32	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 14:32	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 14:32	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 14:32	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 14:32	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 14:32	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 14:32	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 14:32	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 14:32	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 14:32	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 14:32	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 14:32	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 14:32	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 14:32	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 14:32	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 14:32	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 14:32	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 14:32	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 14:32	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 14:32	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 14:32	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 14:32	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 14:32	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 14:32	75-35-4	M5
cis-1,2-Dichloroethene	**1150**	ug/L	50.0	10		03/19/19 01:48	156-59-2	M5
trans-1,2-Dichloroethene	**63.6**	ug/L	5.0	1		03/14/19 14:32	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 14:32	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 14:32	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 14:32	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 14:32	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 14:32	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 14:32	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 14:32	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 14:32	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 14:32	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 14:32	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 14:32	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 14:32	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 14:32	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: DUP-A **Lab ID: 50218636015** Collected: 03/05/19 08:00 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 14:32	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 14:32	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 14:32	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 14:32	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 14:32	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 14:32	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 14:32	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 14:32	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 14:32	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 14:32	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 14:32	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 14:32	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 14:32	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 14:32	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 14:32	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 14:32	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 14:32	79-00-5	M5
Trichloroethene	**272**	ug/L	5.0	1		03/14/19 14:32	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 14:32	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 14:32	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 14:32	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 14:32	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 14:32	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 14:32	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 14:32	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	93	%.	89-116	1		03/14/19 14:32	1868-53-7	M5
4-Bromofluorobenzene (S)	107	%.	85-111	1		03/14/19 14:32	460-00-4	M5
Toluene-d8 (S)	87	%.	87-110	1		03/14/19 14:32	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-16 **Lab ID: 50218636016** Collected: 03/06/19 10:45 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 15:05	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 15:05	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 15:05	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 15:05	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 15:05	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 15:05	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 15:05	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 15:05	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 15:05	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 15:05	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 15:05	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 15:05	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 15:05	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 15:05	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 15:05	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 15:05	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 15:05	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 15:05	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 15:05	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 15:05	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 15:05	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 15:05	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 15:05	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 15:05	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 15:05	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 15:05	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 15:05	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 15:05	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 15:05	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 15:05	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 15:05	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 15:05	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 15:05	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 15:05	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 15:05	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 15:05	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 15:05	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 15:05	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 15:05	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 15:05	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 15:05	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 15:05	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 15:05	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 15:05	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 15:05	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 15:05	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 15:05	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-16 **Lab ID: 50218636016** Collected: 03/06/19 10:45 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 15:05	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 15:05	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 15:05	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 15:05	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 15:05	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 15:05	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 15:05	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 15:05	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 15:05	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 15:05	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 15:05	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 15:05	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 15:05	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 15:05	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 15:05	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 15:05	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 15:05	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		03/14/19 15:05	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 15:05	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 15:05	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 15:05	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 15:05	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 15:05	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 15:05	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 15:05	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	95	%.	89-116	1		03/14/19 15:05	1868-53-7	M5
4-Bromofluorobenzene (S)	106	%.	85-111	1		03/14/19 15:05	460-00-4	M5
Toluene-d8 (S)	89	%.	87-110	1		03/14/19 15:05	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-28 **Lab ID: 50218636017** Collected: 03/06/19 09:25 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 15:36	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 15:36	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 15:36	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 15:36	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 15:36	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 15:36	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 15:36	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 15:36	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 15:36	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 15:36	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 15:36	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 15:36	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 15:36	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 15:36	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 15:36	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 15:36	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 15:36	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 15:36	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 15:36	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 15:36	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 15:36	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 15:36	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 15:36	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 15:36	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 15:36	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 15:36	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 15:36	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 15:36	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 15:36	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 15:36	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 15:36	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 15:36	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 15:36	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 15:36	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 15:36	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 15:36	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 15:36	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 15:36	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 15:36	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 15:36	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 15:36	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 15:36	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 15:36	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 15:36	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 15:36	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 15:36	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 15:36	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-28 **Lab ID: 50218636017** Collected: 03/06/19 09:25 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 15:36	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 15:36	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 15:36	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 15:36	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 15:36	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 15:36	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 15:36	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 15:36	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 15:36	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 15:36	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 15:36	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 15:36	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 15:36	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 15:36	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 15:36	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 15:36	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 15:36	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		03/14/19 15:36	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 15:36	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 15:36	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 15:36	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 15:36	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 15:36	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 15:36	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 15:36	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	96	%.	89-116	1		03/14/19 15:36	1868-53-7	M5
4-Bromofluorobenzene (S)	105	%.	85-111	1		03/14/19 15:36	460-00-4	M5
Toluene-d8 (S)	88	%.	87-110	1		03/14/19 15:36	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-17 **Lab ID: 50218636018** Collected: 03/06/19 12:30 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 16:08	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 16:08	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 16:08	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 16:08	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 16:08	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 16:08	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 16:08	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 16:08	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 16:08	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 16:08	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 16:08	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 16:08	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 16:08	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 16:08	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 16:08	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 16:08	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 16:08	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 16:08	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 16:08	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 16:08	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 16:08	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 16:08	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 16:08	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 16:08	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 16:08	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 16:08	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 16:08	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 16:08	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 16:08	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 16:08	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 16:08	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 16:08	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 16:08	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 16:08	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 16:08	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 16:08	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 16:08	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 16:08	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 16:08	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 16:08	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 16:08	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 16:08	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 16:08	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 16:08	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 16:08	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 16:08	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 16:08	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-17 **Lab ID: 50218636018** Collected: 03/06/19 12:30 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 16:08	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 16:08	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 16:08	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 16:08	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 16:08	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 16:08	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 16:08	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 16:08	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 16:08	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 16:08	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 16:08	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 16:08	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 16:08	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 16:08	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 16:08	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 16:08	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 16:08	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		03/14/19 16:08	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 16:08	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 16:08	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 16:08	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 16:08	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 16:08	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 16:08	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 16:08	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	94	%.	89-116	1		03/14/19 16:08	1868-53-7	M5
4-Bromofluorobenzene (S)	106	%.	85-111	1		03/14/19 16:08	460-00-4	M5
Toluene-d8 (S)	88	%.	87-110	1		03/14/19 16:08	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-15 **Lab ID: 50218636019** Collected: 03/06/19 13:35 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 16:40	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 16:40	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 16:40	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 16:40	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 16:40	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 16:40	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 16:40	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 16:40	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 16:40	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 16:40	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 16:40	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 16:40	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 16:40	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 16:40	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 16:40	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 16:40	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 16:40	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 16:40	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 16:40	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 16:40	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 16:40	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 16:40	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 16:40	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 16:40	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 16:40	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 16:40	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 16:40	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 16:40	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 16:40	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 16:40	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 16:40	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 16:40	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 16:40	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 16:40	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 16:40	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 16:40	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 16:40	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 16:40	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 16:40	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 16:40	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 16:40	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 16:40	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 16:40	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 16:40	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 16:40	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 16:40	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 16:40	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-15 **Lab ID: 50218636019** Collected: 03/06/19 13:35 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 16:40	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 16:40	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 16:40	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 16:40	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 16:40	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 16:40	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 16:40	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 16:40	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 16:40	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 16:40	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 16:40	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 16:40	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 16:40	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 16:40	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 16:40	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 16:40	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 16:40	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		03/14/19 16:40	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 16:40	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 16:40	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 16:40	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 16:40	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 16:40	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 16:40	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 16:40	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	95	%.	89-116	1		03/14/19 16:40	1868-53-7	M5
4-Bromofluorobenzene (S)	107	%.	85-111	1		03/14/19 16:40	460-00-4	M5
Toluene-d8 (S)	88	%.	87-110	1		03/14/19 16:40	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-15D **Lab ID: 50218636020** Collected: 03/06/19 14:30 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 17:12	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 17:12	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 17:12	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 17:12	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 17:12	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 17:12	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 17:12	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 17:12	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 17:12	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 17:12	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 17:12	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 17:12	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 17:12	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 17:12	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 17:12	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 17:12	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 17:12	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 17:12	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 17:12	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 17:12	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 17:12	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 17:12	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 17:12	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 17:12	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 17:12	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 17:12	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 17:12	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 17:12	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 17:12	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 17:12	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 17:12	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 17:12	75-35-4	M5
cis-1,2-Dichloroethene	**430**	ug/L	50.0	10		03/14/19 17:44	156-59-2	M5
trans-1,2-Dichloroethene	**17.9**	ug/L	5.0	1		03/14/19 17:12	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 17:12	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 17:12	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 17:12	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 17:12	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 17:12	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 17:12	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 17:12	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 17:12	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 17:12	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 17:12	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 17:12	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 17:12	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 17:12	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-15D **Lab ID: 50218636020** Collected: 03/06/19 14:30 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 17:12	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 17:12	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 17:12	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 17:12	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 17:12	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 17:12	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 17:12	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 17:12	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 17:12	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 17:12	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 17:12	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 17:12	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 17:12	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 17:12	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 17:12	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 17:12	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 17:12	79-00-5	M5
Trichloroethene	**7.8**	ug/L	5.0	1		03/14/19 17:12	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 17:12	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 17:12	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 17:12	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 17:12	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 17:12	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 17:12	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 17:12	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	93	%.	89-116	1		03/14/19 17:12	1868-53-7	M5
4-Bromofluorobenzene (S)	105	%.	85-111	1		03/14/19 17:12	460-00-4	M5
Toluene-d8 (S)	89	%.	87-110	1		03/14/19 17:12	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-14 **Lab ID: 50218636021** Collected: 03/06/19 15:30 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 18:16	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 18:16	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 18:16	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 18:16	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 18:16	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 18:16	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 18:16	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 18:16	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 18:16	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 18:16	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 18:16	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 18:16	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 18:16	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 18:16	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 18:16	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 18:16	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 18:16	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 18:16	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 18:16	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 18:16	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 18:16	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 18:16	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 18:16	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 18:16	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 18:16	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 18:16	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 18:16	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 18:16	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 18:16	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 18:16	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 18:16	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 18:16	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 18:16	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 18:16	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 18:16	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 18:16	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 18:16	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 18:16	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 18:16	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 18:16	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 18:16	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 18:16	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 18:16	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 18:16	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 18:16	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 18:16	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 18:16	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-14 **Lab ID: 50218636021** Collected: 03/06/19 15:30 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 18:16	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 18:16	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 18:16	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 18:16	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 18:16	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 18:16	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 18:16	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 18:16	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 18:16	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 18:16	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 18:16	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 18:16	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 18:16	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 18:16	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 18:16	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 18:16	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 18:16	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		03/14/19 18:16	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 18:16	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 18:16	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 18:16	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 18:16	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 18:16	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 18:16	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 18:16	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	96	%.	89-116	1		03/14/19 18:16	1868-53-7	M5
4-Bromofluorobenzene (S)	109	%.	85-111	1		03/14/19 18:16	460-00-4	M5
Toluene-d8 (S)	88	%.	87-110	1		03/14/19 18:16	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-14D **Lab ID: 50218636022** Collected: 03/06/19 16:20 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 18:48	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 18:48	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 18:48	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 18:48	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 18:48	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 18:48	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 18:48	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 18:48	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 18:48	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 18:48	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 18:48	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 18:48	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 18:48	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 18:48	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 18:48	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 18:48	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 18:48	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 18:48	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 18:48	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 18:48	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 18:48	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 18:48	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 18:48	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 18:48	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 18:48	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 18:48	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 18:48	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 18:48	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 18:48	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 18:48	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 18:48	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 18:48	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 18:48	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 18:48	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 18:48	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 18:48	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 18:48	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 18:48	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 18:48	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 18:48	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 18:48	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 18:48	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 18:48	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 18:48	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 18:48	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 18:48	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 18:48	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: MW-14D **Lab ID: 50218636022** Collected: 03/06/19 16:20 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 18:48	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 18:48	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 18:48	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 18:48	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 18:48	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 18:48	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 18:48	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 18:48	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 18:48	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 18:48	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 18:48	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 18:48	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 18:48	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 18:48	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 18:48	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 18:48	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 18:48	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		03/14/19 18:48	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 18:48	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 18:48	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 18:48	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 18:48	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 18:48	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 18:48	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 18:48	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	95	%.	89-116	1		03/14/19 18:48	1868-53-7	M5
4-Bromofluorobenzene (S)	108	%.	85-111	1		03/14/19 18:48	460-00-4	M5
Toluene-d8 (S)	90	%.	87-110	1		03/14/19 18:48	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: DUP-B **Lab ID: 50218636023** Collected: 03/06/19 08:00 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/20/19 07:45	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/20/19 07:45	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/20/19 07:45	107-13-1	
Benzene	ND	ug/L	5.0	1		03/20/19 07:45	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/20/19 07:45	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/20/19 07:45	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/20/19 07:45	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/20/19 07:45	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/20/19 07:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/20/19 07:45	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/20/19 07:45	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/20/19 07:45	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/20/19 07:45	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/20/19 07:45	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/20/19 07:45	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/20/19 07:45	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/20/19 07:45	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/20/19 07:45	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/20/19 07:45	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/20/19 07:45	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/20/19 07:45	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/20/19 07:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/20/19 07:45	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/20/19 07:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/20/19 07:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/20/19 07:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/20/19 07:45	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/20/19 07:45	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/20/19 07:45	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/20/19 07:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/20/19 07:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/20/19 07:45	75-35-4	
cis-1,2-Dichloroethene	**473**	ug/L	50.0	10		03/20/19 20:46	156-59-2	
trans-1,2-Dichloroethene	**29.1**	ug/L	5.0	1		03/20/19 07:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/20/19 07:45	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/20/19 07:45	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/20/19 07:45	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/20/19 07:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/20/19 07:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/20/19 07:45	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/20/19 07:45	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/20/19 07:45	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/20/19 07:45	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/20/19 07:45	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/20/19 07:45	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/20/19 07:45	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/20/19 07:45	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: DUP-B **Lab ID: 50218636023** Collected: 03/06/19 08:00 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/20/19 07:45	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/20/19 07:45	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/20/19 07:45	90-12-0	L1,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/20/19 07:45	91-57-6	L1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/20/19 07:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/20/19 07:45	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/20/19 07:45	91-20-3	L1
n-Propylbenzene	ND	ug/L	5.0	1		03/20/19 07:45	103-65-1	
Styrene	ND	ug/L	5.0	1		03/20/19 07:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/20/19 07:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/20/19 07:45	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/20/19 07:45	127-18-4	
Toluene	ND	ug/L	5.0	1		03/20/19 07:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/20/19 07:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/20/19 07:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/20/19 07:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/20/19 07:45	79-00-5	
Trichloroethene	**11.3**	ug/L	5.0	1		03/20/19 07:45	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/20/19 07:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/20/19 07:45	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/20/19 07:45	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/20/19 07:45	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/20/19 07:45	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/20/19 07:45	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/20/19 07:45	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97	%.	80-122	1		03/20/19 07:45	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-114	1		03/20/19 07:45	460-00-4	
Toluene-d8 (S)	102	%.	85-114	1		03/20/19 07:45	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: Trip Blank **Lab ID: 50218636024** Collected: 03/04/19 08:00 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/14/19 21:29	67-64-1	L1,M5
Acrolein	ND	ug/L	50.0	1		03/14/19 21:29	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/14/19 21:29	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/14/19 21:29	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/14/19 21:29	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/14/19 21:29	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/14/19 21:29	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/14/19 21:29	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/14/19 21:29	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/14/19 21:29	78-93-3	L1,M5
n-Butylbenzene	ND	ug/L	5.0	1		03/14/19 21:29	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/14/19 21:29	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/14/19 21:29	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/14/19 21:29	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/14/19 21:29	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/14/19 21:29	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/14/19 21:29	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/14/19 21:29	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/14/19 21:29	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 21:29	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/14/19 21:29	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/14/19 21:29	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/14/19 21:29	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/14/19 21:29	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 21:29	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 21:29	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/14/19 21:29	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/14/19 21:29	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/14/19 21:29	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/14/19 21:29	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/14/19 21:29	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/14/19 21:29	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 21:29	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/14/19 21:29	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 21:29	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/14/19 21:29	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/14/19 21:29	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/14/19 21:29	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 21:29	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/14/19 21:29	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/14/19 21:29	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/14/19 21:29	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/14/19 21:29	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/14/19 21:29	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/14/19 21:29	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/14/19 21:29	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/14/19 21:29	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218636

Sample: Trip Blank **Lab ID: 50218636024** Collected: 03/04/19 08:00 Received: 03/06/19 17:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/14/19 21:29	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/14/19 21:29	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 21:29	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/14/19 21:29	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/14/19 21:29	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/14/19 21:29	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/14/19 21:29	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/14/19 21:29	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/14/19 21:29	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 21:29	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/14/19 21:29	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/14/19 21:29	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/14/19 21:29	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 21:29	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/14/19 21:29	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/14/19 21:29	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/14/19 21:29	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		03/14/19 21:29	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/14/19 21:29	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/14/19 21:29	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 21:29	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/14/19 21:29	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/14/19 21:29	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/14/19 21:29	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/14/19 21:29	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	95	%.	89-116	1		03/14/19 21:29	1868-53-7	M5
4-Bromofluorobenzene (S)	107	%.	85-111	1		03/14/19 21:29	460-00-4	M5
Toluene-d8 (S)	89	%.	87-110	1		03/14/19 21:29	2037-26-5	M5

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

QC Batch: 489081 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50218636008, 50218636009, 50218636010, 50218636011

METHOD BLANK: 2255404 | Matrix: Water
Associated Lab Samples: 50218636008, 50218636009, 50218636010, 50218636011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/13/19 22:26	
1,1,1-Trichloroethane	ug/L	ND	5.0	03/13/19 22:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/13/19 22:26	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/13/19 22:26	
1,1-Dichloroethane	ug/L	ND	5.0	03/13/19 22:26	
1,1-Dichloroethene	ug/L	ND	5.0	03/13/19 22:26	
1,1-Dichloropropene	ug/L	ND	5.0	03/13/19 22:26	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/13/19 22:26	
1,2,3-Trichloropropane	ug/L	ND	5.0	03/13/19 22:26	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/13/19 22:26	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/13/19 22:26	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/13/19 22:26	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/13/19 22:26	
1,2-Dichloroethane	ug/L	ND	5.0	03/13/19 22:26	
1,2-Dichloropropane	ug/L	ND	5.0	03/13/19 22:26	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/13/19 22:26	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/13/19 22:26	
1,3-Dichloropropane	ug/L	ND	5.0	03/13/19 22:26	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/13/19 22:26	
1-Methylnaphthalene	ug/L	ND	10.0	03/13/19 22:26	N2
2,2-Dichloropropane	ug/L	ND	5.0	03/13/19 22:26	
2-Butanone (MEK)	ug/L	ND	25.0	03/13/19 22:26	
2-Chlorotoluene	ug/L	ND	5.0	03/13/19 22:26	
2-Hexanone	ug/L	ND	25.0	03/13/19 22:26	
2-Methylnaphthalene	ug/L	ND	10.0	03/13/19 22:26	
4-Chlorotoluene	ug/L	ND	5.0	03/13/19 22:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/13/19 22:26	
Acetone	ug/L	ND	100	03/13/19 22:26	
Acrolein	ug/L	ND	50.0	03/13/19 22:26	
Acrylonitrile	ug/L	ND	100	03/13/19 22:26	
Benzene	ug/L	ND	5.0	03/13/19 22:26	
Bromobenzene	ug/L	ND	5.0	03/13/19 22:26	
Bromochloromethane	ug/L	ND	5.0	03/13/19 22:26	
Bromodichloromethane	ug/L	ND	5.0	03/13/19 22:26	
Bromoform	ug/L	ND	5.0	03/13/19 22:26	
Bromomethane	ug/L	ND	5.0	03/13/19 22:26	
Carbon disulfide	ug/L	ND	10.0	03/13/19 22:26	
Carbon tetrachloride	ug/L	ND	5.0	03/13/19 22:26	
Chlorobenzene	ug/L	ND	5.0	03/13/19 22:26	
Chloroethane	ug/L	ND	5.0	03/13/19 22:26	
Chloroform	ug/L	ND	5.0	03/13/19 22:26	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

METHOD BLANK: 2255404 Matrix: Water
Associated Lab Samples: 50218636008, 50218636009, 50218636010, 50218636011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	03/13/19 22:26	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/13/19 22:26	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/13/19 22:26	
Dibromochloromethane	ug/L	ND	5.0	03/13/19 22:26	
Dibromomethane	ug/L	ND	5.0	03/13/19 22:26	
Dichlorodifluoromethane	ug/L	ND	5.0	03/13/19 22:26	
Ethyl methacrylate	ug/L	ND	100	03/13/19 22:26	
Ethylbenzene	ug/L	ND	5.0	03/13/19 22:26	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/13/19 22:26	
Iodomethane	ug/L	ND	10.0	03/13/19 22:26	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/13/19 22:26	
Methyl-tert-butyl ether	ug/L	ND	4.0	03/13/19 22:26	
Methylene Chloride	ug/L	ND	5.0	03/13/19 22:26	
n-Butylbenzene	ug/L	ND	5.0	03/13/19 22:26	
n-Hexane	ug/L	ND	5.0	03/13/19 22:26	
n-Propylbenzene	ug/L	ND	5.0	03/13/19 22:26	
Naphthalene	ug/L	ND	1.7	03/13/19 22:26	
p-Isopropyltoluene	ug/L	ND	5.0	03/13/19 22:26	
sec-Butylbenzene	ug/L	ND	5.0	03/13/19 22:26	
Styrene	ug/L	ND	5.0	03/13/19 22:26	
tert-Butylbenzene	ug/L	ND	5.0	03/13/19 22:26	
Tetrachloroethene	ug/L	ND	5.0	03/13/19 22:26	
Toluene	ug/L	ND	5.0	03/13/19 22:26	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/13/19 22:26	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/13/19 22:26	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/13/19 22:26	
Trichloroethene	ug/L	ND	5.0	03/13/19 22:26	
Trichlorofluoromethane	ug/L	ND	5.0	03/13/19 22:26	
Vinyl acetate	ug/L	ND	50.0	03/13/19 22:26	
Vinyl chloride	ug/L	ND	2.0	03/13/19 22:26	
Xylene (Total)	ug/L	ND	10.0	03/13/19 22:26	
4-Bromofluorobenzene (S)	%.	109	85-111	03/13/19 22:26	
Dibromofluoromethane (S)	%.	91	89-116	03/13/19 22:26	
Toluene-d8 (S)	%.	90	87-110	03/13/19 22:26	

LABORATORY CONTROL SAMPLE: 2255405

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	43.1	86	74-126	
1,1,2,2-Tetrachloroethane	ug/L	50	46.2	92	73-117	
1,1-Dichloroethene	ug/L	50	45.5	91	72-123	
1,2,4-Trimethylbenzene	ug/L	50	47.0	94	76-118	
1,2-Dibromoethane (EDB)	ug/L	50	44.3	89	80-120	
1,2-Dichloroethane	ug/L	50	35.4	71	69-122	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

LABORATORY CONTROL SAMPLE: 2255405

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	ug/L	50	48.1	96	75-124	
Benzene	ug/L	50	46.8	94	78-117	
Chlorobenzene	ug/L	50	44.3	89	79-112	
Chloroform	ug/L	50	42.2	84	76-118	
cis-1,2-Dichloroethene	ug/L	50	44.0	88	75-117	
Ethylbenzene	ug/L	50	47.2	94	80-118	
Isopropylbenzene (Cumene)	ug/L	50	49.4	99	81-117	
Methyl-tert-butyl ether	ug/L	50	47.6	95	71-124	
Naphthalene	ug/L	50	46.5	93	67-126	
Tetrachloroethene	ug/L	50	42.1	84	76-116	
Toluene	ug/L	50	42.0	84	77-115	
trans-1,2-Dichloroethene	ug/L	50	45.1	90	75-121	
Trichloroethene	ug/L	50	47.4	95	76-120	
Vinyl chloride	ug/L	50	40.9	82	64-155	
Xylene (Total)	ug/L	150	143	95	78-118	
4-Bromofluorobenzene (S)	%.			106	85-111	
Dibromofluoromethane (S)	%.			89	89-116	
Toluene-d8 (S)	%.			88	87-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2255406 2255407

Parameter	Units	50218675008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	37.7	44.2	75	88	50-141	16	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	43.8	44.8	88	90	52-131	2	20	
1,1-Dichloroethene	ug/L	ND	50	50	38.6	46.4	77	93	51-138	18	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	41.9	45.3	83	90	19-148	8	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	41.9	43.9	84	88	57-134	5	20	
1,2-Dichloroethane	ug/L	ND	50	50	32.3	35.5	65	71	46-139	10	20	
1,2-Dichloropropane	ug/L	ND	50	50	45.2	50.1	90	100	54-135	10	20	
Benzene	ug/L	ND	50	50	42.0	48.1	84	96	50-135	14	20	
Chlorobenzene	ug/L	ND	50	50	40.2	44.4	80	89	39-135	10	20	
Chloroform	ug/L	ND	50	50	38.5	43.3	77	87	52-134	12	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	39.9	46.2	79	92	48-133	15	20	
Ethylbenzene	ug/L	ND	50	50	41.5	47.2	82	94	31-147	13	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	43.6	49.5	87	99	25-151	13	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	45.7	48.1	91	96	51-142	5	20	
Naphthalene	ug/L	ND	50	50	43.1	43.7	86	87	40-135	1	20	
Tetrachloroethene	ug/L	ND	50	50	37.4	42.7	75	85	34-140	13	20	
Toluene	ug/L	ND	50	50	38.1	43.0	75	85	43-134	12	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	40.5	47.8	81	96	51-135	16	20	
Trichloroethene	ug/L	ND	50	50	42.8	48.8	84	96	40-141	13	20	
Vinyl chloride	ug/L	ND	50	50	35.0	42.2	70	84	46-164	19	20	
Xylene (Total)	ug/L	ND	150	150	126	144	84	96	29-145	13	20	
4-Bromofluorobenzene (S)	%.						108	107	85-111			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2255406 2255407

Parameter	Units	50218675008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						89	91	89-116			
Toluene-d8 (S)	%.						88	89	87-110			

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

QC Batch: 489276 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50218636012, 50218636013, 50218636014, 50218636015, 50218636016, 50218636017, 50218636018, 50218636019, 50218636020, 50218636021, 50218636022, 50218636024

METHOD BLANK: 2256509 | Matrix: Water
Associated Lab Samples: 50218636012, 50218636013, 50218636014, 50218636015, 50218636016, 50218636017, 50218636018, 50218636019, 50218636020, 50218636021, 50218636022, 50218636024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/14/19 11:20	M5
1,1,1-Trichloroethane	ug/L	ND	5.0	03/14/19 11:20	M5
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/14/19 11:20	M5
1,1,2-Trichloroethane	ug/L	ND	5.0	03/14/19 11:20	M5
1,1-Dichloroethane	ug/L	ND	5.0	03/14/19 11:20	M5
1,1-Dichloroethene	ug/L	ND	5.0	03/14/19 11:20	M5
1,1-Dichloropropene	ug/L	ND	5.0	03/14/19 11:20	M5
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/14/19 11:20	M5
1,2,3-Trichloropropane	ug/L	ND	5.0	03/14/19 11:20	M5
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/14/19 11:20	M5
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/14/19 11:20	M5
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/14/19 11:20	M5
1,2-Dichlorobenzene	ug/L	ND	5.0	03/14/19 11:20	M5
1,2-Dichloroethane	ug/L	ND	5.0	03/14/19 11:20	M5
1,2-Dichloropropane	ug/L	ND	5.0	03/14/19 11:20	M5
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/14/19 11:20	M5
1,3-Dichlorobenzene	ug/L	ND	5.0	03/14/19 11:20	M5
1,3-Dichloropropane	ug/L	ND	5.0	03/14/19 11:20	M5
1,4-Dichlorobenzene	ug/L	ND	5.0	03/14/19 11:20	M5
1-Methylnaphthalene	ug/L	ND	10.0	03/14/19 11:20	M5,N2
2,2-Dichloropropane	ug/L	ND	5.0	03/14/19 11:20	M5
2-Butanone (MEK)	ug/L	ND	25.0	03/14/19 11:20	M5
2-Chlorotoluene	ug/L	ND	5.0	03/14/19 11:20	M5
2-Hexanone	ug/L	ND	25.0	03/14/19 11:20	M5
2-Methylnaphthalene	ug/L	ND	10.0	03/14/19 11:20	M5
4-Chlorotoluene	ug/L	ND	5.0	03/14/19 11:20	M5
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/14/19 11:20	M5
Acetone	ug/L	ND	100	03/14/19 11:20	M5
Acrolein	ug/L	ND	50.0	03/14/19 11:20	M5
Acrylonitrile	ug/L	ND	100	03/14/19 11:20	M5
Benzene	ug/L	ND	5.0	03/14/19 11:20	M5
Bromobenzene	ug/L	ND	5.0	03/14/19 11:20	M5
Bromochloromethane	ug/L	ND	5.0	03/14/19 11:20	M5
Bromodichloromethane	ug/L	ND	5.0	03/14/19 11:20	M5
Bromoform	ug/L	ND	5.0	03/14/19 11:20	M5
Bromomethane	ug/L	ND	5.0	03/14/19 11:20	M5
Carbon disulfide	ug/L	ND	10.0	03/14/19 11:20	M5
Carbon tetrachloride	ug/L	ND	5.0	03/14/19 11:20	M5
Chlorobenzene	ug/L	ND	5.0	03/14/19 11:20	M5
Chloroethane	ug/L	ND	5.0	03/14/19 11:20	M5

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

METHOD BLANK: 2256509 Matrix: Water

Associated Lab Samples: 50218636012, 50218636013, 50218636014, 50218636015, 50218636016, 50218636017, 50218636018, 50218636019, 50218636020, 50218636021, 50218636022, 50218636024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	5.0	03/14/19 11:20	M5
Chloromethane	ug/L	ND	5.0	03/14/19 11:20	M5
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/14/19 11:20	M5
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/14/19 11:20	M5
Dibromochloromethane	ug/L	ND	5.0	03/14/19 11:20	M5
Dibromomethane	ug/L	ND	5.0	03/14/19 11:20	M5
Dichlorodifluoromethane	ug/L	ND	5.0	03/14/19 11:20	M5
Ethyl methacrylate	ug/L	ND	100	03/14/19 11:20	M5
Ethylbenzene	ug/L	ND	5.0	03/14/19 11:20	M5
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/14/19 11:20	M5
Iodomethane	ug/L	ND	10.0	03/14/19 11:20	M5
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/14/19 11:20	M5
Methyl-tert-butyl ether	ug/L	ND	4.0	03/14/19 11:20	M5
Methylene Chloride	ug/L	ND	5.0	03/14/19 11:20	M5
n-Butylbenzene	ug/L	ND	5.0	03/14/19 11:20	M5
n-Hexane	ug/L	ND	5.0	03/14/19 11:20	M5
n-Propylbenzene	ug/L	ND	5.0	03/14/19 11:20	M5
Naphthalene	ug/L	ND	1.7	03/14/19 11:20	M5
p-Isopropyltoluene	ug/L	ND	5.0	03/14/19 11:20	M5
sec-Butylbenzene	ug/L	ND	5.0	03/14/19 11:20	M5
Styrene	ug/L	ND	5.0	03/14/19 11:20	M5
tert-Butylbenzene	ug/L	ND	5.0	03/14/19 11:20	M5
Tetrachloroethene	ug/L	ND	5.0	03/14/19 11:20	M5
Toluene	ug/L	ND	5.0	03/14/19 11:20	M5
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/14/19 11:20	M5
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/14/19 11:20	M5
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/14/19 11:20	M5
Trichloroethene	ug/L	ND	5.0	03/14/19 11:20	M5
Trichlorofluoromethane	ug/L	ND	5.0	03/14/19 11:20	M5
Vinyl acetate	ug/L	ND	50.0	03/14/19 11:20	M5
Vinyl chloride	ug/L	ND	2.0	03/14/19 11:20	M5
Xylene (Total)	ug/L	ND	10.0	03/14/19 11:20	M5
4-Bromofluorobenzene (S)	%.	107	85-111	03/14/19 11:20	M5
Dibromofluoromethane (S)	%.	94	89-116	03/14/19 11:20	M5
Toluene-d8 (S)	%.	90	87-110	03/14/19 11:20	M5

LABORATORY CONTROL SAMPLE: 2256510

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	46.9	94	80-120	M5
1,1,1-Trichloroethane	ug/L	50	48.5	97	74-126	M5
1,1,2,2-Tetrachloroethane	ug/L	50	46.4	93	73-117	M5
1,1,2-Trichloroethane	ug/L	50	44.0	88	74-119	M5

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

LABORATORY CONTROL SAMPLE: 2256510

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethane	ug/L	50	44.6	89	72-119	M5
1,1-Dichloroethene	ug/L	50	50.1	100	72-123	M5
1,1-Dichloropropene	ug/L	50	49.1	98	77-125	M5
1,2,3-Trichlorobenzene	ug/L	50	46.0	92	74-125	M5
1,2,3-Trichloropropane	ug/L	50	43.7	87	82-121	M5
1,2,4-Trichlorobenzene	ug/L	50	47.8	96	70-125	M5
1,2,4-Trimethylbenzene	ug/L	50	48.8	98	76-118	M5
1,2-Dibromoethane (EDB)	ug/L	50	44.7	89	80-120	M5
1,2-Dichlorobenzene	ug/L	50	43.9	88	77-117	M5
1,2-Dichloroethane	ug/L	50	37.1	74	69-122	M5
1,2-Dichloropropane	ug/L	50	52.1	104	75-124	M5
1,3,5-Trimethylbenzene	ug/L	50	50.7	101	75-117	M5
1,3-Dichlorobenzene	ug/L	50	47.5	95	76-116	M5
1,3-Dichloropropane	ug/L	50	45.8	92	82-118	M5
1,4-Dichlorobenzene	ug/L	50	45.7	91	74-115	M5
1-Methylnaphthalene	ug/L	50	49.4	99	70-130	M5,N2
2,2-Dichloropropane	ug/L	50	44.3	89	51-133	M5
2-Butanone (MEK)	ug/L	250	383	153	72-147	L1,M5
2-Chlorotoluene	ug/L	50	51.1	102	73-113	M5
2-Hexanone	ug/L	250	308	123	71-132	M5
2-Methylnaphthalene	ug/L	50	48.4	97	69-123	M5
4-Chlorotoluene	ug/L	50	46.8	94	78-118	M5
4-Methyl-2-pentanone (MIBK)	ug/L	250	233	93	89-128	M5
Acetone	ug/L	250	500	200	46-170	L1,M5
Acrolein	ug/L	1000	1180	118	13-200	M5
Acrylonitrile	ug/L	200	179	89	65-130	M5
Benzene	ug/L	50	49.6	99	78-117	M5
Bromobenzene	ug/L	50	49.5	99	66-126	M5
Bromochloromethane	ug/L	50	41.3	83	76-120	M5
Bromodichloromethane	ug/L	50	47.5	95	76-120	M5
Bromoform	ug/L	50	42.7	85	70-124	M5
Bromomethane	ug/L	50	39.0	78	29-181	M5
Carbon disulfide	ug/L	50	50.6	101	66-123	M5
Carbon tetrachloride	ug/L	50	45.9	92	73-132	M5
Chlorobenzene	ug/L	50	46.5	93	79-112	M5
Chloroethane	ug/L	50	46.8	94	59-156	M5
Chloroform	ug/L	50	44.7	89	76-118	M5
Chloromethane	ug/L	50	40.0	80	45-142	M5
cis-1,2-Dichloroethene	ug/L	50	46.2	92	75-117	M5
cis-1,3-Dichloropropene	ug/L	50	46.7	93	77-120	M5
Dibromochloromethane	ug/L	50	44.7	89	78-123	M5
Dibromomethane	ug/L	50	48.3	97	78-122	M5
Dichlorodifluoromethane	ug/L	50	67.4	135	41-168	M5
Ethyl methacrylate	ug/L	200	199	100	75-128	M5
Ethylbenzene	ug/L	50	48.3	97	80-118	M5
Hexachloro-1,3-butadiene	ug/L	50	53.3	107	73-125	M5
Iodomethane	ug/L	100	113	113	35-174	M5

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

LABORATORY CONTROL SAMPLE: 2256510

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Isopropylbenzene (Cumene)	ug/L	50	51.8	104	81-117	M5
Methyl-tert-butyl ether	ug/L	50	48.3	97	71-124	M5
Methylene Chloride	ug/L	50	44.5	89	59-136	M5
n-Butylbenzene	ug/L	50	51.3	103	72-118	M5
n-Hexane	ug/L	50	56.6	113	60-128	M5
n-Propylbenzene	ug/L	50	50.3	101	75-120	M5
Naphthalene	ug/L	50	46.4	93	67-126	M5
p-Isopropyltoluene	ug/L	50	50.6	101	75-115	M5
sec-Butylbenzene	ug/L	50	51.5	103	76-120	M5
Styrene	ug/L	50	50.8	102	74-121	M5
tert-Butylbenzene	ug/L	50	40.0	80	55-109	M5
Tetrachloroethene	ug/L	50	45.2	90	76-116	M5
Toluene	ug/L	50	43.8	88	77-115	M5
trans-1,2-Dichloroethene	ug/L	50	50.6	101	75-121	M5
trans-1,3-Dichloropropene	ug/L	50	44.8	90	77-121	M5
trans-1,4-Dichloro-2-butene	ug/L	200	170	85	42-128	M5
Trichloroethene	ug/L	50	51.7	103	76-120	M5
Trichlorofluoromethane	ug/L	50	50.9	102	81-141	M5
Vinyl acetate	ug/L	200	165	83	67-131	M5
Vinyl chloride	ug/L	50	51.4	103	64-155	M5
Xylene (Total)	ug/L	150	151	100	78-118	M5
4-Bromofluorobenzene (S)	%.			106	85-111	M5
Dibromofluoromethane (S)	%.			90	89-116	M5
Toluene-d8 (S)	%.			88	87-110	M5

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

QC Batch: 489600
QC Batch Method: EPA 5030/8260
Analysis Method: EPA 5030/8260
Analysis Description: 8260 MSV
Associated Lab Samples: 50218636023

METHOD BLANK: 2258414
Matrix: Water
Associated Lab Samples: 50218636023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/20/19 07:12	
1,1,1-Trichloroethane	ug/L	ND	5.0	03/20/19 07:12	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/20/19 07:12	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/20/19 07:12	
1,1-Dichloroethane	ug/L	ND	5.0	03/20/19 07:12	
1,1-Dichloroethene	ug/L	ND	5.0	03/20/19 07:12	
1,1-Dichloropropene	ug/L	ND	5.0	03/20/19 07:12	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/20/19 07:12	
1,2,3-Trichloropropane	ug/L	ND	5.0	03/20/19 07:12	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/20/19 07:12	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/20/19 07:12	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/20/19 07:12	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/20/19 07:12	
1,2-Dichloroethane	ug/L	ND	5.0	03/20/19 07:12	
1,2-Dichloropropane	ug/L	ND	5.0	03/20/19 07:12	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/20/19 07:12	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/20/19 07:12	
1,3-Dichloropropane	ug/L	ND	5.0	03/20/19 07:12	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/20/19 07:12	
1-Methylnaphthalene	ug/L	ND	10.0	03/20/19 07:12	N2
2,2-Dichloropropane	ug/L	ND	5.0	03/20/19 07:12	
2-Butanone (MEK)	ug/L	ND	25.0	03/20/19 07:12	
2-Chlorotoluene	ug/L	ND	5.0	03/20/19 07:12	
2-Hexanone	ug/L	ND	25.0	03/20/19 07:12	
2-Methylnaphthalene	ug/L	ND	10.0	03/20/19 07:12	
4-Chlorotoluene	ug/L	ND	5.0	03/20/19 07:12	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/20/19 07:12	
Acetone	ug/L	ND	100	03/20/19 07:12	
Acrolein	ug/L	ND	50.0	03/20/19 07:12	
Acrylonitrile	ug/L	ND	100	03/20/19 07:12	
Benzene	ug/L	ND	5.0	03/20/19 07:12	
Bromobenzene	ug/L	ND	5.0	03/20/19 07:12	
Bromochloromethane	ug/L	ND	5.0	03/20/19 07:12	
Bromodichloromethane	ug/L	ND	5.0	03/20/19 07:12	
Bromoform	ug/L	ND	5.0	03/20/19 07:12	
Bromomethane	ug/L	ND	5.0	03/20/19 07:12	
Carbon disulfide	ug/L	ND	10.0	03/20/19 07:12	
Carbon tetrachloride	ug/L	ND	5.0	03/20/19 07:12	
Chlorobenzene	ug/L	ND	5.0	03/20/19 07:12	
Chloroethane	ug/L	ND	5.0	03/20/19 07:12	
Chloroform	ug/L	ND	5.0	03/20/19 07:12	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

METHOD BLANK: 2258414 Matrix: Water
Associated Lab Samples: 50218636023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	03/20/19 07:12	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/20/19 07:12	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/20/19 07:12	
Dibromochloromethane	ug/L	ND	5.0	03/20/19 07:12	
Dibromomethane	ug/L	ND	5.0	03/20/19 07:12	
Dichlorodifluoromethane	ug/L	ND	5.0	03/20/19 07:12	
Ethyl methacrylate	ug/L	ND	100	03/20/19 07:12	
Ethylbenzene	ug/L	ND	5.0	03/20/19 07:12	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/20/19 07:12	
Iodomethane	ug/L	ND	10.0	03/20/19 07:12	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/20/19 07:12	
Methyl-tert-butyl ether	ug/L	ND	4.0	03/20/19 07:12	
Methylene Chloride	ug/L	ND	5.0	03/20/19 07:12	
n-Butylbenzene	ug/L	ND	5.0	03/20/19 07:12	
n-Hexane	ug/L	ND	5.0	03/20/19 07:12	
n-Propylbenzene	ug/L	ND	5.0	03/20/19 07:12	
Naphthalene	ug/L	ND	1.7	03/20/19 07:12	
p-Isopropyltoluene	ug/L	ND	5.0	03/20/19 07:12	
sec-Butylbenzene	ug/L	ND	5.0	03/20/19 07:12	
Styrene	ug/L	ND	5.0	03/20/19 07:12	
tert-Butylbenzene	ug/L	ND	5.0	03/20/19 07:12	
Tetrachloroethene	ug/L	ND	5.0	03/20/19 07:12	
Toluene	ug/L	ND	5.0	03/20/19 07:12	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/20/19 07:12	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/20/19 07:12	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/20/19 07:12	
Trichloroethene	ug/L	ND	5.0	03/20/19 07:12	
Trichlorofluoromethane	ug/L	ND	5.0	03/20/19 07:12	
Vinyl acetate	ug/L	ND	50.0	03/20/19 07:12	
Vinyl chloride	ug/L	ND	2.0	03/20/19 07:12	
Xylene (Total)	ug/L	ND	10.0	03/20/19 07:12	
4-Bromofluorobenzene (S)	%.	103	85-114	03/20/19 07:12	
Dibromofluoromethane (S)	%.	98	80-122	03/20/19 07:12	
Toluene-d8 (S)	%.	103	85-114	03/20/19 07:12	

LABORATORY CONTROL SAMPLE: 2258415

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	54.6	109	78-120	
1,1,1-Trichloroethane	ug/L	50	55.1	110	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	54.5	109	70-124	
1,1,2-Trichloroethane	ug/L	50	58.6	117	79-121	
1,1-Dichloroethane	ug/L	50	56.8	114	70-119	
1,1-Dichloroethene	ug/L	50	56.7	113	71-126	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

LABORATORY CONTROL SAMPLE: 2258415

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloropropene	ug/L	50	53.9	108	76-122	
1,2,3-Trichlorobenzene	ug/L	50	58.7	117	71-126	
1,2,3-Trichloropropane	ug/L	50	56.2	112	75-119	
1,2,4-Trichlorobenzene	ug/L	50	58.4	117	68-130	
1,2,4-Trimethylbenzene	ug/L	50	56.5	113	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	57.6	115	81-119	
1,2-Dichlorobenzene	ug/L	50	53.8	108	78-114	
1,2-Dichloroethane	ug/L	50	49.7	99	68-119	
1,2-Dichloropropane	ug/L	50	58.4	117	79-126	
1,3,5-Trimethylbenzene	ug/L	50	55.1	110	78-118	
1,3-Dichlorobenzene	ug/L	50	54.0	108	77-114	
1,3-Dichloropropane	ug/L	50	57.8	116	82-124	
1,4-Dichlorobenzene	ug/L	50	53.7	107	77-111	
1-Methylnaphthalene	ug/L	50	84.5	169	60-140	L1,N2
2,2-Dichloropropane	ug/L	50	42.9	86	53-137	
2-Butanone (MEK)	ug/L	250	297	119	62-140	
2-Chlorotoluene	ug/L	50	52.9	106	76-120	
2-Hexanone	ug/L	250	299	120	62-143	
2-Methylnaphthalene	ug/L	50	74.8	150	60-133	L1
4-Chlorotoluene	ug/L	50	55.4	111	78-114	
4-Methyl-2-pentanone (MIBK)	ug/L	250	332	133	60-143	
Acetone	ug/L	250	318	127	44-156	
Acrolein	ug/L	1000	1200	120	17-189	
Acrylonitrile	ug/L	200	232	116	58-139	
Benzene	ug/L	50	55.0	110	78-117	
Bromobenzene	ug/L	50	54.4	109	76-114	
Bromochloromethane	ug/L	50	48.9	98	70-122	
Bromodichloromethane	ug/L	50	54.7	109	72-121	
Bromoform	ug/L	50	52.7	105	66-117	
Bromomethane	ug/L	50	43.7	87	20-176	
Carbon disulfide	ug/L	50	54.7	109	65-124	
Carbon tetrachloride	ug/L	50	54.5	109	68-132	
Chlorobenzene	ug/L	50	54.7	109	79-113	
Chloroethane	ug/L	50	62.7	125	62-140	
Chloroform	ug/L	50	54.7	109	73-118	
Chloromethane	ug/L	50	44.7	89	36-132	
cis-1,2-Dichloroethene	ug/L	50	56.7	113	74-122	
cis-1,3-Dichloropropene	ug/L	50	58.1	116	79-126	
Dibromochloromethane	ug/L	50	55.3	111	75-121	
Dibromomethane	ug/L	50	56.3	113	75-123	
Dichlorodifluoromethane	ug/L	50	62.9	126	27-172	
Ethyl methacrylate	ug/L	200	253	127	72-134	
Ethylbenzene	ug/L	50	56.4	113	80-118	
Hexachloro-1,3-butadiene	ug/L	50	52.7	105	71-141	
Iodomethane	ug/L	100	135	135	10-186	
Isopropylbenzene (Cumene)	ug/L	50	55.8	112	82-120	
Methyl-tert-butyl ether	ug/L	50	60.9	122	72-128	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218636

LABORATORY CONTROL SAMPLE: 2258415

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	50	48.7	97	70-121	
n-Butylbenzene	ug/L	50	55.1	110	76-123	
n-Hexane	ug/L	50	54.4	109	58-149	
n-Propylbenzene	ug/L	50	56.2	112	80-122	
Naphthalene	ug/L	50	62.8	126	71-121	L1
p-Isopropyltoluene	ug/L	50	55.6	111	79-121	
sec-Butylbenzene	ug/L	50	54.9	110	78-124	
Styrene	ug/L	50	57.5	115	80-119	
tert-Butylbenzene	ug/L	50	44.4	89	62-102	
Tetrachloroethene	ug/L	50	51.5	103	76-124	
Toluene	ug/L	50	54.7	109	78-116	
trans-1,2-Dichloroethene	ug/L	50	57.9	116	73-121	
trans-1,3-Dichloropropene	ug/L	50	54.8	110	73-126	
trans-1,4-Dichloro-2-butene	ug/L	200	187	93	42-138	
Trichloroethene	ug/L	50	55.9	112	76-120	
Trichlorofluoromethane	ug/L	50	49.2	98	60-138	
Vinyl acetate	ug/L	200	197	98	29-200	
Vinyl chloride	ug/L	50	54.4	109	70-136	
Xylene (Total)	ug/L	150	162	108	79-119	
4-Bromofluorobenzene (S)	%.			102	85-114	
Dibromofluoromethane (S)	%.			97	80-122	
Toluene-d8 (S)	%.			102	85-114	

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7726 Moller Road
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(317)228-3100

QUALIFIERS

Project: Houghland FSI #3
Pace Project No.: 50218636

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 489276

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland FSI #3
Pace Project No.: 50218636

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50218636008	**TMW-4D**	EPA 5030/8260	489081		
50218636009	**TMW-5**	EPA 5030/8260	489081		
50218636010	**TMW-5D**	EPA 5030/8260	489081		
50218636011	**TMW-6**	EPA 5030/8260	489081		
50218636012	**TMW-6D**	EPA 5030/8260	489276		
50218636013	**TMW-7**	EPA 5030/8260	489276		
50218636014	**TMW-7D**	EPA 5030/8260	489276		
50218636015	**DUP-A**	EPA 5030/8260	489276		
50218636016	**MW-16**	EPA 5030/8260	489276		
50218636017	**MW-28**	EPA 5030/8260	489276		
50218636018	**MW-17**	EPA 5030/8260	489276		
50218636019	**MW-15**	EPA 5030/8260	489276		
50218636020	**MW-15D**	EPA 5030/8260	489276		
50218636021	**MW-14**	EPA 5030/8260	489276		
50218636022	**MW-14D**	EPA 5030/8260	489276		
50218636023	**DUP-B**	EPA 5030/8260	489600		
50218636024	**Trip Blank**	EPA 5030/8260	489276		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: Patriot Engg. & Env.
Address: 6150 E 75th ST
Indianapolis IN 46250
Email To: jcody@patrioteng.com
Phone: 317-558-5064 Fax: —
Requested Due Date/TAT: Normal Turn

Section B Required Project Information:

Report To: James Cody
Copy To: Mike Casper
Purchase Order No.:
Project Name: Houghland FSI #3
Project Number: 19-0096-01E

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: IN

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ground water GW

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): Analysis Test: VOC's 8260

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-1	GW	G	3-4-19	12:25				3				X					X		001
2	TMW-1D	"	"	"	13:25															002
3	TMW-2	"	"	"	14:15															003
4	TMW-2D	"	"	"	15:10															004
5	TMW-3	"	"	"	16:00															005
6	TMW-3D	"	"	"	16:45															006
7	TMW-4	"	"	3-5-19	9:25															007
8	TMW-4D	"	"	"	10:15															008
9	TMW-5	"	"	"	11:10															009
10	TMW-5D	"	"	"	12:00															010
11	TMW-6	"	"	"	12:55															011
12	TMW-6D	"	"	"	13:50															012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Absolute Pricing	VKShah / Patriot	03-06-19	17:50	Lucas Harmon	3/6/19	1750	3.2	Y	N	Y N N/A

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: VISHAL SHAH

SIGNATURE of SAMPLER: VKShah DATE Signed (MM/DD/YY): 03-06-2019

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: IN

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): VOCs 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-7	GW	G	3-5-19	14:50				3				X					X		013
2	TMW-7D	GW	G	"	15:45															014
3	DUP-A	GW	G	"	—															015
4	MW-16	GW	G	3-6-19	10:45															016
5	MW-28	"	"	"	9:25															017
6	MW-17	"	"	"	12:30															018
7	MW-15	"	"	"	13:35															019
8	MW-15D	"	"	"	14:30															020
9	MW-14	"	"	"	15:30															021
10	MW-14D	"	"	"	16:20															022
11	DUP-B	"	"	"	—															023
12	Trip Blank	"	"	"	—															024

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Absolute Pricing	VShah / Patriot	03-06-19	17:50	Lucas W Dorman	3/6/19	17:15	3.2	Y	N	~~Y~~ N KS 3/6

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: VISHAL SHAH
SIGNATURE of SAMPLER: VShah
DATE Signed (MM/DD/YY): 03-05-2019

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50218636

Date/Time and Initials of person examining contents: KS 3/6/19 1800

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer: 1 2 3 4 5 6 A B C D E F Ice Type: ☑ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☑ Yes ☐ No ☐ N/A

Cooler Temperature: 2.9 / 3.2 Ice Visible in Sample Containers?: ☑ Yes ☐ No KS 3/6 ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☑ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		✓	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			✓
USDA Regulated Soils? (ID, NY, WA, OR, CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓				
Chain of Custody Present:	✓					
Chain of Custody Filled Out:	✓		Dissolved Metals field filtered?:			✓
Short Hold Time Analysis (<72hr)?: Analysis:		✓	Headspace Wisconsin Sulfide			✓
Time 5035A TC placed in Freezer or Short Holds To Lab:				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Rush TAT Requested:		✓	Headspace in VOA Vials (>6mm):	✓		
Containers Intact?:		✓	Trip Blank Present?:	✓		
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Custody Seals?:	✓		

