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August 21, 2020

Ms. Anne Weinkauf
Indiana Department of Environmental Management
State Cleanup Section
100 North Senate Avenue, Room IGCN 1101
Indianapolis, Indiana 46204

Re: Remediation Work Plan Implementation Report
Former O'Neal's Clothes Depot Cleaners, Martinsville, Indiana
State Cleanup Number 0000402
Wilcox Project Number 341.14

Dear Ms. Weinkauf:

Wilcox Environmental Engineering, Inc. ("Wilcox") is pleased to provide this Remediation Work Plan Implementation ("RWPI") Report on behalf of our Client, the former O'Neal's Clothes Depot Cleaners located at 833 East Morgan Street in Martinsville, Indiana (the "Site"). The RWPI summarizes recently completed remediation activities as described in the Revised RWP dated November 1, 2019.

Please contact Jeremy Kinman at (317) 472-0999 or jkinman@wilcoxenv.com with any questions or comments.

Sincerely,
Wilcox Environmental Engineering, Inc.

Jeremy S. Kinman, LPG, PG
Associate Technical Director

R. Scott Stoldt, CPG, LPG, PG
Executive Director

Enclosures: Remediation Work Plan Implementation Report with Attachments

cc: Mr. David L. Guevara, Taft Stettinius & Hollister LLP

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Remediation Work Plan Implementation Report

Former O'Neal's Clothes Depot Cleaners
833 East Morgan Street
Martinsville, Indiana 46151

State Cleanup Number 0000402
Wilcox Project Number 341.14

August 21, 2020

Prepared for:

Mr. John O'Neal c/o
Mr. David L. Guevara, Ph.D.
Taft Stettinius & Hollister LLP
One Indiana Square, Suite 3500
Indianapolis, Indiana 46204-2023

TABLE OF CONTENTS

LIST OF TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

Wilcox has prepared this Remediation Work Plan Implementation Report ("RWPI") on behalf of Mr. & Mrs. John O'Neal, the owners of the former O'Neal's Clothes Depot Cleaners located at 833 East Morgan Street, Morgan County, Martinsville, Indiana (the "Site"). The Site is being managed in the Indiana Department of Environmental Management ("IDEM") State Cleanup Program and is identified as Site # 0000402. This RWPI documents the *in-situ* chemical reduction ("ISCR") injection activities completed at the Site from April through June 2020, as approved by IDEM in an email dated February 12, 2020.

1.1 Project Background

1.1.1 *Site Name, Address, and Telephone*

The Site is located in Washington Township (Township 12 North, Range 1 East, Section 34) as shown on the Martinsville, Indiana USGS 7.5-Minute Topographic Quadrangle Map (**Figure 1**). The Site's approximate latitude and longitude are 39° 25' 39'' North, 86° 25' 06'' West. The Site has an elevation of approximately 610 feet above mean sea level.

The Site is rectangular in shape, approximately 0.2-acre in size, and located in a residential and commercial area within the City of Martinsville. Residential properties are located north, east, south, and southwest of the Site with a commercial property to the west along East Morgan Street. **Figure 2** depicts the Site and surrounding areas.

1.1.2 *Current Owner and Contact Information*

Mr. and Mrs. John O'Neal purchased the Site in October 1993 and are the current owners. The contact information for Mr. and Mrs. O'Neal follows:

Mr. David L. Guevara, Ph.D.
Taft Stettinius & Hollister LLP
One Indiana Square, Suite 3500
Indianapolis, Indiana 46204-2023
(317) 713-3500

Mr. Jeremy S. Kinman, LPG, PG
Wilcox Environmental Engineering, Inc.
1552 Main Street, Suite 100, Speedway, IN 46224
(317) 472-0999

1.1.3 *Summary of Historical Site Ownership and Past and Present Operations*

The Site operated as a dry-cleaning facility from 1987 to 1996 and 1997 to 2011. The facility was utilized as a dry-cleaning drop-off and pick-up facility from 1996 to 1997 and since 2011. The facility operated as the Clothes Depot Cleaners until 2011 when the Site was leased under the name Vista Cleaners. The Site currently operates as Fabric Care Center.

1.1.4 *Release Discovery and Reporting*

A suspected release was discovered in October 2014 based on soil tetrachloroethene ("PCE") concentrations exceeding the RCG residential migration to groundwater screening level ("RMTGSL"). Multiple phases of soil, groundwater, and vapor investigations conducted by Wilcox are summarized in Section 1.2 below. The Site investigation area is depicted on **Figure 2**.

1.2 Summary of Previous Investigations

Initial Site Investigation – March 2, 2014 (VFC# 80013845)
The Initial Site Investigation ("ISI") included advancing three soil borings (HA-1, B-04, and B-05), and installing three permanent monitoring wells (MW-01 through MW-03). The monitoring wells were installed to collect groundwater samples and calculate the groundwater flow direction. Groundwater was generally measured from 10 to 12 feet bgs and flow was calculated to be west-southwest. PCE was reported in vadose soil and groundwater at concentrations exceeding the RMTGSL and RCG residential groundwater tap screening level ("RGWSL"), respectively. No other chlorinated volatile organic compounds ("cVOCs") were reported.