Comments: 3/3 TMW-4, 3/3 TMW-1D, 3/3 TMW-3, 3/3 TMW-2D, 3/3 TMW-2, 3/3 TMW-1, 3/3 TMW-3D, 1/3 TMW-4D, 1/3 TMW-5, 2/3 TMW-5D, 2/3 TMW 6D, 2/3 TMW-6, 2/3 TMW-7, 2/3 TMW-7D, 1/3 DUPA, are all broken due to freezing. ~~[illegible]~~ out of the remaining samples 2/2 DUP A, 1/1 TMW-6, 1/2 TMW-5
1/6 trip blanks are frozen.
1/6 trip blanks have headspace >6mm
extra set of trip blanks recieved

email sent to client; will recollect 3/7/19tms

Sample Container Count

CLIENT: Patriot

COC PAGE 1 of 2

COC ID#

Project # 50218636

Sample Line Item	DG9H	~~VG9H~~	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	Bulk SBS DI Kit R				Matrix SI/Wt/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1	0																					WT			
2	0																					↓			
3	0																								
4	0																								
5	0																								
6	0																								
7	0																								
8	2																								
9	2																								
10	1																								
11	1																								
12	1																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

Sample Container Count

WO# : 50218636

50218636

CLIENT: Patriot

COC PAGE 2 of 2

COC ID# _____

Project # _____

Sample Line Item	DG9H	VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	Bulk Kit R				Matrix SI (Soil/Wa Aqueous Liquid)	pH <2	pH >9	pH>12
1	1																					WT			
2	1																								
3	2																								
4	3																								
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12	6																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40rnL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

March 20, 2019

Mr. James Cody
Patriot Engineering
6150 E 75th St
Indianapolis, IN 46250

RE: Project: Houghland FSI #3
Pace Project No.: 50218940

Dear Mr. Cody:
Enclosed are the analytical results for sample(s) received by the laboratory on March 08, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Mr. Mike Casper, Patriot Engineering

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Pace Analytical Services, LLC
7726 Moller Road
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(317)228-3100

CERTIFICATIONS

Project:	Houghland FSI #3
Pace Project No.:	50218940

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #:E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #:98019
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355-18-12
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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SAMPLE SUMMARY

Project: Houghland FSI #3
Pace Project No.: 50218940

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50218940001	**MW-12**	Water	03/07/19 09:00	03/08/19 16:00
50218940002	**MW-12D**	Water	03/07/19 09:50	03/08/19 16:00
50218940003	**MW-29**	Water	03/07/19 10:50	03/08/19 16:00
50218940004	**MW-29D**	Water	03/07/19 11:35	03/08/19 16:00
50218940005	**MW-22**	Water	03/07/19 12:30	03/08/19 16:00
50218940006	**MW-22D**	Water	03/07/19 13:20	03/08/19 16:00
50218940007	**MW-33D**	Water	03/07/19 14:25	03/08/19 16:00
50218940008	**MW-33**	Water	03/07/19 15:20	03/08/19 16:00
50218940009	**TMW-1**	Water	03/08/19 09:00	03/08/19 16:00
50218940010	**TMW-1D**	Water	03/08/19 09:55	03/08/19 16:00
50218940011	**TMW-2**	Water	03/08/19 10:50	03/08/19 16:00
50218940012	**TMW-2D**	Water	03/08/19 11:40	03/08/19 16:00
50218940013	**TMW-3**	Water	03/08/19 13:10	03/08/19 16:00
50218940014	**TMW-3D**	Water	03/08/19 14:00	03/08/19 16:00
50218940015	**TMW-4**	Water	03/08/19 15:00	03/08/19 16:00
50218940016	**Trip Blank**	Water	03/07/19 08:00	03/08/19 16:00

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SAMPLE ANALYTE COUNT

Project: Houghland FSI #3
Pace Project No.: 50218940

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50218940001	**MW-12**	EPA 5030/8260	CAP	75
50218940002	**MW-12D**	EPA 5030/8260	CAP	75
50218940003	**MW-29**	EPA 5030/8260	CAP	75
50218940004	**MW-29D**	EPA 5030/8260	CAP	75
50218940005	**MW-22**	EPA 5030/8260	CAP	75
50218940006	**MW-22D**	EPA 5030/8260	CAP	75
50218940007	**MW-33D**	EPA 5030/8260	CAP	75
50218940008	**MW-33**	EPA 5030/8260	CAP	75
50218940009	**TMW-1**	EPA 5030/8260	CAP	75
50218940010	**TMW-1D**	EPA 5030/8260	CAP	75
50218940011	**TMW-2**	EPA 5030/8260	CAP	75
50218940012	**TMW-2D**	EPA 5030/8260	CAP	75
50218940013	**TMW-3**	EPA 5030/8260	CAP	75
50218940014	**TMW-3D**	EPA 5030/8260	CAP	75
50218940015	**TMW-4**	EPA 5030/8260	CAP	75
50218940016	**Trip Blank**	EPA 5030/8260	CAP	75

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SUMMARY OF DETECTION

Project: Houghland FSI #3
Pace Project No.: 50218940

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50218940001	**MW-12**					
EPA 5030/8260	Trichloroethene	42.0	ug/L	5.0	03/15/19 21:20	M5
50218940003	**MW-29**					
EPA 5030/8260	Trichloroethene	15.7	ug/L	5.0	03/16/19 03:21	
50218940004	**MW-29D**					
EPA 5030/8260	cis-1,2-Dichloroethene	21.2	ug/L	5.0	03/15/19 22:26	M5
EPA 5030/8260	Tetrachloroethene	14.4	ug/L	5.0	03/15/19 22:26	M5
EPA 5030/8260	Trichloroethene	124	ug/L	5.0	03/15/19 22:26	M5
50218940005	**MW-22**					
EPA 5030/8260	Tetrachloroethene	5.8	ug/L	5.0	03/16/19 03:53	
EPA 5030/8260	Trichloroethene	30.0	ug/L	5.0	03/16/19 03:53	
50218940006	**MW-22D**					
EPA 5030/8260	Tetrachloroethene	13.3	ug/L	5.0	03/16/19 04:59	
EPA 5030/8260	Trichloroethene	43.6	ug/L	5.0	03/16/19 04:59	
50218940007	**MW-33D**					
EPA 5030/8260	Tetrachloroethene	35.4	ug/L	5.0	03/16/19 05:32	
EPA 5030/8260	Trichloroethene	97.3	ug/L	5.0	03/16/19 05:32	
50218940008	**MW-33**					
EPA 5030/8260	cis-1,2-Dichloroethene	5.6	ug/L	5.0	03/16/19 06:04	
EPA 5030/8260	Tetrachloroethene	46.0	ug/L	5.0	03/16/19 06:04	
EPA 5030/8260	Trichloroethene	71.1	ug/L	5.0	03/16/19 06:04	
50218940009	**TMW-1**					
EPA 5030/8260	Trichloroethene	14.9	ug/L	5.0	03/16/19 06:37	
50218940010	**TMW-1D**					
EPA 5030/8260	cis-1,2-Dichloroethene	660	ug/L	50.0	03/19/19 12:15	
EPA 5030/8260	Trichloroethene	19.8	ug/L	5.0	03/16/19 07:10	
50218940011	**TMW-2**					
EPA 5030/8260	Trichloroethene	106	ug/L	5.0	03/16/19 07:43	
50218940012	**TMW-2D**					
EPA 5030/8260	Chloroform	12.3	ug/L	5.0	03/16/19 08:15	
EPA 5030/8260	cis-1,2-Dichloroethene	250	ug/L	5.0	03/16/19 08:15	
EPA 5030/8260	Trichloroethene	40.9	ug/L	5.0	03/16/19 08:15	
50218940013	**TMW-3**					
EPA 5030/8260	Trichloroethene	37.3	ug/L	5.0	03/16/19 08:48	
50218940014	**TMW-3D**					
EPA 5030/8260	Chloroform	11.8	ug/L	5.0	03/16/19 09:21	
EPA 5030/8260	cis-1,2-Dichloroethene	539	ug/L	50.0	03/19/19 12:48	
EPA 5030/8260	Trichloroethene	152	ug/L	5.0	03/16/19 09:21	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-12 **Lab ID: 50218940001** Collected: 03/07/19 09:00 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/15/19 21:20	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		03/15/19 21:20	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/15/19 21:20	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/15/19 21:20	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/15/19 21:20	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/15/19 21:20	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/15/19 21:20	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/15/19 21:20	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/15/19 21:20	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/15/19 21:20	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		03/15/19 21:20	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/15/19 21:20	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/15/19 21:20	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/15/19 21:20	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/15/19 21:20	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/15/19 21:20	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/15/19 21:20	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/15/19 21:20	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/15/19 21:20	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/15/19 21:20	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/15/19 21:20	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/15/19 21:20	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/15/19 21:20	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/15/19 21:20	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/15/19 21:20	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/15/19 21:20	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/15/19 21:20	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/15/19 21:20	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/15/19 21:20	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/15/19 21:20	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/15/19 21:20	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/15/19 21:20	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/15/19 21:20	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/15/19 21:20	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/15/19 21:20	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/15/19 21:20	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/15/19 21:20	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/15/19 21:20	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/15/19 21:20	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/15/19 21:20	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/15/19 21:20	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/15/19 21:20	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/15/19 21:20	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/15/19 21:20	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/15/19 21:20	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/15/19 21:20	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/15/19 21:20	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-12 **Lab ID: 50218940001** Collected: 03/07/19 09:00 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/15/19 21:20	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/15/19 21:20	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/15/19 21:20	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/15/19 21:20	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/15/19 21:20	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/15/19 21:20	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/15/19 21:20	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/15/19 21:20	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/15/19 21:20	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/15/19 21:20	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/15/19 21:20	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/15/19 21:20	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/15/19 21:20	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/15/19 21:20	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/15/19 21:20	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/15/19 21:20	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/15/19 21:20	79-00-5	M5
Trichloroethene	**42.0**	ug/L	5.0	1		03/15/19 21:20	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/15/19 21:20	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/15/19 21:20	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/15/19 21:20	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/15/19 21:20	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/15/19 21:20	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/15/19 21:20	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/15/19 21:20	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	99	%.	89-116	1		03/15/19 21:20	1868-53-7	M5
4-Bromofluorobenzene (S)	102	%.	85-111	1		03/15/19 21:20	460-00-4	M5
Toluene-d8 (S)	100	%.	87-110	1		03/15/19 21:20	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-12D **Lab ID: 50218940002** Collected: 03/07/19 09:50 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/15/19 21:53	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		03/15/19 21:53	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/15/19 21:53	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/15/19 21:53	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/15/19 21:53	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/15/19 21:53	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/15/19 21:53	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/15/19 21:53	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/15/19 21:53	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/15/19 21:53	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		03/15/19 21:53	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/15/19 21:53	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/15/19 21:53	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/15/19 21:53	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/15/19 21:53	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/15/19 21:53	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/15/19 21:53	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/15/19 21:53	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/15/19 21:53	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/15/19 21:53	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/15/19 21:53	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/15/19 21:53	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/15/19 21:53	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/15/19 21:53	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/15/19 21:53	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/15/19 21:53	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/15/19 21:53	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/15/19 21:53	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/15/19 21:53	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/15/19 21:53	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/15/19 21:53	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/15/19 21:53	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/15/19 21:53	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/15/19 21:53	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/15/19 21:53	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/15/19 21:53	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/15/19 21:53	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/15/19 21:53	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/15/19 21:53	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/15/19 21:53	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/15/19 21:53	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/15/19 21:53	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/15/19 21:53	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/15/19 21:53	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/15/19 21:53	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/15/19 21:53	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/15/19 21:53	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-12D **Lab ID: 50218940002** Collected: 03/07/19 09:50 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/15/19 21:53	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/15/19 21:53	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/15/19 21:53	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/15/19 21:53	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/15/19 21:53	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/15/19 21:53	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/15/19 21:53	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/15/19 21:53	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/15/19 21:53	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/15/19 21:53	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/15/19 21:53	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		03/15/19 21:53	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/15/19 21:53	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/15/19 21:53	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/15/19 21:53	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/15/19 21:53	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/15/19 21:53	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		03/15/19 21:53	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/15/19 21:53	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/15/19 21:53	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/15/19 21:53	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/15/19 21:53	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/15/19 21:53	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/15/19 21:53	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/15/19 21:53	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	98	%.	89-116	1		03/15/19 21:53	1868-53-7	M5
4-Bromofluorobenzene (S)	103	%.	85-111	1		03/15/19 21:53	460-00-4	M5
Toluene-d8 (S)	98	%.	87-110	1		03/15/19 21:53	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-29 **Lab ID: 50218940003** Collected: 03/07/19 10:50 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 03:21	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 03:21	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 03:21	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 03:21	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 03:21	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 03:21	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 03:21	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 03:21	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 03:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 03:21	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 03:21	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 03:21	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 03:21	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 03:21	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 03:21	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 03:21	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 03:21	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 03:21	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 03:21	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 03:21	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 03:21	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 03:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 03:21	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 03:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 03:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 03:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 03:21	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 03:21	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 03:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 03:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 03:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 03:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 03:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 03:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 03:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 03:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 03:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 03:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 03:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 03:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 03:21	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 03:21	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 03:21	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 03:21	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 03:21	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 03:21	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 03:21	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-29 **Lab ID: 50218940003** Collected: 03/07/19 10:50 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 03:21	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 03:21	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 03:21	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 03:21	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 03:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 03:21	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 03:21	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 03:21	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 03:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 03:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 03:21	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/19 03:21	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 03:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 03:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 03:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 03:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 03:21	79-00-5	
Trichloroethene	**15.7**	ug/L	5.0	1		03/16/19 03:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 03:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 03:21	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 03:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 03:21	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 03:21	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 03:21	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 03:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	96	%.	89-116	1		03/16/19 03:21	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-111	1		03/16/19 03:21	460-00-4	
Toluene-d8 (S)	99	%.	87-110	1		03/16/19 03:21	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-29D **Lab ID: 50218940004** Collected: 03/07/19 11:35 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/15/19 22:26	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		03/15/19 22:26	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		03/15/19 22:26	107-13-1	M5
Benzene	ND	ug/L	5.0	1		03/15/19 22:26	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		03/15/19 22:26	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		03/15/19 22:26	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		03/15/19 22:26	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		03/15/19 22:26	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		03/15/19 22:26	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		03/15/19 22:26	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		03/15/19 22:26	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		03/15/19 22:26	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		03/15/19 22:26	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		03/15/19 22:26	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		03/15/19 22:26	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		03/15/19 22:26	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		03/15/19 22:26	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		03/15/19 22:26	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		03/15/19 22:26	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		03/15/19 22:26	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		03/15/19 22:26	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		03/15/19 22:26	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/15/19 22:26	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		03/15/19 22:26	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/15/19 22:26	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/15/19 22:26	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/15/19 22:26	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/15/19 22:26	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/15/19 22:26	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		03/15/19 22:26	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		03/15/19 22:26	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		03/15/19 22:26	75-35-4	M5
cis-1,2-Dichloroethene	**21.2**	ug/L	5.0	1		03/15/19 22:26	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/15/19 22:26	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		03/15/19 22:26	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		03/15/19 22:26	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		03/15/19 22:26	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		03/15/19 22:26	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/15/19 22:26	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/15/19 22:26	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		03/15/19 22:26	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		03/15/19 22:26	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/15/19 22:26	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		03/15/19 22:26	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		03/15/19 22:26	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		03/15/19 22:26	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/15/19 22:26	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-29D **Lab ID: 50218940004** Collected: 03/07/19 11:35 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/15/19 22:26	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		03/15/19 22:26	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		03/15/19 22:26	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/15/19 22:26	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/15/19 22:26	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/15/19 22:26	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		03/15/19 22:26	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		03/15/19 22:26	103-65-1	M5
Styrene	ND	ug/L	5.0	1		03/15/19 22:26	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/15/19 22:26	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/15/19 22:26	79-34-5	M5
Tetrachloroethene	**14.4**	ug/L	5.0	1		03/15/19 22:26	127-18-4	M5
Toluene	ND	ug/L	5.0	1		03/15/19 22:26	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/15/19 22:26	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/15/19 22:26	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/15/19 22:26	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/15/19 22:26	79-00-5	M5
Trichloroethene	**124**	ug/L	5.0	1		03/15/19 22:26	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		03/15/19 22:26	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/15/19 22:26	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/15/19 22:26	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/15/19 22:26	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		03/15/19 22:26	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		03/15/19 22:26	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		03/15/19 22:26	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	98	%.	89-116	1		03/15/19 22:26	1868-53-7	M5
4-Bromofluorobenzene (S)	103	%.	85-111	1		03/15/19 22:26	460-00-4	M5
Toluene-d8 (S)	99	%.	87-110	1		03/15/19 22:26	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-22 **Lab ID: 50218940005** Collected: 03/07/19 12:30 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 03:53	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 03:53	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 03:53	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 03:53	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 03:53	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 03:53	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 03:53	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 03:53	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 03:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 03:53	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 03:53	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 03:53	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 03:53	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 03:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 03:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 03:53	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 03:53	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 03:53	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 03:53	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 03:53	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 03:53	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 03:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 03:53	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 03:53	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 03:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 03:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 03:53	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 03:53	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 03:53	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 03:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 03:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 03:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 03:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 03:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 03:53	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 03:53	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 03:53	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 03:53	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 03:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 03:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 03:53	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 03:53	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 03:53	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 03:53	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 03:53	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 03:53	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 03:53	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-22 **Lab ID: 50218940005** Collected: 03/07/19 12:30 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 03:53	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 03:53	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 03:53	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 03:53	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 03:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 03:53	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 03:53	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 03:53	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 03:53	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 03:53	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 03:53	79-34-5	
Tetrachloroethene	**5.8**	ug/L	5.0	1		03/16/19 03:53	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 03:53	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 03:53	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 03:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 03:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 03:53	79-00-5	
Trichloroethene	**30.0**	ug/L	5.0	1		03/16/19 03:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 03:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 03:53	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 03:53	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 03:53	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 03:53	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 03:53	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 03:53	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98	%.	89-116	1		03/16/19 03:53	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-111	1		03/16/19 03:53	460-00-4	
Toluene-d8 (S)	98	%.	87-110	1		03/16/19 03:53	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-22D **Lab ID: 50218940006** Collected: 03/07/19 13:20 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 04:59	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 04:59	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 04:59	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 04:59	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 04:59	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 04:59	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 04:59	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 04:59	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 04:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 04:59	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 04:59	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 04:59	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 04:59	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 04:59	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 04:59	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 04:59	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 04:59	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 04:59	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 04:59	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 04:59	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 04:59	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 04:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 04:59	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 04:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 04:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 04:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 04:59	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 04:59	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 04:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 04:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 04:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 04:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 04:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 04:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 04:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 04:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 04:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 04:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 04:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 04:59	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 04:59	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 04:59	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 04:59	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 04:59	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 04:59	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 04:59	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 04:59	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-22D **Lab ID: 50218940006** Collected: 03/07/19 13:20 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 04:59	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 04:59	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 04:59	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 04:59	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 04:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 04:59	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 04:59	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 04:59	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 04:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 04:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 04:59	79-34-5	
Tetrachloroethene	**13.3**	ug/L	5.0	1		03/16/19 04:59	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 04:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 04:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 04:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 04:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 04:59	79-00-5	
Trichloroethene	**43.6**	ug/L	5.0	1		03/16/19 04:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 04:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 04:59	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 04:59	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 04:59	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 04:59	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 04:59	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 04:59	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	96	%.	89-116	1		03/16/19 04:59	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-111	1		03/16/19 04:59	460-00-4	
Toluene-d8 (S)	98	%.	87-110	1		03/16/19 04:59	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-33D **Lab ID: 50218940007** Collected: 03/07/19 14:25 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 05:32	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 05:32	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 05:32	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 05:32	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 05:32	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 05:32	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 05:32	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 05:32	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 05:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 05:32	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 05:32	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 05:32	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 05:32	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 05:32	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 05:32	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 05:32	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 05:32	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 05:32	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 05:32	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 05:32	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 05:32	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 05:32	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 05:32	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 05:32	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 05:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 05:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 05:32	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 05:32	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 05:32	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 05:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 05:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 05:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 05:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 05:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 05:32	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 05:32	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 05:32	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 05:32	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 05:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 05:32	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 05:32	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 05:32	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 05:32	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 05:32	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 05:32	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 05:32	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 05:32	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-33D **Lab ID: 50218940007** Collected: 03/07/19 14:25 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 05:32	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 05:32	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 05:32	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 05:32	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 05:32	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 05:32	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 05:32	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 05:32	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 05:32	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 05:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 05:32	79-34-5	
Tetrachloroethene	**35.4**	ug/L	5.0	1		03/16/19 05:32	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 05:32	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 05:32	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 05:32	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 05:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 05:32	79-00-5	
Trichloroethene	**97.3**	ug/L	5.0	1		03/16/19 05:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 05:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 05:32	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 05:32	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 05:32	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 05:32	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 05:32	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 05:32	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97	%.	89-116	1		03/16/19 05:32	1868-53-7	
4-Bromofluorobenzene (S)	103	%.	85-111	1		03/16/19 05:32	460-00-4	
Toluene-d8 (S)	98	%.	87-110	1		03/16/19 05:32	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-33 **Lab ID: 50218940008** Collected: 03/07/19 15:20 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 06:04	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 06:04	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 06:04	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 06:04	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 06:04	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 06:04	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 06:04	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 06:04	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 06:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 06:04	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 06:04	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 06:04	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 06:04	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 06:04	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 06:04	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 06:04	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 06:04	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 06:04	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 06:04	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 06:04	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 06:04	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 06:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 06:04	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 06:04	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 06:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 06:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 06:04	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 06:04	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 06:04	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 06:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 06:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 06:04	75-35-4	
cis-1,2-Dichloroethene	**5.6**	ug/L	5.0	1		03/16/19 06:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 06:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 06:04	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 06:04	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 06:04	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 06:04	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 06:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 06:04	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 06:04	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 06:04	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 06:04	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 06:04	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 06:04	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 06:04	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 06:04	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: MW-33 **Lab ID: 50218940008** Collected: 03/07/19 15:20 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 06:04	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 06:04	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 06:04	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 06:04	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 06:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 06:04	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 06:04	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 06:04	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 06:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 06:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 06:04	79-34-5	
Tetrachloroethene	**46.0**	ug/L	5.0	1		03/16/19 06:04	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 06:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 06:04	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 06:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 06:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 06:04	79-00-5	
Trichloroethene	**71.1**	ug/L	5.0	1		03/16/19 06:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 06:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 06:04	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 06:04	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 06:04	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 06:04	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 06:04	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 06:04	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98	%.	89-116	1		03/16/19 06:04	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-111	1		03/16/19 06:04	460-00-4	
Toluene-d8 (S)	100	%.	87-110	1		03/16/19 06:04	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-1 **Lab ID: 50218940009** Collected: 03/08/19 09:00 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 06:37	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 06:37	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 06:37	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 06:37	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 06:37	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 06:37	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 06:37	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 06:37	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 06:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 06:37	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 06:37	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 06:37	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 06:37	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 06:37	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 06:37	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 06:37	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 06:37	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 06:37	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 06:37	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 06:37	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 06:37	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 06:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 06:37	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 06:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 06:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 06:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 06:37	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 06:37	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 06:37	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 06:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 06:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 06:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 06:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 06:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 06:37	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 06:37	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 06:37	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 06:37	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 06:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 06:37	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 06:37	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 06:37	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 06:37	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 06:37	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 06:37	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 06:37	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 06:37	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-1 **Lab ID: 50218940009** Collected: 03/08/19 09:00 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 06:37	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 06:37	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 06:37	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 06:37	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 06:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 06:37	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 06:37	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 06:37	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 06:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 06:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 06:37	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/19 06:37	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 06:37	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 06:37	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 06:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 06:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 06:37	79-00-5	
Trichloroethene	**14.9**	ug/L	5.0	1		03/16/19 06:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 06:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 06:37	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 06:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 06:37	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 06:37	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 06:37	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 06:37	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	94	%.	89-116	1		03/16/19 06:37	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-111	1		03/16/19 06:37	460-00-4	
Toluene-d8 (S)	99	%.	87-110	1		03/16/19 06:37	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-1D **Lab ID: 50218940010** Collected: 03/08/19 09:55 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 07:10	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 07:10	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 07:10	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 07:10	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 07:10	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 07:10	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 07:10	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 07:10	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 07:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 07:10	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 07:10	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 07:10	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 07:10	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 07:10	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 07:10	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 07:10	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 07:10	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 07:10	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 07:10	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 07:10	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 07:10	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 07:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 07:10	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 07:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 07:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 07:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 07:10	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 07:10	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 07:10	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 07:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 07:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 07:10	75-35-4	
cis-1,2-Dichloroethene	**660**	ug/L	50.0	10		03/19/19 12:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 07:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 07:10	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 07:10	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 07:10	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 07:10	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 07:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 07:10	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 07:10	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 07:10	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 07:10	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 07:10	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 07:10	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 07:10	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 07:10	98-82-8	

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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-1D **Lab ID: 50218940010** Collected: 03/08/19 09:55 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 07:10	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 07:10	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 07:10	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 07:10	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 07:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 07:10	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 07:10	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 07:10	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 07:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 07:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 07:10	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/19 07:10	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 07:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 07:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 07:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 07:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 07:10	79-00-5	
Trichloroethene	**19.8**	ug/L	5.0	1		03/16/19 07:10	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 07:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 07:10	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 07:10	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 07:10	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 07:10	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 07:10	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 07:10	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	96	%.	89-116	1		03/16/19 07:10	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-111	1		03/16/19 07:10	460-00-4	
Toluene-d8 (S)	98	%.	87-110	1		03/16/19 07:10	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-2 **Lab ID: 50218940011** Collected: 03/08/19 10:50 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 07:43	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 07:43	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 07:43	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 07:43	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 07:43	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 07:43	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 07:43	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 07:43	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 07:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 07:43	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 07:43	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 07:43	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 07:43	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 07:43	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 07:43	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 07:43	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 07:43	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 07:43	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 07:43	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 07:43	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 07:43	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 07:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 07:43	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 07:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 07:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 07:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 07:43	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 07:43	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 07:43	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 07:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 07:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 07:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 07:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 07:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 07:43	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 07:43	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 07:43	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 07:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 07:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 07:43	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 07:43	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 07:43	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 07:43	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 07:43	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 07:43	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 07:43	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 07:43	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-2 **Lab ID: 50218940011** Collected: 03/08/19 10:50 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 07:43	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 07:43	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 07:43	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 07:43	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 07:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 07:43	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 07:43	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 07:43	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 07:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 07:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 07:43	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/19 07:43	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 07:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 07:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 07:43	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 07:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 07:43	79-00-5	
Trichloroethene	**106**	ug/L	5.0	1		03/16/19 07:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 07:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 07:43	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 07:43	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 07:43	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 07:43	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 07:43	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 07:43	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	96	%.	89-116	1		03/16/19 07:43	1868-53-7	
4-Bromofluorobenzene (S)	103	%.	85-111	1		03/16/19 07:43	460-00-4	
Toluene-d8 (S)	99	%.	87-110	1		03/16/19 07:43	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-2D **Lab ID: 50218940012** Collected: 03/08/19 11:40 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 08:15	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 08:15	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 08:15	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 08:15	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 08:15	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 08:15	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 08:15	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 08:15	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 08:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 08:15	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 08:15	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 08:15	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 08:15	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 08:15	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 08:15	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 08:15	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 08:15	75-00-3	
Chloroform	**12.3**	ug/L	5.0	1		03/16/19 08:15	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 08:15	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 08:15	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 08:15	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 08:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 08:15	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 08:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 08:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 08:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 08:15	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 08:15	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 08:15	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 08:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 08:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 08:15	75-35-4	
cis-1,2-Dichloroethene	**250**	ug/L	5.0	1		03/16/19 08:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 08:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 08:15	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 08:15	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 08:15	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 08:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 08:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 08:15	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 08:15	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 08:15	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 08:15	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 08:15	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 08:15	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 08:15	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 08:15	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-2D **Lab ID: 50218940012** Collected: 03/08/19 11:40 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 08:15	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 08:15	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 08:15	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 08:15	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 08:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 08:15	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 08:15	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 08:15	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 08:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 08:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 08:15	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/19 08:15	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 08:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 08:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 08:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 08:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 08:15	79-00-5	
Trichloroethene	**40.9**	ug/L	5.0	1		03/16/19 08:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 08:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 08:15	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 08:15	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 08:15	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 08:15	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 08:15	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 08:15	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97	%.	89-116	1		03/16/19 08:15	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-111	1		03/16/19 08:15	460-00-4	
Toluene-d8 (S)	98	%.	87-110	1		03/16/19 08:15	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-3 **Lab ID: 50218940013** Collected: 03/08/19 13:10 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 08:48	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 08:48	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 08:48	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 08:48	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 08:48	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 08:48	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 08:48	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 08:48	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 08:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 08:48	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 08:48	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 08:48	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 08:48	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 08:48	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 08:48	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 08:48	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 08:48	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 08:48	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 08:48	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 08:48	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 08:48	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 08:48	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 08:48	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 08:48	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 08:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 08:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 08:48	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 08:48	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 08:48	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 08:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 08:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 08:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 08:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 08:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 08:48	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 08:48	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 08:48	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 08:48	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 08:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 08:48	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 08:48	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 08:48	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 08:48	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 08:48	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 08:48	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 08:48	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 08:48	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-3 **Lab ID: 50218940013** Collected: 03/08/19 13:10 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 08:48	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 08:48	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 08:48	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 08:48	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 08:48	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 08:48	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 08:48	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 08:48	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 08:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 08:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 08:48	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/19 08:48	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 08:48	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 08:48	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 08:48	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 08:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 08:48	79-00-5	
Trichloroethene	**37.3**	ug/L	5.0	1		03/16/19 08:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 08:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 08:48	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 08:48	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 08:48	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 08:48	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 08:48	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 08:48	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97	%.	89-116	1		03/16/19 08:48	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-111	1		03/16/19 08:48	460-00-4	
Toluene-d8 (S)	98	%.	87-110	1		03/16/19 08:48	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-3D **Lab ID: 50218940014** Collected: 03/08/19 14:00 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 09:21	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 09:21	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 09:21	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 09:21	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 09:21	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 09:21	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 09:21	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 09:21	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 09:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 09:21	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 09:21	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 09:21	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 09:21	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 09:21	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 09:21	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 09:21	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 09:21	75-00-3	
Chloroform	**11.8**	ug/L	5.0	1		03/16/19 09:21	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 09:21	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 09:21	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 09:21	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 09:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 09:21	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 09:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 09:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 09:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 09:21	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 09:21	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 09:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 09:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 09:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 09:21	75-35-4	
cis-1,2-Dichloroethene	**539**	ug/L	50.0	10		03/19/19 12:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 09:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 09:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 09:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 09:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 09:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 09:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 09:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 09:21	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 09:21	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 09:21	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 09:21	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 09:21	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 09:21	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 09:21	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-3D **Lab ID: 50218940014** Collected: 03/08/19 14:00 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 09:21	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 09:21	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 09:21	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 09:21	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 09:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 09:21	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 09:21	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 09:21	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 09:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 09:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 09:21	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/19 09:21	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 09:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 09:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 09:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 09:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 09:21	79-00-5	
Trichloroethene	**152**	ug/L	5.0	1		03/16/19 09:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 09:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 09:21	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 09:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 09:21	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 09:21	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 09:21	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 09:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97	%.	89-116	1		03/16/19 09:21	1868-53-7	
4-Bromofluorobenzene (S)	103	%.	85-111	1		03/16/19 09:21	460-00-4	
Toluene-d8 (S)	99	%.	87-110	1		03/16/19 09:21	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-4 **Lab ID: 50218940015** Collected: 03/08/19 15:00 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 09:54	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 09:54	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 09:54	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 09:54	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 09:54	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 09:54	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 09:54	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 09:54	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 09:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 09:54	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 09:54	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 09:54	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 09:54	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 09:54	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 09:54	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 09:54	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 09:54	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 09:54	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 09:54	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 09:54	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 09:54	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 09:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 09:54	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 09:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 09:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 09:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 09:54	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 09:54	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 09:54	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 09:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 09:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 09:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 09:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 09:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 09:54	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 09:54	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 09:54	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 09:54	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 09:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 09:54	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 09:54	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 09:54	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 09:54	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 09:54	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 09:54	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 09:54	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 09:54	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: TMW-4 **Lab ID: 50218940015** Collected: 03/08/19 15:00 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 09:54	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 09:54	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 09:54	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 09:54	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 09:54	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 09:54	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 09:54	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 09:54	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 09:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 09:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 09:54	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/19 09:54	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 09:54	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 09:54	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 09:54	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 09:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 09:54	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/16/19 09:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 09:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 09:54	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 09:54	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 09:54	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 09:54	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 09:54	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 09:54	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98	%.	89-116	1		03/16/19 09:54	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-111	1		03/16/19 09:54	460-00-4	
Toluene-d8 (S)	99	%.	87-110	1		03/16/19 09:54	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: Trip Blank **Lab ID: 50218940016** Collected: 03/07/19 08:00 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/16/19 10:27	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/16/19 10:27	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/16/19 10:27	107-13-1	
Benzene	ND	ug/L	5.0	1		03/16/19 10:27	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/16/19 10:27	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/16/19 10:27	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/16/19 10:27	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/16/19 10:27	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/16/19 10:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/16/19 10:27	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/16/19 10:27	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/16/19 10:27	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/16/19 10:27	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/16/19 10:27	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/16/19 10:27	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/16/19 10:27	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/16/19 10:27	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/16/19 10:27	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/16/19 10:27	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 10:27	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/16/19 10:27	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/16/19 10:27	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/16/19 10:27	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/16/19 10:27	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 10:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 10:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/16/19 10:27	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/16/19 10:27	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/16/19 10:27	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/16/19 10:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/16/19 10:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/16/19 10:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 10:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/16/19 10:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 10:27	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/16/19 10:27	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/16/19 10:27	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/16/19 10:27	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 10:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/16/19 10:27	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/16/19 10:27	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/16/19 10:27	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/16/19 10:27	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/16/19 10:27	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/16/19 10:27	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/16/19 10:27	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/16/19 10:27	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50218940

Sample: Trip Blank **Lab ID: 50218940016** Collected: 03/07/19 08:00 Received: 03/08/19 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/16/19 10:27	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/16/19 10:27	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 10:27	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/16/19 10:27	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/16/19 10:27	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/16/19 10:27	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/16/19 10:27	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/16/19 10:27	103-65-1	
Styrene	ND	ug/L	5.0	1		03/16/19 10:27	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 10:27	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/16/19 10:27	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/16/19 10:27	127-18-4	
Toluene	ND	ug/L	5.0	1		03/16/19 10:27	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 10:27	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/16/19 10:27	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/16/19 10:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/16/19 10:27	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/16/19 10:27	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/16/19 10:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/16/19 10:27	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 10:27	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/16/19 10:27	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/16/19 10:27	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/16/19 10:27	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/16/19 10:27	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98	%.	89-116	1		03/16/19 10:27	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-111	1		03/16/19 10:27	460-00-4	
Toluene-d8 (S)	99	%.	87-110	1		03/16/19 10:27	2037-26-5	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

QC Batch: 489555 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50218940001, 50218940002, 50218940004

METHOD BLANK: 2258184 | Matrix: Water
Associated Lab Samples: 50218940001, 50218940002, 50218940004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/15/19 13:41	M5
1,1,1-Trichloroethane	ug/L	ND	5.0	03/15/19 13:41	M5
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/15/19 13:41	M5
1,1,2-Trichloroethane	ug/L	ND	5.0	03/15/19 13:41	M5
1,1-Dichloroethane	ug/L	ND	5.0	03/15/19 13:41	M5
1,1-Dichloroethene	ug/L	ND	5.0	03/15/19 13:41	M5
1,1-Dichloropropene	ug/L	ND	5.0	03/15/19 13:41	M5
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/15/19 13:41	M5
1,2,3-Trichloropropane	ug/L	ND	5.0	03/15/19 13:41	M5
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/15/19 13:41	M5
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/15/19 13:41	M5
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/15/19 13:41	M5
1,2-Dichlorobenzene	ug/L	ND	5.0	03/15/19 13:41	M5
1,2-Dichloroethane	ug/L	ND	5.0	03/15/19 13:41	M5
1,2-Dichloropropane	ug/L	ND	5.0	03/15/19 13:41	M5
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/15/19 13:41	M5
1,3-Dichlorobenzene	ug/L	ND	5.0	03/15/19 13:41	M5
1,3-Dichloropropane	ug/L	ND	5.0	03/15/19 13:41	M5
1,4-Dichlorobenzene	ug/L	ND	5.0	03/15/19 13:41	M5
1-Methylnaphthalene	ug/L	ND	10.0	03/15/19 13:41	M5,N2
2,2-Dichloropropane	ug/L	ND	5.0	03/15/19 13:41	M5
2-Butanone (MEK)	ug/L	ND	25.0	03/15/19 13:41	M5
2-Chlorotoluene	ug/L	ND	5.0	03/15/19 13:41	M5
2-Hexanone	ug/L	ND	25.0	03/15/19 13:41	M5
2-Methylnaphthalene	ug/L	ND	10.0	03/15/19 13:41	M5
4-Chlorotoluene	ug/L	ND	5.0	03/15/19 13:41	M5
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/15/19 13:41	M5
Acetone	ug/L	ND	100	03/15/19 13:41	M5
Acrolein	ug/L	ND	50.0	03/15/19 13:41	M5
Acrylonitrile	ug/L	ND	100	03/15/19 13:41	M5
Benzene	ug/L	ND	5.0	03/15/19 13:41	M5
Bromobenzene	ug/L	ND	5.0	03/15/19 13:41	M5
Bromochloromethane	ug/L	ND	5.0	03/15/19 13:41	M5
Bromodichloromethane	ug/L	ND	5.0	03/15/19 13:41	M5
Bromoform	ug/L	ND	5.0	03/15/19 13:41	M5
Bromomethane	ug/L	ND	5.0	03/15/19 13:41	M5
Carbon disulfide	ug/L	ND	10.0	03/15/19 13:41	M5
Carbon tetrachloride	ug/L	ND	5.0	03/15/19 13:41	M5
Chlorobenzene	ug/L	ND	5.0	03/15/19 13:41	M5
Chloroethane	ug/L	ND	5.0	03/15/19 13:41	M5
Chloroform	ug/L	ND	5.0	03/15/19 13:41	M5

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

METHOD BLANK: 2258184 Matrix: Water
Associated Lab Samples: 50218940001, 50218940002, 50218940004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	03/15/19 13:41	M5
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/15/19 13:41	M5
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/15/19 13:41	M5
Dibromochloromethane	ug/L	ND	5.0	03/15/19 13:41	M5
Dibromomethane	ug/L	ND	5.0	03/15/19 13:41	M5
Dichlorodifluoromethane	ug/L	ND	5.0	03/15/19 13:41	M5
Ethyl methacrylate	ug/L	ND	100	03/15/19 13:41	M5
Ethylbenzene	ug/L	ND	5.0	03/15/19 13:41	M5
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/15/19 13:41	M5
Iodomethane	ug/L	ND	10.0	03/15/19 13:41	M5
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/15/19 13:41	M5
Methyl-tert-butyl ether	ug/L	ND	4.0	03/15/19 13:41	M5
Methylene Chloride	ug/L	ND	5.0	03/15/19 13:41	M5
n-Butylbenzene	ug/L	ND	5.0	03/15/19 13:41	M5
n-Hexane	ug/L	ND	5.0	03/15/19 13:41	M5
n-Propylbenzene	ug/L	ND	5.0	03/15/19 13:41	M5
Naphthalene	ug/L	ND	1.7	03/15/19 13:41	M5
p-Isopropyltoluene	ug/L	ND	5.0	03/15/19 13:41	M5
sec-Butylbenzene	ug/L	ND	5.0	03/15/19 13:41	M5
Styrene	ug/L	ND	5.0	03/15/19 13:41	M5
tert-Butylbenzene	ug/L	ND	5.0	03/15/19 13:41	M5
Tetrachloroethene	ug/L	ND	5.0	03/15/19 13:41	M5
Toluene	ug/L	ND	5.0	03/15/19 13:41	M5
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/15/19 13:41	M5
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/15/19 13:41	M5
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/15/19 13:41	M5
Trichloroethene	ug/L	ND	5.0	03/15/19 13:41	M5
Trichlorofluoromethane	ug/L	ND	5.0	03/15/19 13:41	M5
Vinyl acetate	ug/L	ND	50.0	03/15/19 13:41	M5
Vinyl chloride	ug/L	ND	2.0	03/15/19 13:41	M5
Xylene (Total)	ug/L	ND	10.0	03/15/19 13:41	M5
4-Bromofluorobenzene (S)	%.	102	85-111	03/15/19 13:41	M5
Dibromofluoromethane (S)	%.	98	89-116	03/15/19 13:41	M5
Toluene-d8 (S)	%.	101	87-110	03/15/19 13:41	M5

LABORATORY CONTROL SAMPLE: 2258185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.1	102	80-120	M5
1,1,1-Trichloroethane	ug/L	50	55.9	112	74-126	M5
1,1,2,2-Tetrachloroethane	ug/L	50	52.2	104	73-117	M5
1,1,2-Trichloroethane	ug/L	50	53.6	107	74-119	M5
1,1-Dichloroethane	ug/L	50	50.8	102	72-119	M5
1,1-Dichloroethene	ug/L	50	54.5	109	72-123	M5

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

LABORATORY CONTROL SAMPLE: 2258185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloropropene	ug/L	50	49.1	98	77-125	M5
1,2,3-Trichlorobenzene	ug/L	50	53.8	108	74-125	M5
1,2,3-Trichloropropane	ug/L	50	55.6	111	82-121	M5
1,2,4-Trichlorobenzene	ug/L	50	54.6	109	70-125	M5
1,2,4-Trimethylbenzene	ug/L	50	49.7	99	76-118	M5
1,2-Dibromoethane (EDB)	ug/L	50	53.3	107	80-120	M5
1,2-Dichlorobenzene	ug/L	50	50.9	102	77-117	M5
1,2-Dichloroethane	ug/L	50	45.1	90	69-122	M5
1,2-Dichloropropane	ug/L	50	55.4	111	75-124	M5
1,3,5-Trimethylbenzene	ug/L	50	49.4	99	75-117	M5
1,3-Dichlorobenzene	ug/L	50	48.4	97	76-116	M5
1,3-Dichloropropane	ug/L	50	52.3	105	82-118	M5
1,4-Dichlorobenzene	ug/L	50	48.5	97	74-115	M5
1-Methylnaphthalene	ug/L	50	52.5	105	70-130	M5,N2
2,2-Dichloropropane	ug/L	50	55.1	110	51-133	M5
2-Butanone (MEK)	ug/L	250	301	120	72-147	M5
2-Chlorotoluene	ug/L	50	50.3	101	73-113	M5
2-Hexanone	ug/L	250	274	110	71-132	M5
2-Methylnaphthalene	ug/L	50	47.9	96	69-123	M5
4-Chlorotoluene	ug/L	50	48.0	96	78-118	M5
4-Methyl-2-pentanone (MIBK)	ug/L	250	273	109	89-128	M5
Acetone	ug/L	250	273	109	46-170	M5
Acrolein	ug/L	1000	1210	121	13-200	M5
Acrylonitrile	ug/L	200	226	113	65-130	M5
Benzene	ug/L	50	48.6	97	78-117	M5
Bromobenzene	ug/L	50	45.5	91	66-126	M5
Bromochloromethane	ug/L	50	51.9	104	76-120	M5
Bromodichloromethane	ug/L	50	51.9	104	76-120	M5
Bromoform	ug/L	50	46.2	92	70-124	M5
Bromomethane	ug/L	50	56.4	113	29-181	M5
Carbon disulfide	ug/L	50	55.1	110	66-123	M5
Carbon tetrachloride	ug/L	50	52.0	104	73-132	M5
Chlorobenzene	ug/L	50	47.1	94	79-112	M5
Chloroethane	ug/L	50	54.6	109	59-156	M5
Chloroform	ug/L	50	48.5	97	76-118	M5
Chloromethane	ug/L	50	47.1	94	45-142	M5
cis-1,2-Dichloroethene	ug/L	50	52.8	106	75-117	M5
cis-1,3-Dichloropropene	ug/L	50	56.5	113	77-120	M5
Dibromochloromethane	ug/L	50	53.4	107	78-123	M5
Dibromomethane	ug/L	50	54.4	109	78-122	M5
Dichlorodifluoromethane	ug/L	50	55.5	111	41-168	M5
Ethyl methacrylate	ug/L	200	226	113	75-128	M5
Ethylbenzene	ug/L	50	49.9	100	80-118	M5
Hexachloro-1,3-butadiene	ug/L	50	57.9	116	73-125	M5
Iodomethane	ug/L	100	98.1	98	35-174	M5
Isopropylbenzene (Cumene)	ug/L	50	49.3	99	81-117	M5
Methyl-tert-butyl ether	ug/L	50	55.2	110	71-124	M5

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

LABORATORY CONTROL SAMPLE: 2258185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	50	47.4	95	59-136	M5
n-Butylbenzene	ug/L	50	52.1	104	72-118	M5
n-Hexane	ug/L	50	63.4	127	60-128	M5
n-Propylbenzene	ug/L	50	49.0	98	75-120	M5
Naphthalene	ug/L	50	55.4	111	67-126	M5
p-Isopropyltoluene	ug/L	50	50.3	101	75-115	M5
sec-Butylbenzene	ug/L	50	50.4	101	76-120	M5
Styrene	ug/L	50	50.2	100	74-121	M5
tert-Butylbenzene	ug/L	50	38.9	78	55-109	M5
Tetrachloroethene	ug/L	50	51.6	103	76-116	M5
Toluene	ug/L	50	50.6	101	77-115	M5
trans-1,2-Dichloroethene	ug/L	50	54.5	109	75-121	M5
trans-1,3-Dichloropropene	ug/L	50	55.1	110	77-121	M5
trans-1,4-Dichloro-2-butene	ug/L	200	233	116	42-128	M5
Trichloroethene	ug/L	50	52.2	104	76-120	M5
Trichlorofluoromethane	ug/L	50	53.4	107	81-141	M5
Vinyl acetate	ug/L	200	224	112	67-131	M5
Vinyl chloride	ug/L	50	55.8	112	64-155	M5
Xylene (Total)	ug/L	150	151	101	78-118	M5
4-Bromofluorobenzene (S)	%.			102	85-111	M5
Dibromofluoromethane (S)	%.			99	89-116	M5
Toluene-d8 (S)	%.			100	87-110	M5

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

QC Batch: 489568 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50218940003, 50218940005, 50218940006, 50218940007, 50218940008, 50218940009, 50218940010, 50218940011, 50218940012, 50218940013, 50218940014, 50218940015, 50218940016

METHOD BLANK: 2258278 | Matrix: Water
Associated Lab Samples: 50218940003, 50218940005, 50218940006, 50218940007, 50218940008, 50218940009, 50218940010, 50218940011, 50218940012, 50218940013, 50218940014, 50218940015, 50218940016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/16/19 01:42	
1,1,1-Trichloroethane	ug/L	ND	5.0	03/16/19 01:42	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/16/19 01:42	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/16/19 01:42	
1,1-Dichloroethane	ug/L	ND	5.0	03/16/19 01:42	
1,1-Dichloroethene	ug/L	ND	5.0	03/16/19 01:42	
1,1-Dichloropropene	ug/L	ND	5.0	03/16/19 01:42	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/16/19 01:42	
1,2,3-Trichloropropane	ug/L	ND	5.0	03/16/19 01:42	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/16/19 01:42	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/16/19 01:42	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/16/19 01:42	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/16/19 01:42	
1,2-Dichloroethane	ug/L	ND	5.0	03/16/19 01:42	
1,2-Dichloropropane	ug/L	ND	5.0	03/16/19 01:42	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/16/19 01:42	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/16/19 01:42	
1,3-Dichloropropane	ug/L	ND	5.0	03/16/19 01:42	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/16/19 01:42	
1-Methylnaphthalene	ug/L	ND	10.0	03/16/19 01:42	N2
2,2-Dichloropropane	ug/L	ND	5.0	03/16/19 01:42	
2-Butanone (MEK)	ug/L	ND	25.0	03/16/19 01:42	
2-Chlorotoluene	ug/L	ND	5.0	03/16/19 01:42	
2-Hexanone	ug/L	ND	25.0	03/16/19 01:42	
2-Methylnaphthalene	ug/L	ND	10.0	03/16/19 01:42	
4-Chlorotoluene	ug/L	ND	5.0	03/16/19 01:42	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/16/19 01:42	
Acetone	ug/L	ND	100	03/16/19 01:42	
Acrolein	ug/L	ND	50.0	03/16/19 01:42	
Acrylonitrile	ug/L	ND	100	03/16/19 01:42	
Benzene	ug/L	ND	5.0	03/16/19 01:42	
Bromobenzene	ug/L	ND	5.0	03/16/19 01:42	
Bromochloromethane	ug/L	ND	5.0	03/16/19 01:42	
Bromodichloromethane	ug/L	ND	5.0	03/16/19 01:42	
Bromoform	ug/L	ND	5.0	03/16/19 01:42	
Bromomethane	ug/L	ND	5.0	03/16/19 01:42	
Carbon disulfide	ug/L	ND	10.0	03/16/19 01:42	
Carbon tetrachloride	ug/L	ND	5.0	03/16/19 01:42	
Chlorobenzene	ug/L	ND	5.0	03/16/19 01:42	
Chloroethane	ug/L	ND	5.0	03/16/19 01:42	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

METHOD BLANK: 2258278 Matrix: Water

Associated Lab Samples: 50218940003, 50218940005, 50218940006, 50218940007, 50218940008, 50218940009, 50218940010, 50218940011, 50218940012, 50218940013, 50218940014, 50218940015, 50218940016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	5.0	03/16/19 01:42	
Chloromethane	ug/L	ND	5.0	03/16/19 01:42	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/16/19 01:42	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/16/19 01:42	
Dibromochloromethane	ug/L	ND	5.0	03/16/19 01:42	
Dibromomethane	ug/L	ND	5.0	03/16/19 01:42	
Dichlorodifluoromethane	ug/L	ND	5.0	03/16/19 01:42	
Ethyl methacrylate	ug/L	ND	100	03/16/19 01:42	
Ethylbenzene	ug/L	ND	5.0	03/16/19 01:42	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/16/19 01:42	
Iodomethane	ug/L	ND	10.0	03/16/19 01:42	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/16/19 01:42	
Methyl-tert-butyl ether	ug/L	ND	4.0	03/16/19 01:42	
Methylene Chloride	ug/L	ND	5.0	03/16/19 01:42	
n-Butylbenzene	ug/L	ND	5.0	03/16/19 01:42	
n-Hexane	ug/L	ND	5.0	03/16/19 01:42	
n-Propylbenzene	ug/L	ND	5.0	03/16/19 01:42	
Naphthalene	ug/L	ND	1.7	03/16/19 01:42	
p-Isopropyltoluene	ug/L	ND	5.0	03/16/19 01:42	
sec-Butylbenzene	ug/L	ND	5.0	03/16/19 01:42	
Styrene	ug/L	ND	5.0	03/16/19 01:42	
tert-Butylbenzene	ug/L	ND	5.0	03/16/19 01:42	
Tetrachloroethene	ug/L	ND	5.0	03/16/19 01:42	
Toluene	ug/L	ND	5.0	03/16/19 01:42	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/16/19 01:42	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/16/19 01:42	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/16/19 01:42	
Trichloroethene	ug/L	ND	5.0	03/16/19 01:42	
Trichlorofluoromethane	ug/L	ND	5.0	03/16/19 01:42	
Vinyl acetate	ug/L	ND	50.0	03/16/19 01:42	
Vinyl chloride	ug/L	ND	2.0	03/16/19 01:42	
Xylene (Total)	ug/L	ND	10.0	03/16/19 01:42	
4-Bromofluorobenzene (S)	%.	103	85-111	03/16/19 01:42	
Dibromofluoromethane (S)	%.	97	89-116	03/16/19 01:42	
Toluene-d8 (S)	%.	99	87-110	03/16/19 01:42	

LABORATORY CONTROL SAMPLE: 2258279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.9	104	80-120	
1,1,1-Trichloroethane	ug/L	50	56.3	113	74-126	
1,1,2,2-Tetrachloroethane	ug/L	50	51.3	103	73-117	
1,1,2-Trichloroethane	ug/L	50	53.7	107	74-119	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

LABORATORY CONTROL SAMPLE: 2258279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethane	ug/L	50	49.7	99	72-119	
1,1-Dichloroethene	ug/L	50	57.1	114	72-123	
1,1-Dichloropropene	ug/L	50	48.9	98	77-125	
1,2,3-Trichlorobenzene	ug/L	50	54.6	109	74-125	
1,2,3-Trichloropropane	ug/L	50	55.2	110	82-121	
1,2,4-Trichlorobenzene	ug/L	50	54.2	108	70-125	
1,2,4-Trimethylbenzene	ug/L	50	49.4	99	76-118	
1,2-Dibromoethane (EDB)	ug/L	50	53.0	106	80-120	
1,2-Dichlorobenzene	ug/L	50	51.2	102	77-117	
1,2-Dichloroethane	ug/L	50	44.3	89	69-122	
1,2-Dichloropropane	ug/L	50	54.8	110	75-124	
1,3,5-Trimethylbenzene	ug/L	50	49.6	99	75-117	
1,3-Dichlorobenzene	ug/L	50	48.8	98	76-116	
1,3-Dichloropropane	ug/L	50	52.0	104	82-118	
1,4-Dichlorobenzene	ug/L	50	48.5	97	74-115	
1-Methylnaphthalene	ug/L	50	56.2	112	70-130	N2
2,2-Dichloropropane	ug/L	50	42.7	85	51-133	
2-Butanone (MEK)	ug/L	250	286	115	72-147	
2-Chlorotoluene	ug/L	50	50.4	101	73-113	
2-Hexanone	ug/L	250	265	106	71-132	
2-Methylnaphthalene	ug/L	50	49.3	99	69-123	
4-Chlorotoluene	ug/L	50	48.1	96	78-118	
4-Methyl-2-pentanone (MIBK)	ug/L	250	259	104	89-128	
Acetone	ug/L	250	264	106	46-170	
Acrolein	ug/L	1000	1250	125	13-200	
Acrylonitrile	ug/L	200	219	110	65-130	
Benzene	ug/L	50	48.7	97	78-117	
Bromobenzene	ug/L	50	55.7	111	66-126	
Bromochloromethane	ug/L	50	49.7	99	76-120	
Bromodichloromethane	ug/L	50	51.7	103	76-120	
Bromoform	ug/L	50	42.9	86	70-124	
Bromomethane	ug/L	50	40.7	81	29-181	
Carbon disulfide	ug/L	50	56.2	112	66-123	
Carbon tetrachloride	ug/L	50	52.6	105	73-132	
Chlorobenzene	ug/L	50	47.9	96	79-112	
Chloroethane	ug/L	50	55.9	112	59-156	
Chloroform	ug/L	50	49.1	98	76-118	
Chloromethane	ug/L	50	39.4	79	45-142	
cis-1,2-Dichloroethene	ug/L	50	54.6	109	75-117	
cis-1,3-Dichloropropene	ug/L	50	52.4	105	77-120	
Dibromochloromethane	ug/L	50	53.4	107	78-123	
Dibromomethane	ug/L	50	54.9	110	78-122	
Dichlorodifluoromethane	ug/L	50	54.5	109	41-168	
Ethyl methacrylate	ug/L	200	221	111	75-128	
Ethylbenzene	ug/L	50	51.0	102	80-118	
Hexachloro-1,3-butadiene	ug/L	50	57.3	115	73-125	
Iodomethane	ug/L	100	73.1	73	35-174	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

LABORATORY CONTROL SAMPLE: 2258279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Isopropylbenzene (Cumene)	ug/L	50	50.0	100	81-117	
Methyl-tert-butyl ether	ug/L	50	55.3	111	71-124	
Methylene Chloride	ug/L	50	48.1	96	59-136	
n-Butylbenzene	ug/L	50	50.0	100	72-118	
n-Hexane	ug/L	50	54.6	109	60-128	
n-Propylbenzene	ug/L	50	48.5	97	75-120	
Naphthalene	ug/L	50	56.3	113	67-126	
p-Isopropyltoluene	ug/L	50	50.0	100	75-115	
sec-Butylbenzene	ug/L	50	50.0	100	76-120	
Styrene	ug/L	50	50.8	102	74-121	
tert-Butylbenzene	ug/L	50	38.4	77	55-109	
Tetrachloroethene	ug/L	50	51.4	103	76-116	
Toluene	ug/L	50	50.5	101	77-115	
trans-1,2-Dichloroethene	ug/L	50	57.1	114	75-121	
trans-1,3-Dichloropropene	ug/L	50	50.7	101	77-121	
trans-1,4-Dichloro-2-butene	ug/L	200	147	73	42-128	
Trichloroethene	ug/L	50	52.3	105	76-120	
Trichlorofluoromethane	ug/L	50	54.9	110	81-141	
Vinyl acetate	ug/L	200	215	108	67-131	
Vinyl chloride	ug/L	50	55.6	111	64-155	
Xylene (Total)	ug/L	150	154	102	78-118	
4-Bromofluorobenzene (S)	%.			101	85-111	
Dibromofluoromethane (S)	%.			100	89-116	
Toluene-d8 (S)	%.			99	87-110	

MATRIX SPIKE SAMPLE: 2258280

Parameter	Units	50218940003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	50	50.2	100	48-138	
1,1,1-Trichloroethane	ug/L	ND	50	56.5	113	50-141	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	47.7	95	52-131	
1,1,2-Trichloroethane	ug/L	ND	50	50.0	100	53-131	
1,1-Dichloroethane	ug/L	ND	50	49.5	99	51-130	
1,1-Dichloroethene	ug/L	ND	50	55.9	112	51-138	
1,1-Dichloropropene	ug/L	ND	50	48.5	97	47-143	
1,2,3-Trichlorobenzene	ug/L	ND	50	52.9	106	26-143	
1,2,3-Trichloropropane	ug/L	ND	50	51.2	102	60-136	
1,2,4-Trichlorobenzene	ug/L	ND	50	51.9	104	20-142	
1,2,4-Trimethylbenzene	ug/L	ND	50	48.4	97	19-148	
1,2-Dibromoethane (EDB)	ug/L	ND	50	49.9	100	57-134	
1,2-Dichlorobenzene	ug/L	ND	50	49.7	99	30-142	
1,2-Dichloroethane	ug/L	ND	50	42.5	85	46-139	
1,2-Dichloropropane	ug/L	ND	50	53.3	107	54-135	
1,3,5-Trimethylbenzene	ug/L	ND	50	48.5	97	16-149	
1,3-Dichlorobenzene	ug/L	ND	50	47.8	96	24-142	

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

MATRIX SPIKE SAMPLE: 2258280

Parameter	Units	50218940003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,3-Dichloropropane	ug/L	ND	50	48.7	97	59-134	
1,4-Dichlorobenzene	ug/L	ND	50	47.1	94	24-140	
1-Methylnaphthalene	ug/L	ND	50	48.7	97	44-135	N2
2,2-Dichloropropane	ug/L	ND	50	35.1	70	24-138	
2-Butanone (MEK)	ug/L	ND	250	250	100	49-156	
2-Chlorotoluene	ug/L	ND	50	48.5	97	21-143	
2-Hexanone	ug/L	ND	250	232	93	53-140	
2-Methylnaphthalene	ug/L	ND	50	43.7	87	33-137	
4-Chlorotoluene	ug/L	ND	50	47.4	95	23-147	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	250	232	93	50-139	
Acetone	ug/L	ND	250	237	95	34-160	
Acrolein	ug/L	ND	1000	836	84	30-178	
Acrylonitrile	ug/L	ND	200	195	98	54-136	
Benzene	ug/L	ND	50	47.5	95	50-135	
Bromobenzene	ug/L	ND	50	52.8	106	28-147	
Bromochloromethane	ug/L	ND	50	48.3	97	54-138	
Bromodichloromethane	ug/L	ND	50	49.5	99	50-135	
Bromoform	ug/L	ND	50	40.8	82	43-133	
Bromomethane	ug/L	ND	50	34.1	68	15-170	
Carbon disulfide	ug/L	ND	50	55.3	111	36-139	
Carbon tetrachloride	ug/L	ND	50	53.2	106	43-151	
Chlorobenzene	ug/L	ND	50	46.5	93	39-135	
Chloroethane	ug/L	ND	50	54.3	109	42-165	
Chloroform	ug/L	ND	50	48.1	96	52-134	
Chloromethane	ug/L	ND	50	37.4	75	33-146	
cis-1,2-Dichloroethene	ug/L	ND	50	53.9	108	48-133	
cis-1,3-Dichloropropene	ug/L	ND	50	48.8	98	46-131	
Dibromochloromethane	ug/L	ND	50	51.1	102	50-139	
Dibromomethane	ug/L	ND	50	52.2	104	55-137	
Dichlorodifluoromethane	ug/L	ND	50	48.3	97	29-178	
Ethyl methacrylate	ug/L	ND	200	204	102	58-136	
Ethylbenzene	ug/L	ND	50	50.1	100	31-147	
Hexachloro-1,3-butadiene	ug/L	ND	50	55.1	110	10-158	
Iodomethane	ug/L	ND	100	71.9	72	17-173	
Isopropylbenzene (Cumene)	ug/L	ND	50	48.9	98	25-151	
Methyl-tert-butyl ether	ug/L	ND	50	52.2	104	51-142	
Methylene Chloride	ug/L	ND	50	46.9	94	41-142	
n-Butylbenzene	ug/L	ND	50	48.3	97	10-153	
n-Hexane	ug/L	ND	50	46.9	94	35-141	
n-Propylbenzene	ug/L	ND	50	47.8	96	16-153	
Naphthalene	ug/L	ND	50	51.2	102	40-135	
p-Isopropyltoluene	ug/L	ND	50	49.0	98	11-150	
sec-Butylbenzene	ug/L	ND	50	49.3	99	11-157	
Styrene	ug/L	ND	50	49.3	99	28-142	
tert-Butylbenzene	ug/L	ND	50	39.0	78	11-132	
Tetrachloroethene	ug/L	ND	50	55.5	103	34-140	
Toluene	ug/L	ND	50	49.8	100	43-134	

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

MATRIX SPIKE SAMPLE: 2258280

Parameter	Units	50218940003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	ND	50	55.9	112	51-135	
trans-1,3-Dichloropropene	ug/L	ND	50	46.5	93	44-133	
trans-1,4-Dichloro-2-butene	ug/L	ND	200	126	63	12-138	
Trichloroethene	ug/L	15.7	50	68.5	106	40-141	
Trichlorofluoromethane	ug/L	ND	50	54.6	109	56-162	
Vinyl acetate	ug/L	ND	200	122	61	11-134	
Vinyl chloride	ug/L	ND	50	54.0	108	46-164	
Xylene (Total)	ug/L	ND	150	151	101	29-145	
4-Bromofluorobenzene (S)	%.				100	85-111	
Dibromofluoromethane (S)	%.				98	89-116	
Toluene-d8 (S)	%.				98	87-110	

SAMPLE DUPLICATE: 2258281

Parameter	Units	50218940005 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		20	
1,1,1-Trichloroethane	ug/L	ND	ND		20	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		20	
1,1,2-Trichloroethane	ug/L	ND	ND		20	
1,1-Dichloroethane	ug/L	ND	ND		20	
1,1-Dichloroethene	ug/L	ND	ND		20	
1,1-Dichloropropene	ug/L	ND	ND		20	
1,2,3-Trichlorobenzene	ug/L	ND	ND		20	
1,2,3-Trichloropropane	ug/L	ND	ND		20	
1,2,4-Trichlorobenzene	ug/L	ND	ND		20	
1,2,4-Trimethylbenzene	ug/L	ND	ND		20	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1,2-Dichlorobenzene	ug/L	ND	ND		20	
1,2-Dichloroethane	ug/L	ND	ND		20	
1,2-Dichloropropane	ug/L	ND	ND		20	
1,3,5-Trimethylbenzene	ug/L	ND	ND		20	
1,3-Dichlorobenzene	ug/L	ND	ND		20	
1,3-Dichloropropane	ug/L	ND	ND		20	
1,4-Dichlorobenzene	ug/L	ND	ND		20	
1-Methylnaphthalene	ug/L	ND	ND		20	N2
2,2-Dichloropropane	ug/L	ND	ND		20	
2-Butanone (MEK)	ug/L	ND	ND		20	
2-Chlorotoluene	ug/L	ND	ND		20	
2-Hexanone	ug/L	ND	ND		20	
2-Methylnaphthalene	ug/L	ND	ND		20	
4-Chlorotoluene	ug/L	ND	ND		20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		20	
Acetone	ug/L	ND	ND		20	
Acrolein	ug/L	ND	ND		20	
Acrylonitrile	ug/L	ND	ND		20	

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50218940

SAMPLE DUPLICATE: 2258281

Parameter	Units	50218940005 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	ND		20	
Bromobenzene	ug/L	ND	ND		20	
Bromochloromethane	ug/L	ND	ND		20	
Bromodichloromethane	ug/L	ND	ND		20	
Bromoform	ug/L	ND	ND		20	
Bromomethane	ug/L	ND	ND		20	
Carbon disulfide	ug/L	ND	ND		20	
Carbon tetrachloride	ug/L	ND	ND		20	
Chlorobenzene	ug/L	ND	ND		20	
Chloroethane	ug/L	ND	ND		20	
Chloroform	ug/L	ND	ND		20	
Chloromethane	ug/L	ND	ND		20	
cis-1,2-Dichloroethene	ug/L	ND	ND		20	
cis-1,3-Dichloropropene	ug/L	ND	ND		20	
Dibromochloromethane	ug/L	ND	ND		20	
Dibromomethane	ug/L	ND	ND		20	
Dichlorodifluoromethane	ug/L	ND	ND		20	
Ethyl methacrylate	ug/L	ND	ND		20	
Ethylbenzene	ug/L	ND	ND		20	
Hexachloro-1,3-butadiene	ug/L	ND	ND		20	
Iodomethane	ug/L	ND	ND		20	
Isopropylbenzene (Cumene)	ug/L	ND	ND		20	
Methyl-tert-butyl ether	ug/L	ND	ND		20	
Methylene Chloride	ug/L	ND	ND		20	
n-Butylbenzene	ug/L	ND	ND		20	
n-Hexane	ug/L	ND	ND		20	
n-Propylbenzene	ug/L	ND	ND		20	
Naphthalene	ug/L	ND	ND		20	
p-Isopropyltoluene	ug/L	ND	ND		20	
sec-Butylbenzene	ug/L	ND	ND		20	
Styrene	ug/L	ND	ND		20	
tert-Butylbenzene	ug/L	ND	ND		20	
Tetrachloroethene	ug/L	5.8	6.0	4	20	
Toluene	ug/L	ND	ND		20	
trans-1,2-Dichloroethene	ug/L	ND	ND		20	
trans-1,3-Dichloropropene	ug/L	ND	ND		20	
trans-1,4-Dichloro-2-butene	ug/L	ND	ND		20	
Trichloroethene	ug/L	30.0	30.6	2	20	
Trichlorofluoromethane	ug/L	ND	ND		20	
Vinyl acetate	ug/L	ND	ND		20	
Vinyl chloride	ug/L	ND	ND		20	
Xylene (Total)	ug/L	ND	ND		20	
4-Bromofluorobenzene (S)	%.	102	103	0		
Dibromofluoromethane (S)	%.	98	96	2		
Toluene-d8 (S)	%.	98	98	0		

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: Houghland FSI #3
Pace Project No.: 50218940

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 489555

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland FSI #3
Pace Project No.: 50218940

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50218940001	**MW-12**	EPA 5030/8260	489555		
50218940002	**MW-12D**	EPA 5030/8260	489555		
50218940003	**MW-29**	EPA 5030/8260	489568		
50218940004	**MW-29D**	EPA 5030/8260	489555		
50218940005	**MW-22**	EPA 5030/8260	489568		
50218940006	**MW-22D**	EPA 5030/8260	489568		
50218940007	**MW-33D**	EPA 5030/8260	489568		
50218940008	**MW-33**	EPA 5030/8260	489568		
50218940009	**TMW-1**	EPA 5030/8260	489568		
50218940010	**TMW-1D**	EPA 5030/8260	489568		
50218940011	**TMW-2**	EPA 5030/8260	489568		
50218940012	**TMW-2D**	EPA 5030/8260	489568		
50218940013	**TMW-3**	EPA 5030/8260	489568		
50218940014	**TMW-3D**	EPA 5030/8260	489568		
50218940015	**TMW-4**	EPA 5030/8260	489568		
50218940016	**Trip Blank**	EPA 5030/8260	489568		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: Patriot Engg. & Env.
Address: 6150 E 75th ST
Indianapolis IN 46250
Email To: jcody@patrioteng.com
Phone: 317-558-5064 Fax:
Requested Due Date/TAT: Normal Turn

Section B Required Project Information:

Report To: James Cody
Copy To: Mike Casper
Purchase Order No.:
Project Name: Houghland FSI #3
Project Number: 19-0096-01E

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: IN

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N): VOC's 8260

ITEM #	SAMPLE ID (ground water GW)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-12	GW	G			3-7-19	9:00		3				X					X		001
2	MW-12D	"	"			"	9:50													002
3	MW-29	"	"			"	10:50													003
4	MW-29D	"	"			"	11:35													004
5	MW-22	"	"			"	12:30													005
6	MW-22D	"	"			"	13:20													006
7	MW-33D	"	"			"	14:25													007
8	MW-33	"	"			"	15:20													008
9	TMW-1	"	"			3-8-19	9:00													009
10	TMW-1D	"	"			"	9:55													010
11	TMW-2	"	"			"	10:50													011
12	TMW-2D	"	"			"	11:40													012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Absolute Pricing	VShah / Patriot	3-8-19	16:00	[signature]	3-8-19	16:00	1.7	Y	N	TV

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: VISHAL SHAH
SIGNATURE of SAMPLER: VShah
DATE Signed (MM/DD/YY): 03-08-2019

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: Patriot Engg. & Env.
Address: 6150 E 75th ST Indianapolis IN 46250
Email To: jcody@patrioteng.com
Phone: 317-558-5064 Fax: —
Requested Due Date/TAT: Normal Turn

Section B Required Project Information:

Report To: James Cody
Copy To: Mike Casper
Purchase Order No.:
Project Name: Houghland FSI #3
Project Number: 19-0096-01E

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER ____

Site Location STATE: IN

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	Composite Start TIME	Composite End/Grab DATE	Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOC's 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-3	GW	G			3-8-19	13:10		3				X						X		013
2	TMW-3D	"	"			"	14:00		3				X						X		014
3	TMW-4	"	"			"	15:00		3				X						X		015
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Absolute Pricing	VS Shah / Patriot	3-8-19	16:00	[illegible]	3-8-19	16:00

SAMPLE CONDITIONS	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	1.7	Y	N	N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: VISHAL SHAH
SIGNATURE of SAMPLER: VS Shah
DATE Signed (MM/DD/YY): 03-08-2019

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

NW

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50218940

Date/Time and Initials of person examining contents: 3/8/19 16:08 CT

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No **Seals Intact:** ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer: 1 2 3 4 5 6 A B C D E F Ice Type: ☒ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☒ Yes ☐ No ☐ N/A

Cooler Temperature: 1.7 / 1.7 Ice Visible in Sample Containers?: ☐ Yes ☒ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☒ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		X	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			X
USDA Regulated Soils? (ID, NY, WA, OR, CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		X				
Chain of Custody Present:	X					
Chain of Custody Filled Out:	X		Dissolved Metals field filtered?:			X
Short Hold Time Analysis (<72hr)?: Analysis:		X	Headspace Wisconsin Sulfide			X
Time 5035A TC placed in Freezer or Short Holds To Lab:				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			X
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			X
Rush TAT Requested:	CT 3/8/19	X	Headspace in VOA Vials (>6mm):	X		
Containers Intact?:	X	X	Trip Blank Present?:	X		
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	X CT 3/8/19	X	Trip Blank Custody Seals?:	X		

Comments: Trip blank recieved, no trip blank on COC
Container recieved broken TB 1/3
Head Space >6mm - MW-22D 1/3, TB MW-1D 1/3, TB 1/2

Analyze Trip Blank per J. Cody via email. 3/8/19tms

Sample Container Count

CLIENT: Patriot Eng. & Env.

COC PAGE 1 of 2

COC ID#

Project # 50218940

Sample Line Item	DG9H / VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	Bulk SBS DI Kit R				Matrix SI/WI/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1	3																				WT			
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

Sample Container Count

WO# : 50218940

50218940

CLIENT: Patriot Eng. + Env.

COC PAGE 2 of 2

COC ID#

Project # 50218940

Sample Line Item	DG9H / VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	SBS Bulk Kit R				Matrix SI/ (Soil/Wat Aqueous	pH <2	pH >9	pH>12
1	3																				WT			
2	↓																				↓			
3																								
4	2	Tripblank																			WT	016		
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

March 25, 2019

Mr. James Cody
Patriot Engineering
6150 E 75th St
Indianapolis, IN 46250

RE: Project: Houghland FSI #3
Pace Project No.: 50219313

Dear Mr. Cody:
Enclosed are the analytical results for sample(s) received by the laboratory on March 13, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Mr. Mike Casper, Patriot Engineering

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CERTIFICATIONS

Project:	Houghland FSI #3
Pace Project No.:	50219313

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #: E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #: 98019
Michigan Department of Environmental Quality, Laboratory #9050
Ohio VAP Certification #: CL0065
Oklahoma Certification #:2018-101
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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SAMPLE SUMMARY

Project: Houghland FSI #3
Pace Project No.: 50219313

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50219313001	**MW-27**	Water	03/11/19 10:30	03/13/19 09:30
50219313002	**MW-10**	Water	03/11/19 11:20	03/13/19 09:30
50219313003	**MW-32**	Water	03/11/19 12:20	03/13/19 09:30
50219313004	**MW-26**	Water	03/11/19 13:10	03/13/19 09:30
50219313005	**MW-31**	Water	03/11/19 14:05	03/13/19 09:30
50219313006	**MW-30**	Water	03/11/19 14:45	03/13/19 09:30
50219313007	**MW-11D**	Water	03/11/19 15:35	03/13/19 09:30
50219313008	**MW-11**	Water	03/11/19 16:20	03/13/19 09:30
50219313009	**MW-23**	Water	03/11/19 17:15	03/13/19 09:30
50219313010	**Dup-C**	Water	03/11/19 00:00	03/13/19 09:30
50219313011	**MW-18**	Water	03/12/19 11:00	03/13/19 09:30
50219313012	**MW-24**	Water	03/12/19 15:00	03/13/19 09:30
50219313013	**MW-19**	Water	03/12/19 11:55	03/13/19 09:30
50219313014	**MW-20**	Water	03/12/19 13:00	03/13/19 09:30
50219313015	**MW-21**	Water	03/12/19 14:00	03/13/19 09:30
50219313016	**Trip Blank**	Water	03/12/19 08:00	03/13/19 09:30

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SAMPLE ANALYTE COUNT

Project: Houghland FSI #3
Pace Project No.: 50219313

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50219313001	**MW-27**	EPA 5030/8260	TMW	75
50219313002	**MW-10**	EPA 5030/8260	TMW	75
50219313003	**MW-32**	EPA 5030/8260	TMW	75
50219313004	**MW-26**	EPA 5030/8260	TMW	75
50219313005	**MW-31**	EPA 5030/8260	TMW	75
50219313006	**MW-30**	EPA 5030/8260	TMW	75
50219313007	**MW-11D**	EPA 5030/8260	TMW	75
50219313008	**MW-11**	EPA 5030/8260	TMW	75
50219313009	**MW-23**	EPA 5030/8260	TMW	75
50219313010	**Dup-C**	EPA 5030/8260	TMW	75
50219313011	**MW-18**	EPA 5030/8260	TMW	75
50219313012	**MW-24**	EPA 5030/8260	TMW	75
50219313013	**MW-19**	EPA 5030/8260	TMW	75
50219313014	**MW-20**	EPA 5030/8260	TMW	75
50219313015	**MW-21**	EPA 5030/8260	TMW	75
50219313016	**Trip Blank**	EPA 5030/8260	TMW	75

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SUMMARY OF DETECTION

Project: Houghland FSI #3
Pace Project No.: 50219313

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50219313003	**MW-32**					
EPA 5030/8260	Tetrachloroethene	16.1	ug/L	5.0	03/21/19 06:53	
EPA 5030/8260	Trichloroethene	37.9	ug/L	5.0	03/21/19 06:53	
50219313004	**MW-26**					
EPA 5030/8260	Tetrachloroethene	12.5	ug/L	5.0	03/21/19 07:28	
EPA 5030/8260	Trichloroethene	35.5	ug/L	5.0	03/21/19 07:28	
50219313005	**MW-31**					
EPA 5030/8260	Tetrachloroethene	293	ug/L	5.0	03/21/19 08:02	
EPA 5030/8260	Trichloroethene	163	ug/L	5.0	03/21/19 08:02	
50219313007	**MW-11D**					
EPA 5030/8260	Tetrachloroethene	7.2	ug/L	5.0	03/22/19 02:56	
50219313008	**MW-11**					
EPA 5030/8260	Tetrachloroethene	39.6	ug/L	5.0	03/22/19 03:31	
EPA 5030/8260	Trichloroethene	29.5	ug/L	5.0	03/22/19 03:31	
50219313009	**MW-23**					
EPA 5030/8260	Tetrachloroethene	15.7	ug/L	5.0	03/22/19 04:05	
EPA 5030/8260	Trichloroethene	21.9	ug/L	5.0	03/22/19 04:05	
50219313012	**MW-24**					
EPA 5030/8260	Tetrachloroethene	55.2	ug/L	5.0	03/23/19 04:20	
EPA 5030/8260	Trichloroethene	60.2	ug/L	5.0	03/23/19 04:20	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-27 **Lab ID: 50219313001** Collected: 03/11/19 10:30 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/21/19 05:44	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/21/19 05:44	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/21/19 05:44	107-13-1	
Benzene	ND	ug/L	5.0	1		03/21/19 05:44	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/21/19 05:44	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/21/19 05:44	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/21/19 05:44	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/21/19 05:44	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/21/19 05:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/21/19 05:44	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/21/19 05:44	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/21/19 05:44	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/21/19 05:44	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/21/19 05:44	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/21/19 05:44	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/21/19 05:44	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/21/19 05:44	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/21/19 05:44	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/21/19 05:44	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/21/19 05:44	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/21/19 05:44	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/21/19 05:44	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/21/19 05:44	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/21/19 05:44	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 05:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 05:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 05:44	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/21/19 05:44	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/21/19 05:44	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/21/19 05:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/21/19 05:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/21/19 05:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/21/19 05:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/21/19 05:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/21/19 05:44	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/21/19 05:44	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/21/19 05:44	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/21/19 05:44	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/21/19 05:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/21/19 05:44	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/21/19 05:44	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/21/19 05:44	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/21/19 05:44	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/21/19 05:44	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/21/19 05:44	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/21/19 05:44	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/21/19 05:44	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-27 **Lab ID: 50219313001** Collected: 03/11/19 10:30 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/21/19 05:44	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/21/19 05:44	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/21/19 05:44	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/21/19 05:44	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/21/19 05:44	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/21/19 05:44	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/21/19 05:44	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/21/19 05:44	103-65-1	
Styrene	ND	ug/L	5.0	1		03/21/19 05:44	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/21/19 05:44	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/21/19 05:44	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/21/19 05:44	127-18-4	
Toluene	ND	ug/L	5.0	1		03/21/19 05:44	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/21/19 05:44	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/21/19 05:44	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/21/19 05:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/21/19 05:44	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/21/19 05:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/21/19 05:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/21/19 05:44	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/21/19 05:44	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/21/19 05:44	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/21/19 05:44	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/21/19 05:44	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/21/19 05:44	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	80-122	1		03/21/19 05:44	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-114	1		03/21/19 05:44	460-00-4	
Toluene-d8 (S)	95	%.	85-114	1		03/21/19 05:44	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-10 **Lab ID: 50219313002** Collected: 03/11/19 11:20 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/21/19 06:18	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/21/19 06:18	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/21/19 06:18	107-13-1	
Benzene	ND	ug/L	5.0	1		03/21/19 06:18	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/21/19 06:18	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/21/19 06:18	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/21/19 06:18	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/21/19 06:18	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/21/19 06:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/21/19 06:18	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/21/19 06:18	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/21/19 06:18	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/21/19 06:18	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/21/19 06:18	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/21/19 06:18	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/21/19 06:18	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/21/19 06:18	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/21/19 06:18	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/21/19 06:18	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/21/19 06:18	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/21/19 06:18	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/21/19 06:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/21/19 06:18	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/21/19 06:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 06:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 06:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 06:18	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/21/19 06:18	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/21/19 06:18	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/21/19 06:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/21/19 06:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/21/19 06:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/21/19 06:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/21/19 06:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/21/19 06:18	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/21/19 06:18	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/21/19 06:18	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/21/19 06:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/21/19 06:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/21/19 06:18	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/21/19 06:18	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/21/19 06:18	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/21/19 06:18	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/21/19 06:18	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/21/19 06:18	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/21/19 06:18	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/21/19 06:18	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-10 **Lab ID: 50219313002** Collected: 03/11/19 11:20 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/21/19 06:18	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/21/19 06:18	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/21/19 06:18	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/21/19 06:18	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/21/19 06:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/21/19 06:18	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/21/19 06:18	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/21/19 06:18	103-65-1	
Styrene	ND	ug/L	5.0	1		03/21/19 06:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/21/19 06:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/21/19 06:18	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/21/19 06:18	127-18-4	
Toluene	ND	ug/L	5.0	1		03/21/19 06:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/21/19 06:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/21/19 06:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/21/19 06:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/21/19 06:18	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/21/19 06:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/21/19 06:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/21/19 06:18	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/21/19 06:18	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/21/19 06:18	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/21/19 06:18	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/21/19 06:18	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/21/19 06:18	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	80-122	1		03/21/19 06:18	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-114	1		03/21/19 06:18	460-00-4	
Toluene-d8 (S)	98	%.	85-114	1		03/21/19 06:18	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-32 **Lab ID: 50219313003** Collected: 03/11/19 12:20 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/21/19 06:53	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/21/19 06:53	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/21/19 06:53	107-13-1	
Benzene	ND	ug/L	5.0	1		03/21/19 06:53	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/21/19 06:53	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/21/19 06:53	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/21/19 06:53	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/21/19 06:53	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/21/19 06:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/21/19 06:53	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/21/19 06:53	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/21/19 06:53	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/21/19 06:53	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/21/19 06:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/21/19 06:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/21/19 06:53	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/21/19 06:53	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/21/19 06:53	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/21/19 06:53	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/21/19 06:53	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/21/19 06:53	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/21/19 06:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/21/19 06:53	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/21/19 06:53	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 06:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 06:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 06:53	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/21/19 06:53	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/21/19 06:53	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/21/19 06:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/21/19 06:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/21/19 06:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/21/19 06:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/21/19 06:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/21/19 06:53	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/21/19 06:53	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/21/19 06:53	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/21/19 06:53	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/21/19 06:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/21/19 06:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/21/19 06:53	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/21/19 06:53	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/21/19 06:53	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/21/19 06:53	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/21/19 06:53	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/21/19 06:53	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/21/19 06:53	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-32 **Lab ID: 50219313003** Collected: 03/11/19 12:20 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/21/19 06:53	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/21/19 06:53	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/21/19 06:53	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/21/19 06:53	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/21/19 06:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/21/19 06:53	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/21/19 06:53	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/21/19 06:53	103-65-1	
Styrene	ND	ug/L	5.0	1		03/21/19 06:53	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/21/19 06:53	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/21/19 06:53	79-34-5	
Tetrachloroethene	**16.1**	ug/L	5.0	1		03/21/19 06:53	127-18-4	
Toluene	ND	ug/L	5.0	1		03/21/19 06:53	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/21/19 06:53	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/21/19 06:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/21/19 06:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/21/19 06:53	79-00-5	
Trichloroethene	**37.9**	ug/L	5.0	1		03/21/19 06:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/21/19 06:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/21/19 06:53	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/21/19 06:53	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/21/19 06:53	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/21/19 06:53	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/21/19 06:53	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/21/19 06:53	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	80-122	1		03/21/19 06:53	1868-53-7	
4-Bromofluorobenzene (S)	97	%.	85-114	1		03/21/19 06:53	460-00-4	
Toluene-d8 (S)	100	%.	85-114	1		03/21/19 06:53	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-26 **Lab ID: 50219313004** Collected: 03/11/19 13:10 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/21/19 07:28	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/21/19 07:28	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/21/19 07:28	107-13-1	
Benzene	ND	ug/L	5.0	1		03/21/19 07:28	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/21/19 07:28	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/21/19 07:28	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/21/19 07:28	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/21/19 07:28	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/21/19 07:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/21/19 07:28	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/21/19 07:28	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/21/19 07:28	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/21/19 07:28	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/21/19 07:28	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/21/19 07:28	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/21/19 07:28	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/21/19 07:28	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/21/19 07:28	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/21/19 07:28	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/21/19 07:28	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/21/19 07:28	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/21/19 07:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/21/19 07:28	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/21/19 07:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 07:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 07:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 07:28	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/21/19 07:28	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/21/19 07:28	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/21/19 07:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/21/19 07:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/21/19 07:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/21/19 07:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/21/19 07:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/21/19 07:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/21/19 07:28	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/21/19 07:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/21/19 07:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/21/19 07:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/21/19 07:28	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/21/19 07:28	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/21/19 07:28	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/21/19 07:28	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/21/19 07:28	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/21/19 07:28	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/21/19 07:28	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/21/19 07:28	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-26 **Lab ID: 50219313004** Collected: 03/11/19 13:10 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/21/19 07:28	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/21/19 07:28	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/21/19 07:28	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/21/19 07:28	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/21/19 07:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/21/19 07:28	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/21/19 07:28	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/21/19 07:28	103-65-1	
Styrene	ND	ug/L	5.0	1		03/21/19 07:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/21/19 07:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/21/19 07:28	79-34-5	
Tetrachloroethene	**12.5**	ug/L	5.0	1		03/21/19 07:28	127-18-4	
Toluene	ND	ug/L	5.0	1		03/21/19 07:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/21/19 07:28	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/21/19 07:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/21/19 07:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/21/19 07:28	79-00-5	
Trichloroethene	**35.5**	ug/L	5.0	1		03/21/19 07:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/21/19 07:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/21/19 07:28	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/21/19 07:28	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/21/19 07:28	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/21/19 07:28	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/21/19 07:28	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/21/19 07:28	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	80-122	1		03/21/19 07:28	1868-53-7	
4-Bromofluorobenzene (S)	96	%.	85-114	1		03/21/19 07:28	460-00-4	
Toluene-d8 (S)	99	%.	85-114	1		03/21/19 07:28	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-31 **Lab ID: 50219313005** Collected: 03/11/19 14:05 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/21/19 08:02	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/21/19 08:02	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/21/19 08:02	107-13-1	
Benzene	ND	ug/L	5.0	1		03/21/19 08:02	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/21/19 08:02	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/21/19 08:02	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/21/19 08:02	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/21/19 08:02	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/21/19 08:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/21/19 08:02	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/21/19 08:02	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/21/19 08:02	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/21/19 08:02	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/21/19 08:02	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/21/19 08:02	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/21/19 08:02	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/21/19 08:02	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/21/19 08:02	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/21/19 08:02	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/21/19 08:02	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/21/19 08:02	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/21/19 08:02	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/21/19 08:02	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/21/19 08:02	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 08:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 08:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/21/19 08:02	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/21/19 08:02	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/21/19 08:02	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/21/19 08:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/21/19 08:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/21/19 08:02	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/21/19 08:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/21/19 08:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/21/19 08:02	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/21/19 08:02	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/21/19 08:02	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/21/19 08:02	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/21/19 08:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/21/19 08:02	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/21/19 08:02	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/21/19 08:02	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/21/19 08:02	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/21/19 08:02	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/21/19 08:02	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/21/19 08:02	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/21/19 08:02	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-31 **Lab ID: 50219313005** Collected: 03/11/19 14:05 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/21/19 08:02	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/21/19 08:02	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/21/19 08:02	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/21/19 08:02	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/21/19 08:02	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/21/19 08:02	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/21/19 08:02	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/21/19 08:02	103-65-1	
Styrene	ND	ug/L	5.0	1		03/21/19 08:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/21/19 08:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/21/19 08:02	79-34-5	
Tetrachloroethene	**293**	ug/L	5.0	1		03/21/19 08:02	127-18-4	
Toluene	ND	ug/L	5.0	1		03/21/19 08:02	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/21/19 08:02	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/21/19 08:02	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/21/19 08:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/21/19 08:02	79-00-5	
Trichloroethene	**163**	ug/L	5.0	1		03/21/19 08:02	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/21/19 08:02	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/21/19 08:02	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/21/19 08:02	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/21/19 08:02	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/21/19 08:02	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/21/19 08:02	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/21/19 08:02	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	96	%.	80-122	1		03/21/19 08:02	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-114	1		03/21/19 08:02	460-00-4	
Toluene-d8 (S)	100	%.	85-114	1		03/21/19 08:02	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-30 **Lab ID: 50219313006** Collected: 03/11/19 14:45 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/22/19 02:21	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/22/19 02:21	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/22/19 02:21	107-13-1	
Benzene	ND	ug/L	5.0	1		03/22/19 02:21	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/22/19 02:21	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/22/19 02:21	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/22/19 02:21	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/22/19 02:21	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/22/19 02:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/22/19 02:21	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/22/19 02:21	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/22/19 02:21	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/22/19 02:21	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/22/19 02:21	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/22/19 02:21	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/22/19 02:21	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/22/19 02:21	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/22/19 02:21	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/22/19 02:21	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 02:21	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 02:21	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/22/19 02:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/22/19 02:21	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/22/19 02:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 02:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 02:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 02:21	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/22/19 02:21	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/22/19 02:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/22/19 02:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/22/19 02:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/22/19 02:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 02:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 02:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 02:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/22/19 02:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 02:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/22/19 02:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 02:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 02:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/22/19 02:21	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/22/19 02:21	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/22/19 02:21	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/22/19 02:21	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/22/19 02:21	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/22/19 02:21	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/22/19 02:21	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-30 **Lab ID: 50219313006** Collected: 03/11/19 14:45 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/22/19 02:21	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/22/19 02:21	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 02:21	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 02:21	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/22/19 02:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/22/19 02:21	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/22/19 02:21	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/22/19 02:21	103-65-1	
Styrene	ND	ug/L	5.0	1		03/22/19 02:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 02:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 02:21	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/22/19 02:21	127-18-4	
Toluene	ND	ug/L	5.0	1		03/22/19 02:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 02:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 02:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/22/19 02:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/22/19 02:21	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/22/19 02:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/22/19 02:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/22/19 02:21	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 02:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 02:21	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/22/19 02:21	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/22/19 02:21	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/22/19 02:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	80-122	1		03/22/19 02:21	1868-53-7	
4-Bromofluorobenzene (S)	96	%.	85-114	1		03/22/19 02:21	460-00-4	
Toluene-d8 (S)	97	%.	85-114	1		03/22/19 02:21	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-11D **Lab ID: 50219313007** Collected: 03/11/19 15:35 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/22/19 02:56	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/22/19 02:56	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/22/19 02:56	107-13-1	
Benzene	ND	ug/L	5.0	1		03/22/19 02:56	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/22/19 02:56	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/22/19 02:56	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/22/19 02:56	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/22/19 02:56	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/22/19 02:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/22/19 02:56	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/22/19 02:56	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/22/19 02:56	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/22/19 02:56	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/22/19 02:56	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/22/19 02:56	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/22/19 02:56	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/22/19 02:56	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/22/19 02:56	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/22/19 02:56	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 02:56	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 02:56	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/22/19 02:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/22/19 02:56	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/22/19 02:56	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 02:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 02:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 02:56	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/22/19 02:56	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/22/19 02:56	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/22/19 02:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/22/19 02:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/22/19 02:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 02:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 02:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 02:56	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/22/19 02:56	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 02:56	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/22/19 02:56	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 02:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 02:56	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/22/19 02:56	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/22/19 02:56	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/22/19 02:56	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/22/19 02:56	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/22/19 02:56	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/22/19 02:56	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/22/19 02:56	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-11D **Lab ID: 50219313007** Collected: 03/11/19 15:35 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/22/19 02:56	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/22/19 02:56	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 02:56	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 02:56	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/22/19 02:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/22/19 02:56	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/22/19 02:56	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/22/19 02:56	103-65-1	
Styrene	ND	ug/L	5.0	1		03/22/19 02:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 02:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 02:56	79-34-5	
Tetrachloroethene	**7.2**	ug/L	5.0	1		03/22/19 02:56	127-18-4	
Toluene	ND	ug/L	5.0	1		03/22/19 02:56	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 02:56	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 02:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/22/19 02:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/22/19 02:56	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/22/19 02:56	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/22/19 02:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/22/19 02:56	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 02:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 02:56	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/22/19 02:56	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/22/19 02:56	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/22/19 02:56	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	80-122	1		03/22/19 02:56	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-114	1		03/22/19 02:56	460-00-4	
Toluene-d8 (S)	95	%.	85-114	1		03/22/19 02:56	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-11 **Lab ID: 50219313008** Collected: 03/11/19 16:20 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/22/19 03:31	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/22/19 03:31	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/22/19 03:31	107-13-1	
Benzene	ND	ug/L	5.0	1		03/22/19 03:31	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/22/19 03:31	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/22/19 03:31	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/22/19 03:31	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/22/19 03:31	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/22/19 03:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/22/19 03:31	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/22/19 03:31	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/22/19 03:31	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/22/19 03:31	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/22/19 03:31	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/22/19 03:31	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/22/19 03:31	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/22/19 03:31	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/22/19 03:31	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/22/19 03:31	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 03:31	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 03:31	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/22/19 03:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/22/19 03:31	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/22/19 03:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 03:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 03:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 03:31	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/22/19 03:31	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/22/19 03:31	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/22/19 03:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/22/19 03:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/22/19 03:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 03:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 03:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 03:31	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/22/19 03:31	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 03:31	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/22/19 03:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 03:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 03:31	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/22/19 03:31	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/22/19 03:31	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/22/19 03:31	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/22/19 03:31	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/22/19 03:31	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/22/19 03:31	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/22/19 03:31	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-11 **Lab ID: 50219313008** Collected: 03/11/19 16:20 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/22/19 03:31	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/22/19 03:31	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 03:31	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 03:31	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/22/19 03:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/22/19 03:31	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/22/19 03:31	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/22/19 03:31	103-65-1	
Styrene	ND	ug/L	5.0	1		03/22/19 03:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 03:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 03:31	79-34-5	
Tetrachloroethene	**39.6**	ug/L	5.0	1		03/22/19 03:31	127-18-4	
Toluene	ND	ug/L	5.0	1		03/22/19 03:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 03:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 03:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/22/19 03:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/22/19 03:31	79-00-5	
Trichloroethene	**29.5**	ug/L	5.0	1		03/22/19 03:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/22/19 03:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/22/19 03:31	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 03:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 03:31	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/22/19 03:31	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/22/19 03:31	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/22/19 03:31	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	80-122	1		03/22/19 03:31	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-114	1		03/22/19 03:31	460-00-4	
Toluene-d8 (S)	95	%.	85-114	1		03/22/19 03:31	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-23 **Lab ID: 50219313009** Collected: 03/11/19 17:15 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/22/19 04:05	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/22/19 04:05	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/22/19 04:05	107-13-1	
Benzene	ND	ug/L	5.0	1		03/22/19 04:05	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/22/19 04:05	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/22/19 04:05	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/22/19 04:05	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/22/19 04:05	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/22/19 04:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/22/19 04:05	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/22/19 04:05	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/22/19 04:05	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/22/19 04:05	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/22/19 04:05	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/22/19 04:05	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/22/19 04:05	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/22/19 04:05	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/22/19 04:05	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/22/19 04:05	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 04:05	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 04:05	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/22/19 04:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/22/19 04:05	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/22/19 04:05	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 04:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 04:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 04:05	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/22/19 04:05	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/22/19 04:05	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/22/19 04:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/22/19 04:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/22/19 04:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 04:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 04:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 04:05	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/22/19 04:05	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 04:05	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/22/19 04:05	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 04:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 04:05	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/22/19 04:05	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/22/19 04:05	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/22/19 04:05	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/22/19 04:05	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/22/19 04:05	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/22/19 04:05	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/22/19 04:05	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-23 **Lab ID: 50219313009** Collected: 03/11/19 17:15 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/22/19 04:05	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/22/19 04:05	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 04:05	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 04:05	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/22/19 04:05	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/22/19 04:05	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/22/19 04:05	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/22/19 04:05	103-65-1	
Styrene	ND	ug/L	5.0	1		03/22/19 04:05	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 04:05	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 04:05	79-34-5	
Tetrachloroethene	**15.7**	ug/L	5.0	1		03/22/19 04:05	127-18-4	
Toluene	ND	ug/L	5.0	1		03/22/19 04:05	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 04:05	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 04:05	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/22/19 04:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/22/19 04:05	79-00-5	
Trichloroethene	**21.9**	ug/L	5.0	1		03/22/19 04:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/22/19 04:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/22/19 04:05	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 04:05	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 04:05	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/22/19 04:05	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/22/19 04:05	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/22/19 04:05	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		03/22/19 04:05	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-114	1		03/22/19 04:05	460-00-4	
Toluene-d8 (S)	98	%.	85-114	1		03/22/19 04:05	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: Dup-C **Lab ID: 50219313010** Collected: 03/11/19 00:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/22/19 04:40	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/22/19 04:40	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/22/19 04:40	107-13-1	
Benzene	ND	ug/L	5.0	1		03/22/19 04:40	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/22/19 04:40	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/22/19 04:40	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/22/19 04:40	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/22/19 04:40	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/22/19 04:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/22/19 04:40	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/22/19 04:40	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/22/19 04:40	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/22/19 04:40	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/22/19 04:40	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/22/19 04:40	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/22/19 04:40	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/22/19 04:40	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/22/19 04:40	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/22/19 04:40	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 04:40	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 04:40	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/22/19 04:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/22/19 04:40	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/22/19 04:40	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 04:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 04:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 04:40	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/22/19 04:40	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/22/19 04:40	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/22/19 04:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/22/19 04:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/22/19 04:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 04:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 04:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 04:40	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/22/19 04:40	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 04:40	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/22/19 04:40	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 04:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 04:40	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/22/19 04:40	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/22/19 04:40	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/22/19 04:40	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/22/19 04:40	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/22/19 04:40	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/22/19 04:40	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/22/19 04:40	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: Dup-C **Lab ID: 50219313010** Collected: 03/11/19 00:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/22/19 04:40	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/22/19 04:40	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 04:40	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 04:40	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/22/19 04:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/22/19 04:40	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/22/19 04:40	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/22/19 04:40	103-65-1	
Styrene	ND	ug/L	5.0	1		03/22/19 04:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 04:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 04:40	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/22/19 04:40	127-18-4	
Toluene	ND	ug/L	5.0	1		03/22/19 04:40	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 04:40	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 04:40	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/22/19 04:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/22/19 04:40	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/22/19 04:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/22/19 04:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/22/19 04:40	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 04:40	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 04:40	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/22/19 04:40	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/22/19 04:40	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/22/19 04:40	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	80-122	1		03/22/19 04:40	1868-53-7	
4-Bromofluorobenzene (S)	96	%.	85-114	1		03/22/19 04:40	460-00-4	
Toluene-d8 (S)	92	%.	85-114	1		03/22/19 04:40	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-18 **Lab ID: 50219313011** Collected: 03/12/19 11:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/23/19 03:46	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/23/19 03:46	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/23/19 03:46	107-13-1	
Benzene	ND	ug/L	5.0	1		03/23/19 03:46	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/23/19 03:46	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/23/19 03:46	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/23/19 03:46	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/23/19 03:46	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/23/19 03:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/23/19 03:46	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/23/19 03:46	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/23/19 03:46	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/23/19 03:46	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/23/19 03:46	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/23/19 03:46	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/23/19 03:46	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/23/19 03:46	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/23/19 03:46	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/23/19 03:46	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/23/19 03:46	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/23/19 03:46	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/23/19 03:46	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/23/19 03:46	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/23/19 03:46	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/23/19 03:46	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/23/19 03:46	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/23/19 03:46	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/23/19 03:46	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/23/19 03:46	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/23/19 03:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/23/19 03:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/23/19 03:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/23/19 03:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/23/19 03:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/23/19 03:46	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/23/19 03:46	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/23/19 03:46	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/23/19 03:46	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/23/19 03:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/23/19 03:46	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/23/19 03:46	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/23/19 03:46	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/23/19 03:46	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/23/19 03:46	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/23/19 03:46	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/23/19 03:46	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/23/19 03:46	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-18 **Lab ID: 50219313011** Collected: 03/12/19 11:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/23/19 03:46	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/23/19 03:46	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/23/19 03:46	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/23/19 03:46	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/23/19 03:46	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/23/19 03:46	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/23/19 03:46	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/23/19 03:46	103-65-1	
Styrene	ND	ug/L	5.0	1		03/23/19 03:46	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/23/19 03:46	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/23/19 03:46	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/23/19 03:46	127-18-4	
Toluene	ND	ug/L	5.0	1		03/23/19 03:46	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/23/19 03:46	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/23/19 03:46	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/23/19 03:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/23/19 03:46	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/23/19 03:46	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/23/19 03:46	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/23/19 03:46	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/23/19 03:46	95-63-6	L2
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/23/19 03:46	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/23/19 03:46	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/23/19 03:46	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/23/19 03:46	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		03/23/19 03:46	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-114	1		03/23/19 03:46	460-00-4	
Toluene-d8 (S)	99	%.	85-114	1		03/23/19 03:46	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-24 **Lab ID: 50219313012** Collected: 03/12/19 15:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/23/19 04:20	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/23/19 04:20	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/23/19 04:20	107-13-1	
Benzene	ND	ug/L	5.0	1		03/23/19 04:20	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/23/19 04:20	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/23/19 04:20	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/23/19 04:20	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/23/19 04:20	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/23/19 04:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/23/19 04:20	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/23/19 04:20	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/23/19 04:20	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/23/19 04:20	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/23/19 04:20	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/23/19 04:20	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/23/19 04:20	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/23/19 04:20	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/23/19 04:20	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/23/19 04:20	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/23/19 04:20	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/23/19 04:20	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/23/19 04:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/23/19 04:20	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/23/19 04:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/23/19 04:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/23/19 04:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/23/19 04:20	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/23/19 04:20	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/23/19 04:20	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/23/19 04:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/23/19 04:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/23/19 04:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/23/19 04:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/23/19 04:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/23/19 04:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/23/19 04:20	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/23/19 04:20	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/23/19 04:20	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/23/19 04:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/23/19 04:20	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/23/19 04:20	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/23/19 04:20	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/23/19 04:20	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/23/19 04:20	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/23/19 04:20	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/23/19 04:20	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/23/19 04:20	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-24 **Lab ID: 50219313012** Collected: 03/12/19 15:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/23/19 04:20	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/23/19 04:20	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/23/19 04:20	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/23/19 04:20	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/23/19 04:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/23/19 04:20	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/23/19 04:20	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/23/19 04:20	103-65-1	
Styrene	ND	ug/L	5.0	1		03/23/19 04:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/23/19 04:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/23/19 04:20	79-34-5	
Tetrachloroethene	**55.2**	ug/L	5.0	1		03/23/19 04:20	127-18-4	
Toluene	ND	ug/L	5.0	1		03/23/19 04:20	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/23/19 04:20	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/23/19 04:20	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/23/19 04:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/23/19 04:20	79-00-5	
Trichloroethene	**60.2**	ug/L	5.0	1		03/23/19 04:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/23/19 04:20	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/23/19 04:20	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/23/19 04:20	95-63-6	L2
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/23/19 04:20	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/23/19 04:20	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/23/19 04:20	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/23/19 04:20	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100	%.	80-122	1		03/23/19 04:20	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-114	1		03/23/19 04:20	460-00-4	
Toluene-d8 (S)	98	%.	85-114	1		03/23/19 04:20	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-19 **Lab ID: 50219313013** Collected: 03/12/19 11:55 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/22/19 07:33	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/22/19 07:33	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/22/19 07:33	107-13-1	
Benzene	ND	ug/L	5.0	1		03/22/19 07:33	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/22/19 07:33	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/22/19 07:33	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/22/19 07:33	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/22/19 07:33	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/22/19 07:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/22/19 07:33	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/22/19 07:33	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/22/19 07:33	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/22/19 07:33	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/22/19 07:33	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/22/19 07:33	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/22/19 07:33	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/22/19 07:33	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/22/19 07:33	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/22/19 07:33	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 07:33	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 07:33	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/22/19 07:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/22/19 07:33	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/22/19 07:33	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 07:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 07:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 07:33	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/22/19 07:33	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/22/19 07:33	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/22/19 07:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/22/19 07:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/22/19 07:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 07:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 07:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 07:33	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/22/19 07:33	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 07:33	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/22/19 07:33	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 07:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 07:33	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/22/19 07:33	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/22/19 07:33	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/22/19 07:33	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/22/19 07:33	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/22/19 07:33	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/22/19 07:33	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/22/19 07:33	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-19 **Lab ID: 50219313013** Collected: 03/12/19 11:55 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/22/19 07:33	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/22/19 07:33	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 07:33	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 07:33	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/22/19 07:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/22/19 07:33	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/22/19 07:33	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/22/19 07:33	103-65-1	
Styrene	ND	ug/L	5.0	1		03/22/19 07:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 07:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 07:33	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/22/19 07:33	127-18-4	
Toluene	ND	ug/L	5.0	1		03/22/19 07:33	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 07:33	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 07:33	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/22/19 07:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/22/19 07:33	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/22/19 07:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/22/19 07:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/22/19 07:33	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 07:33	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 07:33	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/22/19 07:33	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/22/19 07:33	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/22/19 07:33	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	80-122	1		03/22/19 07:33	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-114	1		03/22/19 07:33	460-00-4	
Toluene-d8 (S)	97	%.	85-114	1		03/22/19 07:33	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-20 **Lab ID: 50219313014** Collected: 03/12/19 13:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/22/19 19:42	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/22/19 19:42	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/22/19 19:42	107-13-1	
Benzene	ND	ug/L	5.0	1		03/22/19 19:42	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/22/19 19:42	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/22/19 19:42	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/22/19 19:42	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/22/19 19:42	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/22/19 19:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/22/19 19:42	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/22/19 19:42	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/22/19 19:42	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/22/19 19:42	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/22/19 19:42	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/22/19 19:42	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/22/19 19:42	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/22/19 19:42	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/22/19 19:42	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/22/19 19:42	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 19:42	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 19:42	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/22/19 19:42	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/22/19 19:42	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/22/19 19:42	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 19:42	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 19:42	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 19:42	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/22/19 19:42	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/22/19 19:42	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/22/19 19:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/22/19 19:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/22/19 19:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 19:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 19:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 19:42	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/22/19 19:42	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 19:42	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/22/19 19:42	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 19:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 19:42	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/22/19 19:42	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/22/19 19:42	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/22/19 19:42	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/22/19 19:42	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/22/19 19:42	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/22/19 19:42	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/22/19 19:42	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-20 **Lab ID: 50219313014** Collected: 03/12/19 13:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/22/19 19:42	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/22/19 19:42	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 19:42	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 19:42	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/22/19 19:42	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/22/19 19:42	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/22/19 19:42	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/22/19 19:42	103-65-1	
Styrene	ND	ug/L	5.0	1		03/22/19 19:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 19:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 19:42	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/22/19 19:42	127-18-4	
Toluene	ND	ug/L	5.0	1		03/22/19 19:42	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 19:42	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 19:42	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/22/19 19:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/22/19 19:42	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/22/19 19:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/22/19 19:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/22/19 19:42	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 19:42	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 19:42	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/22/19 19:42	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/22/19 19:42	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/22/19 19:42	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	80-122	1		03/22/19 19:42	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-114	1		03/22/19 19:42	460-00-4	
Toluene-d8 (S)	99	%.	85-114	1		03/22/19 19:42	2037-26-5	