Further Site Investigation – June 10, 2015 (VFC# 800060633)
The 2015 Further Site Investigation ("FSI") included advancing three soil borings (B-06 through B-08) and installing three monitoring wells (MW-04 through MW-06) to provide additional horizontal characterization and to develop a preliminary conceptual site model ("CSM") to evaluate potential exposure pathways and receptors. The CSM is included as **Figure 3**. The extent of PCE concentrations in soil exceeding the RMTGSL was adequately defined. Additional groundwater investigation to refine the dissolved PCE plume was recommended.

Further Site Investigation II – June 6, 2016 (VFC# 80305788)
The FSI II utilized expedited site characterization methods using real-time analytical techniques to further evaluate the horizontal extent of PCE contamination. Activities included advancing 35 soil borings (B-09 through B-44) and installing 14 monitoring wells (MW-07 through MW-21). Subsequent groundwater monitoring results indicated the horizontal extent of the dissolved PCE plume was defined; however, PCE concentrations were present at levels exceeding the RCG residential vapor intrusion groundwater screening level ("RVIGWSL") at multiple locations in the pre-dominantly residential area southwest of and down-gradient from the Site. Cumulative groundwater grab data is summarized in **Table 1**. Wilcox deployed groundwater interface polyethylene diffusion bags ("PDBs") in eight down-gradient monitoring wells to evaluate concentration gradients within the water column. In general, most locations reported a decrease in PCE concentrations when sampled via surface PDBs. A significant concentration differential was reported in distal wells MW-18 and MW-19. The data indicated that a shallow vertical distribution of COC concentrations exists within the water column becoming more prominent toward the distal end of the plume. Utilizing the PDB data, Wilcox identified multiple residential structures located within the RVIGWSL 100-foot buffer zone requiring vapor intrusion ("VI") evaluation. A VI summary is depicted graphically on **Figure 4**.

Site Status Update Report – November 18, 2016 (VFC# 80384262)
Wilcox installed five monitoring wells (MW-22 through MW-26) to provide enhanced characterization of the dissolved plume centerline and to define the southwestern edge of the plume.

2017 Winter Vapor Intrusion Sampling Update – May 4, 2017 (VFC# 80456408)
Wilcox attempted to obtain access to 13 residential properties for the 2017 winter worst-case scenario conditions, but only received access to four properties. The vapor results from the 740 East Washington Street residence placed it under *Scenario 6 (Remedy)* from IDEM's February 2014 *Vapor Remedy Selection and Implementation* guidance letter. Additionally, vapor data collected from the 760 East Washington Street residence placed it under *Scenario 3 (Remedy or indefinite sampling)*. Accordingly, Wilcox proposed to install a vapor mitigation system ("VMS") at the two residences to mitigate the sub-slab and indoor air ("IA)" vapor concentrations.

2017 Summer Vapor Intrusion Sampling Update – October 16, 2017 (VFC# 80540198)
Wilcox attempted to obtain access to 30 residential properties for the 2017 summer worst-case scenario conditions and received 16 returned agreements granting access. Wilcox attempted to schedule days and times with the 16 residents with only 10 responding to scheduling requests. An Access Request Summary is provided in **Table 2**. The summer 2017 VI sampling event was the first assessment for seven residential properties and the second for three residences. Wilcox recommended discontinuing VI evaluation at 40 North Colfax based on two consecutive compliant vapor sampling events.

Further Site Investigation III – December 11, 2017 (VFC# 80573635)
The FSI III investigation was designed to respond to the IDEM comment letter dated August 26, 2016 (Doc. 80342523) and was further refined in a February 21, 2017 meeting with IDEM personnel. Wilcox conducted a sewer camera investigation to further evaluate the integrity of the sanitary sewer in the alleyway between the Site building and North Graham Street. The camera investigation identified sewer line fractures and root locations that are suspected to be the likely points where cVOCs were introduced into the subsurface. Wilcox advanced six relatively deeper soil borings identified as B-45/MIP-01 through B-50/MIP-06 on **Figure 2** utilizing a Membrane Interface Probe/Hydraulic Profiling Tool ("MIP/HPT") in order to collect real-time data to facilitate optimal placement of deep monitoring well screens and to evaluate the vertical extent of cVOCs along the dissolved plume centerline. Two deep monitoring wells (MW-09D and MW-15D) were subsequently installed utilizing the MIP/HPT data. PCE was reported above the RGWSL in the groundwater sample collected from MW-09D.

Wilcox also advanced 17 soil borings (B-51 through B-67) to address horizontal data gaps along the perimeter of the groundwater plume and adjacent to the sanitary sewer. No VOCs were reported in the groundwater samples collected from the shallow borings.

Additional activities included deploying four In-Situ Rugged Troll® pressure transducer data loggers at MW-18, MW-23, MW-25, and MW-26 in order to collect high-resolution groundwater elevation data, and surveying a subset of nine monitoring wells (NPL MW-4S, 4M, 4B, 28S, 29S, 32S, 34S, 35S, and 36S) associated with the Pike and Mulberry National Priority List ("NPL") site into the existing well network to provide a better understanding of regional groundwater flow patterns.