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7726 Moller Road
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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-21 **Lab ID: 50219313015** Collected: 03/12/19 14:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/22/19 21:26	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/22/19 21:26	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/22/19 21:26	107-13-1	
Benzene	ND	ug/L	5.0	1		03/22/19 21:26	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/22/19 21:26	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/22/19 21:26	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/22/19 21:26	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/22/19 21:26	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/22/19 21:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/22/19 21:26	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/22/19 21:26	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/22/19 21:26	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/22/19 21:26	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/22/19 21:26	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/22/19 21:26	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/22/19 21:26	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/22/19 21:26	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/22/19 21:26	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/22/19 21:26	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 21:26	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/22/19 21:26	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/22/19 21:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/22/19 21:26	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/22/19 21:26	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 21:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 21:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/22/19 21:26	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/22/19 21:26	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/22/19 21:26	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/22/19 21:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/22/19 21:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/22/19 21:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 21:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/22/19 21:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 21:26	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/22/19 21:26	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/22/19 21:26	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/22/19 21:26	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 21:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/22/19 21:26	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/22/19 21:26	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/22/19 21:26	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/22/19 21:26	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/22/19 21:26	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/22/19 21:26	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/22/19 21:26	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/22/19 21:26	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: MW-21 **Lab ID: 50219313015** Collected: 03/12/19 14:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/22/19 21:26	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/22/19 21:26	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 21:26	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/22/19 21:26	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/22/19 21:26	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/22/19 21:26	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/22/19 21:26	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/22/19 21:26	103-65-1	
Styrene	ND	ug/L	5.0	1		03/22/19 21:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 21:26	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/22/19 21:26	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/22/19 21:26	127-18-4	
Toluene	ND	ug/L	5.0	1		03/22/19 21:26	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 21:26	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/22/19 21:26	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/22/19 21:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/22/19 21:26	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/22/19 21:26	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/22/19 21:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/22/19 21:26	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 21:26	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/22/19 21:26	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/22/19 21:26	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/22/19 21:26	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/22/19 21:26	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	80-122	1		03/22/19 21:26	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-114	1		03/22/19 21:26	460-00-4	
Toluene-d8 (S)	96	%.	85-114	1		03/22/19 21:26	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: Trip Blank **Lab ID: 50219313016** Collected: 03/12/19 08:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		03/23/19 04:55	67-64-1	
Acrolein	ND	ug/L	50.0	1		03/23/19 04:55	107-02-8	
Acrylonitrile	ND	ug/L	100	1		03/23/19 04:55	107-13-1	
Benzene	ND	ug/L	5.0	1		03/23/19 04:55	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		03/23/19 04:55	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		03/23/19 04:55	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		03/23/19 04:55	75-27-4	
Bromoform	ND	ug/L	5.0	1		03/23/19 04:55	75-25-2	
Bromomethane	ND	ug/L	5.0	1		03/23/19 04:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		03/23/19 04:55	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		03/23/19 04:55	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		03/23/19 04:55	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		03/23/19 04:55	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		03/23/19 04:55	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		03/23/19 04:55	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		03/23/19 04:55	108-90-7	
Chloroethane	ND	ug/L	5.0	1		03/23/19 04:55	75-00-3	
Chloroform	ND	ug/L	5.0	1		03/23/19 04:55	67-66-3	
Chloromethane	ND	ug/L	5.0	1		03/23/19 04:55	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		03/23/19 04:55	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		03/23/19 04:55	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		03/23/19 04:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		03/23/19 04:55	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		03/23/19 04:55	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		03/23/19 04:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		03/23/19 04:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		03/23/19 04:55	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		03/23/19 04:55	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		03/23/19 04:55	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		03/23/19 04:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		03/23/19 04:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		03/23/19 04:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		03/23/19 04:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		03/23/19 04:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		03/23/19 04:55	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		03/23/19 04:55	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		03/23/19 04:55	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		03/23/19 04:55	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		03/23/19 04:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		03/23/19 04:55	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		03/23/19 04:55	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		03/23/19 04:55	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		03/23/19 04:55	87-68-3	
n-Hexane	ND	ug/L	5.0	1		03/23/19 04:55	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		03/23/19 04:55	591-78-6	
Iodomethane	ND	ug/L	10.0	1		03/23/19 04:55	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		03/23/19 04:55	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50219313

Sample: Trip Blank **Lab ID: 50219313016** Collected: 03/12/19 08:00 Received: 03/13/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		03/23/19 04:55	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		03/23/19 04:55	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		03/23/19 04:55	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		03/23/19 04:55	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		03/23/19 04:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		03/23/19 04:55	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		03/23/19 04:55	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		03/23/19 04:55	103-65-1	
Styrene	ND	ug/L	5.0	1		03/23/19 04:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		03/23/19 04:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		03/23/19 04:55	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		03/23/19 04:55	127-18-4	
Toluene	ND	ug/L	5.0	1		03/23/19 04:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		03/23/19 04:55	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		03/23/19 04:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		03/23/19 04:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		03/23/19 04:55	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		03/23/19 04:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		03/23/19 04:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		03/23/19 04:55	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		03/23/19 04:55	95-63-6	L2
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		03/23/19 04:55	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		03/23/19 04:55	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		03/23/19 04:55	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		03/23/19 04:55	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	80-122	1		03/23/19 04:55	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-114	1		03/23/19 04:55	460-00-4	
Toluene-d8 (S)	95	%.	85-114	1		03/23/19 04:55	2037-26-5	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

QC Batch: 490334 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50219313001, 50219313002, 50219313003, 50219313004, 50219313005

METHOD BLANK: 2261820 | Matrix: Water
Associated Lab Samples: 50219313001, 50219313002, 50219313003, 50219313004, 50219313005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/21/19 01:06	
1,1,1-Trichloroethane	ug/L	ND	5.0	03/21/19 01:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/21/19 01:06	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/21/19 01:06	
1,1-Dichloroethane	ug/L	ND	5.0	03/21/19 01:06	
1,1-Dichloroethene	ug/L	ND	5.0	03/21/19 01:06	
1,1-Dichloropropene	ug/L	ND	5.0	03/21/19 01:06	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/21/19 01:06	
1,2,3-Trichloropropane	ug/L	ND	5.0	03/21/19 01:06	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/21/19 01:06	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/21/19 01:06	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/21/19 01:06	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/21/19 01:06	
1,2-Dichloroethane	ug/L	ND	5.0	03/21/19 01:06	
1,2-Dichloropropane	ug/L	ND	5.0	03/21/19 01:06	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/21/19 01:06	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/21/19 01:06	
1,3-Dichloropropane	ug/L	ND	5.0	03/21/19 01:06	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/21/19 01:06	
1-Methylnaphthalene	ug/L	ND	10.0	03/21/19 01:06	N2
2,2-Dichloropropane	ug/L	ND	5.0	03/21/19 01:06	
2-Butanone (MEK)	ug/L	ND	25.0	03/21/19 01:06	
2-Chlorotoluene	ug/L	ND	5.0	03/21/19 01:06	
2-Hexanone	ug/L	ND	25.0	03/21/19 01:06	
2-Methylnaphthalene	ug/L	ND	10.0	03/21/19 01:06	
4-Chlorotoluene	ug/L	ND	5.0	03/21/19 01:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/21/19 01:06	
Acetone	ug/L	ND	100	03/21/19 01:06	
Acrolein	ug/L	ND	50.0	03/21/19 01:06	
Acrylonitrile	ug/L	ND	100	03/21/19 01:06	
Benzene	ug/L	ND	5.0	03/21/19 01:06	
Bromobenzene	ug/L	ND	5.0	03/21/19 01:06	
Bromochloromethane	ug/L	ND	5.0	03/21/19 01:06	
Bromodichloromethane	ug/L	ND	5.0	03/21/19 01:06	
Bromoform	ug/L	ND	5.0	03/21/19 01:06	
Bromomethane	ug/L	ND	5.0	03/21/19 01:06	
Carbon disulfide	ug/L	ND	10.0	03/21/19 01:06	
Carbon tetrachloride	ug/L	ND	5.0	03/21/19 01:06	
Chlorobenzene	ug/L	ND	5.0	03/21/19 01:06	
Chloroethane	ug/L	ND	5.0	03/21/19 01:06	
Chloroform	ug/L	ND	5.0	03/21/19 01:06	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

METHOD BLANK: 2261820 Matrix: Water
Associated Lab Samples: 50219313001, 50219313002, 50219313003, 50219313004, 50219313005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	03/21/19 01:06	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/21/19 01:06	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/21/19 01:06	
Dibromochloromethane	ug/L	ND	5.0	03/21/19 01:06	
Dibromomethane	ug/L	ND	5.0	03/21/19 01:06	
Dichlorodifluoromethane	ug/L	ND	5.0	03/21/19 01:06	
Ethyl methacrylate	ug/L	ND	100	03/21/19 01:06	
Ethylbenzene	ug/L	ND	5.0	03/21/19 01:06	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/21/19 01:06	
Iodomethane	ug/L	ND	10.0	03/21/19 01:06	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/21/19 01:06	
Methyl-tert-butyl ether	ug/L	ND	4.0	03/21/19 01:06	
Methylene Chloride	ug/L	ND	5.0	03/21/19 01:06	
n-Butylbenzene	ug/L	ND	5.0	03/21/19 01:06	
n-Hexane	ug/L	ND	5.0	03/21/19 01:06	
n-Propylbenzene	ug/L	ND	5.0	03/21/19 01:06	
Naphthalene	ug/L	ND	1.7	03/21/19 01:06	
p-Isopropyltoluene	ug/L	ND	5.0	03/21/19 01:06	
sec-Butylbenzene	ug/L	ND	5.0	03/21/19 01:06	
Styrene	ug/L	ND	5.0	03/21/19 01:06	
tert-Butylbenzene	ug/L	ND	5.0	03/21/19 01:06	
Tetrachloroethene	ug/L	ND	5.0	03/21/19 01:06	
Toluene	ug/L	ND	5.0	03/21/19 01:06	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/21/19 01:06	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/21/19 01:06	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/21/19 01:06	
Trichloroethene	ug/L	ND	5.0	03/21/19 01:06	
Trichlorofluoromethane	ug/L	ND	5.0	03/21/19 01:06	
Vinyl acetate	ug/L	ND	50.0	03/21/19 01:06	
Vinyl chloride	ug/L	ND	2.0	03/21/19 01:06	
Xylene (Total)	ug/L	ND	10.0	03/21/19 01:06	
4-Bromofluorobenzene (S)	%.	99	85-114	03/21/19 01:06	
Dibromofluoromethane (S)	%.	102	80-122	03/21/19 01:06	
Toluene-d8 (S)	%.	98	85-114	03/21/19 01:06	

LABORATORY CONTROL SAMPLE: 2261821

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	47.1	94	78-120	
1,1,1-Trichloroethane	ug/L	50	47.5	95	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	48.1	96	70-124	
1,1,2-Trichloroethane	ug/L	50	52.0	104	79-121	
1,1-Dichloroethane	ug/L	50	50.7	101	70-119	
1,1-Dichloroethene	ug/L	50	44.8	90	71-126	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

LABORATORY CONTROL SAMPLE: 2261821

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloropropene	ug/L	50	47.5	95	76-122	
1,2,3-Trichlorobenzene	ug/L	50	42.6	85	71-126	
1,2,3-Trichloropropane	ug/L	50	49.4	99	75-119	
1,2,4-Trichlorobenzene	ug/L	50	42.2	84	68-130	
1,2,4-Trimethylbenzene	ug/L	50	41.8	84	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	53.2	106	81-119	
1,2-Dichlorobenzene	ug/L	50	46.1	92	78-114	
1,2-Dichloroethane	ug/L	50	52.5	105	68-119	
1,2-Dichloropropane	ug/L	50	51.5	103	79-126	
1,3,5-Trimethylbenzene	ug/L	50	42.4	85	78-118	
1,3-Dichlorobenzene	ug/L	50	44.8	90	77-114	
1,3-Dichloropropane	ug/L	50	54.8	110	82-124	
1,4-Dichlorobenzene	ug/L	50	44.4	89	77-111	
1-Methylnaphthalene	ug/L	50	48.9	98	60-140	N2
2,2-Dichloropropane	ug/L	50	45.7	91	53-137	
2-Butanone (MEK)	ug/L	250	346	138	62-140	
2-Chlorotoluene	ug/L	50	47.9	96	76-120	
2-Hexanone	ug/L	250	282	113	62-143	
2-Methylnaphthalene	ug/L	50	44.5	89	60-133	
4-Chlorotoluene	ug/L	50	45.2	90	78-114	
4-Methyl-2-pentanone (MIBK)	ug/L	250	287	115	60-143	
Acetone	ug/L	250	357	143	44-156	
Acrolein	ug/L	1000	1120	112	17-189	
Acrylonitrile	ug/L	200	212	106	58-139	
Benzene	ug/L	50	47.6	95	78-117	
Bromobenzene	ug/L	50	48.3	97	76-114	
Bromochloromethane	ug/L	50	54.7	109	70-122	
Bromodichloromethane	ug/L	50	44.7	89	72-121	
Bromoform	ug/L	50	40.7	81	66-117	
Bromomethane	ug/L	50	58.1	116	20-176	
Carbon disulfide	ug/L	50	45.1	90	65-124	
Carbon tetrachloride	ug/L	50	42.0	84	68-132	
Chlorobenzene	ug/L	50	45.7	91	79-113	
Chloroethane	ug/L	50	54.2	108	62-140	
Chloroform	ug/L	50	45.2	90	73-118	
Chloromethane	ug/L	50	39.9	80	36-132	
cis-1,2-Dichloroethene	ug/L	50	46.3	93	74-122	
cis-1,3-Dichloropropene	ug/L	50	52.6	105	79-126	
Dibromochloromethane	ug/L	50	46.0	92	75-121	
Dibromomethane	ug/L	50	49.5	99	75-123	
Dichlorodifluoromethane	ug/L	50	50.3	101	27-172	
Ethyl methacrylate	ug/L	200	203	101	72-134	
Ethylbenzene	ug/L	50	46.4	93	80-118	
Hexachloro-1,3-butadiene	ug/L	50	44.2	88	71-141	
Iodomethane	ug/L	100	91.0	91	10-186	
Isopropylbenzene (Cumene)	ug/L	50	46.1	92	82-120	
Methyl-tert-butyl ether	ug/L	50	55.0	110	72-128	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

LABORATORY CONTROL SAMPLE: 2261821

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	50	46.5	93	70-121	
n-Butylbenzene	ug/L	50	42.9	86	76-123	
n-Hexane	ug/L	50	50.6	101	58-149	
n-Propylbenzene	ug/L	50	46.7	93	80-122	
Naphthalene	ug/L	50	44.1	88	71-121	
p-Isopropyltoluene	ug/L	50	45.1	90	79-121	
sec-Butylbenzene	ug/L	50	46.2	92	78-124	
Styrene	ug/L	50	46.4	93	80-119	
tert-Butylbenzene	ug/L	50	36.9	74	62-102	
Tetrachloroethene	ug/L	50	45.1	90	76-124	
Toluene	ug/L	50	44.9	90	78-116	
trans-1,2-Dichloroethene	ug/L	50	47.1	94	73-121	
trans-1,3-Dichloropropene	ug/L	50	51.8	104	73-126	
trans-1,4-Dichloro-2-butene	ug/L	200	180	90	42-138	
Trichloroethene	ug/L	50	45.2	90	76-120	
Trichlorofluoromethane	ug/L	50	46.4	93	60-138	
Vinyl acetate	ug/L	200	250	125	29-200	
Vinyl chloride	ug/L	50	49.9	100	70-136	
Xylene (Total)	ug/L	150	138	92	79-119	
4-Bromofluorobenzene (S)	%.			101	85-114	
Dibromofluoromethane (S)	%.			94	80-122	
Toluene-d8 (S)	%.			103	85-114	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

QC Batch: 490561 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50219313006, 50219313007, 50219313008, 50219313009, 50219313010, 50219313013

METHOD BLANK: 2263164 | Matrix: Water
Associated Lab Samples: 50219313006, 50219313007, 50219313008, 50219313009, 50219313010, 50219313013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/22/19 01:12	
1,1,1-Trichloroethane	ug/L	ND	5.0	03/22/19 01:12	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/22/19 01:12	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/22/19 01:12	
1,1-Dichloroethane	ug/L	ND	5.0	03/22/19 01:12	
1,1-Dichloroethene	ug/L	ND	5.0	03/22/19 01:12	
1,1-Dichloropropene	ug/L	ND	5.0	03/22/19 01:12	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/22/19 01:12	
1,2,3-Trichloropropane	ug/L	ND	5.0	03/22/19 01:12	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/22/19 01:12	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/22/19 01:12	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/22/19 01:12	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/22/19 01:12	
1,2-Dichloroethane	ug/L	ND	5.0	03/22/19 01:12	
1,2-Dichloropropane	ug/L	ND	5.0	03/22/19 01:12	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/22/19 01:12	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/22/19 01:12	
1,3-Dichloropropane	ug/L	ND	5.0	03/22/19 01:12	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/22/19 01:12	
1-Methylnaphthalene	ug/L	ND	10.0	03/22/19 01:12	N2
2,2-Dichloropropane	ug/L	ND	5.0	03/22/19 01:12	
2-Butanone (MEK)	ug/L	ND	25.0	03/22/19 01:12	
2-Chlorotoluene	ug/L	ND	5.0	03/22/19 01:12	
2-Hexanone	ug/L	ND	25.0	03/22/19 01:12	
2-Methylnaphthalene	ug/L	ND	10.0	03/22/19 01:12	
4-Chlorotoluene	ug/L	ND	5.0	03/22/19 01:12	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/22/19 01:12	
Acetone	ug/L	ND	100	03/22/19 01:12	
Acrolein	ug/L	ND	50.0	03/22/19 01:12	
Acrylonitrile	ug/L	ND	100	03/22/19 01:12	
Benzene	ug/L	ND	5.0	03/22/19 01:12	
Bromobenzene	ug/L	ND	5.0	03/22/19 01:12	
Bromochloromethane	ug/L	ND	5.0	03/22/19 01:12	
Bromodichloromethane	ug/L	ND	5.0	03/22/19 01:12	
Bromoform	ug/L	ND	5.0	03/22/19 01:12	
Bromomethane	ug/L	ND	5.0	03/22/19 01:12	
Carbon disulfide	ug/L	ND	10.0	03/22/19 01:12	
Carbon tetrachloride	ug/L	ND	5.0	03/22/19 01:12	
Chlorobenzene	ug/L	ND	5.0	03/22/19 01:12	
Chloroethane	ug/L	ND	5.0	03/22/19 01:12	
Chloroform	ug/L	ND	5.0	03/22/19 01:12	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

METHOD BLANK: 2263164 Matrix: Water
Associated Lab Samples: 50219313006, 50219313007, 50219313008, 50219313009, 50219313010, 50219313013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	03/22/19 01:12	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/22/19 01:12	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/22/19 01:12	
Dibromochloromethane	ug/L	ND	5.0	03/22/19 01:12	
Dibromomethane	ug/L	ND	5.0	03/22/19 01:12	
Dichlorodifluoromethane	ug/L	ND	5.0	03/22/19 01:12	
Ethyl methacrylate	ug/L	ND	100	03/22/19 01:12	
Ethylbenzene	ug/L	ND	5.0	03/22/19 01:12	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/22/19 01:12	
Iodomethane	ug/L	ND	10.0	03/22/19 01:12	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/22/19 01:12	
Methyl-tert-butyl ether	ug/L	ND	4.0	03/22/19 01:12	
Methylene Chloride	ug/L	ND	5.0	03/22/19 01:12	
n-Butylbenzene	ug/L	ND	5.0	03/22/19 01:12	
n-Hexane	ug/L	ND	5.0	03/22/19 01:12	
n-Propylbenzene	ug/L	ND	5.0	03/22/19 01:12	
Naphthalene	ug/L	ND	1.7	03/22/19 01:12	
p-Isopropyltoluene	ug/L	ND	5.0	03/22/19 01:12	
sec-Butylbenzene	ug/L	ND	5.0	03/22/19 01:12	
Styrene	ug/L	ND	5.0	03/22/19 01:12	
tert-Butylbenzene	ug/L	ND	5.0	03/22/19 01:12	
Tetrachloroethene	ug/L	ND	5.0	03/22/19 01:12	
Toluene	ug/L	ND	5.0	03/22/19 01:12	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/22/19 01:12	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/22/19 01:12	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/22/19 01:12	
Trichloroethene	ug/L	ND	5.0	03/22/19 01:12	
Trichlorofluoromethane	ug/L	ND	5.0	03/22/19 01:12	
Vinyl acetate	ug/L	ND	50.0	03/22/19 01:12	
Vinyl chloride	ug/L	ND	2.0	03/22/19 01:12	
Xylene (Total)	ug/L	ND	10.0	03/22/19 01:12	
4-Bromofluorobenzene (S)	%.	99	85-114	03/22/19 01:12	
Dibromofluoromethane (S)	%.	103	80-122	03/22/19 01:12	
Toluene-d8 (S)	%.	94	85-114	03/22/19 01:12	

LABORATORY CONTROL SAMPLE: 2263165

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	44.7	89	78-120	
1,1,1-Trichloroethane	ug/L	50	46.5	93	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	42.8	86	70-124	
1,1,2-Trichloroethane	ug/L	50	47.5	95	79-121	
1,1-Dichloroethane	ug/L	50	47.9	96	70-119	
1,1-Dichloroethene	ug/L	50	45.9	92	71-126	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

LABORATORY CONTROL SAMPLE: 2263165

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloropropene	ug/L	50	46.9	94	76-122	
1,2,3-Trichlorobenzene	ug/L	50	43.2	86	71-126	
1,2,3-Trichloropropane	ug/L	50	46.0	92	75-119	
1,2,4-Trichlorobenzene	ug/L	50	43.7	87	68-130	
1,2,4-Trimethylbenzene	ug/L	50	42.7	85	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	47.2	94	81-119	
1,2-Dichlorobenzene	ug/L	50	45.8	92	78-114	
1,2-Dichloroethane	ug/L	50	49.2	98	68-119	
1,2-Dichloropropane	ug/L	50	49.4	99	79-126	
1,3,5-Trimethylbenzene	ug/L	50	42.0	84	78-118	
1,3-Dichlorobenzene	ug/L	50	45.3	91	77-114	
1,3-Dichloropropane	ug/L	50	51.0	102	82-124	
1,4-Dichlorobenzene	ug/L	50	44.6	89	77-111	
1-Methylnaphthalene	ug/L	50	42.6	85	60-140	N2
2,2-Dichloropropane	ug/L	50	43.9	88	53-137	
2-Butanone (MEK)	ug/L	250	282	113	62-140	
2-Chlorotoluene	ug/L	50	45.1	90	76-120	
2-Hexanone	ug/L	250	254	102	62-143	
2-Methylnaphthalene	ug/L	50	41.2	82	60-133	
4-Chlorotoluene	ug/L	50	44.5	89	78-114	
4-Methyl-2-pentanone (MIBK)	ug/L	250	254	101	60-143	
Acetone	ug/L	250	285	114	44-156	
Acrolein	ug/L	1000	1250	125	17-189	
Acrylonitrile	ug/L	200	190	95	58-139	
Benzene	ug/L	50	47.0	94	78-117	
Bromobenzene	ug/L	50	45.7	91	76-114	
Bromochloromethane	ug/L	50	52.9	106	70-122	
Bromodichloromethane	ug/L	50	42.1	84	72-121	
Bromoform	ug/L	50	36.5	73	66-117	
Bromomethane	ug/L	50	54.7	109	20-176	
Carbon disulfide	ug/L	50	42.5	85	65-124	
Carbon tetrachloride	ug/L	50	43.4	87	68-132	
Chlorobenzene	ug/L	50	45.8	92	79-113	
Chloroethane	ug/L	50	53.2	106	62-140	
Chloroform	ug/L	50	44.3	89	73-118	
Chloromethane	ug/L	50	41.3	83	36-132	
cis-1,2-Dichloroethene	ug/L	50	44.6	89	74-122	
cis-1,3-Dichloropropene	ug/L	50	47.0	94	79-126	
Dibromochloromethane	ug/L	50	42.3	85	75-121	
Dibromomethane	ug/L	50	45.1	90	75-123	
Dichlorodifluoromethane	ug/L	50	46.5	93	27-172	
Ethyl methacrylate	ug/L	200	177	88	72-134	
Ethylbenzene	ug/L	50	46.3	93	80-118	
Hexachloro-1,3-butadiene	ug/L	50	47.1	94	71-141	
Iodomethane	ug/L	100	89.8	90	10-186	
Isopropylbenzene (Cumene)	ug/L	50	46.5	93	82-120	
Methyl-tert-butyl ether	ug/L	50	51.0	102	72-128	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

LABORATORY CONTROL SAMPLE: 2263165

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	50	44.7	89	70-121	
n-Butylbenzene	ug/L	50	42.8	86	76-123	
n-Hexane	ug/L	50	48.7	97	58-149	
n-Propylbenzene	ug/L	50	45.2	90	80-122	
Naphthalene	ug/L	50	41.4	83	71-121	
p-Isopropyltoluene	ug/L	50	44.8	90	79-121	
sec-Butylbenzene	ug/L	50	45.3	91	78-124	
Styrene	ug/L	50	45.8	92	80-119	
tert-Butylbenzene	ug/L	50	35.7	71	62-102	
Tetrachloroethene	ug/L	50	46.6	93	76-124	
Toluene	ug/L	50	42.0	84	78-116	
trans-1,2-Dichloroethene	ug/L	50	47.3	95	73-121	
trans-1,3-Dichloropropene	ug/L	50	45.4	91	73-126	
trans-1,4-Dichloro-2-butene	ug/L	200	161	80	42-138	
Trichloroethene	ug/L	50	45.1	90	76-120	
Trichlorofluoromethane	ug/L	50	49.4	99	60-138	
Vinyl acetate	ug/L	200	219	109	29-200	
Vinyl chloride	ug/L	50	49.5	99	70-136	
Xylene (Total)	ug/L	150	141	94	79-119	
4-Bromofluorobenzene (S)	%.			101	85-114	
Dibromofluoromethane (S)	%.			95	80-122	
Toluene-d8 (S)	%.			97	85-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263166 2263167

Parameter	Units	50219313013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	50	50	45.5	44.4	91	89	44-142	2	20	
1,1,1-Trichloroethane	ug/L	ND	50	50	48.8	46.5	98	93	48-145	5	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	48.5	50.0	97	100	44-139	3	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	51.9	51.6	104	103	49-140	1	20	
1,1-Dichloroethane	ug/L	ND	50	50	53.5	51.9	107	104	38-142	3	20	
1,1-Dichloroethene	ug/L	ND	50	50	47.2	46.5	94	93	46-148	2	20	
1,1-Dichloropropene	ug/L	ND	50	50	50.8	48.8	102	98	47-142	4	20	
1,2,3-Trichlorobenzene	ug/L	ND	50	50	39.4	39.3	79	79	34-139	0	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	48.8	50.5	98	101	44-140	3	20	
1,2,4-Trichlorobenzene	ug/L	ND	50	50	38.7	39.2	77	78	31-142	1	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	44.0	42.4	88	85	39-140	4	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	50.1	51.2	100	102	47-143	2	20	
1,2-Dichlorobenzene	ug/L	ND	50	50	45.2	44.8	90	90	40-135	1	20	
1,2-Dichloroethane	ug/L	ND	50	50	53.3	53.3	107	107	44-138	0	20	
1,2-Dichloropropane	ug/L	ND	50	50	55.0	54.0	110	108	53-142	2	20	
1,3,5-Trimethylbenzene	ug/L	ND	50	50	44.3	42.3	89	85	36-142	5	20	
1,3-Dichlorobenzene	ug/L	ND	50	50	44.4	43.2	89	86	37-136	3	20	
1,3-Dichloropropane	ug/L	ND	50	50	57.5	56.7	115	113	47-145	1	20	

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REPORT OF LABORATORY ANALYSIS

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263166 2263167

Parameter	Units	50219313013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	ND	50	50	43.6	42.8	87	86	38-132	2	20	
1-Methylnaphthalene	ug/L	ND	50	50	37.4	41.7	75	83	35-144	11	20	N2
2,2-Dichloropropane	ug/L	ND	50	50	44.9	43.6	90	87	19-147	3	20	
2-Butanone (MEK)	ug/L	ND	250	250	309	325	123	130	36-153	5	20	
2-Chlorotoluene	ug/L	ND	50	50	48.2	46.5	96	93	37-143	4	20	
2-Hexanone	ug/L	ND	250	250	299	315	120	126	38-149	5	20	
2-Methylnaphthalene	ug/L	ND	50	50	35.1	38.5	70	77	38-134	9	20	
4-Chlorotoluene	ug/L	ND	50	50	45.6	44.0	91	88	38-137	4	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	250	250	307	315	123	126	43-145	2	20	
Acetone	ug/L	ND	250	250	290	305	116	122	21-161	5	20	
Acrolein	ug/L	ND	1000	1000	1010	1040	101	104	17-153	3	20	
Acrylonitrile	ug/L	ND	200	200	215	217	107	109	40-141	1	20	
Benzene	ug/L	ND	50	50	50.3	48.4	101	97	49-140	4	20	
Bromobenzene	ug/L	ND	50	50	50.4	48.5	101	97	39-137	4	20	
Bromochloromethane	ug/L	ND	50	50	62.5	60.7	125	121	50-132	3	20	
Bromodichloromethane	ug/L	ND	50	50	45.5	44.4	91	89	42-139	3	20	
Bromoform	ug/L	ND	50	50	37.4	38.9	75	78	29-135	4	20	
Bromomethane	ug/L	ND	50	50	55.9	52.9	112	106	10-162	5	20	
Carbon disulfide	ug/L	ND	50	50	46.3	44.7	93	89	33-144	3	20	
Carbon tetrachloride	ug/L	ND	50	50	44.1	41.8	88	84	45-148	5	20	
Chlorobenzene	ug/L	ND	50	50	47.1	45.4	94	91	47-135	4	20	
Chloroethane	ug/L	ND	50	50	60.7	59.0	121	118	41-149	3	20	
Chloroform	ug/L	ND	50	50	48.8	46.5	98	93	49-136	5	20	
Chloromethane	ug/L	ND	50	50	47.1	45.6	94	91	17-138	3	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	46.6	46.2	93	92	46-143	1	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	52.5	50.4	105	101	44-142	4	20	
Dibromochloromethane	ug/L	ND	50	50	44.5	44.4	89	89	41-141	0	20	
Dibromomethane	ug/L	ND	50	50	50.4	49.1	101	98	46-140	3	20	
Dichlorodifluoromethane	ug/L	ND	50	50	48.1	45.9	96	92	10-193	5	20	
Ethyl methacrylate	ug/L	ND	200	200	194	196	97	98	45-145	1	20	
Ethylbenzene	ug/L	ND	50	50	47.3	45.3	95	91	44-145	4	20	
Hexachloro-1,3-butadiene	ug/L	ND	50	50	42.6	40.5	85	81	27-158	5	20	
Iodomethane	ug/L	ND	100	100	86.4	86.9	86	87	10-172	1	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	48.1	45.5	96	91	43-148	6	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	54.7	54.6	109	109	38-158	0	20	
Methylene Chloride	ug/L	ND	50	50	49.1	48.0	98	96	33-140	2	20	
n-Butylbenzene	ug/L	ND	50	50	44.6	42.6	89	85	35-142	5	20	
n-Hexane	ug/L	ND	50	50	54.1	52.0	108	104	32-159	4	20	
n-Propylbenzene	ug/L	ND	50	50	47.6	46.0	95	92	37-145	4	20	
Naphthalene	ug/L	ND	50	50	39.7	41.5	79	83	40-137	4	20	
p-Isopropyltoluene	ug/L	ND	50	50	45.0	43.0	90	86	37-143	5	20	
sec-Butylbenzene	ug/L	ND	50	50	47.4	45.7	95	91	40-144	4	20	
Styrene	ug/L	ND	50	50	47.0	45.8	94	92	37-143	3	20	
tert-Butylbenzene	ug/L	ND	50	50	37.2	35.1	74	70	35-114	6	20	
Tetrachloroethene	ug/L	ND	50	50	44.9	42.8	90	86	41-145	5	20	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263166 2263167

Parameter	Units	50219313013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene	ug/L	ND	50	50	44.8	43.2	90	86	48-139	4	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	49.4	47.3	99	95	46-140	4	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	49.3	48.9	99	98	37-141	1	20	
trans-1,4-Dichloro-2-butene	ug/L	ND	200	200	173	177	86	88	10-166	2	20	
Trichloroethene	ug/L	ND	50	50	47.7	45.5	95	91	43-147	5	20	
Trichlorofluoromethane	ug/L	ND	50	50	49.9	48.4	100	97	39-154	3	20	
Vinyl acetate	ug/L	ND	200	200	212	215	106	108	10-181	2	20	
Vinyl chloride	ug/L	ND	50	50	54.0	52.0	108	104	49-153	4	20	
Xylene (Total)	ug/L	ND	150	150	143	137	96	91	44-147	5	20	
4-Bromofluorobenzene (S)	%.						104	103	85-114			
Dibromofluoromethane (S)	%.						96	96	80-122			
Toluene-d8 (S)	%.						96	100	85-114			

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

QC Batch: 490799 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50219313014, 50219313015

METHOD BLANK: 2264631 | Matrix: Water
Associated Lab Samples: 50219313014, 50219313015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/22/19 17:24	
1,1,1-Trichloroethane	ug/L	ND	5.0	03/22/19 17:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/22/19 17:24	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/22/19 17:24	
1,1-Dichloroethane	ug/L	ND	5.0	03/22/19 17:24	
1,1-Dichloroethene	ug/L	ND	5.0	03/22/19 17:24	
1,1-Dichloropropene	ug/L	ND	5.0	03/22/19 17:24	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/22/19 17:24	
1,2,3-Trichloropropane	ug/L	ND	5.0	03/22/19 17:24	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/22/19 17:24	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/22/19 17:24	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/22/19 17:24	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/22/19 17:24	
1,2-Dichloroethane	ug/L	ND	5.0	03/22/19 17:24	
1,2-Dichloropropane	ug/L	ND	5.0	03/22/19 17:24	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/22/19 17:24	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/22/19 17:24	
1,3-Dichloropropane	ug/L	ND	5.0	03/22/19 17:24	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/22/19 17:24	
1-Methylnaphthalene	ug/L	ND	10.0	03/22/19 17:24	N2
2,2-Dichloropropane	ug/L	ND	5.0	03/22/19 17:24	
2-Butanone (MEK)	ug/L	ND	25.0	03/22/19 17:24	
2-Chlorotoluene	ug/L	ND	5.0	03/22/19 17:24	
2-Hexanone	ug/L	ND	25.0	03/22/19 17:24	
2-Methylnaphthalene	ug/L	ND	10.0	03/22/19 17:24	
4-Chlorotoluene	ug/L	ND	5.0	03/22/19 17:24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/22/19 17:24	
Acetone	ug/L	ND	100	03/22/19 17:24	
Acrolein	ug/L	ND	50.0	03/22/19 17:24	
Acrylonitrile	ug/L	ND	100	03/22/19 17:24	
Benzene	ug/L	ND	5.0	03/22/19 17:24	
Bromobenzene	ug/L	ND	5.0	03/22/19 17:24	
Bromochloromethane	ug/L	ND	5.0	03/22/19 17:24	
Bromodichloromethane	ug/L	ND	5.0	03/22/19 17:24	
Bromoform	ug/L	ND	5.0	03/22/19 17:24	
Bromomethane	ug/L	ND	5.0	03/22/19 17:24	
Carbon disulfide	ug/L	ND	10.0	03/22/19 17:24	
Carbon tetrachloride	ug/L	ND	5.0	03/22/19 17:24	
Chlorobenzene	ug/L	ND	5.0	03/22/19 17:24	
Chloroethane	ug/L	ND	5.0	03/22/19 17:24	
Chloroform	ug/L	ND	5.0	03/22/19 17:24	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

METHOD BLANK: 2264631 Matrix: Water
Associated Lab Samples: 50219313014, 50219313015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	03/22/19 17:24	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/22/19 17:24	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/22/19 17:24	
Dibromochloromethane	ug/L	ND	5.0	03/22/19 17:24	
Dibromomethane	ug/L	ND	5.0	03/22/19 17:24	
Dichlorodifluoromethane	ug/L	ND	5.0	03/22/19 17:24	
Ethyl methacrylate	ug/L	ND	100	03/22/19 17:24	
Ethylbenzene	ug/L	ND	5.0	03/22/19 17:24	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/22/19 17:24	
Iodomethane	ug/L	ND	10.0	03/22/19 17:24	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/22/19 17:24	
Methyl-tert-butyl ether	ug/L	ND	4.0	03/22/19 17:24	
Methylene Chloride	ug/L	ND	5.0	03/22/19 17:24	
n-Butylbenzene	ug/L	ND	5.0	03/22/19 17:24	
n-Hexane	ug/L	ND	5.0	03/22/19 17:24	
n-Propylbenzene	ug/L	ND	5.0	03/22/19 17:24	
Naphthalene	ug/L	ND	1.7	03/22/19 17:24	
p-Isopropyltoluene	ug/L	ND	5.0	03/22/19 17:24	
sec-Butylbenzene	ug/L	ND	5.0	03/22/19 17:24	
Styrene	ug/L	ND	5.0	03/22/19 17:24	
tert-Butylbenzene	ug/L	ND	5.0	03/22/19 17:24	
Tetrachloroethene	ug/L	ND	5.0	03/22/19 17:24	
Toluene	ug/L	ND	5.0	03/22/19 17:24	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/22/19 17:24	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/22/19 17:24	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/22/19 17:24	
Trichloroethene	ug/L	ND	5.0	03/22/19 17:24	
Trichlorofluoromethane	ug/L	ND	5.0	03/22/19 17:24	
Vinyl acetate	ug/L	ND	50.0	03/22/19 17:24	
Vinyl chloride	ug/L	ND	2.0	03/22/19 17:24	
Xylene (Total)	ug/L	ND	10.0	03/22/19 17:24	
4-Bromofluorobenzene (S)	%.	98	85-114	03/22/19 17:24	
Dibromofluoromethane (S)	%.	103	80-122	03/22/19 17:24	
Toluene-d8 (S)	%.	99	85-114	03/22/19 17:24	

LABORATORY CONTROL SAMPLE: 2264632

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	47.5	95	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	47.7	95	70-124	
1,1-Dichloroethene	ug/L	50	45.6	91	71-126	
1,2,4-Trimethylbenzene	ug/L	50	42.9	86	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	52.1	104	81-119	
1,2-Dichloroethane	ug/L	50	51.4	103	68-119	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

LABORATORY CONTROL SAMPLE: 2264632

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	ug/L	50	54.5	109	79-126	
Benzene	ug/L	50	47.3	95	78-117	
Chlorobenzene	ug/L	50	46.4	93	79-113	
Chloroform	ug/L	50	44.6	89	73-118	
cis-1,2-Dichloroethene	ug/L	50	45.4	91	74-122	
Ethylbenzene	ug/L	50	47.5	95	80-118	
Isopropylbenzene (Cumene)	ug/L	50	46.8	94	82-120	
Methyl-tert-butyl ether	ug/L	50	50.7	101	72-128	
Naphthalene	ug/L	50	41.4	83	71-121	
Tetrachloroethene	ug/L	50	45.2	90	76-124	
Toluene	ug/L	50	46.3	93	78-116	
trans-1,2-Dichloroethene	ug/L	50	46.9	94	73-121	
Trichloroethene	ug/L	50	47.8	96	76-120	
Vinyl chloride	ug/L	50	52.2	104	70-136	
Xylene (Total)	ug/L	150	142	95	79-119	
4-Bromofluorobenzene (S)	%.			103	85-114	
Dibromofluoromethane (S)	%.			89	80-122	
Toluene-d8 (S)	%.			103	85-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2264633 2264634

Parameter	Units	50219313014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	52.0	49.9	104	100	48-145	4	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	47.1	47.2	94	94	44-139	0	20	
1,1-Dichloroethene	ug/L	ND	50	50	50.0	46.8	100	94	46-148	7	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	45.7	43.8	91	88	39-140	4	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	52.7	50.4	105	101	47-143	5	20	
1,2-Dichloroethane	ug/L	ND	50	50	53.8	53.2	108	106	44-138	1	20	
1,2-Dichloropropane	ug/L	ND	50	50	56.2	53.6	112	107	53-142	5	20	
Benzene	ug/L	ND	50	50	51.9	48.9	104	98	49-140	6	20	
Chlorobenzene	ug/L	ND	50	50	48.4	46.9	97	94	47-135	3	20	
Chloroform	ug/L	ND	50	50	49.9	47.2	100	94	49-136	5	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	50.3	47.2	101	94	46-143	6	20	
Ethylbenzene	ug/L	ND	50	50	48.9	47.0	98	94	44-145	4	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	48.5	46.3	97	93	43-148	5	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	54.6	51.9	109	104	38-158	5	20	
Naphthalene	ug/L	ND	50	50	42.0	41.5	84	83	40-137	1	20	
Tetrachloroethene	ug/L	ND	50	50	46.9	45.7	94	91	41-145	3	20	
Toluene	ug/L	ND	50	50	47.5	44.5	95	89	48-139	7	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	52.0	50.0	104	100	46-140	4	20	
Trichloroethene	ug/L	ND	50	50	48.8	47.1	98	94	43-147	4	20	
Vinyl chloride	ug/L	ND	50	50	54.9	51.6	110	103	49-153	6	20	
Xylene (Total)	ug/L	ND	150	150	148	142	98	95	44-147	4	20	
4-Bromofluorobenzene (S)	%.						98	98	85-114			

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REPORT OF LABORATORY ANALYSIS

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2264633 2264634

Parameter	Units	50219313014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						95	94	80-122			
Toluene-d8 (S)	%.						102	98	85-114			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2264635 2264636

Parameter	Units	50219313015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	49.4	48.7	99	97	48-145	1	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	45.9	49.1	92	98	44-139	7	20	
1,1-Dichloroethene	ug/L	ND	50	50	48.2	47.4	96	95	46-148	2	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	44.1	43.8	88	88	39-140	1	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	50.9	52.8	102	106	47-143	4	20	
1,2-Dichloroethane	ug/L	ND	50	50	52.7	54.0	105	108	44-138	2	20	
1,2-Dichloropropane	ug/L	ND	50	50	54.0	54.1	108	108	53-142	0	20	
Benzene	ug/L	ND	50	50	49.9	50.2	100	100	49-140	1	20	
Chlorobenzene	ug/L	ND	50	50	47.1	47.1	94	94	47-135	0	20	
Chloroform	ug/L	ND	50	50	47.3	47.1	95	94	49-136	0	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	47.0	47.8	94	96	46-143	2	20	
Ethylbenzene	ug/L	ND	50	50	47.6	47.7	95	95	44-145	0	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	47.2	47.1	94	94	43-148	0	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	51.6	55.4	103	111	38-158	7	20	
Naphthalene	ug/L	ND	50	50	40.9	44.5	82	89	40-137	9	20	
Tetrachloroethene	ug/L	ND	50	50	45.5	45.3	91	91	41-145	0	20	
Toluene	ug/L	ND	50	50	44.4	46.6	89	93	48-139	5	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	50.2	49.3	100	99	46-140	2	20	
Trichloroethene	ug/L	ND	50	50	47.5	48.0	95	96	43-147	1	20	
Vinyl chloride	ug/L	ND	50	50	53.3	52.4	107	105	49-153	2	20	
Xylene (Total)	ug/L	ND	150	150	142	142	95	94	44-147	0	20	
4-Bromofluorobenzene (S)	%.						98	103	85-114			
Dibromofluoromethane (S)	%.						93	95	80-122			
Toluene-d8 (S)	%.						99	100	85-114			

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7726 Moller Road
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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

QC Batch: 490811 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50219313011, 50219313012, 50219313016

METHOD BLANK: 2264683 | Matrix: Water
Associated Lab Samples: 50219313011, 50219313012, 50219313016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	03/23/19 02:37	
1,1,1-Trichloroethane	ug/L	ND	5.0	03/23/19 02:37	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	03/23/19 02:37	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/23/19 02:37	
1,1-Dichloroethane	ug/L	ND	5.0	03/23/19 02:37	
1,1-Dichloroethene	ug/L	ND	5.0	03/23/19 02:37	
1,1-Dichloropropene	ug/L	ND	5.0	03/23/19 02:37	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	03/23/19 02:37	
1,2,3-Trichloropropane	ug/L	ND	5.0	03/23/19 02:37	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	03/23/19 02:37	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	03/23/19 02:37	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	03/23/19 02:37	
1,2-Dichlorobenzene	ug/L	ND	5.0	03/23/19 02:37	
1,2-Dichloroethane	ug/L	ND	5.0	03/23/19 02:37	
1,2-Dichloropropane	ug/L	ND	5.0	03/23/19 02:37	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	03/23/19 02:37	
1,3-Dichlorobenzene	ug/L	ND	5.0	03/23/19 02:37	
1,3-Dichloropropane	ug/L	ND	5.0	03/23/19 02:37	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/23/19 02:37	
1-Methylnaphthalene	ug/L	ND	10.0	03/23/19 02:37	N2
2,2-Dichloropropane	ug/L	ND	5.0	03/23/19 02:37	
2-Butanone (MEK)	ug/L	ND	25.0	03/23/19 02:37	
2-Chlorotoluene	ug/L	ND	5.0	03/23/19 02:37	
2-Hexanone	ug/L	ND	25.0	03/23/19 02:37	
2-Methylnaphthalene	ug/L	ND	10.0	03/23/19 02:37	
4-Chlorotoluene	ug/L	ND	5.0	03/23/19 02:37	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	03/23/19 02:37	
Acetone	ug/L	ND	100	03/23/19 02:37	
Acrolein	ug/L	ND	50.0	03/23/19 02:37	
Acrylonitrile	ug/L	ND	100	03/23/19 02:37	
Benzene	ug/L	ND	5.0	03/23/19 02:37	
Bromobenzene	ug/L	ND	5.0	03/23/19 02:37	
Bromochloromethane	ug/L	ND	5.0	03/23/19 02:37	
Bromodichloromethane	ug/L	ND	5.0	03/23/19 02:37	
Bromoform	ug/L	ND	5.0	03/23/19 02:37	
Bromomethane	ug/L	ND	5.0	03/23/19 02:37	
Carbon disulfide	ug/L	ND	10.0	03/23/19 02:37	
Carbon tetrachloride	ug/L	ND	5.0	03/23/19 02:37	
Chlorobenzene	ug/L	ND	5.0	03/23/19 02:37	
Chloroethane	ug/L	ND	5.0	03/23/19 02:37	
Chloroform	ug/L	ND	5.0	03/23/19 02:37	

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

METHOD BLANK: 2264683 Matrix: Water
Associated Lab Samples: 50219313011, 50219313012, 50219313016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	03/23/19 02:37	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/23/19 02:37	
cis-1,3-Dichloropropene	ug/L	ND	5.0	03/23/19 02:37	
Dibromochloromethane	ug/L	ND	5.0	03/23/19 02:37	
Dibromomethane	ug/L	ND	5.0	03/23/19 02:37	
Dichlorodifluoromethane	ug/L	ND	5.0	03/23/19 02:37	
Ethyl methacrylate	ug/L	ND	100	03/23/19 02:37	
Ethylbenzene	ug/L	ND	5.0	03/23/19 02:37	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	03/23/19 02:37	
Iodomethane	ug/L	ND	10.0	03/23/19 02:37	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	03/23/19 02:37	
Methyl-tert-butyl ether	ug/L	ND	4.0	03/23/19 02:37	
Methylene Chloride	ug/L	ND	5.0	03/23/19 02:37	
n-Butylbenzene	ug/L	ND	5.0	03/23/19 02:37	
n-Hexane	ug/L	ND	5.0	03/23/19 02:37	
n-Propylbenzene	ug/L	ND	5.0	03/23/19 02:37	
Naphthalene	ug/L	ND	1.7	03/23/19 02:37	
p-Isopropyltoluene	ug/L	ND	5.0	03/23/19 02:37	
sec-Butylbenzene	ug/L	ND	5.0	03/23/19 02:37	
Styrene	ug/L	ND	5.0	03/23/19 02:37	
tert-Butylbenzene	ug/L	ND	5.0	03/23/19 02:37	
Tetrachloroethene	ug/L	ND	5.0	03/23/19 02:37	
Toluene	ug/L	ND	5.0	03/23/19 02:37	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/23/19 02:37	
trans-1,3-Dichloropropene	ug/L	ND	5.0	03/23/19 02:37	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	03/23/19 02:37	
Trichloroethene	ug/L	ND	5.0	03/23/19 02:37	
Trichlorofluoromethane	ug/L	ND	5.0	03/23/19 02:37	
Vinyl acetate	ug/L	ND	50.0	03/23/19 02:37	
Vinyl chloride	ug/L	ND	2.0	03/23/19 02:37	
Xylene (Total)	ug/L	ND	10.0	03/23/19 02:37	
4-Bromofluorobenzene (S)	%.	101	85-114	03/23/19 02:37	
Dibromofluoromethane (S)	%.	100	80-122	03/23/19 02:37	
Toluene-d8 (S)	%.	96	85-114	03/23/19 02:37	

LABORATORY CONTROL SAMPLE: 2264684

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	43.2	86	78-120	
1,1,1-Trichloroethane	ug/L	50	42.7	85	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	40.7	81	70-124	
1,1,2-Trichloroethane	ug/L	50	46.0	92	79-121	
1,1-Dichloroethane	ug/L	50	43.5	87	70-119	
1,1-Dichloroethene	ug/L	50	40.2	80	71-126	