2018 Winter Vapor Intrusion Sampling and Diagnostic Testing – June 21, 2018 (VFC# 82568160)
VMS diagnostic evaluation was conducted at the 740 and 760 East Washington Street residences with a VMS subsequently installed at 740 East Washington based on the results. Diagnostic testing at the 760 East Washington Street residence indicated little to no influence from vacuum applied to the sub-slab due to building construction methods. Additionally, vapor samples were collected from seven residences to represent winter-worst case scenario conditions. Wilcox also collected vapor samples from the 760 East Washington Street residence to confirm previous compliant results. Based on two consecutive compliant vapor sampling events, Wilcox recommended discontinuing vapor sampling at the following residences:

- 660 East Jackson Street
- 39 South Ohio Street
- 40 South Ohio Street
- 60 South Ohio Street
- 89 South Ohio Street
- 90 South Ohio Street
- 759 East Washington Street
- 760 East Washington Street

Vapor Mitigation System Installation and 30-Day Post Installation Sampling Report – 740 East Washington Street – September 14, 2018 (VFC# 82618175)
A VMS was installed at the 740 East Washington Street residence. 30-day post-installation evaluation that included pressure field extension testing and vapor sampling indicated the VMS was operating as designed and the VI pathways were adequately mitigated.

2018 Summer Vapor Intrusion Sampling Update: 659 East Washington Street – September 28, 2018 (VFC# 82625428)
Wilcox previously collected compliant VI samples from the 659 East Washington Street residence on March 24, 2017 prior to the property being sold in August 2017. Access was obtained from the new property owner on July 30, 2018 and vapor samples were collected in August 2018 during summer worst-case conditions. Vapor results were below residential screening levels and Wilcox recommended VI sampling be discontinued based on two consecutive compliant events.

Indoor Air Confirmatory Sampling Update: 740 East Washington Street – April 7, 2020 (VFC #82947670
IA samples were collected from the 740 East Washington Street residence in January 2020 to represent winter "worst-case" scenario conditions. Analytical results were below residential screening levels and pressure field extension testing indicated that a negative pressure gradient was being sustained between the sub-slab and indoor air. VMS operations continue and the next annual VMS inspection will occur during the 2021 winter season with IA sampling scheduled during the 2023 winter season in accordance with the *Operations, Maintenance, and Monitoring Plan* ("OMM Plan"). Should it be supported by the data collected, a VMS shutdown and IA sampling event will be completed prior to the 2023 winter season to determine continued operational need.

Winter 2020 Vapor Intrusion Sampling Update: 840 and 879 East Washington Street – April 28, 2020 (VFC #82958046

The property owners for residences located at 840 and 879 East Washington Street contacted Wilcox on February 7, 2020 and requested VI evaluation in their respective residences. The properties are positioned south of and approximately 100 feet (840 East Washington) and 250 feet (879 East Washington) from the southern property line of the Site property (**Figure 2**). Vapor sampling was completed at each residence in March 2020 and the results were below residential screening levels. Additional vapor evaluation will be completed at each residence during the summer 2020 season.[1]

[1] Vapor sampling was conducted at 879 East Washington Street on August 4, 2020 and yielded results below residential screening levels – results will be formally reported under separate cover. Wilcox is continuing to coordinate access to 840 East Washington Street property for summer season vapor sampling.

2.0 BASELINE SOIL AND GROUNDWATER DATA

2.1 Soil VOCs Concentrations

Wilcox completed 83 soil borings and 31 permanent monitoring wells during the Site characterization to define the nature and extent of soil and groundwater contamination. As summarized in **Table 3**, soil PCE concentrations exceeding the RMTGSL are generally limited and have been identified at the following locations and depths: HA-01 (3-3.5'), HA-01 (3.5-4'), B-08 (1-2'), MW-04 (3-4'), MW-10 (3-4'), B-72 (9-9.5'), B-73 (9-9.5'), B-74 (9-9.5'), and B-75 (9-9.5'). PCE soil concentrations above RMTGSLs range from 0.0531 mg/kg at B-72 (9-9.5') to 7.71 mg/kg at HA-01 (3-3.5'). TCE impacts at B-08 (1-2') and B-71 (9-9.5') were detected above laboratory detection levels but below the RMTGSL. No other VOCs have been reported in soil samples at concentrations above laboratory detection levels. Cumulative soil analytical results are summarized on **Figure 5.**

2.2 Groundwater Flow Direction

On April 6-9, 2020, Wilcox field personnel completed the second quarter 2020 groundwater monitoring event representing a baseline of groundwater flow and dissolved contaminant data prior to Revised RWP implementation. Groundwater elevation data is summarized in **Table 4**, and the approximate potentiometric surface and groundwater flow direction in April 2020 is depicted on **Figure 6**. Groundwater flows generally to the southwest which is consistent with previous flow interpretations. The calculated gradient was 0.007 foot/foot.

2.3 Groundwater VOCs Concentrations

Pre-injection baseline groundwater samples were collected in April 2020 using low-flow methods and submitted under chain-of-custody protocol to Pace Analytical Services of Indianapolis, Indiana for analyses of VOCs via USEPA Method 8260. The April 2020 groundwater analytical results are summarized in **Table 4** and are depicted on **Figures 7** and **8**. PCE was reported above the RGWSL at concentrations ranging from 6.3 to 111 micrograms per liter ("µg/L") at 15 monitoring wells. Of those, MW-24 exceeded the RVIGWSL of 110 µg/L. No PCE concentrations exceeded the RCG commercial/industrial vapor intrusion groundwater screening level, and no other VOCs exceeded laboratory reporting levels.