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

LABORATORY CONTROL SAMPLE: 2264684

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloropropene	ug/L	50	41.9	84	76-122	
1,2,3-Trichlorobenzene	ug/L	50	41.2	82	71-126	
1,2,3-Trichloropropane	ug/L	50	42.7	85	75-119	
1,2,4-Trichlorobenzene	ug/L	50	41.8	84	68-130	
1,2,4-Trimethylbenzene	ug/L	50	38.8	78	79-117	L2
1,2-Dibromoethane (EDB)	ug/L	50	47.6	95	81-119	
1,2-Dichlorobenzene	ug/L	50	43.7	87	78-114	
1,2-Dichloroethane	ug/L	50	45.4	91	68-119	
1,2-Dichloropropane	ug/L	50	44.7	89	79-126	
1,3,5-Trimethylbenzene	ug/L	50	39.3	79	78-118	
1,3-Dichlorobenzene	ug/L	50	42.3	85	77-114	
1,3-Dichloropropane	ug/L	50	49.0	98	82-124	
1,4-Dichlorobenzene	ug/L	50	42.1	84	77-111	
1-Methylnaphthalene	ug/L	50	45.4	91	60-140	N2
2,2-Dichloropropane	ug/L	50	39.8	80	53-137	
2-Butanone (MEK)	ug/L	250	262	105	62-140	
2-Chlorotoluene	ug/L	50	43.1	86	76-120	
2-Hexanone	ug/L	250	221	88	62-143	
2-Methylnaphthalene	ug/L	50	43.3	87	60-133	
4-Chlorotoluene	ug/L	50	41.9	84	78-114	
4-Methyl-2-pentanone (MIBK)	ug/L	250	221	89	60-143	
Acetone	ug/L	250	225	90	44-156	
Acrolein	ug/L	1000	956	96	17-189	
Acrylonitrile	ug/L	200	185	92	58-139	
Benzene	ug/L	50	42.8	86	78-117	
Bromobenzene	ug/L	50	41.8	84	76-114	
Bromochloromethane	ug/L	50	46.2	92	70-122	
Bromodichloromethane	ug/L	50	39.5	79	72-121	
Bromoform	ug/L	50	36.4	73	66-117	
Bromomethane	ug/L	50	54.4	109	20-176	
Carbon disulfide	ug/L	50	38.3	77	65-124	
Carbon tetrachloride	ug/L	50	37.9	76	68-132	
Chlorobenzene	ug/L	50	42.8	86	79-113	
Chloroethane	ug/L	50	45.7	91	62-140	
Chloroform	ug/L	50	40.3	81	73-118	
Chloromethane	ug/L	50	31.1	62	36-132	
cis-1,2-Dichloroethene	ug/L	50	41.6	83	74-122	
cis-1,3-Dichloropropene	ug/L	50	45.1	90	79-126	
Dibromochloromethane	ug/L	50	40.1	80	75-121	
Dibromomethane	ug/L	50	45.1	90	75-123	
Dichlorodifluoromethane	ug/L	50	33.2	66	27-172	
Ethyl methacrylate	ug/L	200	178	89	72-134	
Ethylbenzene	ug/L	50	42.7	85	80-118	
Hexachloro-1,3-butadiene	ug/L	50	43.9	88	71-141	
Iodomethane	ug/L	100	86.9	87	10-186	
Isopropylbenzene (Cumene)	ug/L	50	42.1	84	82-120	
Methyl-tert-butyl ether	ug/L	50	49.4	99	72-128	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50219313

LABORATORY CONTROL SAMPLE: 2264684

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	50	41.8	84	70-121	
n-Butylbenzene	ug/L	50	38.5	77	76-123	
n-Hexane	ug/L	50	42.5	85	58-149	
n-Propylbenzene	ug/L	50	41.6	83	80-122	
Naphthalene	ug/L	50	41.6	83	71-121	
p-Isopropyltoluene	ug/L	50	41.7	83	79-121	
sec-Butylbenzene	ug/L	50	41.8	84	78-124	
Styrene	ug/L	50	42.6	85	80-119	
tert-Butylbenzene	ug/L	50	33.2	66	62-102	
Tetrachloroethene	ug/L	50	42.4	85	76-124	
Toluene	ug/L	50	39.1	78	78-116	
trans-1,2-Dichloroethene	ug/L	50	42.6	85	73-121	
trans-1,3-Dichloropropene	ug/L	50	44.2	88	73-126	
trans-1,4-Dichloro-2-butene	ug/L	200	145	72	42-138	
Trichloroethene	ug/L	50	40.6	81	76-120	
Trichlorofluoromethane	ug/L	50	40.8	82	60-138	
Vinyl acetate	ug/L	200	208	104	29-200	
Vinyl chloride	ug/L	50	39.8	80	70-136	
Xylene (Total)	ug/L	150	128	86	79-119	
4-Bromofluorobenzene (S)	%.			95	85-114	
Dibromofluoromethane (S)	%.			90	80-122	
Toluene-d8 (S)	%.			95	85-114	

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(317)228-3100

QUALIFIERS

Project: Houghland FSI #3
Pace Project No.: 50219313

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland FSI #3
Pace Project No.: 50219313

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50219313001	**MW-27**	EPA 5030/8260	490334		
50219313002	**MW-10**	EPA 5030/8260	490334		
50219313003	**MW-32**	EPA 5030/8260	490334		
50219313004	**MW-26**	EPA 5030/8260	490334		
50219313005	**MW-31**	EPA 5030/8260	490334		
50219313006	**MW-30**	EPA 5030/8260	490561		
50219313007	**MW-11D**	EPA 5030/8260	490561		
50219313008	**MW-11**	EPA 5030/8260	490561		
50219313009	**MW-23**	EPA 5030/8260	490561		
50219313010	**Dup-C**	EPA 5030/8260	490561		
50219313011	**MW-18**	EPA 5030/8260	490811		
50219313012	**MW-24**	EPA 5030/8260	490811		
50219313013	**MW-19**	EPA 5030/8260	490561		
50219313014	**MW-20**	EPA 5030/8260	490799		
50219313015	**MW-21**	EPA 5030/8260	490799		
50219313016	**Trip Blank**	EPA 5030/8260	490811		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:
Company: Patriot Engg. & Env.
Address: 6150 E 75th ST Indianapolis IN 46250
Email To: jcody@patrioteng.com
Phone: 317-558-5064 Fax: —
Requested Due Date/TAT: Normal TURN

Section B Required Project Information:
Report To: James Cody
Copy To: Mike Casper
Purchase Order No.:
Project Name: Houghland FSI #3
Project Number: 19-0096-01E

Section C Invoice Information:
Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER ____

Site Location STATE: IN

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOC's 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-27	GW	G			3-11-19	10:30		3				X						X		001
2	MW-10					"	11:20														002
3	MW-32					"	12:20														003
4	MW-26					"	13:10														004
5	MW-31					"	14:05														005
6	MW-30					"	14:45														006
7	MW-11D					"	15:35														007
8	MW-11					"	16:20														008
9	MW-23					"	17:15														009
10	DUP-C					"	—														010
11	MW-18					3-12-19	11:00														011
12	MW-24					"	15:00														012

5021913

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Absolute Pricing	VSShah / Patriot	3-13-19	9:30		3-13	930	1.2	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: VISHAL SHAH
SIGNATURE of SAMPLER: VSShah
DATE Signed (MM/DD/YY): 03-12-19

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: Patriot Engg. & Env.
Address: 6150 E 75th ST
Indianapolis IN 46250
Email To: jcody@patrioteng.com
Phone: 317-558-5064 Fax:
Requested Due Date/TAT: NORMAL TURN

Section B Required Project Information:

Report To: JAMES CODY
Copy To: MIKE CASPER
Purchase Order No.:
Project Name: Houghland FSI #3
Project Number: 19-0096-01E

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: IN

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	COLLECTED Composite Start Time	COLLECTED Composite End/GRAB Date	COLLECTED Composite End/GRAB Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): VOCs 8260	MS-A	MSD-A	MS-B	MSD-B	MS-C	MSD-C	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-19	GW	G			3-12-19	11:55		9				X					X	X	X						013
2	MW-20					"	13:00		9				X					X			X	X				014
3	MW-21					"	14:00		9				X					X					X	X		015
4	Trip blank	—	—			—	—		3									X								016
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Absolute Pricing	VShah / Patriot	3-13-19	9:30		3-13	930

SAMPLE CONDITIONS	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	1,2	Y	N	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: VISHAL SHAH
SIGNATURE of SAMPLER: VShah
DATE Signed (MM/DD/YY): 03-12-19

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.08, 12-Oct-2007

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50219313

Date/Time and Initials of person examining contents: KS 3-13-19 1624

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No **Seals Intact:** ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer: 1 2 3 4 5 6 A B C D (E) F Ice Type: ☒ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☐ Yes ☐ No ☒ N/A

Cooler Temperature: 1.2/1.2 Ice Visible in Sample Containers?: ☐ Yes ☒ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☒ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		✓	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			✓
USDA Regulated Soils? (ID, NY, WA, OR, CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓				
Chain of Custody Present:	✓					
Chain of Custody Filled Out:	✓		Dissolved Metals field filtered?:			✓
Short Hold Time Analysis (<72hr)?: Analysis:		✓	Headspace Wisconsin Sulfide			✓
Time 5035A TC placed in Freezer or Short Holds To Lab:				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Rush TAT Requested:		✓	Headspace in VOA Vials (>6mm):	✓		
Containers Intact?:	✓		Trip Blank Present?:	✓		
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Custody Seals?:	✓		

Comments: 3/3 trip blanks have headspace >6mm

Sample Container Count

CLIENT: Patriot

COC PAGE 1 of 2

COC ID#

Project # 50219313

Sample Line Item	DG9H	VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	Bulk SBS DI Kit R				Matrix SI/Wt/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1	3																					WT			
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Sample Container Count

WO# : 50219313

50219313

CLIENT: Patriot

COC PAGE 2 of 2

COC ID# _____

Project # 50219313

Sample Line Item	DG9H (VG9H)	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	Bulk SBS Di Kit R				Matrix S (Soil/Wa Aqueous	pH <2	pH >9	pH>12
1	9																				WT			
2	9																				↓			
3	9																							
4	3																							
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

April 10, 2019

Mr. James Cody
Patriot Engineering
6150 E 75th St
Indianapolis, IN 46250

RE: Project: Houghland FSI #3
Pace Project No.: 50220614

Dear Mr. Cody:
Enclosed are the analytical results for sample(s) received by the laboratory on March 27, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Mr. Mike Casper, Patriot Engineering

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project:	Houghland FSI #3
Pace Project No.:	50220614

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #: E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #: 98019
Michigan Department of Environmental Quality, Laboratory #9050
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: Houghland FSI #3
Pace Project No.: 50220614

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50220614001	**TMW-1**	Water	03/25/19 15:20	03/27/19 15:30
50220614002	**TMW-1D**	Water	03/25/19 16:15	03/27/19 15:30
50220614003	**TMW-2**	Water	03/26/19 09:40	03/27/19 15:30
50220614004	**TMW-2D**	Water	03/26/19 10:20	03/27/19 15:30
50220614005	**TMW-3**	Water	03/26/19 11:15	03/27/19 15:30
50220614006	**TMW-3D**	Water	03/26/19 12:00	03/27/19 15:30
50220614007	**TMW-4**	Water	03/26/19 13:25	03/27/19 15:30
50220614008	**TMW-4D**	Water	03/26/19 14:10	03/27/19 15:30
50220614009	**TMW-5**	Water	03/26/19 15:00	03/27/19 15:30
50220614010	**TMW-5D**	Water	03/26/19 15:55	03/27/19 15:30
50220614011	**TMW-6**	Water	03/27/19 08:30	03/27/19 15:30
50220614012	**TMW-6D**	Water	03/27/19 09:15	03/27/19 15:30
50220614013	**TMW-7**	Water	03/27/19 10:15	03/27/19 15:30
50220614014	**TMW-7D**	Water	03/27/19 11:00	03/27/19 15:30
50220614015	**Dup-A**	Water	03/26/19 08:00	03/27/19 15:30
50220614016	**Trip Blank**	Water	03/25/19 08:00	03/27/19 15:30
50220614017	**MW-29**	Water	03/27/19 12:15	03/27/19 15:30
50220614018	**MW-29D**	Water	03/27/19 13:00	03/27/19 15:30
50220614019	**MW-22**	Water	03/27/19 13:45	03/27/19 15:30
50220614020	**MW-22D**	Water	03/27/19 14:30	03/27/19 15:30

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SAMPLE ANALYTE COUNT

Project: Houghland FSI #3
Pace Project No.: 50220614

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50220614001	**TMW-1**	EPA 5030/8260	TMW	75
50220614002	**TMW-1D**	EPA 5030/8260	TMW	75
50220614003	**TMW-2**	EPA 5030/8260	TMW	75
50220614004	**TMW-2D**	EPA 5030/8260	TMW	75
50220614005	**TMW-3**	EPA 5030/8260	TMW	75
50220614006	**TMW-3D**	EPA 5030/8260	TMW	75
50220614007	**TMW-4**	EPA 5030/8260	TMW	75
50220614008	**TMW-4D**	EPA 5030/8260	CAP	75
50220614009	**TMW-5**	EPA 5030/8260	TMW	75
50220614010	**TMW-5D**	EPA 5030/8260	TMW	75
50220614011	**TMW-6**	EPA 5030/8260	TMW	75
50220614012	**TMW-6D**	EPA 5030/8260	TMW	75
50220614013	**TMW-7**	EPA 5030/8260	TMW	75
50220614014	**TMW-7D**	EPA 5030/8260	TMW	75
50220614015	**Dup-A**	EPA 5030/8260	CAP	75
50220614016	**Trip Blank**	EPA 5030/8260	TMW	75
50220614017	**MW-29**	EPA 5030/8260	TMW	75
50220614018	**MW-29D**	EPA 5030/8260	TMW	75
50220614019	**MW-22**	EPA 5030/8260	TMW	75
50220614020	**MW-22D**	EPA 5030/8260	TMW	75

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Houghland FSI #3
Pace Project No.: 50220614

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50220614001	**TMW-1**					
EPA 5030/8260	Trichloroethene	7.0	ug/L	5.0	04/06/19 07:17	
50220614002	**TMW-1D**					
EPA 5030/8260	cis-1,2-Dichloroethene	829	ug/L	50.0	04/06/19 08:26	
EPA 5030/8260	trans-1,2-Dichloroethene	41.0	ug/L	5.0	04/06/19 07:51	
EPA 5030/8260	Trichloroethene	11.9	ug/L	5.0	04/06/19 07:51	
50220614003	**TMW-2**					
EPA 5030/8260	Trichloroethene	73.7	ug/L	5.0	04/06/19 12:11	
50220614004	**TMW-2D**					
EPA 5030/8260	cis-1,2-Dichloroethene	683	ug/L	50.0	04/08/19 14:33	
EPA 5030/8260	trans-1,2-Dichloroethene	49.6	ug/L	5.0	04/06/19 12:45	
EPA 5030/8260	Trichloroethene	13.7	ug/L	5.0	04/06/19 12:45	
EPA 5030/8260	Vinyl chloride	2.3	ug/L	2.0	04/06/19 12:45	
50220614005	**TMW-3**					
EPA 5030/8260	Trichloroethene	25.2	ug/L	5.0	04/08/19 15:07	
50220614006	**TMW-3D**					
EPA 5030/8260	cis-1,2-Dichloroethene	904	ug/L	50.0	04/06/19 13:54	
EPA 5030/8260	trans-1,2-Dichloroethene	78.4	ug/L	5.0	04/06/19 13:20	
EPA 5030/8260	Trichloroethene	288	ug/L	5.0	04/06/19 13:20	
50220614008	**TMW-4D**					
EPA 5030/8260	cis-1,2-Dichloroethene	395	ug/L	25.0	04/09/19 16:48	
EPA 5030/8260	Trichloroethene	10.9	ug/L	5.0	04/08/19 20:34	
50220614009	**TMW-5**					
EPA 5030/8260	Methylene Chloride	6.6	ug/L	5.0	04/09/19 07:35	B,C9,H7
EPA 5030/8260	Trichloroethene	244	ug/L	5.0	04/09/19 07:35	
50220614010	**TMW-5D**					
EPA 5030/8260	cis-1,2-Dichloroethene	1220	ug/L	50.0	04/09/19 09:19	
EPA 5030/8260	trans-1,2-Dichloroethene	112	ug/L	5.0	04/09/19 08:44	
EPA 5030/8260	Methylene Chloride	6.8	ug/L	5.0	04/09/19 08:44	B,C9,H7
EPA 5030/8260	Trichloroethene	500	ug/L	50.0	04/09/19 09:19	
50220614014	**TMW-7D**					
EPA 5030/8260	cis-1,2-Dichloroethene	943	ug/L	50.0	04/10/19 13:41	M1
EPA 5030/8260	trans-1,2-Dichloroethene	46.0	ug/L	5.0	04/10/19 05:10	
50220614015	**Dup-A**					
EPA 5030/8260	cis-1,2-Dichloroethene	1160	ug/L	50.0	04/08/19 21:39	
EPA 5030/8260	Trichloroethene	510	ug/L	50.0	04/08/19 21:39	
50220614017	**MW-29**					
EPA 5030/8260	Tetrachloroethene	6.8	ug/L	5.0	04/10/19 06:54	
EPA 5030/8260	Trichloroethene	40.6	ug/L	5.0	04/10/19 06:54	
50220614018	**MW-29D**					
EPA 5030/8260	cis-1,2-Dichloroethene	21.4	ug/L	5.0	04/10/19 07:29	

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Houghland FSI #3
Pace Project No.: 50220614

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50220614018	**MW-29D**					
EPA 5030/8260	Tetrachloroethene	9.8	ug/L	5.0	04/10/19 07:29	
EPA 5030/8260	Trichloroethene	106	ug/L	5.0	04/10/19 07:29	
50220614019	**MW-22**					
EPA 5030/8260	Tetrachloroethene	6.7	ug/L	5.0	04/10/19 08:03	
EPA 5030/8260	Trichloroethene	30.8	ug/L	5.0	04/10/19 08:03	
50220614020	**MW-22D**					
EPA 5030/8260	Tetrachloroethene	7.4	ug/L	5.0	04/10/19 08:38	
EPA 5030/8260	Trichloroethene	32.1	ug/L	5.0	04/10/19 08:38	

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Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-1 **Lab ID: 50220614001** Collected: 03/25/19 15:20 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/06/19 07:17	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/06/19 07:17	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/06/19 07:17	107-13-1	
Benzene	ND	ug/L	5.0	1		04/06/19 07:17	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/06/19 07:17	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/06/19 07:17	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/06/19 07:17	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/06/19 07:17	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/06/19 07:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/06/19 07:17	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/06/19 07:17	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/06/19 07:17	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/06/19 07:17	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/06/19 07:17	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/06/19 07:17	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/06/19 07:17	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/06/19 07:17	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/06/19 07:17	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/06/19 07:17	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 07:17	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 07:17	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/06/19 07:17	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/06/19 07:17	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/06/19 07:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 07:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 07:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 07:17	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/06/19 07:17	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/06/19 07:17	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/06/19 07:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/06/19 07:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/06/19 07:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/06/19 07:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/06/19 07:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 07:17	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/06/19 07:17	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 07:17	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/06/19 07:17	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 07:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 07:17	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/06/19 07:17	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/06/19 07:17	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/06/19 07:17	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/06/19 07:17	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/06/19 07:17	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/06/19 07:17	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/06/19 07:17	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-1 **Lab ID: 50220614001** Collected: 03/25/19 15:20 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/06/19 07:17	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/06/19 07:17	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 07:17	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 07:17	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/06/19 07:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/06/19 07:17	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/06/19 07:17	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/06/19 07:17	103-65-1	
Styrene	ND	ug/L	5.0	1		04/06/19 07:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 07:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 07:17	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/06/19 07:17	127-18-4	
Toluene	ND	ug/L	5.0	1		04/06/19 07:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 07:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 07:17	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/06/19 07:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/06/19 07:17	79-00-5	
Trichloroethene	**7.0**	ug/L	5.0	1		04/06/19 07:17	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/06/19 07:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/06/19 07:17	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 07:17	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 07:17	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/06/19 07:17	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/06/19 07:17	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/06/19 07:17	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	80-122	1		04/06/19 07:17	1868-53-7	
4-Bromofluorobenzene (S)	97	%.	85-114	1		04/06/19 07:17	460-00-4	
Toluene-d8 (S)	97	%.	85-114	1		04/06/19 07:17	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-1D **Lab ID: 50220614002** Collected: 03/25/19 16:15 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/06/19 07:51	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/06/19 07:51	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/06/19 07:51	107-13-1	
Benzene	ND	ug/L	5.0	1		04/06/19 07:51	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/06/19 07:51	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/06/19 07:51	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/06/19 07:51	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/06/19 07:51	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/06/19 07:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/06/19 07:51	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/06/19 07:51	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/06/19 07:51	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/06/19 07:51	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/06/19 07:51	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/06/19 07:51	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/06/19 07:51	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/06/19 07:51	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/06/19 07:51	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/06/19 07:51	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 07:51	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 07:51	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/06/19 07:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/06/19 07:51	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/06/19 07:51	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 07:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 07:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 07:51	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/06/19 07:51	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/06/19 07:51	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/06/19 07:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/06/19 07:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/06/19 07:51	75-35-4	
cis-1,2-Dichloroethene	**829**	ug/L	50.0	10		04/06/19 08:26	156-59-2	
trans-1,2-Dichloroethene	**41.0**	ug/L	5.0	1		04/06/19 07:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 07:51	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/06/19 07:51	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 07:51	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/06/19 07:51	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 07:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 07:51	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/06/19 07:51	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/06/19 07:51	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/06/19 07:51	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/06/19 07:51	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/06/19 07:51	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/06/19 07:51	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/06/19 07:51	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-1D **Lab ID: 50220614002** Collected: 03/25/19 16:15 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/06/19 07:51	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/06/19 07:51	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 07:51	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 07:51	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/06/19 07:51	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/06/19 07:51	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/06/19 07:51	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/06/19 07:51	103-65-1	
Styrene	ND	ug/L	5.0	1		04/06/19 07:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 07:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 07:51	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/06/19 07:51	127-18-4	
Toluene	ND	ug/L	5.0	1		04/06/19 07:51	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 07:51	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 07:51	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/06/19 07:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/06/19 07:51	79-00-5	
Trichloroethene	**11.9**	ug/L	5.0	1		04/06/19 07:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/06/19 07:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/06/19 07:51	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 07:51	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 07:51	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/06/19 07:51	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/06/19 07:51	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/06/19 07:51	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	80-122	1		04/06/19 07:51	1868-53-7	
4-Bromofluorobenzene (S)	96	%.	85-114	1		04/06/19 07:51	460-00-4	
Toluene-d8 (S)	97	%.	85-114	1		04/06/19 07:51	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-2 **Lab ID: 50220614003** Collected: 03/26/19 09:40 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/06/19 12:11	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/06/19 12:11	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/06/19 12:11	107-13-1	
Benzene	ND	ug/L	5.0	1		04/06/19 12:11	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/06/19 12:11	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/06/19 12:11	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/06/19 12:11	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/06/19 12:11	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/06/19 12:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/06/19 12:11	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/06/19 12:11	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/06/19 12:11	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/06/19 12:11	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/06/19 12:11	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/06/19 12:11	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/06/19 12:11	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/06/19 12:11	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/06/19 12:11	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/06/19 12:11	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 12:11	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 12:11	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/06/19 12:11	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/06/19 12:11	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/06/19 12:11	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 12:11	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 12:11	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 12:11	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/06/19 12:11	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/06/19 12:11	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/06/19 12:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/06/19 12:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/06/19 12:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/06/19 12:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/06/19 12:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 12:11	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/06/19 12:11	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 12:11	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/06/19 12:11	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 12:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 12:11	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/06/19 12:11	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/06/19 12:11	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/06/19 12:11	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/06/19 12:11	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/06/19 12:11	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/06/19 12:11	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/06/19 12:11	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-2 **Lab ID: 50220614003** Collected: 03/26/19 09:40 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/06/19 12:11	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/06/19 12:11	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 12:11	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 12:11	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/06/19 12:11	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/06/19 12:11	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/06/19 12:11	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/06/19 12:11	103-65-1	
Styrene	ND	ug/L	5.0	1		04/06/19 12:11	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 12:11	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 12:11	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/06/19 12:11	127-18-4	
Toluene	ND	ug/L	5.0	1		04/06/19 12:11	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 12:11	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 12:11	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/06/19 12:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/06/19 12:11	79-00-5	
Trichloroethene	**73.7**	ug/L	5.0	1		04/06/19 12:11	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/06/19 12:11	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/06/19 12:11	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 12:11	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 12:11	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/06/19 12:11	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/06/19 12:11	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/06/19 12:11	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	107	%.	80-122	1		04/06/19 12:11	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-114	1		04/06/19 12:11	460-00-4	
Toluene-d8 (S)	100	%.	85-114	1		04/06/19 12:11	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-2D **Lab ID: 50220614004** Collected: 03/26/19 10:20 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/06/19 12:45	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/06/19 12:45	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/06/19 12:45	107-13-1	
Benzene	ND	ug/L	5.0	1		04/06/19 12:45	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/06/19 12:45	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/06/19 12:45	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/06/19 12:45	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/06/19 12:45	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/06/19 12:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/06/19 12:45	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/06/19 12:45	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/06/19 12:45	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/06/19 12:45	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/06/19 12:45	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/06/19 12:45	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/06/19 12:45	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/06/19 12:45	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/06/19 12:45	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/06/19 12:45	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 12:45	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 12:45	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/06/19 12:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/06/19 12:45	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/06/19 12:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 12:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 12:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 12:45	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/06/19 12:45	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/06/19 12:45	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/06/19 12:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/06/19 12:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/06/19 12:45	75-35-4	
cis-1,2-Dichloroethene	**683**	ug/L	50.0	10		04/08/19 14:33	156-59-2	
trans-1,2-Dichloroethene	**49.6**	ug/L	5.0	1		04/06/19 12:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 12:45	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/06/19 12:45	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 12:45	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/06/19 12:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 12:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 12:45	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/06/19 12:45	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/06/19 12:45	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/06/19 12:45	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/06/19 12:45	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/06/19 12:45	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/06/19 12:45	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/06/19 12:45	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-2D **Lab ID: 50220614004** Collected: 03/26/19 10:20 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/06/19 12:45	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/06/19 12:45	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 12:45	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 12:45	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/06/19 12:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/06/19 12:45	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/06/19 12:45	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/06/19 12:45	103-65-1	
Styrene	ND	ug/L	5.0	1		04/06/19 12:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 12:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 12:45	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/06/19 12:45	127-18-4	
Toluene	ND	ug/L	5.0	1		04/06/19 12:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 12:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 12:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/06/19 12:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/06/19 12:45	79-00-5	
Trichloroethene	**13.7**	ug/L	5.0	1		04/06/19 12:45	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/06/19 12:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/06/19 12:45	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 12:45	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 12:45	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/06/19 12:45	108-05-4	
Vinyl chloride	**2.3**	ug/L	2.0	1		04/06/19 12:45	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/06/19 12:45	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108	%.	80-122	1		04/06/19 12:45	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-114	1		04/06/19 12:45	460-00-4	
Toluene-d8 (S)	100	%.	85-114	1		04/06/19 12:45	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-3 **Lab ID: 50220614005** Collected: 03/26/19 11:15 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/08/19 15:07	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/08/19 15:07	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/08/19 15:07	107-13-1	
Benzene	ND	ug/L	5.0	1		04/08/19 15:07	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/08/19 15:07	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/08/19 15:07	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/08/19 15:07	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/08/19 15:07	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/08/19 15:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/08/19 15:07	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/08/19 15:07	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/08/19 15:07	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/08/19 15:07	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/08/19 15:07	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/08/19 15:07	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/08/19 15:07	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/08/19 15:07	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/08/19 15:07	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/08/19 15:07	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/08/19 15:07	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/08/19 15:07	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/08/19 15:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/08/19 15:07	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/08/19 15:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/08/19 15:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/08/19 15:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/08/19 15:07	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/08/19 15:07	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/08/19 15:07	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/08/19 15:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/08/19 15:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/08/19 15:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/08/19 15:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/08/19 15:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/08/19 15:07	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/08/19 15:07	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/08/19 15:07	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/08/19 15:07	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/08/19 15:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/08/19 15:07	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/08/19 15:07	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/08/19 15:07	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/08/19 15:07	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/08/19 15:07	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/08/19 15:07	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/08/19 15:07	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/08/19 15:07	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-3 **Lab ID: 50220614005** Collected: 03/26/19 11:15 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/08/19 15:07	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/08/19 15:07	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/08/19 15:07	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/08/19 15:07	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/08/19 15:07	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/08/19 15:07	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/08/19 15:07	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/08/19 15:07	103-65-1	
Styrene	ND	ug/L	5.0	1		04/08/19 15:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/08/19 15:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/08/19 15:07	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/08/19 15:07	127-18-4	
Toluene	ND	ug/L	5.0	1		04/08/19 15:07	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/08/19 15:07	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/08/19 15:07	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/08/19 15:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/08/19 15:07	79-00-5	
Trichloroethene	**25.2**	ug/L	5.0	1		04/08/19 15:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/08/19 15:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/08/19 15:07	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/08/19 15:07	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/08/19 15:07	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/08/19 15:07	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/08/19 15:07	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/08/19 15:07	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	80-122	1		04/08/19 15:07	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-114	1		04/08/19 15:07	460-00-4	
Toluene-d8 (S)	100	%.	85-114	1		04/08/19 15:07	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-3D **Lab ID: 50220614006** Collected: 03/26/19 12:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/06/19 13:20	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/06/19 13:20	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/06/19 13:20	107-13-1	
Benzene	ND	ug/L	5.0	1		04/06/19 13:20	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/06/19 13:20	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/06/19 13:20	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/06/19 13:20	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/06/19 13:20	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/06/19 13:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/06/19 13:20	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/06/19 13:20	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/06/19 13:20	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/06/19 13:20	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/06/19 13:20	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/06/19 13:20	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/06/19 13:20	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/06/19 13:20	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/06/19 13:20	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/06/19 13:20	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 13:20	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 13:20	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/06/19 13:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/06/19 13:20	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/06/19 13:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 13:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 13:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 13:20	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/06/19 13:20	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/06/19 13:20	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/06/19 13:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/06/19 13:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/06/19 13:20	75-35-4	
cis-1,2-Dichloroethene	**904**	ug/L	50.0	10		04/06/19 13:54	156-59-2	
trans-1,2-Dichloroethene	**78.4**	ug/L	5.0	1		04/06/19 13:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 13:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/06/19 13:20	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 13:20	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/06/19 13:20	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 13:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 13:20	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/06/19 13:20	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/06/19 13:20	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/06/19 13:20	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/06/19 13:20	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/06/19 13:20	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/06/19 13:20	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/06/19 13:20	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-3D **Lab ID: 50220614006** Collected: 03/26/19 12:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/06/19 13:20	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/06/19 13:20	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 13:20	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 13:20	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/06/19 13:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/06/19 13:20	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/06/19 13:20	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/06/19 13:20	103-65-1	
Styrene	ND	ug/L	5.0	1		04/06/19 13:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 13:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 13:20	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/06/19 13:20	127-18-4	
Toluene	ND	ug/L	5.0	1		04/06/19 13:20	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 13:20	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 13:20	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/06/19 13:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/06/19 13:20	79-00-5	
Trichloroethene	**288**	ug/L	5.0	1		04/06/19 13:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/06/19 13:20	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/06/19 13:20	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 13:20	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 13:20	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/06/19 13:20	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/06/19 13:20	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/06/19 13:20	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108	%.	80-122	1		04/06/19 13:20	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-114	1		04/06/19 13:20	460-00-4	
Toluene-d8 (S)	99	%.	85-114	1		04/06/19 13:20	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-4 **Lab ID: 50220614007** Collected: 03/26/19 13:25 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/09/19 07:00	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/09/19 07:00	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/09/19 07:00	107-13-1	
Benzene	ND	ug/L	5.0	1		04/09/19 07:00	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/09/19 07:00	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/09/19 07:00	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/09/19 07:00	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/09/19 07:00	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/09/19 07:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/09/19 07:00	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/09/19 07:00	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/09/19 07:00	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/09/19 07:00	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/09/19 07:00	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/09/19 07:00	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/09/19 07:00	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/09/19 07:00	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/09/19 07:00	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/09/19 07:00	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/09/19 07:00	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/09/19 07:00	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/09/19 07:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/09/19 07:00	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/09/19 07:00	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 07:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 07:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 07:00	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/09/19 07:00	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/09/19 07:00	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/09/19 07:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/09/19 07:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/09/19 07:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/09/19 07:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/09/19 07:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/09/19 07:00	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/09/19 07:00	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/09/19 07:00	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/09/19 07:00	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/19 07:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/19 07:00	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/09/19 07:00	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/09/19 07:00	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/09/19 07:00	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/09/19 07:00	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/09/19 07:00	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/09/19 07:00	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/09/19 07:00	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-4 **Lab ID: 50220614007** Collected: 03/26/19 13:25 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/09/19 07:00	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/09/19 07:00	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/09/19 07:00	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/09/19 07:00	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/09/19 07:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/09/19 07:00	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/09/19 07:00	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/09/19 07:00	103-65-1	
Styrene	ND	ug/L	5.0	1		04/09/19 07:00	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/19 07:00	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/19 07:00	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/09/19 07:00	127-18-4	
Toluene	ND	ug/L	5.0	1		04/09/19 07:00	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/09/19 07:00	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/09/19 07:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/09/19 07:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/09/19 07:00	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/09/19 07:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/09/19 07:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/09/19 07:00	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/09/19 07:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/09/19 07:00	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/09/19 07:00	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/09/19 07:00	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/09/19 07:00	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	80-122	1		04/09/19 07:00	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-114	1		04/09/19 07:00	460-00-4	
Toluene-d8 (S)	97	%.	85-114	1		04/09/19 07:00	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-4D **Lab ID: 50220614008** Collected: 03/26/19 14:10 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/08/19 20:34	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/08/19 20:34	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/08/19 20:34	107-13-1	
Benzene	ND	ug/L	5.0	1		04/08/19 20:34	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/08/19 20:34	108-86-1	L1
Bromochloromethane	ND	ug/L	5.0	1		04/08/19 20:34	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/08/19 20:34	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/08/19 20:34	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/08/19 20:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/08/19 20:34	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/08/19 20:34	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/08/19 20:34	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/08/19 20:34	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/08/19 20:34	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/08/19 20:34	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/08/19 20:34	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/08/19 20:34	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/08/19 20:34	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/08/19 20:34	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/08/19 20:34	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/08/19 20:34	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/08/19 20:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/08/19 20:34	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/08/19 20:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/08/19 20:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/08/19 20:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/08/19 20:34	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/08/19 20:34	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/08/19 20:34	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/08/19 20:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/08/19 20:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/08/19 20:34	75-35-4	
cis-1,2-Dichloroethene	**395**	ug/L	25.0	5		04/09/19 16:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/08/19 20:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/08/19 20:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/08/19 20:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/08/19 20:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/08/19 20:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/08/19 20:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/08/19 20:34	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/08/19 20:34	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/08/19 20:34	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/08/19 20:34	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/08/19 20:34	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/08/19 20:34	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/08/19 20:34	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/08/19 20:34	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-4D **Lab ID: 50220614008** Collected: 03/26/19 14:10 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/08/19 20:34	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/08/19 20:34	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/08/19 20:34	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/08/19 20:34	91-57-6	L1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/08/19 20:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/08/19 20:34	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/08/19 20:34	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/08/19 20:34	103-65-1	
Styrene	ND	ug/L	5.0	1		04/08/19 20:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/08/19 20:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/08/19 20:34	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/08/19 20:34	127-18-4	
Toluene	ND	ug/L	5.0	1		04/08/19 20:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/08/19 20:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/08/19 20:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/08/19 20:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/08/19 20:34	79-00-5	
Trichloroethene	**10.9**	ug/L	5.0	1		04/08/19 20:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/08/19 20:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/08/19 20:34	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/08/19 20:34	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/08/19 20:34	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/08/19 20:34	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/08/19 20:34	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/08/19 20:34	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	80-122	1		04/08/19 20:34	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-114	1		04/08/19 20:34	460-00-4	
Toluene-d8 (S)	90	%.	85-114	1		04/08/19 20:34	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-5 **Lab ID: 50220614009** Collected: 03/26/19 15:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/09/19 07:35	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/09/19 07:35	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/09/19 07:35	107-13-1	
Benzene	ND	ug/L	5.0	1		04/09/19 07:35	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/09/19 07:35	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/09/19 07:35	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/09/19 07:35	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/09/19 07:35	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/09/19 07:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/09/19 07:35	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/09/19 07:35	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/09/19 07:35	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/09/19 07:35	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/09/19 07:35	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/09/19 07:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/09/19 07:35	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/09/19 07:35	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/09/19 07:35	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/09/19 07:35	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/09/19 07:35	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/09/19 07:35	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/09/19 07:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/09/19 07:35	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/09/19 07:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 07:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 07:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 07:35	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/09/19 07:35	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/09/19 07:35	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/09/19 07:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/09/19 07:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/09/19 07:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/09/19 07:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/09/19 07:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/09/19 07:35	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/09/19 07:35	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/09/19 07:35	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/09/19 07:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/19 07:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/19 07:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/09/19 07:35	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/09/19 07:35	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/09/19 07:35	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/09/19 07:35	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/09/19 07:35	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/09/19 07:35	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/09/19 07:35	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-5 **Lab ID: 50220614009** Collected: 03/26/19 15:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/09/19 07:35	99-87-6	
Methylene Chloride	**6.6**	ug/L	5.0	1		04/09/19 07:35	75-09-2	B,C9,H7
1-Methylnaphthalene	ND	ug/L	10.0	1		04/09/19 07:35	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/09/19 07:35	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/09/19 07:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/09/19 07:35	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/09/19 07:35	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/09/19 07:35	103-65-1	
Styrene	ND	ug/L	5.0	1		04/09/19 07:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/19 07:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/19 07:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/09/19 07:35	127-18-4	
Toluene	ND	ug/L	5.0	1		04/09/19 07:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/09/19 07:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/09/19 07:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/09/19 07:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/09/19 07:35	79-00-5	
Trichloroethene	**244**	ug/L	5.0	1		04/09/19 07:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/09/19 07:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/09/19 07:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/09/19 07:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/09/19 07:35	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/09/19 07:35	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/09/19 07:35	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/09/19 07:35	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	80-122	1		04/09/19 07:35	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-114	1		04/09/19 07:35	460-00-4	
Toluene-d8 (S)	94	%.	85-114	1		04/09/19 07:35	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-5D **Lab ID: 50220614010** Collected: 03/26/19 15:55 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/09/19 08:44	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/09/19 08:44	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/09/19 08:44	107-13-1	
Benzene	ND	ug/L	5.0	1		04/09/19 08:44	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/09/19 08:44	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/09/19 08:44	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/09/19 08:44	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/09/19 08:44	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/09/19 08:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/09/19 08:44	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/09/19 08:44	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/09/19 08:44	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/09/19 08:44	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/09/19 08:44	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/09/19 08:44	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/09/19 08:44	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/09/19 08:44	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/09/19 08:44	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/09/19 08:44	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/09/19 08:44	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/09/19 08:44	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/09/19 08:44	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/09/19 08:44	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/09/19 08:44	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 08:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 08:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 08:44	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/09/19 08:44	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/09/19 08:44	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/09/19 08:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/09/19 08:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/09/19 08:44	75-35-4	
cis-1,2-Dichloroethene	**1220**	ug/L	50.0	10		04/09/19 09:19	156-59-2	
trans-1,2-Dichloroethene	**112**	ug/L	5.0	1		04/09/19 08:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/09/19 08:44	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/09/19 08:44	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/09/19 08:44	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/09/19 08:44	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/19 08:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/19 08:44	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/09/19 08:44	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/09/19 08:44	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/09/19 08:44	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/09/19 08:44	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/09/19 08:44	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/09/19 08:44	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/09/19 08:44	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-5D **Lab ID: 50220614010** Collected: 03/26/19 15:55 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/09/19 08:44	99-87-6	
Methylene Chloride	**6.8**	ug/L	5.0	1		04/09/19 08:44	75-09-2	B,C9,H7
1-Methylnaphthalene	ND	ug/L	10.0	1		04/09/19 08:44	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/09/19 08:44	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/09/19 08:44	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/09/19 08:44	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/09/19 08:44	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/09/19 08:44	103-65-1	
Styrene	ND	ug/L	5.0	1		04/09/19 08:44	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/19 08:44	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/19 08:44	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/09/19 08:44	127-18-4	
Toluene	ND	ug/L	5.0	1		04/09/19 08:44	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/09/19 08:44	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/09/19 08:44	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/09/19 08:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/09/19 08:44	79-00-5	
Trichloroethene	**500**	ug/L	50.0	10		04/09/19 09:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/09/19 08:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/09/19 08:44	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/09/19 08:44	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/09/19 08:44	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/09/19 08:44	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/09/19 08:44	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/09/19 08:44	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	80-122	1		04/09/19 08:44	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-114	1		04/09/19 08:44	460-00-4	
Toluene-d8 (S)	98	%.	85-114	1		04/09/19 08:44	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-6 **Lab ID: 50220614011** Collected: 03/27/19 08:30 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 04:01	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/10/19 04:01	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/10/19 04:01	107-13-1	
Benzene	ND	ug/L	5.0	1		04/10/19 04:01	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/10/19 04:01	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 04:01	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 04:01	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/10/19 04:01	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/10/19 04:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 04:01	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 04:01	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 04:01	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 04:01	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 04:01	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 04:01	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 04:01	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/10/19 04:01	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/10/19 04:01	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/10/19 04:01	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 04:01	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 04:01	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 04:01	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 04:01	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/10/19 04:01	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 04:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 04:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 04:01	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 04:01	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 04:01	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 04:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 04:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 04:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 04:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 04:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 04:01	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 04:01	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 04:01	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 04:01	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 04:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 04:01	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 04:01	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 04:01	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 04:01	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/10/19 04:01	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/10/19 04:01	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/10/19 04:01	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 04:01	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-6 **Lab ID: 50220614011** Collected: 03/27/19 08:30 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 04:01	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 04:01	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 04:01	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 04:01	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 04:01	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 04:01	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/10/19 04:01	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 04:01	103-65-1	
Styrene	ND	ug/L	5.0	1		04/10/19 04:01	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 04:01	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 04:01	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/10/19 04:01	127-18-4	
Toluene	ND	ug/L	5.0	1		04/10/19 04:01	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 04:01	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 04:01	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 04:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 04:01	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/10/19 04:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 04:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 04:01	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 04:01	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 04:01	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 04:01	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 04:01	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 04:01	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	80-122	1		04/10/19 04:01	1868-53-7	
4-Bromofluorobenzene (S)	97	%.	85-114	1		04/10/19 04:01	460-00-4	
Toluene-d8 (S)	99	%.	85-114	1		04/10/19 04:01	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-6D **Lab ID: 50220614012** Collected: 03/27/19 09:15 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 04:35	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/10/19 04:35	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/10/19 04:35	107-13-1	
Benzene	ND	ug/L	5.0	1		04/10/19 04:35	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/10/19 04:35	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 04:35	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 04:35	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/10/19 04:35	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/10/19 04:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 04:35	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 04:35	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 04:35	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 04:35	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 04:35	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 04:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 04:35	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/10/19 04:35	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/10/19 04:35	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/10/19 04:35	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 04:35	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 04:35	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 04:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 04:35	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/10/19 04:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 04:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 04:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 04:35	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 04:35	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 04:35	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 04:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 04:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 04:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 04:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 04:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 04:35	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 04:35	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 04:35	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 04:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 04:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 04:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 04:35	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 04:35	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 04:35	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/10/19 04:35	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/10/19 04:35	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/10/19 04:35	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 04:35	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-6D **Lab ID: 50220614012** Collected: 03/27/19 09:15 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 04:35	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 04:35	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 04:35	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 04:35	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 04:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 04:35	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/10/19 04:35	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 04:35	103-65-1	
Styrene	ND	ug/L	5.0	1		04/10/19 04:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 04:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 04:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/10/19 04:35	127-18-4	
Toluene	ND	ug/L	5.0	1		04/10/19 04:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 04:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 04:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 04:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 04:35	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/10/19 04:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 04:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 04:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 04:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 04:35	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 04:35	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 04:35	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 04:35	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/10/19 04:35	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-114	1		04/10/19 04:35	460-00-4	
Toluene-d8 (S)	100	%.	85-114	1		04/10/19 04:35	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-7 **Lab ID: 50220614013** Collected: 03/27/19 10:15 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/09/19 21:22	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/09/19 21:22	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/09/19 21:22	107-13-1	
Benzene	ND	ug/L	5.0	1		04/09/19 21:22	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/09/19 21:22	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/09/19 21:22	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/09/19 21:22	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/09/19 21:22	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/09/19 21:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/09/19 21:22	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/09/19 21:22	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/09/19 21:22	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/09/19 21:22	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/09/19 21:22	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/09/19 21:22	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/09/19 21:22	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/09/19 21:22	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/09/19 21:22	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/09/19 21:22	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/09/19 21:22	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/09/19 21:22	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/09/19 21:22	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/09/19 21:22	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/09/19 21:22	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 21:22	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 21:22	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/09/19 21:22	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/09/19 21:22	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/09/19 21:22	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/09/19 21:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/09/19 21:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/09/19 21:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/09/19 21:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/09/19 21:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/09/19 21:22	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/09/19 21:22	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/09/19 21:22	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/09/19 21:22	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/19 21:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/09/19 21:22	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/09/19 21:22	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/09/19 21:22	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/09/19 21:22	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/09/19 21:22	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/09/19 21:22	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/09/19 21:22	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/09/19 21:22	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-7 **Lab ID: 50220614013** Collected: 03/27/19 10:15 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/09/19 21:22	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/09/19 21:22	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/09/19 21:22	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/09/19 21:22	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/09/19 21:22	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/09/19 21:22	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/09/19 21:22	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/09/19 21:22	103-65-1	
Styrene	ND	ug/L	5.0	1		04/09/19 21:22	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/19 21:22	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/09/19 21:22	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/09/19 21:22	127-18-4	
Toluene	ND	ug/L	5.0	1		04/09/19 21:22	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/09/19 21:22	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/09/19 21:22	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/09/19 21:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/09/19 21:22	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/09/19 21:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/09/19 21:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/09/19 21:22	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/09/19 21:22	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/09/19 21:22	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/09/19 21:22	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/09/19 21:22	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/09/19 21:22	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	80-122	1		04/09/19 21:22	1868-53-7	
4-Bromofluorobenzene (S)	96	%.	85-114	1		04/09/19 21:22	460-00-4	
Toluene-d8 (S)	99	%.	85-114	1		04/09/19 21:22	2037-26-5	

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7726 Moller Road
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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-7D **Lab ID: 50220614014** Collected: 03/27/19 11:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 05:10	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/10/19 05:10	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/10/19 05:10	107-13-1	
Benzene	ND	ug/L	5.0	1		04/10/19 05:10	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/10/19 05:10	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 05:10	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 05:10	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/10/19 05:10	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/10/19 05:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 05:10	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 05:10	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 05:10	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 05:10	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 05:10	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 05:10	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 05:10	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/10/19 05:10	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/10/19 05:10	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/10/19 05:10	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 05:10	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 05:10	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 05:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 05:10	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/10/19 05:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 05:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 05:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 05:10	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 05:10	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 05:10	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 05:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 05:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 05:10	75-35-4	
cis-1,2-Dichloroethene	**943**	ug/L	50.0	10		04/10/19 13:41	156-59-2	M1
trans-1,2-Dichloroethene	**46.0**	ug/L	5.0	1		04/10/19 05:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 05:10	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 05:10	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 05:10	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 05:10	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 05:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 05:10	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 05:10	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 05:10	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 05:10	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/10/19 05:10	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/10/19 05:10	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/10/19 05:10	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 05:10	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: TMW-7D **Lab ID: 50220614014** Collected: 03/27/19 11:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 05:10	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 05:10	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 05:10	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 05:10	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 05:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 05:10	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/10/19 05:10	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 05:10	103-65-1	
Styrene	ND	ug/L	5.0	1		04/10/19 05:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 05:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 05:10	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/10/19 05:10	127-18-4	
Toluene	ND	ug/L	5.0	1		04/10/19 05:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 05:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 05:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 05:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 05:10	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/10/19 05:10	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 05:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 05:10	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 05:10	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 05:10	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 05:10	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 05:10	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 05:10	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100	%.	80-122	1		04/10/19 05:10	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-114	1		04/10/19 05:10	460-00-4	
Toluene-d8 (S)	100	%.	85-114	1		04/10/19 05:10	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: Dup-A **Lab ID: 50220614015** Collected: 03/26/19 08:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/08/19 21:06	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/08/19 21:06	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/08/19 21:06	107-13-1	
Benzene	ND	ug/L	5.0	1		04/08/19 21:06	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/08/19 21:06	108-86-1	L1
Bromochloromethane	ND	ug/L	5.0	1		04/08/19 21:06	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/08/19 21:06	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/08/19 21:06	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/08/19 21:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/08/19 21:06	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/08/19 21:06	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/08/19 21:06	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/08/19 21:06	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/08/19 21:06	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/08/19 21:06	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/08/19 21:06	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/08/19 21:06	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/08/19 21:06	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/08/19 21:06	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/08/19 21:06	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/08/19 21:06	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/08/19 21:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/08/19 21:06	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/08/19 21:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/08/19 21:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/08/19 21:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/08/19 21:06	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/08/19 21:06	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/08/19 21:06	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/08/19 21:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/08/19 21:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/08/19 21:06	75-35-4	
cis-1,2-Dichloroethene	**1160**	ug/L	50.0	10		04/08/19 21:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/08/19 21:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/08/19 21:06	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/08/19 21:06	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/08/19 21:06	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/08/19 21:06	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/08/19 21:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/08/19 21:06	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/08/19 21:06	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/08/19 21:06	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/08/19 21:06	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/08/19 21:06	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/08/19 21:06	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/08/19 21:06	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/08/19 21:06	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: Dup-A **Lab ID: 50220614015** Collected: 03/26/19 08:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/08/19 21:06	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/08/19 21:06	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/08/19 21:06	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/08/19 21:06	91-57-6	L1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/08/19 21:06	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/08/19 21:06	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/08/19 21:06	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/08/19 21:06	103-65-1	
Styrene	ND	ug/L	5.0	1		04/08/19 21:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/08/19 21:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/08/19 21:06	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/08/19 21:06	127-18-4	
Toluene	ND	ug/L	5.0	1		04/08/19 21:06	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/08/19 21:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/08/19 21:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/08/19 21:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/08/19 21:06	79-00-5	
Trichloroethene	**510**	ug/L	50.0	10		04/08/19 21:39	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/08/19 21:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/08/19 21:06	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/08/19 21:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/08/19 21:06	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/08/19 21:06	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/08/19 21:06	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/08/19 21:06	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	80-122	1		04/08/19 21:06	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-114	1		04/08/19 21:06	460-00-4	
Toluene-d8 (S)	91	%.	85-114	1		04/08/19 21:06	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: Trip Blank **Lab ID: 50220614016** Collected: 03/25/19 08:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/06/19 09:00	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/06/19 09:00	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/06/19 09:00	107-13-1	
Benzene	ND	ug/L	5.0	1		04/06/19 09:00	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/06/19 09:00	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/06/19 09:00	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/06/19 09:00	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/06/19 09:00	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/06/19 09:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/06/19 09:00	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/06/19 09:00	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/06/19 09:00	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/06/19 09:00	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/06/19 09:00	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/06/19 09:00	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/06/19 09:00	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/06/19 09:00	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/06/19 09:00	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/06/19 09:00	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 09:00	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/06/19 09:00	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/06/19 09:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/06/19 09:00	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/06/19 09:00	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 09:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 09:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/06/19 09:00	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/06/19 09:00	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/06/19 09:00	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/06/19 09:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/06/19 09:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/06/19 09:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/06/19 09:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/06/19 09:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 09:00	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/06/19 09:00	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/06/19 09:00	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/06/19 09:00	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 09:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/06/19 09:00	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/06/19 09:00	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/06/19 09:00	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/06/19 09:00	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/06/19 09:00	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/06/19 09:00	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/06/19 09:00	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/06/19 09:00	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: Trip Blank **Lab ID: 50220614016** Collected: 03/25/19 08:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/06/19 09:00	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/06/19 09:00	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 09:00	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/06/19 09:00	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/06/19 09:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/06/19 09:00	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/06/19 09:00	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/06/19 09:00	103-65-1	
Styrene	ND	ug/L	5.0	1		04/06/19 09:00	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 09:00	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/06/19 09:00	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/06/19 09:00	127-18-4	
Toluene	ND	ug/L	5.0	1		04/06/19 09:00	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 09:00	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/06/19 09:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/06/19 09:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/06/19 09:00	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/06/19 09:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/06/19 09:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/06/19 09:00	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 09:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/06/19 09:00	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/06/19 09:00	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/06/19 09:00	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/06/19 09:00	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	80-122	1		04/06/19 09:00	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-114	1		04/06/19 09:00	460-00-4	
Toluene-d8 (S)	98	%.	85-114	1		04/06/19 09:00	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: MW-29 **Lab ID: 50220614017** Collected: 03/27/19 12:15 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 06:54	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/10/19 06:54	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/10/19 06:54	107-13-1	
Benzene	ND	ug/L	5.0	1		04/10/19 06:54	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/10/19 06:54	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 06:54	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 06:54	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/10/19 06:54	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/10/19 06:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 06:54	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 06:54	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 06:54	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 06:54	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 06:54	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 06:54	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 06:54	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/10/19 06:54	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/10/19 06:54	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/10/19 06:54	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 06:54	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 06:54	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 06:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 06:54	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/10/19 06:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 06:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 06:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 06:54	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 06:54	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 06:54	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 06:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 06:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 06:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 06:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 06:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 06:54	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 06:54	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 06:54	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 06:54	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 06:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 06:54	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 06:54	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 06:54	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 06:54	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/10/19 06:54	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/10/19 06:54	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/10/19 06:54	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 06:54	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: MW-29 **Lab ID: 50220614017** Collected: 03/27/19 12:15 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 06:54	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 06:54	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 06:54	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 06:54	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 06:54	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 06:54	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/10/19 06:54	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 06:54	103-65-1	
Styrene	ND	ug/L	5.0	1		04/10/19 06:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 06:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 06:54	79-34-5	
Tetrachloroethene	**6.8**	ug/L	5.0	1		04/10/19 06:54	127-18-4	
Toluene	ND	ug/L	5.0	1		04/10/19 06:54	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 06:54	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 06:54	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 06:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 06:54	79-00-5	
Trichloroethene	**40.6**	ug/L	5.0	1		04/10/19 06:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 06:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 06:54	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 06:54	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 06:54	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 06:54	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 06:54	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 06:54	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98	%.	80-122	1		04/10/19 06:54	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-114	1		04/10/19 06:54	460-00-4	
Toluene-d8 (S)	99	%.	85-114	1		04/10/19 06:54	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: MW-29D **Lab ID: 50220614018** Collected: 03/27/19 13:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 07:29	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/10/19 07:29	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/10/19 07:29	107-13-1	
Benzene	ND	ug/L	5.0	1		04/10/19 07:29	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/10/19 07:29	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 07:29	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 07:29	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/10/19 07:29	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/10/19 07:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 07:29	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 07:29	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 07:29	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 07:29	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 07:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 07:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 07:29	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/10/19 07:29	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/10/19 07:29	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/10/19 07:29	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 07:29	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 07:29	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 07:29	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 07:29	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/10/19 07:29	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 07:29	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 07:29	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 07:29	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 07:29	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 07:29	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 07:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 07:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 07:29	75-35-4	
cis-1,2-Dichloroethene	**21.4**	ug/L	5.0	1		04/10/19 07:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 07:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 07:29	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 07:29	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 07:29	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 07:29	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 07:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 07:29	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 07:29	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 07:29	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 07:29	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/10/19 07:29	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/10/19 07:29	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/10/19 07:29	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 07:29	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: MW-29D **Lab ID: 50220614018** Collected: 03/27/19 13:00 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 07:29	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 07:29	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 07:29	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 07:29	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 07:29	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 07:29	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/10/19 07:29	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 07:29	103-65-1	
Styrene	ND	ug/L	5.0	1		04/10/19 07:29	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 07:29	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 07:29	79-34-5	
Tetrachloroethene	**9.8**	ug/L	5.0	1		04/10/19 07:29	127-18-4	
Toluene	ND	ug/L	5.0	1		04/10/19 07:29	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 07:29	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 07:29	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 07:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 07:29	79-00-5	
Trichloroethene	**106**	ug/L	5.0	1		04/10/19 07:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 07:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 07:29	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 07:29	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 07:29	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 07:29	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 07:29	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 07:29	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/10/19 07:29	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-114	1		04/10/19 07:29	460-00-4	
Toluene-d8 (S)	100	%.	85-114	1		04/10/19 07:29	2037-26-5	

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7726 Moller Road
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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: MW-22 **Lab ID: 50220614019** Collected: 03/27/19 13:45 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 08:03	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/10/19 08:03	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/10/19 08:03	107-13-1	
Benzene	ND	ug/L	5.0	1		04/10/19 08:03	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/10/19 08:03	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 08:03	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 08:03	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/10/19 08:03	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/10/19 08:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 08:03	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 08:03	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 08:03	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 08:03	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 08:03	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 08:03	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 08:03	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/10/19 08:03	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/10/19 08:03	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/10/19 08:03	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 08:03	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 08:03	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 08:03	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 08:03	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/10/19 08:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 08:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 08:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 08:03	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 08:03	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 08:03	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 08:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 08:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 08:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 08:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 08:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 08:03	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 08:03	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 08:03	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 08:03	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 08:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 08:03	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 08:03	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 08:03	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 08:03	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/10/19 08:03	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/10/19 08:03	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/10/19 08:03	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 08:03	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: MW-22 **Lab ID: 50220614019** Collected: 03/27/19 13:45 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 08:03	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 08:03	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 08:03	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 08:03	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 08:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 08:03	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/10/19 08:03	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 08:03	103-65-1	
Styrene	ND	ug/L	5.0	1		04/10/19 08:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 08:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 08:03	79-34-5	
Tetrachloroethene	**6.7**	ug/L	5.0	1		04/10/19 08:03	127-18-4	
Toluene	ND	ug/L	5.0	1		04/10/19 08:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 08:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 08:03	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 08:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 08:03	79-00-5	
Trichloroethene	**30.8**	ug/L	5.0	1		04/10/19 08:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 08:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 08:03	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 08:03	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 08:03	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 08:03	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 08:03	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 08:03	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100	%.	80-122	1		04/10/19 08:03	1868-53-7	
4-Bromofluorobenzene (S)	95	%.	85-114	1		04/10/19 08:03	460-00-4	
Toluene-d8 (S)	98	%.	85-114	1		04/10/19 08:03	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: MW-22D **Lab ID: 50220614020** Collected: 03/27/19 14:30 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 08:38	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/10/19 08:38	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/10/19 08:38	107-13-1	
Benzene	ND	ug/L	5.0	1		04/10/19 08:38	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/10/19 08:38	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 08:38	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 08:38	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/10/19 08:38	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/10/19 08:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 08:38	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 08:38	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 08:38	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 08:38	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 08:38	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 08:38	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 08:38	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/10/19 08:38	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/10/19 08:38	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/10/19 08:38	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 08:38	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 08:38	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 08:38	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 08:38	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/10/19 08:38	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 08:38	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 08:38	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 08:38	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 08:38	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 08:38	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 08:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 08:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 08:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 08:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 08:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 08:38	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 08:38	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 08:38	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 08:38	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 08:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 08:38	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 08:38	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 08:38	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 08:38	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/10/19 08:38	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/10/19 08:38	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/10/19 08:38	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 08:38	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220614

Sample: MW-22D **Lab ID: 50220614020** Collected: 03/27/19 14:30 Received: 03/27/19 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 08:38	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 08:38	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 08:38	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 08:38	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 08:38	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 08:38	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/10/19 08:38	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 08:38	103-65-1	
Styrene	ND	ug/L	5.0	1		04/10/19 08:38	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 08:38	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 08:38	79-34-5	
Tetrachloroethene	**7.4**	ug/L	5.0	1		04/10/19 08:38	127-18-4	
Toluene	ND	ug/L	5.0	1		04/10/19 08:38	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 08:38	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 08:38	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 08:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 08:38	79-00-5	
Trichloroethene	**32.1**	ug/L	5.0	1		04/10/19 08:38	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 08:38	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 08:38	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 08:38	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 08:38	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 08:38	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 08:38	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 08:38	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	99	%.	80-122	1		04/10/19 08:38	1868-53-7	
4-Bromofluorobenzene (S)	96	%.	85-114	1		04/10/19 08:38	460-00-4	
Toluene-d8 (S)	100	%.	85-114	1		04/10/19 08:38	2037-26-5	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

QC Batch: 493241 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50220614001, 50220614002, 50220614016

METHOD BLANK: 2276385 | Matrix: Water
Associated Lab Samples: 50220614001, 50220614002, 50220614016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	04/06/19 03:49	
1,1,1-Trichloroethane	ug/L	ND	5.0	04/06/19 03:49	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/06/19 03:49	
1,1,2-Trichloroethane	ug/L	ND	5.0	04/06/19 03:49	
1,1-Dichloroethane	ug/L	ND	5.0	04/06/19 03:49	
1,1-Dichloroethene	ug/L	ND	5.0	04/06/19 03:49	
1,1-Dichloropropene	ug/L	ND	5.0	04/06/19 03:49	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	04/06/19 03:49	
1,2,3-Trichloropropane	ug/L	ND	5.0	04/06/19 03:49	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	04/06/19 03:49	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	04/06/19 03:49	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	04/06/19 03:49	
1,2-Dichlorobenzene	ug/L	ND	5.0	04/06/19 03:49	
1,2-Dichloroethane	ug/L	ND	5.0	04/06/19 03:49	
1,2-Dichloropropane	ug/L	ND	5.0	04/06/19 03:49	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	04/06/19 03:49	
1,3-Dichlorobenzene	ug/L	ND	5.0	04/06/19 03:49	
1,3-Dichloropropane	ug/L	ND	5.0	04/06/19 03:49	
1,4-Dichlorobenzene	ug/L	ND	5.0	04/06/19 03:49	
1-Methylnaphthalene	ug/L	ND	10.0	04/06/19 03:49	N2
2,2-Dichloropropane	ug/L	ND	5.0	04/06/19 03:49	
2-Butanone (MEK)	ug/L	ND	25.0	04/06/19 03:49	
2-Chlorotoluene	ug/L	ND	5.0	04/06/19 03:49	
2-Hexanone	ug/L	ND	25.0	04/06/19 03:49	
2-Methylnaphthalene	ug/L	ND	10.0	04/06/19 03:49	
4-Chlorotoluene	ug/L	ND	5.0	04/06/19 03:49	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	04/06/19 03:49	
Acetone	ug/L	ND	100	04/06/19 03:49	
Acrolein	ug/L	ND	50.0	04/06/19 03:49	
Acrylonitrile	ug/L	ND	100	04/06/19 03:49	
Benzene	ug/L	ND	5.0	04/06/19 03:49	
Bromobenzene	ug/L	ND	5.0	04/06/19 03:49	
Bromochloromethane	ug/L	ND	5.0	04/06/19 03:49	
Bromodichloromethane	ug/L	ND	5.0	04/06/19 03:49	
Bromoform	ug/L	ND	5.0	04/06/19 03:49	
Bromomethane	ug/L	ND	5.0	04/06/19 03:49	
Carbon disulfide	ug/L	ND	10.0	04/06/19 03:49	
Carbon tetrachloride	ug/L	ND	5.0	04/06/19 03:49	
Chlorobenzene	ug/L	ND	5.0	04/06/19 03:49	
Chloroethane	ug/L	ND	5.0	04/06/19 03:49	
Chloroform	ug/L	ND	5.0	04/06/19 03:49	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

METHOD BLANK: 2276385 Matrix: Water
Associated Lab Samples: 50220614001, 50220614002, 50220614016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	04/06/19 03:49	
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/06/19 03:49	
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/06/19 03:49	
Dibromochloromethane	ug/L	ND	5.0	04/06/19 03:49	
Dibromomethane	ug/L	ND	5.0	04/06/19 03:49	
Dichlorodifluoromethane	ug/L	ND	5.0	04/06/19 03:49	
Ethyl methacrylate	ug/L	ND	100	04/06/19 03:49	
Ethylbenzene	ug/L	ND	5.0	04/06/19 03:49	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/06/19 03:49	
Iodomethane	ug/L	ND	10.0	04/06/19 03:49	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	04/06/19 03:49	
Methyl-tert-butyl ether	ug/L	ND	4.0	04/06/19 03:49	
Methylene Chloride	ug/L	ND	5.0	04/06/19 03:49	
n-Butylbenzene	ug/L	ND	5.0	04/06/19 03:49	
n-Hexane	ug/L	ND	5.0	04/06/19 03:49	
n-Propylbenzene	ug/L	ND	5.0	04/06/19 03:49	
Naphthalene	ug/L	ND	1.7	04/06/19 03:49	
p-Isopropyltoluene	ug/L	ND	5.0	04/06/19 03:49	
sec-Butylbenzene	ug/L	ND	5.0	04/06/19 03:49	
Styrene	ug/L	ND	5.0	04/06/19 03:49	
tert-Butylbenzene	ug/L	ND	5.0	04/06/19 03:49	
Tetrachloroethene	ug/L	ND	5.0	04/06/19 03:49	
Toluene	ug/L	ND	5.0	04/06/19 03:49	
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/06/19 03:49	
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/06/19 03:49	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	04/06/19 03:49	
Trichloroethene	ug/L	ND	5.0	04/06/19 03:49	
Trichlorofluoromethane	ug/L	ND	5.0	04/06/19 03:49	
Vinyl acetate	ug/L	ND	50.0	04/06/19 03:49	
Vinyl chloride	ug/L	ND	2.0	04/06/19 03:49	
Xylene (Total)	ug/L	ND	10.0	04/06/19 03:49	
4-Bromofluorobenzene (S)	%.	98	85-114	04/06/19 03:49	
Dibromofluoromethane (S)	%.	102	80-122	04/06/19 03:49	
Toluene-d8 (S)	%.	96	85-114	04/06/19 03:49	

LABORATORY CONTROL SAMPLE: 2276386

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	43.2	86	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	48.7	97	70-124	
1,1-Dichloroethene	ug/L	50	43.0	86	71-126	
1,2,4-Trimethylbenzene	ug/L	50	42.4	85	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	45.6	91	81-119	
1,2-Dichloroethane	ug/L	50	41.7	83	68-119	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

LABORATORY CONTROL SAMPLE: 2276386

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	ug/L	50	48.1	96	79-126	
Benzene	ug/L	50	42.7	85	78-117	
Chlorobenzene	ug/L	50	42.9	86	79-113	
Chloroform	ug/L	50	43.6	87	73-118	
cis-1,2-Dichloroethene	ug/L	50	44.3	89	74-122	
Ethylbenzene	ug/L	50	42.3	85	80-118	
Isopropylbenzene (Cumene)	ug/L	50	42.7	85	82-120	
Methyl-tert-butyl ether	ug/L	50	50.3	101	72-128	
Naphthalene	ug/L	50	47.4	95	71-121	
Tetrachloroethene	ug/L	50	41.0	82	76-124	
Toluene	ug/L	50	42.1	84	78-116	
trans-1,2-Dichloroethene	ug/L	50	43.7	87	73-121	
Trichloroethene	ug/L	50	43.7	87	76-120	
Vinyl chloride	ug/L	50	41.6	83	70-136	
Xylene (Total)	ug/L	150	130	87	79-119	
4-Bromofluorobenzene (S)	%.			97	85-114	
Dibromofluoromethane (S)	%.			95	80-122	
Toluene-d8 (S)	%.			98	85-114	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

QC Batch: 493245 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50220614003, 50220614004, 50220614006

METHOD BLANK: 2276402 | Matrix: Water
Associated Lab Samples: 50220614003, 50220614004, 50220614006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	04/06/19 04:41	
1,1,1-Trichloroethane	ug/L	ND	5.0	04/06/19 04:41	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/06/19 04:41	
1,1,2-Trichloroethane	ug/L	ND	5.0	04/06/19 04:41	
1,1-Dichloroethane	ug/L	ND	5.0	04/06/19 04:41	
1,1-Dichloroethene	ug/L	ND	5.0	04/06/19 04:41	
1,1-Dichloropropene	ug/L	ND	5.0	04/06/19 04:41	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	04/06/19 04:41	
1,2,3-Trichloropropane	ug/L	ND	5.0	04/06/19 04:41	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	04/06/19 04:41	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	04/06/19 04:41	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	04/06/19 04:41	
1,2-Dichlorobenzene	ug/L	ND	5.0	04/06/19 04:41	
1,2-Dichloroethane	ug/L	ND	5.0	04/06/19 04:41	
1,2-Dichloropropane	ug/L	ND	5.0	04/06/19 04:41	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	04/06/19 04:41	
1,3-Dichlorobenzene	ug/L	ND	5.0	04/06/19 04:41	
1,3-Dichloropropane	ug/L	ND	5.0	04/06/19 04:41	
1,4-Dichlorobenzene	ug/L	ND	5.0	04/06/19 04:41	
1-Methylnaphthalene	ug/L	ND	10.0	04/06/19 04:41	N2
2,2-Dichloropropane	ug/L	ND	5.0	04/06/19 04:41	
2-Butanone (MEK)	ug/L	ND	25.0	04/06/19 04:41	
2-Chlorotoluene	ug/L	ND	5.0	04/06/19 04:41	
2-Hexanone	ug/L	ND	25.0	04/06/19 04:41	
2-Methylnaphthalene	ug/L	ND	10.0	04/06/19 04:41	
4-Chlorotoluene	ug/L	ND	5.0	04/06/19 04:41	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	04/06/19 04:41	
Acetone	ug/L	ND	100	04/06/19 04:41	
Acrolein	ug/L	ND	50.0	04/06/19 04:41	
Acrylonitrile	ug/L	ND	100	04/06/19 04:41	
Benzene	ug/L	ND	5.0	04/06/19 04:41	
Bromobenzene	ug/L	ND	5.0	04/06/19 04:41	
Bromochloromethane	ug/L	ND	5.0	04/06/19 04:41	
Bromodichloromethane	ug/L	ND	5.0	04/06/19 04:41	
Bromoform	ug/L	ND	5.0	04/06/19 04:41	
Bromomethane	ug/L	ND	5.0	04/06/19 04:41	
Carbon disulfide	ug/L	ND	10.0	04/06/19 04:41	
Carbon tetrachloride	ug/L	ND	5.0	04/06/19 04:41	
Chlorobenzene	ug/L	ND	5.0	04/06/19 04:41	
Chloroethane	ug/L	ND	5.0	04/06/19 04:41	
Chloroform	ug/L	ND	5.0	04/06/19 04:41	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

METHOD BLANK: 2276402 Matrix: Water
Associated Lab Samples: 50220614003, 50220614004, 50220614006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	04/06/19 04:41	
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/06/19 04:41	
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/06/19 04:41	
Dibromochloromethane	ug/L	ND	5.0	04/06/19 04:41	
Dibromomethane	ug/L	ND	5.0	04/06/19 04:41	
Dichlorodifluoromethane	ug/L	ND	5.0	04/06/19 04:41	
Ethyl methacrylate	ug/L	ND	100	04/06/19 04:41	
Ethylbenzene	ug/L	ND	5.0	04/06/19 04:41	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/06/19 04:41	
Iodomethane	ug/L	ND	10.0	04/06/19 04:41	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	04/06/19 04:41	
Methyl-tert-butyl ether	ug/L	ND	4.0	04/06/19 04:41	
Methylene Chloride	ug/L	ND	5.0	04/06/19 04:41	
n-Butylbenzene	ug/L	ND	5.0	04/06/19 04:41	
n-Hexane	ug/L	ND	5.0	04/06/19 04:41	
n-Propylbenzene	ug/L	ND	5.0	04/06/19 04:41	
Naphthalene	ug/L	ND	1.7	04/06/19 04:41	
p-Isopropyltoluene	ug/L	ND	5.0	04/06/19 04:41	
sec-Butylbenzene	ug/L	ND	5.0	04/06/19 04:41	
Styrene	ug/L	ND	5.0	04/06/19 04:41	
tert-Butylbenzene	ug/L	ND	5.0	04/06/19 04:41	
Tetrachloroethene	ug/L	ND	5.0	04/06/19 04:41	
Toluene	ug/L	ND	5.0	04/06/19 04:41	
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/06/19 04:41	
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/06/19 04:41	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	04/06/19 04:41	
Trichloroethene	ug/L	ND	5.0	04/06/19 04:41	
Trichlorofluoromethane	ug/L	ND	5.0	04/06/19 04:41	
Vinyl acetate	ug/L	ND	50.0	04/06/19 04:41	
Vinyl chloride	ug/L	ND	2.0	04/06/19 04:41	
Xylene (Total)	ug/L	ND	10.0	04/06/19 04:41	
4-Bromofluorobenzene (S)	%.	98	85-114	04/06/19 04:41	
Dibromofluoromethane (S)	%.	106	80-122	04/06/19 04:41	
Toluene-d8 (S)	%.	99	85-114	04/06/19 04:41	

LABORATORY CONTROL SAMPLE: 2276403

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	48.1	96	78-120	
1,1,1-Trichloroethane	ug/L	50	45.0	90	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	48.1	96	70-124	
1,1,2-Trichloroethane	ug/L	50	49.7	99	79-121	
1,1-Dichloroethane	ug/L	50	44.8	90	70-119	
1,1-Dichloroethene	ug/L	50	43.7	87	71-126	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

LABORATORY CONTROL SAMPLE: 2276403

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloropropene	ug/L	50	42.9	86	76-122	
1,2,3-Trichlorobenzene	ug/L	50	44.8	90	71-126	
1,2,3-Trichloropropane	ug/L	50	50.0	100	75-119	
1,2,4-Trichlorobenzene	ug/L	50	45.1	90	68-130	
1,2,4-Trimethylbenzene	ug/L	50	41.1	82	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	50.4	101	81-119	
1,2-Dichlorobenzene	ug/L	50	44.2	88	78-114	
1,2-Dichloroethane	ug/L	50	43.6	87	68-119	
1,2-Dichloropropane	ug/L	50	47.8	96	79-126	
1,3,5-Trimethylbenzene	ug/L	50	40.4	81	78-118	
1,3-Dichlorobenzene	ug/L	50	43.6	87	77-114	
1,3-Dichloropropane	ug/L	50	48.3	97	82-124	
1,4-Dichlorobenzene	ug/L	50	42.0	84	77-111	
1-Methylnaphthalene	ug/L	50	48.4	97	60-140	N2
2,2-Dichloropropane	ug/L	50	41.2	82	53-137	
2-Butanone (MEK)	ug/L	250	231	93	62-140	
2-Chlorotoluene	ug/L	50	43.0	86	76-120	
2-Hexanone	ug/L	250	218	87	62-143	
2-Methylnaphthalene	ug/L	50	49.5	99	60-133	
4-Chlorotoluene	ug/L	50	42.5	85	78-114	
4-Methyl-2-pentanone (MIBK)	ug/L	250	219	87	60-143	
Acetone	ug/L	250	210	84	44-156	
Acrolein	ug/L	1000	1150	115	17-189	
Acrylonitrile	ug/L	200	184	92	58-139	
Benzene	ug/L	50	43.9	88	78-117	
Bromobenzene	ug/L	50	41.9	84	76-114	
Bromochloromethane	ug/L	50	44.2	88	70-122	
Bromodichloromethane	ug/L	50	45.4	91	72-121	
Bromoform	ug/L	50	47.5	95	66-117	
Bromomethane	ug/L	50	41.3	83	20-176	
Carbon disulfide	ug/L	50	42.2	84	65-124	
Carbon tetrachloride	ug/L	50	41.7	83	68-132	
Chlorobenzene	ug/L	50	44.1	88	79-113	
Chloroethane	ug/L	50	45.6	91	62-140	
Chloroform	ug/L	50	43.0	86	73-118	
Chloromethane	ug/L	50	31.0	62	36-132	
cis-1,2-Dichloroethene	ug/L	50	45.1	90	74-122	
cis-1,3-Dichloropropene	ug/L	50	46.9	94	79-126	
Dibromochloromethane	ug/L	50	47.6	95	75-121	
Dibromomethane	ug/L	50	48.7	97	75-123	
Dichlorodifluoromethane	ug/L	50	36.3	73	27-172	
Ethyl methacrylate	ug/L	200	203	101	72-134	
Ethylbenzene	ug/L	50	44.1	88	80-118	
Hexachloro-1,3-butadiene	ug/L	50	46.7	93	71-141	
Iodomethane	ug/L	100	89.2	89	10-186	
Isopropylbenzene (Cumene)	ug/L	50	43.8	88	82-120	
Methyl-tert-butyl ether	ug/L	50	50.8	102	72-128	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

LABORATORY CONTROL SAMPLE: 2276403

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	50	46.7	93	70-121	
n-Butylbenzene	ug/L	50	40.0	80	76-123	
n-Hexane	ug/L	50	45.1	90	58-149	
n-Propylbenzene	ug/L	50	42.0	84	80-122	
Naphthalene	ug/L	50	47.4	95	71-121	
p-Isopropyltoluene	ug/L	50	42.4	85	79-121	
sec-Butylbenzene	ug/L	50	42.9	86	78-124	
Styrene	ug/L	50	45.2	90	80-119	
tert-Butylbenzene	ug/L	50	35.9	72	62-102	
Tetrachloroethene	ug/L	50	43.4	87	76-124	
Toluene	ug/L	50	43.3	87	78-116	
trans-1,2-Dichloroethene	ug/L	50	45.8	92	73-121	
trans-1,3-Dichloropropene	ug/L	50	45.6	91	73-126	
trans-1,4-Dichloro-2-butene	ug/L	200	155	78	42-138	
Trichloroethene	ug/L	50	45.5	91	76-120	
Trichlorofluoromethane	ug/L	50	39.8	80	60-138	
Vinyl acetate	ug/L	200	159	80	29-200	
Vinyl chloride	ug/L	50	37.6	75	70-136	
Xylene (Total)	ug/L	150	133	89	79-119	
4-Bromofluorobenzene (S)	%.			97	85-114	
Dibromofluoromethane (S)	%.			95	80-122	
Toluene-d8 (S)	%.			98	85-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2276404 2276405

Parameter	Units	50220732002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	50	50	48.9	50.1	98	100	44-142	2	20	
1,1,1-Trichloroethane	ug/L	ND	50	50	46.9	50.0	94	100	48-145	7	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	47.2	54.1	94	108	44-139	14	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	49.9	53.9	100	108	49-140	8	20	
1,1-Dichloroethane	ug/L	ND	50	50	46.7	51.7	93	103	38-142	10	20	
1,1-Dichloroethene	ug/L	ND	50	50	45.9	49.3	92	99	46-148	7	20	
1,1-Dichloropropene	ug/L	ND	50	50	44.5	49.2	89	98	47-142	10	20	
1,2,3-Trichlorobenzene	ug/L	ND	50	50	44.1	45.0	88	90	34-139	2	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	52.9	54.6	106	109	44-140	3	20	
1,2,4-Trichlorobenzene	ug/L	ND	50	50	44.3	45.1	89	90	31-142	2	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	40.4	44.5	81	89	39-140	10	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	50.9	51.8	102	104	47-143	2	20	
1,2-Dichlorobenzene	ug/L	ND	50	50	43.6	46.0	87	92	40-135	5	20	
1,2-Dichloroethane	ug/L	ND	50	50	46.4	49.7	93	99	44-138	7	20	
1,2-Dichloropropane	ug/L	ND	50	50	49.3	54.1	99	108	53-142	9	20	
1,3,5-Trimethylbenzene	ug/L	ND	50	50	39.7	44.0	79	88	36-142	10	20	
1,3-Dichlorobenzene	ug/L	ND	50	50	43.2	46.2	86	92	37-136	7	20	
1,3-Dichloropropane	ug/L	ND	50	50	49.6	52.1	99	104	47-145	5	20	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2276404 2276405

Parameter	Units	50220732002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	ND	50	50	41.3	44.1	83	88	38-132	7	20	
1-Methylnaphthalene	ug/L	ND	50	50	45.6	46.9	91	94	35-144	3	20	N2
2,2-Dichloropropane	ug/L	ND	50	50	42.4	45.6	85	91	19-147	7	20	
2-Butanone (MEK)	ug/L	ND	250	250	234	240	94	96	36-153	3	20	
2-Chlorotoluene	ug/L	ND	50	50	41.9	48.0	84	96	37-143	13	20	
2-Hexanone	ug/L	ND	250	250	217	231	87	92	38-149	6	20	
2-Methylnaphthalene	ug/L	ND	50	50	44.8	47.5	90	95	38-134	6	20	
4-Chlorotoluene	ug/L	ND	50	50	42.2	45.6	84	91	38-137	8	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	250	250	220	236	88	94	43-145	7	20	
Acetone	ug/L	ND	250	250	223	228	89	91	21-161	2	20	
Acrolein	ug/L	ND	1000	1000	957	972	96	97	17-153	2	20	
Acrylonitrile	ug/L	ND	200	200	190	196	95	98	40-141	3	20	
Benzene	ug/L	ND	50	50	45.2	48.7	90	97	49-140	7	20	
Bromobenzene	ug/L	ND	50	50	42.3	45.8	85	92	39-137	8	20	
Bromochloromethane	ug/L	ND	50	50	46.1	50.0	92	100	50-132	8	20	
Bromodichloromethane	ug/L	ND	50	50	47.4	50.5	95	101	42-139	6	20	
Bromoform	ug/L	ND	50	50	45.6	49.4	91	99	29-135	8	20	
Bromomethane	ug/L	ND	50	50	42.9	46.1	86	92	10-162	7	20	
Carbon disulfide	ug/L	ND	50	50	44.3	48.9	89	98	33-144	10	20	
Carbon tetrachloride	ug/L	ND	50	50	45.1	47.3	90	95	45-148	5	20	
Chlorobenzene	ug/L	ND	50	50	46.0	46.8	92	94	47-135	2	20	
Chloroethane	ug/L	ND	50	50	47.7	54.4	95	109	41-149	13	20	
Chloroform	ug/L	ND	50	50	44.3	47.4	89	95	49-136	7	20	
Chloromethane	ug/L	ND	50	50	31.6	36.4	63	73	17-138	14	20	
cis-1,2-Dichloroethene	ug/L	56.4	50	50	94.2	101	76	88	46-143	6	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	47.2	50.2	94	100	44-142	6	20	
Dibromochloromethane	ug/L	ND	50	50	48.7	51.0	97	102	41-141	5	20	
Dibromomethane	ug/L	ND	50	50	50.4	52.2	101	104	46-140	4	20	
Dichlorodifluoromethane	ug/L	ND	50	50	36.0	38.2	72	76	10-193	6	20	
Ethyl methacrylate	ug/L	ND	200	200	203	211	101	105	45-145	4	20	
Ethylbenzene	ug/L	ND	50	50	46.0	47.2	92	94	44-145	2	20	
Hexachloro-1,3-butadiene	ug/L	ND	50	50	46.4	47.8	93	96	27-158	3	20	
Iodomethane	ug/L	ND	100	100	97.6	101	98	101	10-172	4	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	44.6	46.6	89	93	43-148	5	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	52.6	54.0	105	108	38-158	3	20	
Methylene Chloride	ug/L	ND	50	50	48.0	50.8	96	102	33-140	6	20	
n-Butylbenzene	ug/L	ND	50	50	38.4	43.8	77	88	35-142	13	20	
n-Hexane	ug/L	ND	50	50	47.3	52.5	95	105	32-159	11	20	
n-Propylbenzene	ug/L	ND	50	50	42.1	47.5	84	95	37-145	12	20	
Naphthalene	ug/L	ND	50	50	45.6	48.0	91	96	40-137	5	20	
p-Isopropyltoluene	ug/L	ND	50	50	41.8	46.0	84	92	37-143	10	20	
sec-Butylbenzene	ug/L	ND	50	50	42.2	47.1	84	94	40-144	11	20	
Styrene	ug/L	ND	50	50	45.2	46.4	90	93	37-143	2	20	
tert-Butylbenzene	ug/L	ND	50	50	34.7	38.3	69	77	35-114	10	20	
Tetrachloroethene	ug/L	ND	50	50	45.3	46.1	91	92	41-145	2	20	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2276404 2276405

Parameter	Units	50220732002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene	ug/L	ND	50	50	43.8	47.5	88	95	48-139	8	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	50.6	55.7	94	104	46-140	10	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	44.8	48.7	90	97	37-141	8	20	
trans-1,4-Dichloro-2-butene	ug/L	ND	200	200	151	161	76	81	10-166	6	20	
Trichloroethene	ug/L	ND	50	50	46.4	48.4	93	97	43-147	4	20	
Trichlorofluoromethane	ug/L	ND	50	50	42.7	45.9	85	92	39-154	7	20	
Vinyl acetate	ug/L	ND	200	200	127	135	63	68	10-181	6	20	
Vinyl chloride	ug/L	2.4	50	50	41.9	47.4	79	90	49-153	12	20	
Xylene (Total)	ug/L	ND	150	150	136	142	91	94	44-147	4	20	
4-Bromofluorobenzene (S)	%.						99	98	85-114			
Dibromofluoromethane (S)	%.						96	98	80-122			
Toluene-d8 (S)	%.						98	100	85-114			

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

QC Batch: 493487 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50220614008, 50220614015

METHOD BLANK: 2277233 | Matrix: Water
Associated Lab Samples: 50220614008, 50220614015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	04/08/19 12:54	
1,1,1-Trichloroethane	ug/L	ND	5.0	04/08/19 12:54	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/08/19 12:54	
1,1,2-Trichloroethane	ug/L	ND	5.0	04/08/19 12:54	
1,1-Dichloroethane	ug/L	ND	5.0	04/08/19 12:54	
1,1-Dichloroethene	ug/L	ND	5.0	04/08/19 12:54	
1,1-Dichloropropene	ug/L	ND	5.0	04/08/19 12:54	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	04/08/19 12:54	
1,2,3-Trichloropropane	ug/L	ND	5.0	04/08/19 12:54	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	04/08/19 12:54	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	04/08/19 12:54	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	04/08/19 12:54	
1,2-Dichlorobenzene	ug/L	ND	5.0	04/08/19 12:54	
1,2-Dichloroethane	ug/L	ND	5.0	04/08/19 12:54	
1,2-Dichloropropane	ug/L	ND	5.0	04/08/19 12:54	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	04/08/19 12:54	
1,3-Dichlorobenzene	ug/L	ND	5.0	04/08/19 12:54	
1,3-Dichloropropane	ug/L	ND	5.0	04/08/19 12:54	
1,4-Dichlorobenzene	ug/L	ND	5.0	04/08/19 12:54	
1-Methylnaphthalene	ug/L	ND	10.0	04/08/19 12:54	N2
2,2-Dichloropropane	ug/L	ND	5.0	04/08/19 12:54	
2-Butanone (MEK)	ug/L	ND	25.0	04/08/19 12:54	
2-Chlorotoluene	ug/L	ND	5.0	04/08/19 12:54	
2-Hexanone	ug/L	ND	25.0	04/08/19 12:54	
2-Methylnaphthalene	ug/L	ND	10.0	04/08/19 12:54	
4-Chlorotoluene	ug/L	ND	5.0	04/08/19 12:54	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	04/08/19 12:54	
Acetone	ug/L	ND	100	04/08/19 12:54	
Acrolein	ug/L	ND	50.0	04/08/19 12:54	
Acrylonitrile	ug/L	ND	100	04/08/19 12:54	
Benzene	ug/L	ND	5.0	04/08/19 12:54	
Bromobenzene	ug/L	ND	5.0	04/08/19 12:54	
Bromochloromethane	ug/L	ND	5.0	04/08/19 12:54	
Bromodichloromethane	ug/L	ND	5.0	04/08/19 12:54	
Bromoform	ug/L	ND	5.0	04/08/19 12:54	
Bromomethane	ug/L	ND	5.0	04/08/19 12:54	
Carbon disulfide	ug/L	ND	10.0	04/08/19 12:54	
Carbon tetrachloride	ug/L	ND	5.0	04/08/19 12:54	
Chlorobenzene	ug/L	ND	5.0	04/08/19 12:54	
Chloroethane	ug/L	ND	5.0	04/08/19 12:54	
Chloroform	ug/L	ND	5.0	04/08/19 12:54	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

METHOD BLANK: 2277233 Matrix: Water
Associated Lab Samples: 50220614008, 50220614015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	04/08/19 12:54	
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/08/19 12:54	
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/08/19 12:54	
Dibromochloromethane	ug/L	ND	5.0	04/08/19 12:54	
Dibromomethane	ug/L	ND	5.0	04/08/19 12:54	
Dichlorodifluoromethane	ug/L	ND	5.0	04/08/19 12:54	
Ethyl methacrylate	ug/L	ND	100	04/08/19 12:54	
Ethylbenzene	ug/L	ND	5.0	04/08/19 12:54	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/08/19 12:54	
Iodomethane	ug/L	ND	10.0	04/08/19 12:54	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	04/08/19 12:54	
Methyl-tert-butyl ether	ug/L	ND	4.0	04/08/19 12:54	
Methylene Chloride	ug/L	ND	5.0	04/08/19 12:54	
n-Butylbenzene	ug/L	ND	5.0	04/08/19 12:54	
n-Hexane	ug/L	ND	5.0	04/08/19 12:54	
n-Propylbenzene	ug/L	ND	5.0	04/08/19 12:54	
Naphthalene	ug/L	ND	1.7	04/08/19 12:54	
p-Isopropyltoluene	ug/L	ND	5.0	04/08/19 12:54	
sec-Butylbenzene	ug/L	ND	5.0	04/08/19 12:54	
Styrene	ug/L	ND	5.0	04/08/19 12:54	
tert-Butylbenzene	ug/L	ND	5.0	04/08/19 12:54	
Tetrachloroethene	ug/L	ND	5.0	04/08/19 12:54	
Toluene	ug/L	ND	5.0	04/08/19 12:54	
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/08/19 12:54	
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/08/19 12:54	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	04/08/19 12:54	
Trichloroethene	ug/L	ND	5.0	04/08/19 12:54	
Trichlorofluoromethane	ug/L	ND	5.0	04/08/19 12:54	
Vinyl acetate	ug/L	ND	50.0	04/08/19 12:54	
Vinyl chloride	ug/L	ND	2.0	04/08/19 12:54	
Xylene (Total)	ug/L	ND	10.0	04/08/19 12:54	
4-Bromofluorobenzene (S)	%.	100	85-114	04/08/19 12:54	
Dibromofluoromethane (S)	%.	103	80-122	04/08/19 12:54	
Toluene-d8 (S)	%.	91	85-114	04/08/19 12:54	

LABORATORY CONTROL SAMPLE: 2277234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	55.0	110	78-120	
1,1,1-Trichloroethane	ug/L	50	56.3	113	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	46.2	92	70-124	
1,1,2-Trichloroethane	ug/L	50	51.5	103	79-121	
1,1-Dichloroethane	ug/L	50	52.9	106	70-119	
1,1-Dichloroethene	ug/L	50	55.2	110	71-126	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

LABORATORY CONTROL SAMPLE: 2277234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloropropene	ug/L	50	48.5	97	76-122	
1,2,3-Trichlorobenzene	ug/L	50	51.6	103	71-126	
1,2,3-Trichloropropane	ug/L	50	52.9	106	75-119	
1,2,4-Trichlorobenzene	ug/L	50	52.4	105	68-130	
1,2,4-Trimethylbenzene	ug/L	50	49.8	100	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	52.7	105	81-119	
1,2-Dichlorobenzene	ug/L	50	51.9	104	78-114	
1,2-Dichloroethane	ug/L	50	48.0	96	68-119	
1,2-Dichloropropane	ug/L	50	54.8	110	79-126	
1,3,5-Trimethylbenzene	ug/L	50	48.3	97	78-118	
1,3-Dichlorobenzene	ug/L	50	53.3	107	77-114	
1,3-Dichloropropane	ug/L	50	50.3	101	82-124	
1,4-Dichlorobenzene	ug/L	50	49.5	99	77-111	
1-Methylnaphthalene	ug/L	50	63.2	126	60-140	N2
2,2-Dichloropropane	ug/L	50	58.6	117	53-137	
2-Butanone (MEK)	ug/L	250	301	120	62-140	
2-Chlorotoluene	ug/L	50	49.1	98	76-120	
2-Hexanone	ug/L	250	248	99	62-143	
2-Methylnaphthalene	ug/L	50	68.5	137	60-133	L1
4-Chlorotoluene	ug/L	50	54.8	110	78-114	
4-Methyl-2-pentanone (MIBK)	ug/L	250	242	97	60-143	
Acetone	ug/L	250	257	103	44-156	
Acrolein	ug/L	1000	416	42	17-189	
Acrylonitrile	ug/L	200	219	110	58-139	
Benzene	ug/L	50	48.7	97	78-117	
Bromobenzene	ug/L	50	58.5	117	76-114	L1
Bromochloromethane	ug/L	50	47.7	95	70-122	
Bromodichloromethane	ug/L	50	47.5	95	72-121	
Bromoform	ug/L	50	44.4	89	66-117	
Bromomethane	ug/L	50	43.0	86	20-176	
Carbon disulfide	ug/L	50	56.8	114	65-124	
Carbon tetrachloride	ug/L	50	47.3	95	68-132	
Chlorobenzene	ug/L	50	48.9	98	79-113	
Chloroethane	ug/L	50	54.2	108	62-140	
Chloroform	ug/L	50	51.7	103	73-118	
Chloromethane	ug/L	50	39.4	79	36-132	
cis-1,2-Dichloroethene	ug/L	50	54.5	109	74-122	
cis-1,3-Dichloropropene	ug/L	50	51.8	104	79-126	
Dibromochloromethane	ug/L	50	54.2	108	75-121	
Dibromomethane	ug/L	50	49.0	98	75-123	
Dichlorodifluoromethane	ug/L	50	47.1	94	27-172	
Ethyl methacrylate	ug/L	200	207	104	72-134	
Ethylbenzene	ug/L	50	51.9	104	80-118	
Hexachloro-1,3-butadiene	ug/L	50	65.6	131	71-141	
Iodomethane	ug/L	100	24.6	25	10-186	
Isopropylbenzene (Cumene)	ug/L	50	52.6	105	82-120	
Methyl-tert-butyl ether	ug/L	50	55.5	111	72-128	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

LABORATORY CONTROL SAMPLE: 2277234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	50	49.5	99	70-121	
n-Butylbenzene	ug/L	50	50.1	100	76-123	
n-Hexane	ug/L	50	62.7	125	58-149	
n-Propylbenzene	ug/L	50	46.0	92	80-122	
Naphthalene	ug/L	50	49.4	99	71-121	
p-Isopropyltoluene	ug/L	50	51.6	103	79-121	
sec-Butylbenzene	ug/L	50	51.0	102	78-124	
Styrene	ug/L	50	52.1	104	80-119	
tert-Butylbenzene	ug/L	50	45.1	90	62-102	
Tetrachloroethene	ug/L	50	52.6	105	76-124	
Toluene	ug/L	50	43.8	88	78-116	
trans-1,2-Dichloroethene	ug/L	50	55.2	110	73-121	
trans-1,3-Dichloropropene	ug/L	50	46.7	93	73-126	
trans-1,4-Dichloro-2-butene	ug/L	200	188	94	42-138	
Trichloroethene	ug/L	50	51.4	103	76-120	
Trichlorofluoromethane	ug/L	50	50.5	101	60-138	
Vinyl acetate	ug/L	200	216	108	29-200	
Vinyl chloride	ug/L	50	49.0	98	70-136	
Xylene (Total)	ug/L	150	154	103	79-119	
4-Bromofluorobenzene (S)	%.			102	85-114	
Dibromofluoromethane (S)	%.			100	80-122	
Toluene-d8 (S)	%.			89	85-114	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

QC Batch: 493507 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50220614005

METHOD BLANK: 2277317 | Matrix: Water
Associated Lab Samples: 50220614005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	04/08/19 11:40	
1,1,1-Trichloroethane	ug/L	ND	5.0	04/08/19 11:40	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/08/19 11:40	
1,1,2-Trichloroethane	ug/L	ND	5.0	04/08/19 11:40	
1,1-Dichloroethane	ug/L	ND	5.0	04/08/19 11:40	
1,1-Dichloroethene	ug/L	ND	5.0	04/08/19 11:40	
1,1-Dichloropropene	ug/L	ND	5.0	04/08/19 11:40	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	04/08/19 11:40	
1,2,3-Trichloropropane	ug/L	ND	5.0	04/08/19 11:40	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	04/08/19 11:40	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	04/08/19 11:40	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	04/08/19 11:40	
1,2-Dichlorobenzene	ug/L	ND	5.0	04/08/19 11:40	
1,2-Dichloroethane	ug/L	ND	5.0	04/08/19 11:40	
1,2-Dichloropropane	ug/L	ND	5.0	04/08/19 11:40	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	04/08/19 11:40	
1,3-Dichlorobenzene	ug/L	ND	5.0	04/08/19 11:40	
1,3-Dichloropropane	ug/L	ND	5.0	04/08/19 11:40	
1,4-Dichlorobenzene	ug/L	ND	5.0	04/08/19 11:40	
1-Methylnaphthalene	ug/L	ND	10.0	04/08/19 11:40	N2
2,2-Dichloropropane	ug/L	ND	5.0	04/08/19 11:40	
2-Butanone (MEK)	ug/L	ND	25.0	04/08/19 11:40	
2-Chlorotoluene	ug/L	ND	5.0	04/08/19 11:40	
2-Hexanone	ug/L	ND	25.0	04/08/19 11:40	
2-Methylnaphthalene	ug/L	ND	10.0	04/08/19 11:40	
4-Chlorotoluene	ug/L	ND	5.0	04/08/19 11:40	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	04/08/19 11:40	
Acetone	ug/L	ND	100	04/08/19 11:40	
Acrolein	ug/L	ND	50.0	04/08/19 11:40	
Acrylonitrile	ug/L	ND	100	04/08/19 11:40	
Benzene	ug/L	ND	5.0	04/08/19 11:40	
Bromobenzene	ug/L	ND	5.0	04/08/19 11:40	
Bromochloromethane	ug/L	ND	5.0	04/08/19 11:40	
Bromodichloromethane	ug/L	ND	5.0	04/08/19 11:40	
Bromoform	ug/L	ND	5.0	04/08/19 11:40	
Bromomethane	ug/L	ND	5.0	04/08/19 11:40	
Carbon disulfide	ug/L	ND	10.0	04/08/19 11:40	
Carbon tetrachloride	ug/L	ND	5.0	04/08/19 11:40	
Chlorobenzene	ug/L	ND	5.0	04/08/19 11:40	
Chloroethane	ug/L	ND	5.0	04/08/19 11:40	
Chloroform	ug/L	ND	5.0	04/08/19 11:40	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

METHOD BLANK: 2277317 Matrix: Water
Associated Lab Samples: 50220614005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	04/08/19 11:40	
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/08/19 11:40	
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/08/19 11:40	
Dibromochloromethane	ug/L	ND	5.0	04/08/19 11:40	
Dibromomethane	ug/L	ND	5.0	04/08/19 11:40	
Dichlorodifluoromethane	ug/L	ND	5.0	04/08/19 11:40	
Ethyl methacrylate	ug/L	ND	100	04/08/19 11:40	
Ethylbenzene	ug/L	ND	5.0	04/08/19 11:40	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/08/19 11:40	
Iodomethane	ug/L	ND	10.0	04/08/19 11:40	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	04/08/19 11:40	
Methyl-tert-butyl ether	ug/L	ND	4.0	04/08/19 11:40	
Methylene Chloride	ug/L	ND	5.0	04/08/19 11:40	
n-Butylbenzene	ug/L	ND	5.0	04/08/19 11:40	
n-Hexane	ug/L	ND	5.0	04/08/19 11:40	
n-Propylbenzene	ug/L	ND	5.0	04/08/19 11:40	
Naphthalene	ug/L	ND	1.7	04/08/19 11:40	
p-Isopropyltoluene	ug/L	ND	5.0	04/08/19 11:40	
sec-Butylbenzene	ug/L	ND	5.0	04/08/19 11:40	
Styrene	ug/L	ND	5.0	04/08/19 11:40	
tert-Butylbenzene	ug/L	ND	5.0	04/08/19 11:40	
Tetrachloroethene	ug/L	ND	5.0	04/08/19 11:40	
Toluene	ug/L	ND	5.0	04/08/19 11:40	
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/08/19 11:40	
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/08/19 11:40	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	04/08/19 11:40	
Trichloroethene	ug/L	ND	5.0	04/08/19 11:40	
Trichlorofluoromethane	ug/L	ND	5.0	04/08/19 11:40	
Vinyl acetate	ug/L	ND	50.0	04/08/19 11:40	
Vinyl chloride	ug/L	ND	2.0	04/08/19 11:40	
Xylene (Total)	ug/L	ND	10.0	04/08/19 11:40	
4-Bromofluorobenzene (S)	%.	97	85-114	04/08/19 11:40	
Dibromofluoromethane (S)	%.	105	80-122	04/08/19 11:40	
Toluene-d8 (S)	%.	98	85-114	04/08/19 11:40	

LABORATORY CONTROL SAMPLE: 2277318

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.1	100	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	47.3	95	70-124	
1,1-Dichloroethene	ug/L	50	50.8	102	71-126	
1,2,4-Trimethylbenzene	ug/L	50	45.3	91	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	49.4	99	81-119	
1,2-Dichloroethane	ug/L	50	46.5	93	68-119	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

LABORATORY CONTROL SAMPLE: 2277318

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	ug/L	50	51.8	104	79-126	
Benzene	ug/L	50	48.6	97	78-117	
Chlorobenzene	ug/L	50	48.0	96	79-113	
Chloroform	ug/L	50	46.5	93	73-118	
cis-1,2-Dichloroethene	ug/L	50	50.0	100	74-122	
Ethylbenzene	ug/L	50	48.6	97	80-118	
Isopropylbenzene (Cumene)	ug/L	50	48.1	96	82-120	
Methyl-tert-butyl ether	ug/L	50	50.1	100	72-128	
Naphthalene	ug/L	50	45.9	92	71-121	
Tetrachloroethene	ug/L	50	49.1	98	76-124	
Toluene	ug/L	50	47.9	96	78-116	
trans-1,2-Dichloroethene	ug/L	50	51.7	103	73-121	
Trichloroethene	ug/L	50	49.8	100	76-120	
Vinyl chloride	ug/L	50	45.0	90	70-136	
Xylene (Total)	ug/L	150	146	97	79-119	
4-Bromofluorobenzene (S)	%.			98	85-114	
Dibromofluoromethane (S)	%.			96	80-122	
Toluene-d8 (S)	%.			100	85-114	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

QC Batch: 493522 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50220614007, 50220614009, 50220614010

METHOD BLANK: 2277379 | Matrix: Water
Associated Lab Samples: 50220614007, 50220614009, 50220614010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	04/08/19 23:30	
1,1,1-Trichloroethane	ug/L	ND	5.0	04/08/19 23:30	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/08/19 23:30	
1,1,2-Trichloroethane	ug/L	ND	5.0	04/08/19 23:30	
1,1-Dichloroethane	ug/L	ND	5.0	04/08/19 23:30	
1,1-Dichloroethene	ug/L	ND	5.0	04/08/19 23:30	
1,1-Dichloropropene	ug/L	ND	5.0	04/08/19 23:30	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	04/08/19 23:30	
1,2,3-Trichloropropane	ug/L	ND	5.0	04/08/19 23:30	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	04/08/19 23:30	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	04/08/19 23:30	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	04/08/19 23:30	
1,2-Dichlorobenzene	ug/L	ND	5.0	04/08/19 23:30	
1,2-Dichloroethane	ug/L	ND	5.0	04/08/19 23:30	
1,2-Dichloropropane	ug/L	ND	5.0	04/08/19 23:30	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	04/08/19 23:30	
1,3-Dichlorobenzene	ug/L	ND	5.0	04/08/19 23:30	
1,3-Dichloropropane	ug/L	ND	5.0	04/08/19 23:30	
1,4-Dichlorobenzene	ug/L	ND	5.0	04/08/19 23:30	
1-Methylnaphthalene	ug/L	ND	10.0	04/08/19 23:30	N2
2,2-Dichloropropane	ug/L	ND	5.0	04/08/19 23:30	
2-Butanone (MEK)	ug/L	ND	25.0	04/08/19 23:30	
2-Chlorotoluene	ug/L	ND	5.0	04/08/19 23:30	
2-Hexanone	ug/L	ND	25.0	04/08/19 23:30	
2-Methylnaphthalene	ug/L	ND	10.0	04/08/19 23:30	
4-Chlorotoluene	ug/L	ND	5.0	04/08/19 23:30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	04/08/19 23:30	
Acetone	ug/L	ND	100	04/08/19 23:30	
Acrolein	ug/L	ND	50.0	04/08/19 23:30	
Acrylonitrile	ug/L	ND	100	04/08/19 23:30	
Benzene	ug/L	ND	5.0	04/08/19 23:30	
Bromobenzene	ug/L	ND	5.0	04/08/19 23:30	
Bromochloromethane	ug/L	ND	5.0	04/08/19 23:30	
Bromodichloromethane	ug/L	ND	5.0	04/08/19 23:30	
Bromoform	ug/L	ND	5.0	04/08/19 23:30	
Bromomethane	ug/L	ND	5.0	04/08/19 23:30	
Carbon disulfide	ug/L	ND	10.0	04/08/19 23:30	
Carbon tetrachloride	ug/L	ND	5.0	04/08/19 23:30	
Chlorobenzene	ug/L	ND	5.0	04/08/19 23:30	
Chloroethane	ug/L	ND	5.0	04/08/19 23:30	
Chloroform	ug/L	ND	5.0	04/08/19 23:30	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

METHOD BLANK: 2277379 Matrix: Water
Associated Lab Samples: 50220614007, 50220614009, 50220614010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	04/08/19 23:30	
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/08/19 23:30	
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/08/19 23:30	
Dibromochloromethane	ug/L	ND	5.0	04/08/19 23:30	
Dibromomethane	ug/L	ND	5.0	04/08/19 23:30	
Dichlorodifluoromethane	ug/L	ND	5.0	04/08/19 23:30	
Ethyl methacrylate	ug/L	ND	100	04/08/19 23:30	
Ethylbenzene	ug/L	ND	5.0	04/08/19 23:30	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/08/19 23:30	
Iodomethane	ug/L	ND	10.0	04/08/19 23:30	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	04/08/19 23:30	
Methyl-tert-butyl ether	ug/L	ND	4.0	04/08/19 23:30	
Methylene Chloride	ug/L	5.2	5.0	04/08/19 23:30	
n-Butylbenzene	ug/L	ND	5.0	04/08/19 23:30	
n-Hexane	ug/L	ND	5.0	04/08/19 23:30	
n-Propylbenzene	ug/L	ND	5.0	04/08/19 23:30	
Naphthalene	ug/L	ND	1.7	04/08/19 23:30	
p-Isopropyltoluene	ug/L	ND	5.0	04/08/19 23:30	
sec-Butylbenzene	ug/L	ND	5.0	04/08/19 23:30	
Styrene	ug/L	ND	5.0	04/08/19 23:30	
tert-Butylbenzene	ug/L	ND	5.0	04/08/19 23:30	
Tetrachloroethene	ug/L	ND	5.0	04/08/19 23:30	
Toluene	ug/L	ND	5.0	04/08/19 23:30	
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/08/19 23:30	
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/08/19 23:30	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	04/08/19 23:30	
Trichloroethene	ug/L	ND	5.0	04/08/19 23:30	
Trichlorofluoromethane	ug/L	ND	5.0	04/08/19 23:30	
Vinyl acetate	ug/L	ND	50.0	04/08/19 23:30	
Vinyl chloride	ug/L	ND	2.0	04/08/19 23:30	
Xylene (Total)	ug/L	ND	10.0	04/08/19 23:30	
4-Bromofluorobenzene (S)	%.	98	85-114	04/08/19 23:30	
Dibromofluoromethane (S)	%.	103	80-122	04/08/19 23:30	
Toluene-d8 (S)	%.	96	85-114	04/08/19 23:30	