3.0 REMEDIAL ACTIVITY COMPLETION

3.1 Soil Chemical Injection

Following the successful completion of the 2018 pilot test, Wilcox implemented soil chemical injection consisting of Hydrogen Release Compound® ("HRC"), Bio-Dechlor INOCULUM Plus ("BDI Plus"), PlumeStop® Liquid Activated Carbon™ ("PlumeStop"), and calcium chloride ("CaCl") from April 20th through May 22, 2020 west and southwest of the Site property. Supplemental injections consisting of BDI Plus and an experimental electron donor developed by Regenesis Remediation Services referred to as Donor X [2] were completed at the Site property near MW-01 from June 17-19, 2020. Technical specification sheets for each of the injectable products with installation instructions are included in **Appendix A**.

The initial injection designed presented in the November 1, 2019 Revised RWP included four permeable reactive barriers ("PRBs") positioned west and southwest of the Site property. The proposed barrier south of East Washington Street between the 571 and 605 East Washington Street properties was removed due to access restrictions and additional stakeholder input, and the injectable products initially designated for that specific barrier were distributed among the three remaining barriers. The injection application of HRC, BDI Plus, PlumeStop, and CaCl were completed as a series of PRBs identified on **Figure 9** as Barriers A through C. The BDI Plus and Donor X supplemental injections at the Site property were installed as a set of closely spaced direct-push borings positioned upgradient from and adjacent to MW-01 and the Site building.

HRC is an engineered, hydrogen-releasing compound designed specifically for enhanced, *in-situ* anaerobic bioremediation of cVOCs in groundwater or highly saturated soils. Upon contact with groundwater, this viscous, poly-lactate ester material becomes hydrated and subject to microbial breakdown producing a controlled-release of hydrogen for periods of up to 18 to 24 months with a single application. HRC enables enhanced anaerobic biodegradation by adding hydrogen (an electron donor) to groundwater and/or soil to increase the number and vitality of indigenous microorganisms able to perform the naturally occurring process of enhanced reductive dechlorination ("ERD"). During this process, certain naturally occurring microorganisms replace chlorine atoms on chlorinated contaminants with the newly available hydrogen effectively reducing the contaminant to a less harmful substance with the preferred and innocuous endpoints of ethane or ethene.

BDI Plus is designed for use at sites where chlorinated contaminants are present and unable to be completely biodegraded via the existing microbial communities. BDI Plus is an enriched, natural microbial consortium containing species of Dehalococcoides sp. ("DHC") which are capable of completely dechlorinating contaminants during *in-situ* anaerobic bioremediation processes. BDI Plus has been shown to stimulate the rapid dechlorination of chlorinated compounds. BDI Plus is provided in a liquid form which is directly injected into the contaminated subsurface either with or following a staged-release electron donor (food source) application. Once in place, this microbial consortium accelerates the extant rate of chlorinated contaminant degradation from

[2] Donor X is a concentrated aqueous suspension of fast and slow-release electron donors, including a solid-phase form of lactate. This formulation is designed to provide both a rapid release of organic carbon to quickly establish a reducing environment and also serve as a hydrogen source to dechlorinating bacteria to promote the long-term reductive dechlorination of cVOCs.

parent compounds to intermediates such as cis-1,2-dichloroethene ("cDCE") and vinyl chloride ("VC") and completely through to harmless end products such as ethene and ethane.

PlumeStop is an aqueous liquid composed of fine particles of activated carbon suspended in water and is injected into the subsurface as a colloidal suspension using conventional liquid-injection equipment. Dissolved-phase contaminants partition out of groundwater and into/onto the PlumeStop matrix resulting in a potentially rapid decrease in groundwater contaminant concentrations. The net rate of sorptive partitioning is due to the increased relative surface area of the colloidal particles (1-2 μm). The PlumeStop becomes saturated with the contaminants, concentrating them within its structure, and is generally co-applied with HRC and BDI Plus. Under favorable electron donor/acceptor and geochemical conditions, PlumeStop can be colonized by microbes enhancing biodegradation rates and efficiency. In this manner, PlumeStop provides both a growth-medium and a substrate source to support microbial growth while keeping the contaminants out of groundwater resulting in rapid dissolved contaminant concentration decrease.

CaCl is often used as a parking solution for PlumeStop barriers when groundwater movement is above average. Upon contact with PlumeStop, CaCl binds several particles of the activated carbon together, slowing or stopping their movement through the aquifer increasing barrier placement and efficacy.

Donor X is a concentrated aqueous suspension of fast and slow-release electron donors, including a solid-phase form of lactate designed to provide a rapid release of organic carbon to quickly establish a reducing environment and provide a hydrogen source to dechlorinating bacteria. Additional details regarding the injectables products are included in the Regenesis application summary reports provided in **Appendix B**.

3.1.1 *Design Verification Testing*

Regenesis completed design verification testing ("DVT") activities in order to evaluate potential design modifications prior to executing the full-scale ISCR application. The calculated radius of influence ("ROI") was verified in the field using existing monitoring wells and temporary piezometers to confirm the spacing of injection points within each PRB. During DVT activities, the DTW and geochemical parameters were monitored to identify lithological limitations of injections and flowrates while observing the response in pressure. Periodically during injection activities, groundwater samples were retrieved to observe changes in turbidity, conductivity and to determine the PlumeStop concentration. DVT results verified initial design parameters and no significant changes were made.