LABORATORY CONTROL SAMPLE: 2277380

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	43.7	87	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	49.6	99	70-124	
1,1-Dichloroethene	ug/L	50	44.2	88	71-126	
1,2,4-Trimethylbenzene	ug/L	50	42.5	85	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	46.9	94	81-119	
1,2-Dichloroethane	ug/L	50	41.6	83	68-119	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

LABORATORY CONTROL SAMPLE: 2277380

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	ug/L	50	49.1	98	79-126	
Benzene	ug/L	50	45.1	90	78-117	
Chlorobenzene	ug/L	50	42.9	86	79-113	
Chloroform	ug/L	50	44.9	90	73-118	
cis-1,2-Dichloroethene	ug/L	50	46.0	92	74-122	
Ethylbenzene	ug/L	50	43.3	87	80-118	
Isopropylbenzene (Cumene)	ug/L	50	43.2	86	82-120	
Methyl-tert-butyl ether	ug/L	50	48.9	98	72-128	
Naphthalene	ug/L	50	45.6	91	71-121	
Tetrachloroethene	ug/L	50	40.3	81	76-124	
Toluene	ug/L	50	43.4	87	78-116	
trans-1,2-Dichloroethene	ug/L	50	46.7	93	73-121	
Trichloroethene	ug/L	50	46.8	94	76-120	
Vinyl chloride	ug/L	50	44.2	88	70-136	
Xylene (Total)	ug/L	150	130	87	79-119	
4-Bromofluorobenzene (S)	%.			99	85-114	
Dibromofluoromethane (S)	%.			96	80-122	
Toluene-d8 (S)	%.			99	85-114	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

QC Batch: 493721 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50220614013

METHOD BLANK: 2278087 | Matrix: Water
Associated Lab Samples: 50220614013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	04/09/19 13:16	
1,1,1-Trichloroethane	ug/L	ND	5.0	04/09/19 13:16	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/09/19 13:16	
1,1,2-Trichloroethane	ug/L	ND	5.0	04/09/19 13:16	
1,1-Dichloroethane	ug/L	ND	5.0	04/09/19 13:16	
1,1-Dichloroethene	ug/L	ND	5.0	04/09/19 13:16	
1,1-Dichloropropene	ug/L	ND	5.0	04/09/19 13:16	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	04/09/19 13:16	
1,2,3-Trichloropropane	ug/L	ND	5.0	04/09/19 13:16	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	04/09/19 13:16	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	04/09/19 13:16	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	04/09/19 13:16	
1,2-Dichlorobenzene	ug/L	ND	5.0	04/09/19 13:16	
1,2-Dichloroethane	ug/L	ND	5.0	04/09/19 13:16	
1,2-Dichloropropane	ug/L	ND	5.0	04/09/19 13:16	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	04/09/19 13:16	
1,3-Dichlorobenzene	ug/L	ND	5.0	04/09/19 13:16	
1,3-Dichloropropane	ug/L	ND	5.0	04/09/19 13:16	
1,4-Dichlorobenzene	ug/L	ND	5.0	04/09/19 13:16	
1-Methylnaphthalene	ug/L	ND	10.0	04/09/19 13:16	N2
2,2-Dichloropropane	ug/L	ND	5.0	04/09/19 13:16	
2-Butanone (MEK)	ug/L	ND	25.0	04/09/19 13:16	
2-Chlorotoluene	ug/L	ND	5.0	04/09/19 13:16	
2-Hexanone	ug/L	ND	25.0	04/09/19 13:16	
2-Methylnaphthalene	ug/L	ND	10.0	04/09/19 13:16	
4-Chlorotoluene	ug/L	ND	5.0	04/09/19 13:16	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	04/09/19 13:16	
Acetone	ug/L	ND	100	04/09/19 13:16	
Acrolein	ug/L	ND	50.0	04/09/19 13:16	
Acrylonitrile	ug/L	ND	100	04/09/19 13:16	
Benzene	ug/L	ND	5.0	04/09/19 13:16	
Bromobenzene	ug/L	ND	5.0	04/09/19 13:16	
Bromochloromethane	ug/L	ND	5.0	04/09/19 13:16	
Bromodichloromethane	ug/L	ND	5.0	04/09/19 13:16	
Bromoform	ug/L	ND	5.0	04/09/19 13:16	
Bromomethane	ug/L	ND	5.0	04/09/19 13:16	
Carbon disulfide	ug/L	ND	10.0	04/09/19 13:16	
Carbon tetrachloride	ug/L	ND	5.0	04/09/19 13:16	
Chlorobenzene	ug/L	ND	5.0	04/09/19 13:16	
Chloroethane	ug/L	ND	5.0	04/09/19 13:16	
Chloroform	ug/L	ND	5.0	04/09/19 13:16	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

METHOD BLANK: 2278087 Matrix: Water
Associated Lab Samples: 50220614013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	04/09/19 13:16	
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/09/19 13:16	
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/09/19 13:16	
Dibromochloromethane	ug/L	ND	5.0	04/09/19 13:16	
Dibromomethane	ug/L	ND	5.0	04/09/19 13:16	
Dichlorodifluoromethane	ug/L	ND	5.0	04/09/19 13:16	
Ethyl methacrylate	ug/L	ND	100	04/09/19 13:16	
Ethylbenzene	ug/L	ND	5.0	04/09/19 13:16	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/09/19 13:16	
Iodomethane	ug/L	ND	10.0	04/09/19 13:16	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	04/09/19 13:16	
Methyl-tert-butyl ether	ug/L	ND	4.0	04/09/19 13:16	
Methylene Chloride	ug/L	ND	5.0	04/09/19 13:16	
n-Butylbenzene	ug/L	ND	5.0	04/09/19 13:16	
n-Hexane	ug/L	ND	5.0	04/09/19 13:16	
n-Propylbenzene	ug/L	ND	5.0	04/09/19 13:16	
Naphthalene	ug/L	ND	1.7	04/09/19 13:16	
p-Isopropyltoluene	ug/L	ND	5.0	04/09/19 13:16	
sec-Butylbenzene	ug/L	ND	5.0	04/09/19 13:16	
Styrene	ug/L	ND	5.0	04/09/19 13:16	
tert-Butylbenzene	ug/L	ND	5.0	04/09/19 13:16	
Tetrachloroethene	ug/L	ND	5.0	04/09/19 13:16	
Toluene	ug/L	ND	5.0	04/09/19 13:16	
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/09/19 13:16	
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/09/19 13:16	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	04/09/19 13:16	
Trichloroethene	ug/L	ND	5.0	04/09/19 13:16	
Trichlorofluoromethane	ug/L	ND	5.0	04/09/19 13:16	
Vinyl acetate	ug/L	ND	50.0	04/09/19 13:16	
Vinyl chloride	ug/L	ND	2.0	04/09/19 13:16	
Xylene (Total)	ug/L	ND	10.0	04/09/19 13:16	
4-Bromofluorobenzene (S)	%.	95	85-114	04/09/19 13:16	
Dibromofluoromethane (S)	%.	103	80-122	04/09/19 13:16	
Toluene-d8 (S)	%.	99	85-114	04/09/19 13:16	

LABORATORY CONTROL SAMPLE: 2278088

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	46.7	93	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	47.6	95	70-124	
1,1-Dichloroethene	ug/L	50	47.1	94	71-126	
1,2,4-Trimethylbenzene	ug/L	50	46.0	92	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	49.6	99	81-119	
1,2-Dichloroethane	ug/L	50	42.4	85	68-119	

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

LABORATORY CONTROL SAMPLE: 2278088

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	ug/L	50	48.2	96	79-126	
Benzene	ug/L	50	45.4	91	78-117	
Chlorobenzene	ug/L	50	47.1	94	79-113	
Chloroform	ug/L	50	43.4	87	73-118	
cis-1,2-Dichloroethene	ug/L	50	46.8	94	74-122	
Ethylbenzene	ug/L	50	48.1	96	80-118	
Isopropylbenzene (Cumene)	ug/L	50	48.1	96	82-120	
Methyl-tert-butyl ether	ug/L	50	46.9	94	72-128	
Naphthalene	ug/L	50	46.6	93	71-121	
Tetrachloroethene	ug/L	50	50.6	101	76-124	
Toluene	ug/L	50	47.5	95	78-116	
trans-1,2-Dichloroethene	ug/L	50	49.6	99	73-121	
Trichloroethene	ug/L	50	48.3	97	76-120	
Vinyl chloride	ug/L	50	40.4	81	70-136	
Xylene (Total)	ug/L	150	145	97	79-119	
4-Bromofluorobenzene (S)	%.			95	85-114	
Dibromofluoromethane (S)	%.			92	80-122	
Toluene-d8 (S)	%.			100	85-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2278089 2278090

Parameter	Units	50220614013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	47.6	48.0	95	96	48-145	1	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	54.1	56.4	108	113	44-139	4	20	
1,1-Dichloroethene	ug/L	ND	50	50	47.4	48.0	95	96	46-148	1	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	45.7	44.6	91	89	39-140	3	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	53.6	54.0	107	108	47-143	1	20	
1,2-Dichloroethane	ug/L	ND	50	50	44.8	47.0	90	94	44-138	5	20	
1,2-Dichloropropane	ug/L	ND	50	50	51.6	54.4	103	109	53-142	5	20	
Benzene	ug/L	ND	50	50	46.6	48.5	93	97	49-140	4	20	
Chlorobenzene	ug/L	ND	50	50	47.5	46.6	95	93	47-135	2	20	
Chloroform	ug/L	ND	50	50	44.8	46.5	90	93	49-136	4	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	48.1	48.6	96	97	46-143	1	20	
Ethylbenzene	ug/L	ND	50	50	49.4	48.1	99	96	44-145	3	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	48.0	47.4	96	95	43-148	1	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	49.8	51.7	100	103	38-158	4	20	
Naphthalene	ug/L	ND	50	50	47.6	48.7	95	97	40-137	2	20	
Tetrachloroethene	ug/L	ND	50	50	48.6	47.2	97	94	41-145	3	20	
Toluene	ug/L	ND	50	50	48.7	48.6	97	97	48-139	0	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	49.9	50.4	100	101	46-140	1	20	
Trichloroethene	ug/L	ND	50	50	47.4	48.9	95	98	43-147	3	20	
Vinyl chloride	ug/L	ND	50	50	41.1	43.9	82	88	49-153	7	20	
Xylene (Total)	ug/L	ND	150	150	146	143	97	95	44-147	2	20	
4-Bromofluorobenzene (S)	%.						96	99	85-114			

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REPORT OF LABORATORY ANALYSIS

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Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2278089 2278090

Parameter	Units	50220614013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						92	94	80-122			
Toluene-d8 (S)	%.						101	101	85-114			

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

QC Batch: 493767 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50220614011, 50220614012, 50220614014, 50220614017, 50220614018, 50220614019, 50220614020

METHOD BLANK: 2278225 | Matrix: Water
Associated Lab Samples: 50220614011, 50220614012, 50220614014, 50220614017, 50220614018, 50220614019, 50220614020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	04/10/19 00:32	
1,1,1-Trichloroethane	ug/L	ND	5.0	04/10/19 00:32	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/10/19 00:32	
1,1,2-Trichloroethane	ug/L	ND	5.0	04/10/19 00:32	
1,1-Dichloroethane	ug/L	ND	5.0	04/10/19 00:32	
1,1-Dichloroethene	ug/L	ND	5.0	04/10/19 00:32	
1,1-Dichloropropene	ug/L	ND	5.0	04/10/19 00:32	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	04/10/19 00:32	
1,2,3-Trichloropropane	ug/L	ND	5.0	04/10/19 00:32	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	04/10/19 00:32	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	04/10/19 00:32	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	04/10/19 00:32	
1,2-Dichlorobenzene	ug/L	ND	5.0	04/10/19 00:32	
1,2-Dichloroethane	ug/L	ND	5.0	04/10/19 00:32	
1,2-Dichloropropane	ug/L	ND	5.0	04/10/19 00:32	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	04/10/19 00:32	
1,3-Dichlorobenzene	ug/L	ND	5.0	04/10/19 00:32	
1,3-Dichloropropane	ug/L	ND	5.0	04/10/19 00:32	
1,4-Dichlorobenzene	ug/L	ND	5.0	04/10/19 00:32	
1-Methylnaphthalene	ug/L	ND	10.0	04/10/19 00:32	N2
2,2-Dichloropropane	ug/L	ND	5.0	04/10/19 00:32	
2-Butanone (MEK)	ug/L	ND	25.0	04/10/19 00:32	
2-Chlorotoluene	ug/L	ND	5.0	04/10/19 00:32	
2-Hexanone	ug/L	ND	25.0	04/10/19 00:32	
2-Methylnaphthalene	ug/L	ND	10.0	04/10/19 00:32	
4-Chlorotoluene	ug/L	ND	5.0	04/10/19 00:32	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	04/10/19 00:32	
Acetone	ug/L	ND	100	04/10/19 00:32	
Acrolein	ug/L	ND	50.0	04/10/19 00:32	
Acrylonitrile	ug/L	ND	100	04/10/19 00:32	
Benzene	ug/L	ND	5.0	04/10/19 00:32	
Bromobenzene	ug/L	ND	5.0	04/10/19 00:32	
Bromochloromethane	ug/L	ND	5.0	04/10/19 00:32	
Bromodichloromethane	ug/L	ND	5.0	04/10/19 00:32	
Bromoform	ug/L	ND	5.0	04/10/19 00:32	
Bromomethane	ug/L	ND	5.0	04/10/19 00:32	
Carbon disulfide	ug/L	ND	10.0	04/10/19 00:32	
Carbon tetrachloride	ug/L	ND	5.0	04/10/19 00:32	
Chlorobenzene	ug/L	ND	5.0	04/10/19 00:32	
Chloroethane	ug/L	ND	5.0	04/10/19 00:32	
Chloroform	ug/L	ND	5.0	04/10/19 00:32	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

METHOD BLANK: 2278225 Matrix: Water
Associated Lab Samples: 50220614011, 50220614012, 50220614014, 50220614017, 50220614018, 50220614019, 50220614020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	04/10/19 00:32	
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/10/19 00:32	
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/10/19 00:32	
Dibromochloromethane	ug/L	ND	5.0	04/10/19 00:32	
Dibromomethane	ug/L	ND	5.0	04/10/19 00:32	
Dichlorodifluoromethane	ug/L	ND	5.0	04/10/19 00:32	
Ethyl methacrylate	ug/L	ND	100	04/10/19 00:32	
Ethylbenzene	ug/L	ND	5.0	04/10/19 00:32	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/10/19 00:32	
Iodomethane	ug/L	ND	10.0	04/10/19 00:32	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	04/10/19 00:32	
Methyl-tert-butyl ether	ug/L	ND	4.0	04/10/19 00:32	
Methylene Chloride	ug/L	ND	5.0	04/10/19 00:32	
n-Butylbenzene	ug/L	ND	5.0	04/10/19 00:32	
n-Hexane	ug/L	ND	5.0	04/10/19 00:32	
n-Propylbenzene	ug/L	ND	5.0	04/10/19 00:32	
Naphthalene	ug/L	ND	1.7	04/10/19 00:32	
p-Isopropyltoluene	ug/L	ND	5.0	04/10/19 00:32	
sec-Butylbenzene	ug/L	ND	5.0	04/10/19 00:32	
Styrene	ug/L	ND	5.0	04/10/19 00:32	
tert-Butylbenzene	ug/L	ND	5.0	04/10/19 00:32	
Tetrachloroethene	ug/L	ND	5.0	04/10/19 00:32	
Toluene	ug/L	ND	5.0	04/10/19 00:32	
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/10/19 00:32	
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/10/19 00:32	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	04/10/19 00:32	
Trichloroethene	ug/L	ND	5.0	04/10/19 00:32	
Trichlorofluoromethane	ug/L	ND	5.0	04/10/19 00:32	
Vinyl acetate	ug/L	ND	50.0	04/10/19 00:32	
Vinyl chloride	ug/L	ND	2.0	04/10/19 00:32	
Xylene (Total)	ug/L	ND	10.0	04/10/19 00:32	
4-Bromofluorobenzene (S)	%.	95	85-114	04/10/19 00:32	
Dibromofluoromethane (S)	%.	100	80-122	04/10/19 00:32	
Toluene-d8 (S)	%.	98	85-114	04/10/19 00:32	

LABORATORY CONTROL SAMPLE: 2278226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	39.5	79	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	51.7	103	70-124	
1,1-Dichloroethene	ug/L	50	41.2	82	71-126	
1,2,4-Trimethylbenzene	ug/L	50	43.5	87	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	46.1	92	81-119	
1,2-Dichloroethane	ug/L	50	39.8	80	68-119	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

LABORATORY CONTROL SAMPLE: 2278226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	ug/L	50	46.9	94	79-126	
Benzene	ug/L	50	42.4	85	78-117	
Chlorobenzene	ug/L	50	42.4	85	79-113	
Chloroform	ug/L	50	42.5	85	73-118	
cis-1,2-Dichloroethene	ug/L	50	42.7	85	74-122	
Ethylbenzene	ug/L	50	41.4	83	80-118	
Isopropylbenzene (Cumene)	ug/L	50	42.7	85	82-120	
Methyl-tert-butyl ether	ug/L	50	47.6	95	72-128	
Naphthalene	ug/L	50	47.1	94	71-121	
Tetrachloroethene	ug/L	50	39.9	80	76-124	
Toluene	ug/L	50	42.8	86	78-116	
trans-1,2-Dichloroethene	ug/L	50	42.4	85	73-121	
Trichloroethene	ug/L	50	43.4	87	76-120	
Vinyl chloride	ug/L	50	39.8	80	70-136	
Xylene (Total)	ug/L	150	127	85	79-119	
4-Bromofluorobenzene (S)	%.			99	85-114	
Dibromofluoromethane (S)	%.			93	80-122	
Toluene-d8 (S)	%.			102	85-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2278227 2278228

Parameter	Units	50220614014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	40.3	39.9	81	80	48-145	1	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	51.4	51.1	103	102	44-139	0	20	
1,1-Dichloroethene	ug/L	ND	50	50	41.6	40.6	83	81	46-148	3	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	43.1	42.5	86	85	39-140	1	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	47.2	46.3	94	93	47-143	2	20	
1,2-Dichloroethane	ug/L	ND	50	50	41.5	39.5	83	79	44-138	5	20	
1,2-Dichloropropane	ug/L	ND	50	50	49.6	47.4	99	95	53-142	5	20	
Benzene	ug/L	ND	50	50	42.8	43.0	86	86	49-140	0	20	
Chlorobenzene	ug/L	ND	50	50	42.8	42.9	86	86	47-135	0	20	
Chloroform	ug/L	ND	50	50	42.8	43.3	86	87	49-136	1	20	
cis-1,2-Dichloroethene	ug/L	943	50	50	754	749	-378	-388	46-143	1	20	M1
Ethylbenzene	ug/L	ND	50	50	42.8	42.7	86	85	44-145	0	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	43.0	42.6	86	85	43-148	1	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	48.3	48.1	97	96	38-158	0	20	
Naphthalene	ug/L	ND	50	50	43.8	45.3	88	91	40-137	3	20	
Tetrachloroethene	ug/L	ND	50	50	40.1	41.1	80	82	41-145	2	20	
Toluene	ug/L	ND	50	50	43.3	43.1	87	86	48-139	0	20	
trans-1,2-Dichloroethene	ug/L	46.0	50	50	84.1	82.4	76	73	46-140	2	20	
Trichloroethene	ug/L	ND	50	50	43.6	43.3	87	87	43-147	1	20	
Vinyl chloride	ug/L	ND	50	50	40.7	40.2	80	79	49-153	1	20	
Xylene (Total)	ug/L	ND	150	150	130	129	87	86	44-147	1	20	
4-Bromofluorobenzene (S)	%.						98	98	85-114			

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REPORT OF LABORATORY ANALYSIS

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220614

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2278227 2278228

Parameter	Units	50220614014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						93	94	80-122			
Toluene-d8 (S)	%.						103	100	85-114			

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REPORT OF LABORATORY ANALYSIS

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(317)228-3100

QUALIFIERS

Project: Houghland FSI #3
Pace Project No.: 50220614

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
C9	Common Laboratory Contaminant.
H7	Re-extraction or re-analysis could not be performed within method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland FSI #3
Pace Project No.: 50220614

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50220614001	**TMW-1**	EPA 5030/8260	493241		
50220614002	**TMW-1D**	EPA 5030/8260	493241		
50220614003	**TMW-2**	EPA 5030/8260	493245		
50220614004	**TMW-2D**	EPA 5030/8260	493245		
50220614005	**TMW-3**	EPA 5030/8260	493507		
50220614006	**TMW-3D**	EPA 5030/8260	493245		
50220614007	**TMW-4**	EPA 5030/8260	493522		
50220614008	**TMW-4D**	EPA 5030/8260	493487		
50220614009	**TMW-5**	EPA 5030/8260	493522		
50220614010	**TMW-5D**	EPA 5030/8260	493522		
50220614011	**TMW-6**	EPA 5030/8260	493767		
50220614012	**TMW-6D**	EPA 5030/8260	493767		
50220614013	**TMW-7**	EPA 5030/8260	493721		
50220614014	**TMW-7D**	EPA 5030/8260	493767		
50220614015	**Dup-A**	EPA 5030/8260	493487		
50220614016	**Trip Blank**	EPA 5030/8260	493241		
50220614017	**MW-29**	EPA 5030/8260	493767		
50220614018	**MW-29D**	EPA 5030/8260	493767		
50220614019	**MW-22**	EPA 5030/8260	493767		
50220614020	**MW-22D**	EPA 5030/8260	493767		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

Section A Required Client Information:

Company: Patriot Engg. & Env.
Address: 6150 E 75th ST Indianapolis IN 46250
Email To: jcody@patrioteng.com
Phone: 317-558-5064 Fax: —
Requested Due Date/TAT: Normal Turn

Section B Required Project Information:

Report To: James Cody
Copy To: mike Caspes
Purchase Order No.:
Project Name: Houghland FSI #3
Project Number: 19-0096-01E

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER ____

Site Location STATE: IN

Requested Analysis Filtered (Y/N)

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	VOC's 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 50220614
1	Tmw-1	GW	G			3-25-19	15:20		3				X						X		001
2	Tmw-1D					"	16:15														002
3	Tmw-2					3-26-19	9:40														003
4	Tmw-2D					"	10:20														004
5	Tmw-3					"	11:15														005
6	Tmw-3D					"	12:00														006
7	Tmw-4					"	13:25														007
8	Tmw-4D					"	14:10														008
9	Tmw-5					"	15:00														009
10	Tmw-5D					"	15:55														010
11	Tmw-6					3-27-19	8:30														011
12	Tmw-6D					"	9:15														012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Absolute Pricing	VSShah / Patriot	3-27-19	15:30	[signature]	3/27/19	1530	0.8	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: VISHAL SHAH

SIGNATURE of SAMPLER: VSShah

DATE Signed (MM/DD/YY): 03-27-2019

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.08, 12-Oct-2007

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: Patriot Engg. & Env.
Address: 6150 E 75th ST Indianapolis IN 46250
Email To: jcody@patrioteng.com
Phone: 317-558-5064 Fax: —
Requested Due Date/TAT: Normal Turn

Section B Required Project Information:

Report To: James Cody
Copy To: Mike Casper
Purchase Order No.:
Project Name: Houghland FSI # 3
Project Number: 19-0096-01E

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER ____

Site Location STATE: IN

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): VOCs 8260 (Y/N); MS/MSD-A (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: VOCs 8260	Analysis Test: MS/MSD-A	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Tmw-7	GW	G			3-27-19	10:15		3				X					X	X		013
2	Tmw-7D					"	11:00		3												014
3	DUP-A					3-26-19	—														015
4	Trip Blank					—	—														016
5	mw-29					3-27-19	12:15														017
6	mw-29D					"	13:00														018
7	mw-22					"	13:45														019
8	mw-22D					"	14:30														020
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Absolute Pricing	VS Shah / Patriot	3-27-19	15:30	[signature]	3/27/19	1530	0.8	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: VISHAL SHAH

SIGNATURE of SAMPLER: VS Shah

DATE Signed (MM/DD/YY): 03-27-2019

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50220614

Date/Time and Initials of person examining contents: LWG 1635 3/27/19

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer: 1 2 3 4 5 6 A B C D E F **Ice Type:** ☑ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☐ Yes ☐ No ☑ N/A

Cooler Temperature: 0.2/0.2 Ice Visible in Sample Containers?: ☐ Yes ☑ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☑ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		✓	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			✓
USDA Regulated Soils? (ID, NY, WA, OR, CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓				
Chain of Custody Present:	✓					
Chain of Custody Filled Out:	✓		Dissolved Metals field filtered?:			✓
Short Hold Time Analysis (<72hr)?: Analysis:		✓	Headspace Wisconsin Sulfide			✓
Time 5035A TC placed in Freezer or Short Holds To Lab:				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Rush TAT Requested:		✓	Headspace in VOA Vials (>6mm):	✓		
Containers Intact?:	✓		Trip Blank Present?:	✓		
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Custody Seals?:			

Comments: H.S >6mm TMW-1D Y3 - LWG 3/27/19

Sample Container Count

CLIENT: Patriot ENS

COC PAGE 1 of 2

COC ID#

Project # 50220614

Sample Line Item	DG9H VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	Bulk SBS Di Kit R				Matrix SI/Wt/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1	3																				WT			
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Sample Container Count

WO# : 50220614

50220614

CLIENT: Patriot ENG

COC PAGE 2 of 2

COC ID# _____

Project # 50220614

Sample Line Item	DG9H VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	SDS Bulk Kit R				Matrix SI/ (Soil/Wat Aqueous	pH <2	pH >9	pH>12
1	9																				WT			
2	3																							
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

April 12, 2019

Mr. James Cody
Patriot Engineering
6150 E 75th St
Indianapolis, IN 46250

RE: Project: Houghland FSI #3
Pace Project No.: 50220912

Dear Mr. Cody:
Enclosed are the analytical results for sample(s) received by the laboratory on March 30, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Mr. Mike Casper, Patriot Engineering

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project:	Houghland FSI #3
Pace Project No.:	50220912

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #: E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #: 98019
Michigan Department of Environmental Quality, Laboratory #9050
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: Houghland FSI #3
Pace Project No.: 50220912

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50220912001	**MW-33**	Water	03/28/19 11:00	03/30/19 12:05
50220912002	**MW-33D**	Water	03/28/19 12:00	03/30/19 12:05
50220912003	**MW-26**	Water	03/28/19 13:00	03/30/19 12:05
50220912004	**MW-32**	Water	03/28/19 14:00	03/30/19 12:05
50220912005	**MW-11**	Water	03/29/19 10:15	03/30/19 12:05
50220912006	**MW-11D**	Water	03/29/19 11:00	03/30/19 12:05
50220912007	**MW-30**	Water	03/29/19 12:00	03/30/19 12:05
50220912008	**MW-31**	Water	03/29/19 13:30	03/30/19 12:05
50220912009	**MW-12**	Water	03/29/19 14:40	03/30/19 12:05
50220912010	**MW-12D**	Water	03/29/19 15:30	03/30/19 12:05
50220912011	**Dup-B**	Water	03/29/19 08:00	03/30/19 12:05
50220912012	**Trip Blank**	Water	03/29/19 08:00	03/30/19 12:05

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: Houghland FSI #3
Pace Project No.: 50220912

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50220912001	**MW-33**	EPA 5030/8260	LKC	75
50220912002	**MW-33D**	EPA 5030/8260	LKC	75
50220912003	**MW-26**	EPA 5030/8260	LKC	75
50220912004	**MW-32**	EPA 5030/8260	LKC	75
50220912005	**MW-11**	EPA 5030/8260	LKC	75
50220912006	**MW-11D**	EPA 5030/8260	LKC	75
50220912007	**MW-30**	EPA 5030/8260	LKC	75
50220912008	**MW-31**	EPA 5030/8260	LKC	75
50220912009	**MW-12**	EPA 5030/8260	LKC	75
50220912010	**MW-12D**	EPA 5030/8260	LKC	75
50220912011	**Dup-B**	EPA 5030/8260	LKC	75
50220912012	**Trip Blank**	EPA 5030/8260	LKC	75

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Houghland FSI #3
Pace Project No.: 50220912

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50220912001	**MW-33**					
EPA 5030/8260	Tetrachloroethene	7.8	ug/L	5.0	04/10/19 19:11	M5
EPA 5030/8260	Trichloroethene	29.3	ug/L	5.0	04/10/19 19:11	M5
50220912002	**MW-33D**					
EPA 5030/8260	Tetrachloroethene	17.1	ug/L	5.0	04/10/19 19:45	M5
EPA 5030/8260	Trichloroethene	59.9	ug/L	5.0	04/10/19 19:45	M5
50220912003	**MW-26**					
EPA 5030/8260	Tetrachloroethene	15.6	ug/L	5.0	04/10/19 20:19	M5
EPA 5030/8260	Trichloroethene	31.0	ug/L	5.0	04/10/19 20:19	M5
50220912004	**MW-32**					
EPA 5030/8260	Tetrachloroethene	15.8	ug/L	5.0	04/10/19 20:53	M5
EPA 5030/8260	Trichloroethene	29.5	ug/L	5.0	04/10/19 20:53	M5
50220912005	**MW-11**					
EPA 5030/8260	Tetrachloroethene	45.3	ug/L	5.0	04/10/19 21:27	M5
EPA 5030/8260	Trichloroethene	31.5	ug/L	5.0	04/10/19 21:27	M5
50220912008	**MW-31**					
EPA 5030/8260	Tetrachloroethene	444	ug/L	25.0	04/11/19 18:26	M5
EPA 5030/8260	Trichloroethene	159	ug/L	5.0	04/10/19 23:08	M5
50220912009	**MW-12**					
EPA 5030/8260	Trichloroethene	29.9	ug/L	5.0	04/10/19 23:42	M5

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7726 Moller Road
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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-33 **Lab ID: 50220912001** Collected: 03/28/19 11:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 19:11	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/10/19 19:11	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/10/19 19:11	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/10/19 19:11	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/10/19 19:11	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 19:11	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 19:11	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/10/19 19:11	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/10/19 19:11	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 19:11	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 19:11	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 19:11	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 19:11	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 19:11	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 19:11	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 19:11	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/10/19 19:11	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/10/19 19:11	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/10/19 19:11	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 19:11	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 19:11	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 19:11	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 19:11	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/10/19 19:11	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 19:11	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 19:11	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 19:11	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 19:11	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 19:11	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 19:11	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 19:11	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 19:11	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 19:11	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 19:11	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 19:11	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 19:11	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 19:11	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 19:11	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 19:11	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 19:11	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 19:11	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 19:11	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 19:11	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/10/19 19:11	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/10/19 19:11	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/10/19 19:11	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 19:11	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-33 **Lab ID: 50220912001** Collected: 03/28/19 11:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 19:11	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 19:11	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 19:11	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 19:11	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 19:11	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 19:11	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/10/19 19:11	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 19:11	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/10/19 19:11	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 19:11	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 19:11	79-34-5	M5
Tetrachloroethene	**7.8**	ug/L	5.0	1		04/10/19 19:11	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/10/19 19:11	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 19:11	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 19:11	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 19:11	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 19:11	79-00-5	M5
Trichloroethene	**29.3**	ug/L	5.0	1		04/10/19 19:11	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 19:11	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 19:11	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 19:11	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 19:11	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 19:11	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 19:11	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 19:11	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/10/19 19:11	1868-53-7	M5
4-Bromofluorobenzene (S)	95	%.	85-114	1		04/10/19 19:11	460-00-4	M5
Toluene-d8 (S)	101	%.	85-114	1		04/10/19 19:11	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-33D **Lab ID: 50220912002** Collected: 03/28/19 12:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 19:45	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/10/19 19:45	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/10/19 19:45	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/10/19 19:45	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/10/19 19:45	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 19:45	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 19:45	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/10/19 19:45	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/10/19 19:45	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 19:45	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 19:45	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 19:45	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 19:45	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 19:45	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 19:45	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 19:45	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/10/19 19:45	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/10/19 19:45	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/10/19 19:45	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 19:45	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 19:45	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 19:45	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 19:45	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/10/19 19:45	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 19:45	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 19:45	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 19:45	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 19:45	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 19:45	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 19:45	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 19:45	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 19:45	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 19:45	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 19:45	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 19:45	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 19:45	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 19:45	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 19:45	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 19:45	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 19:45	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 19:45	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 19:45	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 19:45	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/10/19 19:45	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/10/19 19:45	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/10/19 19:45	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 19:45	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-33D **Lab ID: 50220912002** Collected: 03/28/19 12:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 19:45	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 19:45	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 19:45	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 19:45	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 19:45	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 19:45	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/10/19 19:45	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 19:45	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/10/19 19:45	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 19:45	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 19:45	79-34-5	M5
Tetrachloroethene	**17.1**	ug/L	5.0	1		04/10/19 19:45	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/10/19 19:45	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 19:45	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 19:45	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 19:45	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 19:45	79-00-5	M5
Trichloroethene	**59.9**	ug/L	5.0	1		04/10/19 19:45	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 19:45	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 19:45	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 19:45	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 19:45	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 19:45	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 19:45	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 19:45	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/10/19 19:45	1868-53-7	M5
4-Bromofluorobenzene (S)	95	%.	85-114	1		04/10/19 19:45	460-00-4	M5
Toluene-d8 (S)	99	%.	85-114	1		04/10/19 19:45	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-26 **Lab ID: 50220912003** Collected: 03/28/19 13:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 20:19	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/10/19 20:19	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/10/19 20:19	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/10/19 20:19	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/10/19 20:19	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 20:19	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 20:19	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/10/19 20:19	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/10/19 20:19	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 20:19	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 20:19	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 20:19	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 20:19	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 20:19	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 20:19	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 20:19	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/10/19 20:19	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/10/19 20:19	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/10/19 20:19	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 20:19	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 20:19	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 20:19	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 20:19	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/10/19 20:19	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 20:19	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 20:19	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 20:19	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 20:19	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 20:19	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 20:19	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 20:19	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 20:19	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 20:19	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 20:19	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 20:19	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 20:19	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 20:19	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 20:19	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 20:19	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 20:19	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 20:19	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 20:19	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 20:19	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/10/19 20:19	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/10/19 20:19	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/10/19 20:19	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 20:19	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-26 **Lab ID: 50220912003** Collected: 03/28/19 13:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 20:19	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 20:19	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 20:19	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 20:19	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 20:19	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 20:19	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/10/19 20:19	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 20:19	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/10/19 20:19	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 20:19	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 20:19	79-34-5	M5
Tetrachloroethene	**15.6**	ug/L	5.0	1		04/10/19 20:19	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/10/19 20:19	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 20:19	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 20:19	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 20:19	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 20:19	79-00-5	M5
Trichloroethene	**31.0**	ug/L	5.0	1		04/10/19 20:19	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 20:19	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 20:19	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 20:19	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 20:19	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 20:19	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 20:19	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 20:19	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	99	%.	80-122	1		04/10/19 20:19	1868-53-7	M5
4-Bromofluorobenzene (S)	97	%.	85-114	1		04/10/19 20:19	460-00-4	M5
Toluene-d8 (S)	101	%.	85-114	1		04/10/19 20:19	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-32 **Lab ID: 50220912004** Collected: 03/28/19 14:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 20:53	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/10/19 20:53	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/10/19 20:53	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/10/19 20:53	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/10/19 20:53	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 20:53	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 20:53	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/10/19 20:53	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/10/19 20:53	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 20:53	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 20:53	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 20:53	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 20:53	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 20:53	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 20:53	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 20:53	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/10/19 20:53	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/10/19 20:53	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/10/19 20:53	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 20:53	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 20:53	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 20:53	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 20:53	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/10/19 20:53	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 20:53	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 20:53	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 20:53	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 20:53	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 20:53	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 20:53	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 20:53	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 20:53	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 20:53	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 20:53	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 20:53	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 20:53	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 20:53	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 20:53	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 20:53	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 20:53	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 20:53	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 20:53	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 20:53	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/10/19 20:53	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/10/19 20:53	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/10/19 20:53	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 20:53	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-32 **Lab ID: 50220912004** Collected: 03/28/19 14:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 20:53	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 20:53	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 20:53	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 20:53	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 20:53	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 20:53	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/10/19 20:53	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 20:53	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/10/19 20:53	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 20:53	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 20:53	79-34-5	M5
Tetrachloroethene	**15.8**	ug/L	5.0	1		04/10/19 20:53	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/10/19 20:53	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 20:53	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 20:53	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 20:53	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 20:53	79-00-5	M5
Trichloroethene	**29.5**	ug/L	5.0	1		04/10/19 20:53	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 20:53	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 20:53	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 20:53	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 20:53	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 20:53	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 20:53	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 20:53	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	99	%.	80-122	1		04/10/19 20:53	1868-53-7	M5
4-Bromofluorobenzene (S)	96	%.	85-114	1		04/10/19 20:53	460-00-4	M5
Toluene-d8 (S)	101	%.	85-114	1		04/10/19 20:53	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-11 **Lab ID: 50220912005** Collected: 03/29/19 10:15 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 21:27	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/10/19 21:27	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/10/19 21:27	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/10/19 21:27	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/10/19 21:27	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 21:27	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 21:27	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/10/19 21:27	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/10/19 21:27	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 21:27	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 21:27	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 21:27	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 21:27	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 21:27	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 21:27	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 21:27	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/10/19 21:27	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/10/19 21:27	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/10/19 21:27	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 21:27	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 21:27	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 21:27	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 21:27	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/10/19 21:27	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 21:27	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 21:27	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 21:27	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 21:27	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 21:27	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 21:27	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 21:27	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 21:27	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 21:27	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 21:27	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 21:27	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 21:27	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 21:27	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 21:27	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 21:27	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 21:27	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 21:27	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 21:27	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 21:27	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/10/19 21:27	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/10/19 21:27	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/10/19 21:27	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 21:27	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-11 **Lab ID: 50220912005** Collected: 03/29/19 10:15 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 21:27	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 21:27	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 21:27	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 21:27	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 21:27	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 21:27	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/10/19 21:27	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 21:27	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/10/19 21:27	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 21:27	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 21:27	79-34-5	M5
Tetrachloroethene	**45.3**	ug/L	5.0	1		04/10/19 21:27	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/10/19 21:27	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 21:27	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 21:27	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 21:27	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 21:27	79-00-5	M5
Trichloroethene	**31.5**	ug/L	5.0	1		04/10/19 21:27	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 21:27	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 21:27	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 21:27	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 21:27	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 21:27	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 21:27	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 21:27	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/10/19 21:27	1868-53-7	M5
4-Bromofluorobenzene (S)	99	%.	85-114	1		04/10/19 21:27	460-00-4	M5
Toluene-d8 (S)	101	%.	85-114	1		04/10/19 21:27	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-11D **Lab ID: 50220912006** Collected: 03/29/19 11:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 22:01	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/10/19 22:01	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/10/19 22:01	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/10/19 22:01	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/10/19 22:01	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 22:01	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 22:01	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/10/19 22:01	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/10/19 22:01	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 22:01	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 22:01	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 22:01	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 22:01	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 22:01	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 22:01	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 22:01	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/10/19 22:01	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/10/19 22:01	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/10/19 22:01	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 22:01	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 22:01	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 22:01	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 22:01	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/10/19 22:01	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 22:01	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 22:01	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 22:01	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 22:01	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 22:01	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 22:01	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 22:01	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 22:01	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 22:01	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 22:01	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 22:01	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 22:01	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 22:01	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 22:01	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 22:01	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 22:01	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 22:01	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 22:01	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 22:01	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/10/19 22:01	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/10/19 22:01	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/10/19 22:01	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 22:01	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-11D **Lab ID: 50220912006** Collected: 03/29/19 11:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 22:01	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 22:01	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 22:01	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 22:01	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 22:01	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 22:01	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/10/19 22:01	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 22:01	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/10/19 22:01	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 22:01	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 22:01	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		04/10/19 22:01	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/10/19 22:01	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 22:01	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 22:01	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 22:01	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 22:01	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		04/10/19 22:01	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 22:01	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 22:01	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 22:01	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 22:01	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 22:01	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 22:01	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 22:01	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/10/19 22:01	1868-53-7	M5
4-Bromofluorobenzene (S)	96	%.	85-114	1		04/10/19 22:01	460-00-4	M5
Toluene-d8 (S)	101	%.	85-114	1		04/10/19 22:01	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-30 **Lab ID: 50220912007** Collected: 03/29/19 12:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 22:34	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/10/19 22:34	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/10/19 22:34	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/10/19 22:34	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/10/19 22:34	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 22:34	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 22:34	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/10/19 22:34	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/10/19 22:34	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 22:34	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 22:34	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 22:34	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 22:34	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 22:34	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 22:34	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 22:34	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/10/19 22:34	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/10/19 22:34	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/10/19 22:34	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 22:34	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 22:34	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 22:34	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 22:34	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/10/19 22:34	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 22:34	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 22:34	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 22:34	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 22:34	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 22:34	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 22:34	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 22:34	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 22:34	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 22:34	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 22:34	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 22:34	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 22:34	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 22:34	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 22:34	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 22:34	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 22:34	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 22:34	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 22:34	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 22:34	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/10/19 22:34	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/10/19 22:34	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/10/19 22:34	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 22:34	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-30 **Lab ID: 50220912007** Collected: 03/29/19 12:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 22:34	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 22:34	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 22:34	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 22:34	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 22:34	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 22:34	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/10/19 22:34	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 22:34	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/10/19 22:34	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 22:34	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 22:34	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		04/10/19 22:34	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/10/19 22:34	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 22:34	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 22:34	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 22:34	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 22:34	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		04/10/19 22:34	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 22:34	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 22:34	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 22:34	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 22:34	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 22:34	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 22:34	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 22:34	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/10/19 22:34	1868-53-7	M5
4-Bromofluorobenzene (S)	95	%.	85-114	1		04/10/19 22:34	460-00-4	M5
Toluene-d8 (S)	101	%.	85-114	1		04/10/19 22:34	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-31 **Lab ID: 50220912008** Collected: 03/29/19 13:30 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 23:08	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/10/19 23:08	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/10/19 23:08	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/10/19 23:08	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/10/19 23:08	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 23:08	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 23:08	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/10/19 23:08	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/10/19 23:08	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 23:08	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 23:08	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 23:08	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 23:08	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 23:08	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 23:08	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 23:08	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/10/19 23:08	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/10/19 23:08	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/10/19 23:08	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 23:08	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 23:08	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 23:08	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 23:08	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/10/19 23:08	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 23:08	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 23:08	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 23:08	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 23:08	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 23:08	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 23:08	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 23:08	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 23:08	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 23:08	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 23:08	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 23:08	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 23:08	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 23:08	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 23:08	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 23:08	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 23:08	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 23:08	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 23:08	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 23:08	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/10/19 23:08	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/10/19 23:08	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/10/19 23:08	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 23:08	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-31 **Lab ID: 50220912008** Collected: 03/29/19 13:30 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 23:08	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 23:08	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 23:08	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 23:08	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 23:08	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 23:08	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/10/19 23:08	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 23:08	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/10/19 23:08	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 23:08	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 23:08	79-34-5	M5
Tetrachloroethene	**444**	ug/L	25.0	5		04/11/19 18:26	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/10/19 23:08	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 23:08	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 23:08	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 23:08	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 23:08	79-00-5	M5
Trichloroethene	**159**	ug/L	5.0	1		04/10/19 23:08	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 23:08	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 23:08	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 23:08	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 23:08	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 23:08	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 23:08	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 23:08	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	96	%.	80-122	1		04/10/19 23:08	1868-53-7	M5
4-Bromofluorobenzene (S)	95	%.	85-114	1		04/10/19 23:08	460-00-4	M5
Toluene-d8 (S)	101	%.	85-114	1		04/10/19 23:08	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-12 **Lab ID: 50220912009** Collected: 03/29/19 14:40 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 23:42	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/10/19 23:42	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/10/19 23:42	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/10/19 23:42	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/10/19 23:42	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 23:42	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 23:42	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/10/19 23:42	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/10/19 23:42	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 23:42	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 23:42	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 23:42	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 23:42	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 23:42	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 23:42	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 23:42	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/10/19 23:42	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/10/19 23:42	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/10/19 23:42	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 23:42	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 23:42	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 23:42	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 23:42	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/10/19 23:42	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 23:42	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 23:42	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 23:42	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 23:42	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 23:42	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 23:42	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 23:42	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 23:42	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 23:42	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 23:42	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 23:42	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 23:42	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 23:42	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 23:42	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 23:42	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 23:42	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 23:42	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 23:42	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 23:42	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/10/19 23:42	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/10/19 23:42	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/10/19 23:42	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 23:42	98-82-8	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-12 **Lab ID: 50220912009** Collected: 03/29/19 14:40 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 23:42	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 23:42	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 23:42	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 23:42	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 23:42	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 23:42	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/10/19 23:42	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 23:42	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/10/19 23:42	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 23:42	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 23:42	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		04/10/19 23:42	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/10/19 23:42	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 23:42	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 23:42	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 23:42	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 23:42	79-00-5	M5
Trichloroethene	**29.9**	ug/L	5.0	1		04/10/19 23:42	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 23:42	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 23:42	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 23:42	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 23:42	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 23:42	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 23:42	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 23:42	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/10/19 23:42	1868-53-7	M5
4-Bromofluorobenzene (S)	96	%.	85-114	1		04/10/19 23:42	460-00-4	M5
Toluene-d8 (S)	99	%.	85-114	1		04/10/19 23:42	2037-26-5	M5

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-12D **Lab ID: 50220912010** Collected: 03/29/19 15:30 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/10/19 12:28	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/10/19 12:28	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/10/19 12:28	107-13-1	
Benzene	ND	ug/L	5.0	1		04/10/19 12:28	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/10/19 12:28	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/10/19 12:28	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/10/19 12:28	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/10/19 12:28	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/10/19 12:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/10/19 12:28	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/10/19 12:28	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/10/19 12:28	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/10/19 12:28	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/10/19 12:28	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/10/19 12:28	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/10/19 12:28	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/10/19 12:28	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/10/19 12:28	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/10/19 12:28	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 12:28	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/10/19 12:28	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/10/19 12:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/10/19 12:28	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/10/19 12:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 12:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 12:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/10/19 12:28	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/10/19 12:28	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/10/19 12:28	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/10/19 12:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/10/19 12:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/10/19 12:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 12:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/10/19 12:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 12:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/10/19 12:28	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/10/19 12:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/10/19 12:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 12:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/10/19 12:28	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/10/19 12:28	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/10/19 12:28	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/10/19 12:28	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/10/19 12:28	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/10/19 12:28	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/10/19 12:28	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/10/19 12:28	98-82-8	M1

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: MW-12D **Lab ID: 50220912010** Collected: 03/29/19 15:30 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/10/19 12:28	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/10/19 12:28	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 12:28	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/10/19 12:28	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/10/19 12:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/10/19 12:28	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/10/19 12:28	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/10/19 12:28	103-65-1	
Styrene	ND	ug/L	5.0	1		04/10/19 12:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 12:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/10/19 12:28	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/10/19 12:28	127-18-4	
Toluene	ND	ug/L	5.0	1		04/10/19 12:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 12:28	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/10/19 12:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/10/19 12:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/10/19 12:28	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/10/19 12:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/10/19 12:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/10/19 12:28	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 12:28	95-63-6	M1
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/10/19 12:28	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/10/19 12:28	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/10/19 12:28	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/10/19 12:28	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	80-122	1		04/10/19 12:28	1868-53-7	
4-Bromofluorobenzene (S)	96	%.	85-114	1		04/10/19 12:28	460-00-4	
Toluene-d8 (S)	101	%.	85-114	1		04/10/19 12:28	2037-26-5	

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: Dup-B **Lab ID: 50220912011** Collected: 03/29/19 08:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/11/19 00:16	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/11/19 00:16	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/11/19 00:16	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/11/19 00:16	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/11/19 00:16	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/11/19 00:16	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/11/19 00:16	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/11/19 00:16	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/11/19 00:16	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/11/19 00:16	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/11/19 00:16	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/11/19 00:16	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/11/19 00:16	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/11/19 00:16	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/11/19 00:16	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/11/19 00:16	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/11/19 00:16	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/11/19 00:16	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/11/19 00:16	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 00:16	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 00:16	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/11/19 00:16	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/11/19 00:16	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/11/19 00:16	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 00:16	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 00:16	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 00:16	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/11/19 00:16	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/11/19 00:16	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/11/19 00:16	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/11/19 00:16	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/11/19 00:16	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/11/19 00:16	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/11/19 00:16	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 00:16	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/11/19 00:16	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 00:16	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/11/19 00:16	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 00:16	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 00:16	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/11/19 00:16	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/11/19 00:16	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/11/19 00:16	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/11/19 00:16	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/11/19 00:16	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/11/19 00:16	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/11/19 00:16	98-82-8	M5

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: Dup-B **Lab ID: 50220912011** Collected: 03/29/19 08:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/11/19 00:16	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/11/19 00:16	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 00:16	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 00:16	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/11/19 00:16	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/11/19 00:16	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/11/19 00:16	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/11/19 00:16	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/11/19 00:16	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 00:16	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 00:16	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		04/11/19 00:16	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/11/19 00:16	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 00:16	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 00:16	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/11/19 00:16	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/11/19 00:16	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		04/11/19 00:16	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/11/19 00:16	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/11/19 00:16	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 00:16	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 00:16	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/11/19 00:16	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/11/19 00:16	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/11/19 00:16	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	98	%.	80-122	1		04/11/19 00:16	1868-53-7	M5
4-Bromofluorobenzene (S)	94	%.	85-114	1		04/11/19 00:16	460-00-4	M5
Toluene-d8 (S)	100	%.	85-114	1		04/11/19 00:16	2037-26-5	M5

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(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: Trip Blank **Lab ID: 50220912012** Collected: 03/29/19 08:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/11/19 00:50	67-64-1	M5
Acrolein	ND	ug/L	50.0	1		04/11/19 00:50	107-02-8	M5
Acrylonitrile	ND	ug/L	100	1		04/11/19 00:50	107-13-1	M5
Benzene	ND	ug/L	5.0	1		04/11/19 00:50	71-43-2	M5
Bromobenzene	ND	ug/L	5.0	1		04/11/19 00:50	108-86-1	M5
Bromochloromethane	ND	ug/L	5.0	1		04/11/19 00:50	74-97-5	M5
Bromodichloromethane	ND	ug/L	5.0	1		04/11/19 00:50	75-27-4	M5
Bromoform	ND	ug/L	5.0	1		04/11/19 00:50	75-25-2	M5
Bromomethane	ND	ug/L	5.0	1		04/11/19 00:50	74-83-9	M5
2-Butanone (MEK)	ND	ug/L	25.0	1		04/11/19 00:50	78-93-3	M5
n-Butylbenzene	ND	ug/L	5.0	1		04/11/19 00:50	104-51-8	M5
sec-Butylbenzene	ND	ug/L	5.0	1		04/11/19 00:50	135-98-8	M5
tert-Butylbenzene	ND	ug/L	5.0	1		04/11/19 00:50	98-06-6	M5
Carbon disulfide	ND	ug/L	10.0	1		04/11/19 00:50	75-15-0	M5
Carbon tetrachloride	ND	ug/L	5.0	1		04/11/19 00:50	56-23-5	M5
Chlorobenzene	ND	ug/L	5.0	1		04/11/19 00:50	108-90-7	M5
Chloroethane	ND	ug/L	5.0	1		04/11/19 00:50	75-00-3	M5
Chloroform	ND	ug/L	5.0	1		04/11/19 00:50	67-66-3	M5
Chloromethane	ND	ug/L	5.0	1		04/11/19 00:50	74-87-3	M5
2-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 00:50	95-49-8	M5
4-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 00:50	106-43-4	M5
Dibromochloromethane	ND	ug/L	5.0	1		04/11/19 00:50	124-48-1	M5
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/11/19 00:50	106-93-4	M5
Dibromomethane	ND	ug/L	5.0	1		04/11/19 00:50	74-95-3	M5
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 00:50	95-50-1	M5
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 00:50	541-73-1	M5
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 00:50	106-46-7	M5
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/11/19 00:50	110-57-6	M5
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/11/19 00:50	75-71-8	M5
1,1-Dichloroethane	ND	ug/L	5.0	1		04/11/19 00:50	75-34-3	M5
1,2-Dichloroethane	ND	ug/L	5.0	1		04/11/19 00:50	107-06-2	M5
1,1-Dichloroethene	ND	ug/L	5.0	1		04/11/19 00:50	75-35-4	M5
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/11/19 00:50	156-59-2	M5
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/11/19 00:50	156-60-5	M5
1,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 00:50	78-87-5	M5
1,3-Dichloropropane	ND	ug/L	5.0	1		04/11/19 00:50	142-28-9	M5
2,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 00:50	594-20-7	M5
1,1-Dichloropropene	ND	ug/L	5.0	1		04/11/19 00:50	563-58-6	M5
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 00:50	10061-01-5	M5
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 00:50	10061-02-6	M5
Ethylbenzene	ND	ug/L	5.0	1		04/11/19 00:50	100-41-4	M5
Ethyl methacrylate	ND	ug/L	100	1		04/11/19 00:50	97-63-2	M5
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/11/19 00:50	87-68-3	M5
n-Hexane	ND	ug/L	5.0	1		04/11/19 00:50	110-54-3	M5
2-Hexanone	ND	ug/L	25.0	1		04/11/19 00:50	591-78-6	M5
Iodomethane	ND	ug/L	10.0	1		04/11/19 00:50	74-88-4	M5
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/11/19 00:50	98-82-8	M5