3.1.2 *Injection Application*

PlumeStop and CaCl were co-mixed with municipal hydrant water and applied simultaneously while BDI Plus and HRC were injected via the slip-stream method. Since BDI Plus is anaerobic, it was injected with nitrogen to prevent exposure to oxygen. The mixture of PlumeStop and CaCl was injected using the RRS injection trailer through direct push borings drilled with a leading 1.5-inch retractable screen 3 feet in length.

Injection pressures and flow rates varied at each barrier and across different vertical intervals. Generally, pressures were observed between 0-120 pounds per square inch ("PSI") and flow rates were maintained between 2-11.4 gallons per minute ("GPM"). Injection was completed by pumping up to three injection points simultaneously using the RRS injection trailer manifold system. Although pressures were observed under 120 PSI, the RRS trailer is equipped with a pressure bypass valve that re-routes fluids back into the trailer tanks if downhole pressures reach 125 PSI in order to keep pressures at safe levels for field personnel. Soil borings were backfilled with hydrated bentonite after injection activities were completed to seal the boring and patched at the surface to match pre-existing grade materials.

Several injection points exhibited unexpected surfacing resulting in RRS abandoning the point and offsetting 1-2 feet to apply the remaining injectant volume. Steps taken to minimize surfacing included decreased flowrates, packing nearby boreholes with bentonite, and spacing out injection locations where practicable. The detailed injection summary logs are included in **Appendix B**. Specific information for each area of injections is summarized below.

Barrier A				
Application	Total Amount Applied	Amount Applied Per Point	Injection Points	Injection Depth
PlumeStop	6,955 pounds	217 pounds	32	9-16 ft bgs
HRC	654 pounds	20.44 pounds		
BDI Plus	9.613 liters	0.3 liters		
CaCl	1,835 pounds	57 pounds		

-Total of 14,242 gallons of PlumeStop was applied as a 15,000 mg/L solution.

Barrier B				
Application	Total Amount Applied	Amount Applied Per Point	Injection Points	Injection Depth
PlumeStop	15,445 pounds	245 pounds	61	9-16 ft bgs
HRC	1,667 pounds	26.45 pounds		
BDI Plus	24.387 liters	0.388 liters		
CaCl	4,065 pounds	65 pounds		

-Total of 14,248 gallons of PlumeStop and CaCl was applied as a 15,000 mg/L solution in points IP-05 through IP-12, and IP-16 through IP-30. A total of 3,165 gallons of PlumeStop was applied as a 16,000 mg/L solution in points IP-01 through IP-04, and IP-31 through IP-34.

Barrier C				
Application	Total Amount Applied	Amount Applied Per Point	Injection Points	Injection Depth
PlumeStop	8,800 pounds	200-415 pounds	33	12-20 ft bgs
HRC	1,040 pounds	30.48-61.16 pounds		
BDI Plus	16.0 liters	0.376-0.5 liters		
CaCl	2,200 pounds	63-98 pounds		

-Total of 14,248 gallons of PlumeStop and CaCl was applied as a 15,000 mg/L solution in points IP-05 through IP-12, and IP-16 through IP-30. A total of 3,165 gallons of PlumeStop was applied as a 16,000 mg/L solution in points IP-01 through IP-04, and IP-31 through IP-34.

Supplemental Injections				
Application	Total Amount Applied	Amount Applied Per Point	Injection Points	Injection Depth
Donor-X	4,400 lbs	90 lbs	10	7-17 ft bgs
BDI Plus	8 liters	0.52-1.3 liters		

-Total of 3,274 gallons of Donor X remedial solution was applied. Approximately 2,915 pounds was mixed and applied as a 12.7% solution, and 1,485 pounds was mixed and applied as a 25.7% solution.

In general, the following procedure was followed during injection activities:

1. Surface or overhead impediments and underground structures were identified prior to the injections. Underground structures included utility lines and sewers. The planned injection locations were adjusted to account for impediments and obstacles.
2. The direct push unit was set up over each pre-marked point with consideration that borings remained vertical during the injection process.
3. HRC was applied undiluted at each location.
4. PlumeStop was mixed with CaCl for application at IP-01 through IP-14 or mixed with water at the remaining injection points.
5. CaCl was mixed with PlumeStop as described in step 4, or with water and applied as an offset injection point.
6. BDI Plus was co-applied utilizing slip-stream technology while injecting the solution.
7. A bottom-up injection method was employed to distribute the injectant over the target vertical interval. This method utilizes an expendable point and retractable screen at the terminus of the drive rod assembly.
8. After the drive rods had been pushed to terminal depth, the rod assembly was withdrawn three to six inches to enable the expendable tip to be dropped from the drive rods.
9. The delivery hose was connected to the pump outlet and the drive rods. After confirming that the connections were secure, the injectant was pumped through the delivery system into the subsurface starting at the bottom of the injection interval.
10. The drive rods were withdrawn at two-foot intervals (e.g., 14 to 16 feet), and, if applicable, a one-foot interval at the top of the treatment zone. The pre-determined volume of solution was equally distributed across the interval. Deviations from this injection schedule were noted in the field book along with a reason for the change.
11. While removing drive rods, the pump was turned off to allow the pressure to bleed off, and then the length of drive rod was removed, the delivery hose reconnected, and the injection resumed as described above.
12. Volumetric application rates and injection pressures were monitored using in-line flow meters and pressure gauges installed at each delivery line. Regenesis recorded readings for flow rate and injection pressures throughout the injection point. Once the injection was completed and rods withdrawn, injection points were sealed using granular bentonite to the top of the boring.
13. Observations were made for any indications of aquifer refusal or "surfacing" around the injection rods or previously installed injection points. If subsurface acceptance appeared to be low or surfacing occurred, the injection rate was reduced.
14. The above steps were repeated until treatment of the entire vertical zone was achieved, with the drive rods cleaned as necessary.