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220912

Sample: Trip Blank **Lab ID: 50220912012** Collected: 03/29/19 08:00 Received: 03/30/19 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/11/19 00:50	99-87-6	M5
Methylene Chloride	ND	ug/L	5.0	1		04/11/19 00:50	75-09-2	M5
1-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 00:50	90-12-0	M5,N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 00:50	91-57-6	M5
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/11/19 00:50	108-10-1	M5
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/11/19 00:50	1634-04-4	M5
Naphthalene	ND	ug/L	1.7	1		04/11/19 00:50	91-20-3	M5
n-Propylbenzene	ND	ug/L	5.0	1		04/11/19 00:50	103-65-1	M5
Styrene	ND	ug/L	5.0	1		04/11/19 00:50	100-42-5	M5
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 00:50	630-20-6	M5
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 00:50	79-34-5	M5
Tetrachloroethene	ND	ug/L	5.0	1		04/11/19 00:50	127-18-4	M5
Toluene	ND	ug/L	5.0	1		04/11/19 00:50	108-88-3	M5
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 00:50	87-61-6	M5
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 00:50	120-82-1	M5
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/11/19 00:50	71-55-6	M5
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/11/19 00:50	79-00-5	M5
Trichloroethene	ND	ug/L	5.0	1		04/11/19 00:50	79-01-6	M5
Trichlorofluoromethane	ND	ug/L	5.0	1		04/11/19 00:50	75-69-4	M5
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/11/19 00:50	96-18-4	M5
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 00:50	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 00:50	108-67-8	M5
Vinyl acetate	ND	ug/L	50.0	1		04/11/19 00:50	108-05-4	M5
Vinyl chloride	ND	ug/L	2.0	1		04/11/19 00:50	75-01-4	M5
Xylene (Total)	ND	ug/L	10.0	1		04/11/19 00:50	1330-20-7	M5
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/11/19 00:50	1868-53-7	M5
4-Bromofluorobenzene (S)	96	%.	85-114	1		04/11/19 00:50	460-00-4	M5
Toluene-d8 (S)	103	%.	85-114	1		04/11/19 00:50	2037-26-5	M5

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220912

QC Batch: 493782
QC Batch Method: EPA 5030/8260
Analysis Method: EPA 5030/8260
Analysis Description: 8260 MSV
Associated Lab Samples: 50220912010

METHOD BLANK: 2278267
Matrix: Water
Associated Lab Samples: 50220912010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	04/10/19 11:54	
1,1,1-Trichloroethane	ug/L	ND	5.0	04/10/19 11:54	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/10/19 11:54	
1,1,2-Trichloroethane	ug/L	ND	5.0	04/10/19 11:54	
1,1-Dichloroethane	ug/L	ND	5.0	04/10/19 11:54	
1,1-Dichloroethene	ug/L	ND	5.0	04/10/19 11:54	
1,1-Dichloropropene	ug/L	ND	5.0	04/10/19 11:54	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	04/10/19 11:54	
1,2,3-Trichloropropane	ug/L	ND	5.0	04/10/19 11:54	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	04/10/19 11:54	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	04/10/19 11:54	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	04/10/19 11:54	
1,2-Dichlorobenzene	ug/L	ND	5.0	04/10/19 11:54	
1,2-Dichloroethane	ug/L	ND	5.0	04/10/19 11:54	
1,2-Dichloropropane	ug/L	ND	5.0	04/10/19 11:54	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	04/10/19 11:54	
1,3-Dichlorobenzene	ug/L	ND	5.0	04/10/19 11:54	
1,3-Dichloropropane	ug/L	ND	5.0	04/10/19 11:54	
1,4-Dichlorobenzene	ug/L	ND	5.0	04/10/19 11:54	
1-Methylnaphthalene	ug/L	ND	10.0	04/10/19 11:54	N2
2,2-Dichloropropane	ug/L	ND	5.0	04/10/19 11:54	
2-Butanone (MEK)	ug/L	ND	25.0	04/10/19 11:54	
2-Chlorotoluene	ug/L	ND	5.0	04/10/19 11:54	
2-Hexanone	ug/L	ND	25.0	04/10/19 11:54	
2-Methylnaphthalene	ug/L	ND	10.0	04/10/19 11:54	
4-Chlorotoluene	ug/L	ND	5.0	04/10/19 11:54	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	04/10/19 11:54	
Acetone	ug/L	ND	100	04/10/19 11:54	
Acrolein	ug/L	ND	50.0	04/10/19 11:54	
Acrylonitrile	ug/L	ND	100	04/10/19 11:54	
Benzene	ug/L	ND	5.0	04/10/19 11:54	
Bromobenzene	ug/L	ND	5.0	04/10/19 11:54	
Bromochloromethane	ug/L	ND	5.0	04/10/19 11:54	
Bromodichloromethane	ug/L	ND	5.0	04/10/19 11:54	
Bromoform	ug/L	ND	5.0	04/10/19 11:54	
Bromomethane	ug/L	ND	5.0	04/10/19 11:54	
Carbon disulfide	ug/L	ND	10.0	04/10/19 11:54	
Carbon tetrachloride	ug/L	ND	5.0	04/10/19 11:54	
Chlorobenzene	ug/L	ND	5.0	04/10/19 11:54	
Chloroethane	ug/L	ND	5.0	04/10/19 11:54	
Chloroform	ug/L	ND	5.0	04/10/19 11:54	

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220912

METHOD BLANK: 2278267 Matrix: Water
Associated Lab Samples: 50220912010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	04/10/19 11:54	
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/10/19 11:54	
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/10/19 11:54	
Dibromochloromethane	ug/L	ND	5.0	04/10/19 11:54	
Dibromomethane	ug/L	ND	5.0	04/10/19 11:54	
Dichlorodifluoromethane	ug/L	ND	5.0	04/10/19 11:54	
Ethyl methacrylate	ug/L	ND	100	04/10/19 11:54	
Ethylbenzene	ug/L	ND	5.0	04/10/19 11:54	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/10/19 11:54	
Iodomethane	ug/L	ND	10.0	04/10/19 11:54	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	04/10/19 11:54	
Methyl-tert-butyl ether	ug/L	ND	4.0	04/10/19 11:54	
Methylene Chloride	ug/L	ND	5.0	04/10/19 11:54	
n-Butylbenzene	ug/L	ND	5.0	04/10/19 11:54	
n-Hexane	ug/L	ND	5.0	04/10/19 11:54	
n-Propylbenzene	ug/L	ND	5.0	04/10/19 11:54	
Naphthalene	ug/L	ND	1.7	04/10/19 11:54	
p-Isopropyltoluene	ug/L	ND	5.0	04/10/19 11:54	
sec-Butylbenzene	ug/L	ND	5.0	04/10/19 11:54	
Styrene	ug/L	ND	5.0	04/10/19 11:54	
tert-Butylbenzene	ug/L	ND	5.0	04/10/19 11:54	
Tetrachloroethene	ug/L	ND	5.0	04/10/19 11:54	
Toluene	ug/L	ND	5.0	04/10/19 11:54	
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/10/19 11:54	
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/10/19 11:54	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	04/10/19 11:54	
Trichloroethene	ug/L	ND	5.0	04/10/19 11:54	
Trichlorofluoromethane	ug/L	ND	5.0	04/10/19 11:54	
Vinyl acetate	ug/L	ND	50.0	04/10/19 11:54	
Vinyl chloride	ug/L	ND	2.0	04/10/19 11:54	
Xylene (Total)	ug/L	ND	10.0	04/10/19 11:54	
4-Bromofluorobenzene (S)	%.	98	85-114	04/10/19 11:54	
Dibromofluoromethane (S)	%.	109	80-122	04/10/19 11:54	
Toluene-d8 (S)	%.	101	85-114	04/10/19 11:54	

LABORATORY CONTROL SAMPLE: 2278268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	38.9	78	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	43.5	87	70-124	
1,1-Dichloroethene	ug/L	50	39.6	79	71-126	
1,2,4-Trimethylbenzene	ug/L	50	39.4	79	79-117	
1,2-Dibromoethane (EDB)	ug/L	50	52.4	105	81-119	
1,2-Dichloroethane	ug/L	50	43.9	88	68-119	

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(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220912

LABORATORY CONTROL SAMPLE: 2278268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	ug/L	50	43.9	88	79-126	
Benzene	ug/L	50	43.0	86	78-117	
Chlorobenzene	ug/L	50	45.1	90	79-113	
Chloroform	ug/L	50	38.7	77	73-118	
cis-1,2-Dichloroethene	ug/L	50	41.8	84	74-122	
Ethylbenzene	ug/L	50	44.4	89	80-118	
Isopropylbenzene (Cumene)	ug/L	50	43.9	88	82-120	
Methyl-tert-butyl ether	ug/L	50	50.6	101	72-128	
Naphthalene	ug/L	50	41.3	83	71-121	
Tetrachloroethene	ug/L	50	40.0	80	76-124	
Toluene	ug/L	50	43.2	86	78-116	
trans-1,2-Dichloroethene	ug/L	50	41.8	84	73-121	
Trichloroethene	ug/L	50	39.9	80	76-120	
Vinyl chloride	ug/L	50	42.5	85	70-136	
Xylene (Total)	ug/L	150	131	88	79-119	
4-Bromofluorobenzene (S)	%.			99	85-114	
Dibromofluoromethane (S)	%.			94	80-122	
Toluene-d8 (S)	%.			102	85-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2278269 2278270

Parameter	Units	50220912010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	37.6	40.1	75	80	48-145	6	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	40.7	40.4	81	81	44-139	1	20	
1,1-Dichloroethene	ug/L	ND	50	50	41.0	43.1	82	86	46-148	5	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	15.5	18.5	31	37	39-140	18	20	M1
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	46.3	47.8	93	96	47-143	3	20	
1,2-Dichloroethane	ug/L	ND	50	50	42.0	44.2	84	88	44-138	5	20	
1,2-Dichloropropane	ug/L	ND	50	50	39.3	42.2	79	84	53-142	7	20	
Benzene	ug/L	ND	50	50	38.3	41.3	77	83	49-140	7	20	
Chlorobenzene	ug/L	ND	50	50	27.6	30.5	55	61	47-135	10	20	
Chloroform	ug/L	ND	50	50	36.9	39.2	74	78	49-136	6	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	39.3	42.0	79	84	46-143	7	20	
Ethylbenzene	ug/L	ND	50	50	23.2	27.4	46	55	44-145	16	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	19.1	22.6	38	45	43-148	17	20	M1
Methyl-tert-butyl ether	ug/L	ND	50	50	50.5	52.5	101	105	38-158	4	20	
Naphthalene	ug/L	ND	50	50	30.5	32.5	61	65	40-137	6	20	
Tetrachloroethene	ug/L	ND	50	50	22.7	25.7	45	51	41-145	12	20	
Toluene	ug/L	ND	50	50	30.1	33.2	60	66	48-139	10	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	38.6	41.9	77	84	46-140	8	20	
Trichloroethene	ug/L	ND	50	50	32.2	36.0	63	70	43-147	11	20	
Vinyl chloride	ug/L	ND	50	50	49.1	50.2	98	100	49-153	2	20	
Xylene (Total)	ug/L	ND	150	150	68.3	79.3	46	53	44-147	15	20	
4-Bromofluorobenzene (S)	%.						97	97	85-114			

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REPORT OF LABORATORY ANALYSIS

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Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220912

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2278269 2278270

Parameter	Units	50220912010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						95	98	80-122			
Toluene-d8 (S)	%.						102	100	85-114			

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220912

QC Batch: 493984 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50220912001, 50220912002, 50220912003, 50220912004, 50220912005, 50220912006, 50220912007, 50220912008, 50220912009, 50220912011, 50220912012

METHOD BLANK: 2279331 | Matrix: Water
Associated Lab Samples: 50220912001, 50220912002, 50220912003, 50220912004, 50220912005, 50220912006, 50220912007, 50220912008, 50220912009, 50220912011, 50220912012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	04/10/19 15:49	M5
1,1,1-Trichloroethane	ug/L	ND	5.0	04/10/19 15:49	M5
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/10/19 15:49	M5
1,1,2-Trichloroethane	ug/L	ND	5.0	04/10/19 15:49	M5
1,1-Dichloroethane	ug/L	ND	5.0	04/10/19 15:49	M5
1,1-Dichloroethene	ug/L	ND	5.0	04/10/19 15:49	M5
1,1-Dichloropropene	ug/L	ND	5.0	04/10/19 15:49	M5
1,2,3-Trichlorobenzene	ug/L	ND	5.0	04/10/19 15:49	M5
1,2,3-Trichloropropane	ug/L	ND	5.0	04/10/19 15:49	M5
1,2,4-Trichlorobenzene	ug/L	ND	5.0	04/10/19 15:49	M5
1,2,4-Trimethylbenzene	ug/L	ND	5.0	04/10/19 15:49	M5
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	04/10/19 15:49	M5
1,2-Dichlorobenzene	ug/L	ND	5.0	04/10/19 15:49	M5
1,2-Dichloroethane	ug/L	ND	5.0	04/10/19 15:49	M5
1,2-Dichloropropane	ug/L	ND	5.0	04/10/19 15:49	M5
1,3,5-Trimethylbenzene	ug/L	ND	5.0	04/10/19 15:49	M5
1,3-Dichlorobenzene	ug/L	ND	5.0	04/10/19 15:49	M5
1,3-Dichloropropane	ug/L	ND	5.0	04/10/19 15:49	M5
1,4-Dichlorobenzene	ug/L	ND	5.0	04/10/19 15:49	M5
1-Methylnaphthalene	ug/L	ND	10.0	04/10/19 15:49	M5,N2
2,2-Dichloropropane	ug/L	ND	5.0	04/10/19 15:49	M5
2-Butanone (MEK)	ug/L	ND	25.0	04/10/19 15:49	M5
2-Chlorotoluene	ug/L	ND	5.0	04/10/19 15:49	M5
2-Hexanone	ug/L	ND	25.0	04/10/19 15:49	M5
2-Methylnaphthalene	ug/L	ND	10.0	04/10/19 15:49	M5
4-Chlorotoluene	ug/L	ND	5.0	04/10/19 15:49	M5
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	04/10/19 15:49	M5
Acetone	ug/L	ND	100	04/10/19 15:49	M5
Acrolein	ug/L	ND	50.0	04/10/19 15:49	M5
Acrylonitrile	ug/L	ND	100	04/10/19 15:49	M5
Benzene	ug/L	ND	5.0	04/10/19 15:49	M5
Bromobenzene	ug/L	ND	5.0	04/10/19 15:49	M5
Bromochloromethane	ug/L	ND	5.0	04/10/19 15:49	M5
Bromodichloromethane	ug/L	ND	5.0	04/10/19 15:49	M5
Bromoform	ug/L	ND	5.0	04/10/19 15:49	M5
Bromomethane	ug/L	ND	5.0	04/10/19 15:49	M5
Carbon disulfide	ug/L	ND	10.0	04/10/19 15:49	M5
Carbon tetrachloride	ug/L	ND	5.0	04/10/19 15:49	M5
Chlorobenzene	ug/L	ND	5.0	04/10/19 15:49	M5
Chloroethane	ug/L	ND	5.0	04/10/19 15:49	M5

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220912

METHOD BLANK: 2279331 Matrix: Water

Associated Lab Samples: 50220912001, 50220912002, 50220912003, 50220912004, 50220912005, 50220912006, 50220912007, 50220912008, 50220912009, 50220912011, 50220912012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	5.0	04/10/19 15:49	M5
Chloromethane	ug/L	ND	5.0	04/10/19 15:49	M5
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/10/19 15:49	M5
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/10/19 15:49	M5
Dibromochloromethane	ug/L	ND	5.0	04/10/19 15:49	M5
Dibromomethane	ug/L	ND	5.0	04/10/19 15:49	M5
Dichlorodifluoromethane	ug/L	ND	5.0	04/10/19 15:49	M5
Ethyl methacrylate	ug/L	ND	100	04/10/19 15:49	M5
Ethylbenzene	ug/L	ND	5.0	04/10/19 15:49	M5
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/10/19 15:49	M5
Iodomethane	ug/L	ND	10.0	04/10/19 15:49	M5
Isopropylbenzene (Cumene)	ug/L	ND	5.0	04/10/19 15:49	M5
Methyl-tert-butyl ether	ug/L	ND	4.0	04/10/19 15:49	M5
Methylene Chloride	ug/L	ND	5.0	04/10/19 15:49	M5
n-Butylbenzene	ug/L	ND	5.0	04/10/19 15:49	M5
n-Hexane	ug/L	ND	5.0	04/10/19 15:49	M5
n-Propylbenzene	ug/L	ND	5.0	04/10/19 15:49	M5
Naphthalene	ug/L	ND	1.7	04/10/19 15:49	M5
p-Isopropyltoluene	ug/L	ND	5.0	04/10/19 15:49	M5
sec-Butylbenzene	ug/L	ND	5.0	04/10/19 15:49	M5
Styrene	ug/L	ND	5.0	04/10/19 15:49	M5
tert-Butylbenzene	ug/L	ND	5.0	04/10/19 15:49	M5
Tetrachloroethene	ug/L	ND	5.0	04/10/19 15:49	M5
Toluene	ug/L	ND	5.0	04/10/19 15:49	M5
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/10/19 15:49	M5
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/10/19 15:49	M5
trans-1,4-Dichloro-2-butene	ug/L	ND	100	04/10/19 15:49	M5
Trichloroethene	ug/L	ND	5.0	04/10/19 15:49	M5
Trichlorofluoromethane	ug/L	ND	5.0	04/10/19 15:49	M5
Vinyl acetate	ug/L	ND	50.0	04/10/19 15:49	M5
Vinyl chloride	ug/L	ND	2.0	04/10/19 15:49	M5
Xylene (Total)	ug/L	ND	10.0	04/10/19 15:49	M5
4-Bromofluorobenzene (S)	%.	93	85-114	04/10/19 15:49	M5
Dibromofluoromethane (S)	%.	99	80-122	04/10/19 15:49	M5
Toluene-d8 (S)	%.	102	85-114	04/10/19 15:49	M5

LABORATORY CONTROL SAMPLE: 2279332

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	41.3	83	72-127	M5
1,1,2,2-Tetrachloroethane	ug/L	50	40.2	80	70-124	M5
1,1-Dichloroethene	ug/L	50	42.5	85	71-126	M5
1,2,4-Trimethylbenzene	ug/L	50	42.8	86	79-117	M5

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220912

LABORATORY CONTROL SAMPLE: 2279332

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	50	43.1	86	81-119	M5
1,2-Dichloroethane	ug/L	50	42.8	86	68-119	M5
1,2-Dichloropropane	ug/L	50	42.4	85	79-126	M5
Benzene	ug/L	50	43.1	86	78-117	M5
Chlorobenzene	ug/L	50	43.4	87	79-113	M5
Chloroform	ug/L	50	39.3	79	73-118	M5
cis-1,2-Dichloroethene	ug/L	50	41.7	83	74-122	M5
Ethylbenzene	ug/L	50	44.7	89	80-118	M5
Isopropylbenzene (Cumene)	ug/L	50	43.8	88	82-120	M5
Methyl-tert-butyl ether	ug/L	50	43.9	88	72-128	M5
Naphthalene	ug/L	50	39.2	78	71-121	M5
Tetrachloroethene	ug/L	50	42.5	85	76-124	M5
Toluene	ug/L	50	43.5	87	78-116	M5
trans-1,2-Dichloroethene	ug/L	50	44.1	88	73-121	M5
Trichloroethene	ug/L	50	39.0	78	76-120	M5
Vinyl chloride	ug/L	50	46.6	93	70-136	M5
Xylene (Total)	ug/L	150	133	89	79-119	M5
4-Bromofluorobenzene (S)	%.			97	85-114	M5
Dibromofluoromethane (S)	%.			94	80-122	M5
Toluene-d8 (S)	%.			100	85-114	M5

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QUALIFIERS

Project: Houghland FSI #3
Pace Project No.: 50220912

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 493984

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M5	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland FSI #3
Pace Project No.: 50220912

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50220912001	**MW-33**	EPA 5030/8260	493984		
50220912002	**MW-33D**	EPA 5030/8260	493984		
50220912003	**MW-26**	EPA 5030/8260	493984		
50220912004	**MW-32**	EPA 5030/8260	493984		
50220912005	**MW-11**	EPA 5030/8260	493984		
50220912006	**MW-11D**	EPA 5030/8260	493984		
50220912007	**MW-30**	EPA 5030/8260	493984		
50220912008	**MW-31**	EPA 5030/8260	493984		
50220912009	**MW-12**	EPA 5030/8260	493984		
50220912010	**MW-12D**	EPA 5030/8260	493782		
50220912011	**Dup-B**	EPA 5030/8260	493984		
50220912012	**Trip Blank**	EPA 5030/8260	493984		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:

Company: Patriot Engg & Env.
Address: 6150 E 75th ST Indianapolis IN 46250
Email To: jcody@patrioteng.com
Phone: 317-558-5054 Fax: —
Requested Due Date/TAT: Normal Turn

Section B Required Project Information:

Report To: James Cody
Copy To: Mike Gasper
Purchase Order No.:
Project Name: Houghland FSI #3
Project Number: 19-0096-01E

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER ____

Site Location STATE: IN

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): Y/N

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: VOC's 8260	MS/MSD-B	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-33	GW	G			3-28-19	11:00		3				X					X			001
2	MW-33D					"	12:00		3												002
3	MW-26					"	13:00		3												003
4	MW-32					"	14:00		3												004
5	MW-11					3-29-19	10:15		3												005
6	MW-11D					"	11:00		3												006
7	MW-30					"	12:00		3												007
8	MW-31					"	13:30		3												008
9	MW-12					"	14:40		3												009
10	MW-12D					"	15:30		9										X		010
11	DUP-B					"	—		3												011
12	Trip blank					—	—		3												012

50220912

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Absolute Pricing	Vishal / Patriot	3-30-19	12:05	[signature]	3/30/19	1205	1.1	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: VISHAL SHAH

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 03-30-2019

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50220 0912

Date/Time and Initials of person examining contents: 3/30/19 1310 HP

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No **Seals Intact:** ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer: 1 2 3 4 5 6 A B C D E F Ice Type: ☒ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☐ Yes ☒ No ☐ N/A

Cooler Temperature: 1.1 | 1.1 Ice Visible in Sample Containers?: ☐ Yes ☒ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☒ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		✓	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			✓
USDA Regulated Soils? (ID, NY, WA, OR, CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓				
Chain of Custody Present:	✓					
Chain of Custody Filled Out:	✓		Dissolved Metals field filtered?:			✓
Short Hold Time Analysis (<72hr)?: Analysis:		✓	Headspace Wisconsin Sulfide			✓
Time 5035A TC placed in Freezer or Short Holds To Lab:				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Rush TAT Requested:		✓	Headspace in VOA Vials (>6mm):		✓	
Containers Intact?:	✓		Trip Blank Present?:	✓		
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Custody Seals?:	✓		

Comments:

Sample Container Count

WO# : 50220912

50220912

CLIENT: Patriot

COC PAGE 1 of 1

COC ID#

Project # 50220912

Sample Line Item	DG9H VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	SBS Bu Ki R				Matrix (Soil/W Aqueo	pH <2	pH >9	pH>12
1	3																				3T			
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10	19																							
11	3																							
12	3																							

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017

Pace Analytical Services, LLC
7726 Moller Road
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(317)228-3100

April 15, 2019

Mr. James Cody
Patriot Engineering
6150 E 75th St
Indianapolis, IN 46250

RE: Project: Houghland FSI #3
Pace Project No.: 50220969

Dear Mr. Cody:
Enclosed are the analytical results for sample(s) received by the laboratory on April 01, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Mr. Mike Casper, Patriot Engineering

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CERTIFICATIONS

Project:	Houghland FSI #3
Pace Project No.:	50220969

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #: E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #: 98019
Michigan Department of Environmental Quality, Laboratory #9050
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

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SAMPLE SUMMARY

Project: Houghland FSI #3
Pace Project No.: 50220969

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50220969001	**MW-14**	Water	04/01/19 11:00	04/01/19 17:43
50220969002	**MW-14D**	Water	04/01/19 12:20	04/01/19 17:43
50220969003	**MW-15**	Water	04/01/19 13:50	04/01/19 17:43
50220969004	**MW-15D**	Water	04/01/19 14:55	04/01/19 17:43
50220969005	**Trip Blank**	Water	04/01/19 08:00	04/01/19 17:43

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SAMPLE ANALYTE COUNT

Project: Houghland FSI #3
Pace Project No.: 50220969

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50220969001	**MW-14**	EPA 5030/8260	LKC	75
50220969002	**MW-14D**	EPA 5030/8260	LKC	75
50220969003	**MW-15**	EPA 5030/8260	LKC	75
50220969004	**MW-15D**	EPA 5030/8260	LKC	75
50220969005	**Trip Blank**	EPA 5030/8260	LKC	75

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SUMMARY OF DETECTION

Project: Houghland FSI #3
Pace Project No.: 50220969

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50220969001	**MW-14**					
EPA 5030/8260	cis-1,2-Dichloroethene	7.7	ug/L	5.0	04/11/19 15:20	
EPA 5030/8260	Trichloroethene	495	ug/L	25.0	04/13/19 08:53	M1
50220969002	**MW-14D**					
EPA 5030/8260	cis-1,2-Dichloroethene	11.0	ug/L	5.0	04/11/19 20:58	
EPA 5030/8260	Trichloroethene	524	ug/L	25.0	04/13/19 09:27	
50220969003	**MW-15**					
EPA 5030/8260	cis-1,2-Dichloroethene	579	ug/L	25.0	04/13/19 10:01	
EPA 5030/8260	trans-1,2-Dichloroethene	18.1	ug/L	5.0	04/11/19 21:32	
EPA 5030/8260	Trichloroethene	6.7	ug/L	5.0	04/11/19 21:32	
50220969004	**MW-15D**					
EPA 5030/8260	cis-1,2-Dichloroethene	557	ug/L	50.0	04/11/19 22:40	
EPA 5030/8260	trans-1,2-Dichloroethene	29.5	ug/L	5.0	04/11/19 22:06	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220969

Sample: MW-14 **Lab ID: 50220969001** Collected: 04/01/19 11:00 Received: 04/01/19 17:43 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/11/19 15:20	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/11/19 15:20	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/11/19 15:20	107-13-1	
Benzene	ND	ug/L	5.0	1		04/11/19 15:20	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/11/19 15:20	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/11/19 15:20	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/11/19 15:20	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/11/19 15:20	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/11/19 15:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/11/19 15:20	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/11/19 15:20	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/11/19 15:20	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/11/19 15:20	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/11/19 15:20	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/11/19 15:20	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/11/19 15:20	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/11/19 15:20	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/11/19 15:20	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/11/19 15:20	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 15:20	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 15:20	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/11/19 15:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/11/19 15:20	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/11/19 15:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 15:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 15:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 15:20	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/11/19 15:20	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/11/19 15:20	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/11/19 15:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/11/19 15:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/11/19 15:20	75-35-4	
cis-1,2-Dichloroethene	**7.7**	ug/L	5.0	1		04/11/19 15:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/11/19 15:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 15:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/11/19 15:20	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 15:20	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/11/19 15:20	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 15:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 15:20	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/11/19 15:20	100-41-4	M1
Ethyl methacrylate	ND	ug/L	100	1		04/11/19 15:20	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/11/19 15:20	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/11/19 15:20	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/11/19 15:20	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/11/19 15:20	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/11/19 15:20	98-82-8	M1,R1

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220969

Sample: MW-14 **Lab ID: 50220969001** Collected: 04/01/19 11:00 Received: 04/01/19 17:43 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/11/19 15:20	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/11/19 15:20	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 15:20	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 15:20	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/11/19 15:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/11/19 15:20	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/11/19 15:20	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/11/19 15:20	103-65-1	
Styrene	ND	ug/L	5.0	1		04/11/19 15:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 15:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 15:20	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/11/19 15:20	127-18-4	
Toluene	ND	ug/L	5.0	1		04/11/19 15:20	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 15:20	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 15:20	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/11/19 15:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/11/19 15:20	79-00-5	
Trichloroethene	**495**	ug/L	25.0	5		04/13/19 08:53	79-01-6	M1
Trichlorofluoromethane	ND	ug/L	5.0	1		04/11/19 15:20	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/11/19 15:20	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 15:20	95-63-6	L2,M0, R1
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 15:20	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/11/19 15:20	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/11/19 15:20	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/11/19 15:20	1330-20-7	MS
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/11/19 15:20	1868-53-7	
4-Bromofluorobenzene (S)	97	%.	85-114	1		04/11/19 15:20	460-00-4	
Toluene-d8 (S)	99	%.	85-114	1		04/11/19 15:20	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220969

Sample: MW-14D **Lab ID: 50220969002** Collected: 04/01/19 12:20 Received: 04/01/19 17:43 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/11/19 20:58	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/11/19 20:58	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/11/19 20:58	107-13-1	
Benzene	ND	ug/L	5.0	1		04/11/19 20:58	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/11/19 20:58	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/11/19 20:58	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/11/19 20:58	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/11/19 20:58	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/11/19 20:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/11/19 20:58	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/11/19 20:58	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/11/19 20:58	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/11/19 20:58	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/11/19 20:58	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/11/19 20:58	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/11/19 20:58	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/11/19 20:58	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/11/19 20:58	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/11/19 20:58	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 20:58	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 20:58	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/11/19 20:58	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/11/19 20:58	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/11/19 20:58	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 20:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 20:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 20:58	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/11/19 20:58	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/11/19 20:58	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/11/19 20:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/11/19 20:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/11/19 20:58	75-35-4	
cis-1,2-Dichloroethene	**11.0**	ug/L	5.0	1		04/11/19 20:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/11/19 20:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 20:58	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/11/19 20:58	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 20:58	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/11/19 20:58	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 20:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 20:58	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/11/19 20:58	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/11/19 20:58	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/11/19 20:58	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/11/19 20:58	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/11/19 20:58	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/11/19 20:58	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/11/19 20:58	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220969

Sample: MW-14D **Lab ID: 50220969002** Collected: 04/01/19 12:20 Received: 04/01/19 17:43 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/11/19 20:58	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/11/19 20:58	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 20:58	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 20:58	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/11/19 20:58	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/11/19 20:58	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/11/19 20:58	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/11/19 20:58	103-65-1	
Styrene	ND	ug/L	5.0	1		04/11/19 20:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 20:58	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 20:58	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/11/19 20:58	127-18-4	
Toluene	ND	ug/L	5.0	1		04/11/19 20:58	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 20:58	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 20:58	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/11/19 20:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/11/19 20:58	79-00-5	
Trichloroethene	**524**	ug/L	25.0	5		04/13/19 09:27	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/11/19 20:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/11/19 20:58	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 20:58	95-63-6	L2
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 20:58	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/11/19 20:58	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/11/19 20:58	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/11/19 20:58	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		04/11/19 20:58	1868-53-7	
4-Bromofluorobenzene (S)	97	%.	85-114	1		04/11/19 20:58	460-00-4	
Toluene-d8 (S)	96	%.	85-114	1		04/11/19 20:58	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220969

Sample: MW-15 **Lab ID: 50220969003** Collected: 04/01/19 13:50 Received: 04/01/19 17:43 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/11/19 21:32	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/11/19 21:32	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/11/19 21:32	107-13-1	
Benzene	ND	ug/L	5.0	1		04/11/19 21:32	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/11/19 21:32	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/11/19 21:32	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/11/19 21:32	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/11/19 21:32	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/11/19 21:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/11/19 21:32	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/11/19 21:32	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/11/19 21:32	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/11/19 21:32	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/11/19 21:32	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/11/19 21:32	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/11/19 21:32	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/11/19 21:32	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/11/19 21:32	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/11/19 21:32	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 21:32	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 21:32	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/11/19 21:32	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/11/19 21:32	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/11/19 21:32	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 21:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 21:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 21:32	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/11/19 21:32	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/11/19 21:32	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/11/19 21:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/11/19 21:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/11/19 21:32	75-35-4	
cis-1,2-Dichloroethene	**579**	ug/L	25.0	5		04/13/19 10:01	156-59-2	
trans-1,2-Dichloroethene	**18.1**	ug/L	5.0	1		04/11/19 21:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 21:32	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/11/19 21:32	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 21:32	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/11/19 21:32	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 21:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 21:32	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/11/19 21:32	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/11/19 21:32	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/11/19 21:32	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/11/19 21:32	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/11/19 21:32	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/11/19 21:32	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/11/19 21:32	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220969

Sample: MW-15 **Lab ID: 50220969003** Collected: 04/01/19 13:50 Received: 04/01/19 17:43 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/11/19 21:32	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/11/19 21:32	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 21:32	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 21:32	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/11/19 21:32	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/11/19 21:32	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/11/19 21:32	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/11/19 21:32	103-65-1	
Styrene	ND	ug/L	5.0	1		04/11/19 21:32	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 21:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 21:32	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/11/19 21:32	127-18-4	
Toluene	ND	ug/L	5.0	1		04/11/19 21:32	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 21:32	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 21:32	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/11/19 21:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/11/19 21:32	79-00-5	
Trichloroethene	**6.7**	ug/L	5.0	1		04/11/19 21:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/11/19 21:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/11/19 21:32	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 21:32	95-63-6	L2
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 21:32	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/11/19 21:32	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/11/19 21:32	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/11/19 21:32	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98	%.	80-122	1		04/11/19 21:32	1868-53-7	
4-Bromofluorobenzene (S)	97	%.	85-114	1		04/11/19 21:32	460-00-4	
Toluene-d8 (S)	97	%.	85-114	1		04/11/19 21:32	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220969

Sample: MW-15D **Lab ID: 50220969004** Collected: 04/01/19 14:55 Received: 04/01/19 17:43 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/11/19 22:06	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/11/19 22:06	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/11/19 22:06	107-13-1	
Benzene	ND	ug/L	5.0	1		04/11/19 22:06	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/11/19 22:06	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/11/19 22:06	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/11/19 22:06	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/11/19 22:06	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/11/19 22:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/11/19 22:06	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/11/19 22:06	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/11/19 22:06	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/11/19 22:06	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/11/19 22:06	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/11/19 22:06	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/11/19 22:06	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/11/19 22:06	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/11/19 22:06	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/11/19 22:06	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 22:06	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 22:06	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/11/19 22:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/11/19 22:06	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/11/19 22:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 22:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 22:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 22:06	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/11/19 22:06	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/11/19 22:06	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/11/19 22:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/11/19 22:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/11/19 22:06	75-35-4	
cis-1,2-Dichloroethene	**557**	ug/L	50.0	10		04/11/19 22:40	156-59-2	
trans-1,2-Dichloroethene	**29.5**	ug/L	5.0	1		04/11/19 22:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 22:06	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/11/19 22:06	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 22:06	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/11/19 22:06	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 22:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 22:06	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/11/19 22:06	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/11/19 22:06	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/11/19 22:06	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/11/19 22:06	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/11/19 22:06	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/11/19 22:06	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/11/19 22:06	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220969

Sample: MW-15D **Lab ID: 50220969004** Collected: 04/01/19 14:55 Received: 04/01/19 17:43 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/11/19 22:06	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/11/19 22:06	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 22:06	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 22:06	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/11/19 22:06	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/11/19 22:06	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/11/19 22:06	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/11/19 22:06	103-65-1	
Styrene	ND	ug/L	5.0	1		04/11/19 22:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 22:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 22:06	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/11/19 22:06	127-18-4	
Toluene	ND	ug/L	5.0	1		04/11/19 22:06	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 22:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 22:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/11/19 22:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/11/19 22:06	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/11/19 22:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/11/19 22:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/11/19 22:06	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 22:06	95-63-6	L2
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 22:06	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/11/19 22:06	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/11/19 22:06	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/11/19 22:06	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100	%.	80-122	1		04/11/19 22:06	1868-53-7	
4-Bromofluorobenzene (S)	97	%.	85-114	1		04/11/19 22:06	460-00-4	
Toluene-d8 (S)	97	%.	85-114	1		04/11/19 22:06	2037-26-5	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220969

Sample: Trip Blank **Lab ID: 50220969005** Collected: 04/01/19 08:00 Received: 04/01/19 17:43 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
Acetone	ND	ug/L	100	1		04/11/19 23:14	67-64-1	
Acrolein	ND	ug/L	50.0	1		04/11/19 23:14	107-02-8	
Acrylonitrile	ND	ug/L	100	1		04/11/19 23:14	107-13-1	
Benzene	ND	ug/L	5.0	1		04/11/19 23:14	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		04/11/19 23:14	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		04/11/19 23:14	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		04/11/19 23:14	75-27-4	
Bromoform	ND	ug/L	5.0	1		04/11/19 23:14	75-25-2	
Bromomethane	ND	ug/L	5.0	1		04/11/19 23:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		04/11/19 23:14	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		04/11/19 23:14	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		04/11/19 23:14	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		04/11/19 23:14	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		04/11/19 23:14	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		04/11/19 23:14	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		04/11/19 23:14	108-90-7	
Chloroethane	ND	ug/L	5.0	1		04/11/19 23:14	75-00-3	
Chloroform	ND	ug/L	5.0	1		04/11/19 23:14	67-66-3	
Chloromethane	ND	ug/L	5.0	1		04/11/19 23:14	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 23:14	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		04/11/19 23:14	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		04/11/19 23:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		04/11/19 23:14	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		04/11/19 23:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 23:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 23:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		04/11/19 23:14	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		04/11/19 23:14	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		04/11/19 23:14	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		04/11/19 23:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		04/11/19 23:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		04/11/19 23:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		04/11/19 23:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		04/11/19 23:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 23:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		04/11/19 23:14	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		04/11/19 23:14	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		04/11/19 23:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 23:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		04/11/19 23:14	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		04/11/19 23:14	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		04/11/19 23:14	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		04/11/19 23:14	87-68-3	
n-Hexane	ND	ug/L	5.0	1		04/11/19 23:14	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		04/11/19 23:14	591-78-6	
Iodomethane	ND	ug/L	10.0	1		04/11/19 23:14	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		04/11/19 23:14	98-82-8	

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ANALYTICAL RESULTS

Project: Houghland FSI #3
Pace Project No.: 50220969

Sample: Trip Blank **Lab ID: 50220969005** Collected: 04/01/19 08:00 Received: 04/01/19 17:43 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
p-Isopropyltoluene	ND	ug/L	5.0	1		04/11/19 23:14	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		04/11/19 23:14	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 23:14	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1		04/11/19 23:14	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		04/11/19 23:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		04/11/19 23:14	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		04/11/19 23:14	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		04/11/19 23:14	103-65-1	
Styrene	ND	ug/L	5.0	1		04/11/19 23:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 23:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		04/11/19 23:14	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		04/11/19 23:14	127-18-4	
Toluene	ND	ug/L	5.0	1		04/11/19 23:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 23:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		04/11/19 23:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		04/11/19 23:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		04/11/19 23:14	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		04/11/19 23:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		04/11/19 23:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		04/11/19 23:14	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 23:14	95-63-6	L2
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		04/11/19 23:14	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		04/11/19 23:14	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		04/11/19 23:14	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		04/11/19 23:14	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	99	%.	80-122	1		04/11/19 23:14	1868-53-7	
4-Bromofluorobenzene (S)	93	%.	85-114	1		04/11/19 23:14	460-00-4	
Toluene-d8 (S)	98	%.	85-114	1		04/11/19 23:14	2037-26-5	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220969

QC Batch: 493988 | Analysis Method: EPA 5030/8260
QC Batch Method: EPA 5030/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 50220969001, 50220969002, 50220969003, 50220969004, 50220969005

METHOD BLANK: 2279371 | Matrix: Water
Associated Lab Samples: 50220969001, 50220969002, 50220969003, 50220969004, 50220969005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	04/11/19 13:39	
1,1,1-Trichloroethane	ug/L	ND	5.0	04/11/19 13:39	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	04/11/19 13:39	
1,1,2-Trichloroethane	ug/L	ND	5.0	04/11/19 13:39	
1,1-Dichloroethane	ug/L	ND	5.0	04/11/19 13:39	
1,1-Dichloroethene	ug/L	ND	5.0	04/11/19 13:39	
1,1-Dichloropropene	ug/L	ND	5.0	04/11/19 13:39	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	04/11/19 13:39	
1,2,3-Trichloropropane	ug/L	ND	5.0	04/11/19 13:39	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	04/11/19 13:39	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	04/11/19 13:39	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	04/11/19 13:39	
1,2-Dichlorobenzene	ug/L	ND	5.0	04/11/19 13:39	
1,2-Dichloroethane	ug/L	ND	5.0	04/11/19 13:39	
1,2-Dichloropropane	ug/L	ND	5.0	04/11/19 13:39	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	04/11/19 13:39	
1,3-Dichlorobenzene	ug/L	ND	5.0	04/11/19 13:39	
1,3-Dichloropropane	ug/L	ND	5.0	04/11/19 13:39	
1,4-Dichlorobenzene	ug/L	ND	5.0	04/11/19 13:39	
1-Methylnaphthalene	ug/L	ND	10.0	04/11/19 13:39	N2
2,2-Dichloropropane	ug/L	ND	5.0	04/11/19 13:39	
2-Butanone (MEK)	ug/L	ND	25.0	04/11/19 13:39	
2-Chlorotoluene	ug/L	ND	5.0	04/11/19 13:39	
2-Hexanone	ug/L	ND	25.0	04/11/19 13:39	
2-Methylnaphthalene	ug/L	ND	10.0	04/11/19 13:39	
4-Chlorotoluene	ug/L	ND	5.0	04/11/19 13:39	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	04/11/19 13:39	
Acetone	ug/L	ND	100	04/11/19 13:39	
Acrolein	ug/L	ND	50.0	04/11/19 13:39	
Acrylonitrile	ug/L	ND	100	04/11/19 13:39	
Benzene	ug/L	ND	5.0	04/11/19 13:39	
Bromobenzene	ug/L	ND	5.0	04/11/19 13:39	
Bromochloromethane	ug/L	ND	5.0	04/11/19 13:39	
Bromodichloromethane	ug/L	ND	5.0	04/11/19 13:39	
Bromoform	ug/L	ND	5.0	04/11/19 13:39	
Bromomethane	ug/L	ND	5.0	04/11/19 13:39	
Carbon disulfide	ug/L	ND	10.0	04/11/19 13:39	
Carbon tetrachloride	ug/L	ND	5.0	04/11/19 13:39	
Chlorobenzene	ug/L	ND	5.0	04/11/19 13:39	
Chloroethane	ug/L	ND	5.0	04/11/19 13:39	
Chloroform	ug/L	ND	5.0	04/11/19 13:39	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220969

METHOD BLANK: 2279371 Matrix: Water
Associated Lab Samples: 50220969001, 50220969002, 50220969003, 50220969004, 50220969005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloromethane	ug/L	ND	5.0	04/11/19 13:39	
cis-1,2-Dichloroethene	ug/L	ND	5.0	04/11/19 13:39	
cis-1,3-Dichloropropene	ug/L	ND	5.0	04/11/19 13:39	
Dibromochloromethane	ug/L	ND	5.0	04/11/19 13:39	
Dibromomethane	ug/L	ND	5.0	04/11/19 13:39	
Dichlorodifluoromethane	ug/L	ND	5.0	04/11/19 13:39	
Ethyl methacrylate	ug/L	ND	100	04/11/19 13:39	
Ethylbenzene	ug/L	ND	5.0	04/11/19 13:39	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	04/11/19 13:39	
Iodomethane	ug/L	ND	10.0	04/11/19 13:39	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	04/11/19 13:39	
Methyl-tert-butyl ether	ug/L	ND	4.0	04/11/19 13:39	
Methylene Chloride	ug/L	ND	5.0	04/11/19 13:39	
n-Butylbenzene	ug/L	ND	5.0	04/11/19 13:39	
n-Hexane	ug/L	ND	5.0	04/11/19 13:39	
n-Propylbenzene	ug/L	ND	5.0	04/11/19 13:39	
Naphthalene	ug/L	ND	1.7	04/11/19 13:39	
p-Isopropyltoluene	ug/L	ND	5.0	04/11/19 13:39	
sec-Butylbenzene	ug/L	ND	5.0	04/11/19 13:39	
Styrene	ug/L	ND	5.0	04/11/19 13:39	
tert-Butylbenzene	ug/L	ND	5.0	04/11/19 13:39	
Tetrachloroethene	ug/L	ND	5.0	04/11/19 13:39	
Toluene	ug/L	ND	5.0	04/11/19 13:39	
trans-1,2-Dichloroethene	ug/L	ND	5.0	04/11/19 13:39	
trans-1,3-Dichloropropene	ug/L	ND	5.0	04/11/19 13:39	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	04/11/19 13:39	
Trichloroethene	ug/L	ND	5.0	04/11/19 13:39	
Trichlorofluoromethane	ug/L	ND	5.0	04/11/19 13:39	
Vinyl acetate	ug/L	ND	50.0	04/11/19 13:39	
Vinyl chloride	ug/L	ND	2.0	04/11/19 13:39	
Xylene (Total)	ug/L	ND	10.0	04/11/19 13:39	
4-Bromofluorobenzene (S)	%.	97	85-114	04/11/19 13:39	
Dibromofluoromethane (S)	%.	101	80-122	04/11/19 13:39	
Toluene-d8 (S)	%.	99	85-114	04/11/19 13:39	

LABORATORY CONTROL SAMPLE: 2279372

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	40.2	80	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	38.7	77	70-124	
1,1-Dichloroethene	ug/L	50	42.9	86	71-126	
1,2,4-Trimethylbenzene	ug/L	50	39.1	78	79-117	L2
1,2-Dibromoethane (EDB)	ug/L	50	42.4	85	81-119	
1,2-Dichloroethane	ug/L	50	42.4	85	68-119	

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QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220969

LABORATORY CONTROL SAMPLE: 2279372

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloropropane	ug/L	50	41.0	82	79-126	
Benzene	ug/L	50	41.8	84	78-117	
Chlorobenzene	ug/L	50	41.0	82	79-113	
Chloroform	ug/L	50	39.0	78	73-118	
cis-1,2-Dichloroethene	ug/L	50	40.6	81	74-122	
Ethylbenzene	ug/L	50	41.8	84	80-118	
Isopropylbenzene (Cumene)	ug/L	50	42.0	84	82-120	
Methyl-tert-butyl ether	ug/L	50	44.6	89	72-128	
Naphthalene	ug/L	50	38.0	76	71-121	
Tetrachloroethene	ug/L	50	41.1	82	76-124	
Toluene	ug/L	50	40.5	81	78-116	
trans-1,2-Dichloroethene	ug/L	50	43.4	87	73-121	
Trichloroethene	ug/L	50	38.2	76	76-120	
Vinyl chloride	ug/L	50	49.9	100	70-136	
Xylene (Total)	ug/L	150	128	85	79-119	
4-Bromofluorobenzene (S)	%.			97	85-114	
Dibromofluoromethane (S)	%.			96	80-122	
Toluene-d8 (S)	%.			99	85-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2279373 2279374

Parameter	Units	50220969001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	34.2	36.4	68	73	48-145	6	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	36.7	38.8	73	78	44-139	5	20	
1,1-Dichloroethene	ug/L	ND	50	50	35.5	37.6	71	75	46-148	6	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	12.7	16.8	25	34	39-140	28	20	M0,R1
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	37.3	41.4	75	83	47-143	11	20	
1,2-Dichloroethane	ug/L	ND	50	50	40.6	42.4	81	85	44-138	4	20	
1,2-Dichloropropane	ug/L	ND	50	50	36.8	39.4	74	79	53-142	7	20	
Benzene	ug/L	ND	50	50	34.8	38.0	70	76	49-140	9	20	
Chlorobenzene	ug/L	ND	50	50	23.9	28.1	48	56	47-135	16	20	
Chloroform	ug/L	ND	50	50	35.0	37.4	70	75	49-136	6	20	
cis-1,2-Dichloroethene	ug/L	7.7	50	50	43.0	46.3	70	77	46-143	7	20	
Ethylbenzene	ug/L	ND	50	50	19.7	23.8	39	48	44-145	19	20	M1
Isopropylbenzene (Cumene)	ug/L	ND	50	50	16.3	20.3	33	41	43-148	22	20	M1,R1
Methyl-tert-butyl ether	ug/L	ND	50	50	46.7	47.9	93	96	38-158	3	20	
Naphthalene	ug/L	ND	50	50	27.3	31.1	55	62	40-137	13	20	
Tetrachloroethene	ug/L	ND	50	50	20.3	24.4	41	49	41-145	18	20	
Toluene	ug/L	ND	50	50	26.0	29.4	52	59	48-139	12	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	34.5	37.7	69	75	46-140	9	20	
Trichloroethene	ug/L	495	50	50	281	309	-427	-372	43-147	9	20	M1
Vinyl chloride	ug/L	ND	50	50	36.2	38.0	72	76	49-153	5	20	
Xylene (Total)	ug/L	ND	150	150	58.9	70.8	39	47	44-147	18	20	MS
4-Bromofluorobenzene (S)	%.						98	98	85-114			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Houghland FSI #3
Pace Project No.: 50220969

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2279373 2279374

Parameter	Units	50220969001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						97	98	80-122			
Toluene-d8 (S)	%.						96	99	85-114			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: Houghland FSI #3
Pace Project No.: 50220969

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.

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7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Houghland FSI #3
Pace Project No.: 50220969

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50220969001	**MW-14**	EPA 5030/8260	493988		
50220969002	**MW-14D**	EPA 5030/8260	493988		
50220969003	**MW-15**	EPA 5030/8260	493988		
50220969004	**MW-15D**	EPA 5030/8260	493988		
50220969005	**Trip Blank**	EPA 5030/8260	493988		

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:

Company: Patriot Env. & Engg.
Address: 6150 E 75th ST
Indianapolis IN 46250
Email To: jcody@patrioteng.com
Phone: 317-558-5064 Fax: —
Requested Due Date/TAT: Normal Turn

Section B Required Project Information:

Report To: James Cody
Copy To: Mike Gasper
Purchase Order No.: —
Project Name: Houghland FSI # 3
Project Number: 19-0096-01E

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER ____

Site Location STATE: IN

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): Analysis Test: LDCP 8260

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-14	GW	G			4-1-19	11:00		3				X					X		50220969 001
2	MW-14D					"	12:20													002
3	MW-15					"	13:50													003
4	MW-15D					"	14:55													004
5	Trip blank					—	—													005
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Absolute Pricing	Vishal / Patriot	4-1-19	17:43	[signature]	4-1-19	1743	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: VISHAL SHAH

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 04-01-19

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.08, 12-Oct-2007

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50220969

Date/Time and Initials of person examining contents: KS 4-1-19 1749

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer: 1 2 3 4 5 6 A B C D E F **Ice Type:** ☑ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☑ Yes ☐ No ☐ N/A

Cooler Temperature: 5.0 | 5.0 Ice Visible in Sample Containers?: ☐ Yes ☑ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☑ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		✓	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			✓
USDA Regulated Soils? (ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓				
Chain of Custody Present:	✓					
Chain of Custody Filled Out:	✓		Dissolved Metals field filtered?:			✓
Short Hold Time Analysis (<72hr)?: Analysis:		✓	Headspace Wisconsin Sulfide			✓
Time 5035A TC placed in Freezer or Short Holds To Lab:				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Rush TAT Requested:		✓	Headspace in VOA Vials (>6mm):		✓	
Containers Intact?:	✓		Trip Blank Present?:	✓		
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Custody Seals?:	✓		

Comments:

Sample Container Count

WO# : 50220969

50220969

CLIENT: Patriot

COC PAGE 1 of 1

COC ID#

Project # 50220969

Sample Line Item	DG9H / VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	SBS / DI / Bulk / Kit R				Matrix S (Soil/Wa Aqueous	pH <2	pH >9	pH>12
1	3																				WT			
2	↓																				↓			
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

F-IN-Q-270-rev.10,31Aug2017