15. Bentonite was installed in the open borehole when injection for that boring was completed and the drill rods removed. Each borehole was sealed immediately following the reagent application to minimize surfacing during subsequent injection processes.
16. The mobile rig was moved to the next probe point, repeating the above steps.

3.2 Post ISCR Performance Monitoring

Post ISCR groundwater monitoring activities were completed on July 13-16, 2020. Groundwater flowed to the southwest in July 2020 consistent with previous interpretations. Cumulative groundwater elevations are summarized in **Table 4**, and the potentiometric surface map for July 2020 is depicted on **Figure 10**. Samples were labeled, placed in an ice filled cooler maintained at 4ºC ±2ºC, and submitted under chain-of-custody protocol to Pace Analytical Services of Indianapolis, Indiana for VOCs analysis via United States Environmental Protection Agency ("USEPA") Method 8260. Additional samples were collected from a subset of 12 monitoring wells positioned at optimal locations in order to evaluate aquifer geochemistry including nitrate/nitrite, total and dissolved manganese and iron, sulfate, sulfide, total organic carbon ("TOC"), alkalinity, methane, ethane, and ethene. The laboratory reports and chain-of-custody forms are provided in **Appendix C**.

3.2.1 *Groundwater VOCs Results*

ISCR performance data is summarized in **Table 5** and the July 2020 groundwater analytical results are depicted on **Figures 11** and **12**. The April 2020 analytical results were utilized as a pre-injection baseline against which to compare the post-injection data collected in July 2020. The results of the VOCs analyses are as follows:

- PCE concentrations decreased from the April 2020 pre-RWP implementation concentrations at MW-04, MW-06, MW-07, MW-08, MW-12, MW-15 through MW-17, MW-19, MW-22, MW-24, and MW-28. Of note, the PCE concentration at MW-24 decreased from 111 µg/L in April 2020 to non-detect in July 2020.
- PCE concentration increases were reported at MW-01, MW-13, MW-14, MW-18, MW-20, and MW-26. Each of the concentration increases were within the seasonal fluctuation average at each location.
- cDCE was reported at MW-01 at 6.5 µg/L in July 2020 indicating bioattenuation is occurring. The occurrence of cDCE was previously limited to relatively low-level detections at MW-08 and MW-13 during monitoring events completed in 2017 and 2018. No other PCE breakdown products were reported.

3.2.2 *Groundwater Geochemical Parameter Results*

The April and July 2020 aquifer geochemical results were evaluated to determine ISCR performance. Geochemical parameters collected in July 2018 were also used to provide additional evaluation. The data are summarized in **Table 5** and depicted on **Figure 13**. The results are as follows:

- The pH of groundwater decreased in July 2020 at nine of the 12 performance monitoring well locations. This trend is likely associated with the application of HRC due to the release

of volatile fatty acids which act as weak acids depressing groundwater pH.

- Specific conductance measures the ability of groundwater to transmit an electrical current and is directly proportional to the amount of dissolved ions in the water. Conductivity increased in July 2020 at 10 of the 12 performance monitoring wells and can likely be attributed with the use of highly soluble CaCl as a PlumeStop binding agent.
- The bacteria responsible for anaerobic degradation of chlorinated hydrocarbons generally cannot function in environments with elevated dissolved oxygen ("DO") concentrations. A significant post-treatment decreasing DO trend was present at 11 of the 12 performance wells. The pre-treatment DO concentrations at MW-15 and MW-19 were measured at 6.82 and 6.30 mg/L and decreased to 0.01 and 1.47 mg/L, respectively.
- The oxidation-reduction potential ("ORP") of groundwater is a measure of electron activity and is an indicator of the relative tendency of a solution to accept or transfer electrons. Used in conjunction with other geochemical parameters, ORP indicates which terminal electron accepting processes predominate in an aerobic environment. ORP decreased at 10 of the 12 performance wells in July 2020 indicating favorable conditions for reductive dechlorination.
- Depleted levels of nitrate relative to background concentrations generally indicates the aquifer is sufficiently reducing to sustain nitrate reduction forming nitrite as a byproduct. A nitrate concentration decrease corresponding with an associated nitrite increase was present at MW-09 indicating nitrate was being utilized as an electron acceptor and denitrification was likely occurring.
- In some instances, Fe(III) and manganese (IV) are used as electron acceptors during anaerobic biodegradation of organic carbon, but typically are present in solid mineral form. During this process, Fe(III) is reduced to Fe(II), which is soluble in water. Similarly, Mn(IV) is reduced to soluble Mn(II). Fe(II) and Mn(II) concentrations can thus be used as indicators of anaerobic biodegradation. Concentration increases in Mn(II) (analyzed as dissolved manganese) were reported at five locations indicating that conditions were favorable for manganese reduction. Fe(II) was reported above the laboratory detection level at MW-01; however, pre-injection results were not available for comparison.
- TOC is an indicator of substrate distribution during performance monitoring. TOC was reported above the laboratory detection level in 7 of the 12 performance wells with concentrations ranging from 1.0 mg/L at MW-22 to 310 mg/L at MW-01.
- Methane, ethane, and ethene were not detected above laboratory reporting levels in July 2020.

4.0 EXPOSURE PATHWAY ASSESSMENT SUMMARY

Wilcox developed an exposure pathway assessment summary using data from the most recent and previous site investigations, published geological and soil literature, the Indiana Department of Natural Resources (IDNR) Water-Well Database, land-use and zoning information, and the IDEM Wellhead Protection Area Determinator. Following implementation of the Revised RWP, the CSM was updated, and no completed exposure pathways are currently present. Quarterly groundwater monitoring will continue in order to evaluate dissolved contaminant reduction and to assist with plume behavior evaluation. A graphical summary of the CSM is provided as **Figure 3**. It was assumed during the exposure pathway assessment that the Site and surrounding property use would remain consistent with current usage. The CSM will be updated as new data is obtained.

5.0 CONCLUSIONS

RWP implementation activities consisting of ISCR soil injections are complete. In accordance with the IDEM-approved November 1, 2019 Revised RWP, up to eight quarters of post-remedy groundwater monitoring will be completed to generate a data set that is representative of seasonal fluctuations and to demonstrate contaminant concentration reductions.

6.0 LIMITATIONS & SIGNATURES

Wilcox Environmental Engineering's (Wilcox's) services, data, opinions, and recommendations described in this report are for Client's sole and exclusive use, and the unauthorized use of or reliance on the data, opinions, or recommendations expressed herein by parties other than Wilcox's Client is prohibited without Wilcox's express written consent. The services described herein are limited to the specific project, property, and dates of Wilcox's work. No part of Wilcox's report shall be relied upon by any party to represent conditions at other times or properties. Wilcox will accept no responsibility for damages suffered by third parties as a result of reliance upon the data, opinions, or recommendations in this report.

Wilcox's services are subject to all limitations, qualifications, and indemnifications enumerated in the terms and conditions or contract governing the work. Wilcox's findings, interpretations, opinions, and recommendations are probabilities based on Wilcox's professional judgment of Site conditions as discernible from the limited, and often indirect, information provided by others, information available to us at the time we performed our work, or information observed or developed by Wilcox using the methods specified in the scope of work. Wilcox does not warrant the accuracy, completeness, or validity of information and independent opinions, conclusions, and recommendations provided or developed by others, nor does Wilcox assume any responsibility for documenting or reporting conditions detectable with methods or techniques not specified in the scope of work. Maps and drawings in this report are included only to aid the reader and should not be considered surveys or engineering studies. The investigation described in this report was also conducted within the context of agency rules, regulations, action levels, and enforcement policies in effect at the time Wilcox performed its work. Later changes in agency rules, regulations, action levels, or policies may result in different conclusions than those expressed in this report.

Wilcox has striven to perform the services in a manner consistent with that level of care and skill ordinarily exercised by other environmental consultants practicing in the same locality and under similar conditions existing at the time we performed our services. **No other warranty is either expressed or implied in this report or any other document generated in the course of performing Wilcox's services.**

Jeremy S. Kinman, LPG, PG
Associate Technical Director

R. Scott Stoldt, CPG, LPG, PG
Executive Director

TABLES

Table 1. Cumulative Grab Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, IN
Wilcox Project Number: 341.14
State Cleanup Number 0000402

Well	Date Sampled	Sample Type	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
Residential Groundwater Tap Screening Levels			**5**	**5**	**70**	**100**	**2**
Residential Vapor Intrusion Groundwater Screening Levels			110	9.1	NE	NE	2.1
Commercial/Industrial Vapor Intrusion Groundwater Screening Levels			*470*	*38*	*NE*	*NE*	*35*
B-04	01/20/2015	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
	01/20/2015	FD	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
B-05	01/20/2015	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
B-06	03/18/2015	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
B-07	03/18/2015	N	**7.1**	< 5.0	< 5.0	< 5.0	< 2.0
B-08	03/18/2015	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
	03/18/2015	FD	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
B-09	09/25/2015	N	**129**	< 5.0	10.5	< 5.0	< 2.0
B-10	09/25/2015	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
B-11	09/25/2015	N	**178**	< 5.0	8.6	< 5.0	< 2.0
	09/25/2015	FD	**228**	< 5.0	13.5	< 5.0	< 2.0
B-12	12/14/2015	FG	0	0	0	0	***52.4***
B-13	12/14/2015	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
	12/14/2015	FG	0	0	0	0	**20.4**
B-14	12/14/2015	FG	0	0	0	0	***51.8***
B-15	12/14/2015	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
	12/14/2015	FG	0	0	0	0	**32.9**
B-16	12/14/2015	FG	0	0	0	0	0
B-17	12/14/2015	FG	**156**	0	23.2	0	0
B-18	12/14/2015	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
	12/14/2015	FG	0	0	0	0	***35.0***
B-19	12/15/2015	FG	0	0	0	0	0
B-20	12/15/2015	FG	2.0	0	0	0	**22.4**
B-21	12/15/2015	FG	**88.9**	0	0	0	**27.2**
B-22	12/15/2015	FG	0	0	0	0	0
B-23	12/15/2015	FG	**424**	0	0	0	***43.6***
B-24	12/15/2015	FG	**25.6**	0	27.8	0	**27.4**
B-25	12/15/2015	FG	**388**	0	0	0	***50.5***
B-26	12/15/2015	FG	**22.2**	0	0	0	**26.5**
B-27	12/15/2015	FG	0	0	0	0	0
B-28	12/15/2015	FG	**41.6**	0	0	0	***47.1***
B-29	12/15/2015	FG	0	0	0	0	0
B-30	12/15/2015	FG	**235.8**	0	0	0	**12.4**
B-31	12/15/2015	FG	0	2.8	0	0	0
B-32	12/15/2015	FG	0	0.2	0	0	**16.0**
B-33	12/15/2015	FG	**234**	0	0	0	**30.1**
B-34	12/15/2015	FG	0	0	0	0	0
B-35	12/15/2015	FG	**36.7**	0	0	0	**16.6**
B-36	12/15/2015	FG	**61.6**	0	0	0	**30.0**
B-37	01/07/2016	N	**16.5**	< 5.0	< 5.0	< 5.0	< 2.0
B-38	01/07/2016	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
B-39	01/07/2016	N	**104**	< 5.0	< 5.0	< 5.0	< 2.0
B-40	01/07/2016	N	**5.1**	< 5.0	< 5.0	< 5.0	< 2.0
B-41	01/07/2016	N	**12.2**	< 5.0	< 5.0	< 5.0	< 2.0
B-42	01/07/2016	N	**9.2**	< 5.0	< 5.0	< 5.0	< 2.0
B-43	01/07/2016	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
B-44	01/07/2016	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
B-48	8/18/2017	FG	0	0	0	0	NA
B-51	8/18/2017	FG	0	0	0	0	NA
B-52	8/18/2017	FG	0	0	0	0	NA
B-53	8/18/2017	FG	0	0	0	0	NA
B-54	8/21/2017	FG	0	0	0	7.74	NA

Table 1. Cumulative Grab Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, IN
Wilcox Project Number: 341.14
State Cleanup Number 0000402

Well	Date Sampled	Sample Type	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
Residential Groundwater Tap Screening Levels			**5**	**5**	**70**	**100**	**2**
Residential Vapor Intrusion Groundwater Screening Levels			110	9.1	NE	NE	2.1
Commercial/Industrial Vapor Intrusion Groundwater Screening Levels			*470*	*38*	*NE*	*NE*	*35*
B-55	8/21/2017	FG	0	0	0	6.62	NA
B-56	8/21/2017	FG	0	0	0	6.86	NA
B-57	8/21/2017	FG	0	0	0	5.24	NA
B-58	8/21/2017	FG	0	0	0	0	NA
B-59	8/21/2017	FG	0	0	0	6.49	NA
B-60	8/21/2017	FG	0	0	0	5.59	NA
B-61	8/21/2017	FG	0	0	0	3.66	NA
B-62	8/21/2017	FG	0	0	0	0	NA
B-63	8/21/2017	FG	0	0	0	3.29	NA
B-64	8/22/2017	FG	0	0	0	0	NA
B-65	8/22/2017	FG	0	0	0	0	NA
B-66	8/22/2017	FG	0	0	0	0	NA
B-67	8/22/2017	FG	0	0	0	0	NA
B-68	06/06/2019	N	**16.0**	< 5.0	< 5.0	< 5.0	< 2.0
B-69	06/06/2019	N	**31.1**	< 5.0	< 5.0	< 5.0	< 2.0
B-70	06/06/2019	N	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
B-71	06/06/2019	N	**64.0**	< 5.0	< 5.0	< 5.0	< 2.0
	06/06/2019	FD	**68.1**	< 5.0	< 5.0	< 5.0	< 2.0
B-72	06/06/2019	N	**104**	< 5.0	6.8	< 5.0	< 2.0
B-73	06/06/2019	N	**124**	< 5.0	12.4	< 5.0	< 2.0
B-74	06/06/2019	N	**186**	< 5.0	< 5.0	< 5.0	< 2.0
B-75	06/06/2019	N	**52.5**	< 5.0	< 5.0	< 5.0	< 2.0

Notes:
N = Normal Field Sample
FD = Field Duplicate Sample
FG = FROG 2000/4000 Sample
NA = Not Analyzed
NE = Not Established
µg/L = micrograms per liter
< = Analyte not detected at the specified detection level
Screening levels obtained from IDEM's Remediation Closure Guide (RCG) Table A-6, March 22, 2012, updated March 2019
Bold values exceed IDEM RCG Residential Groundwater Tap Screening Levels
Underlined values exceed IDEM RCG Residential Vapor Intrusion Groundwater Screening Levels
Italicized values exceed IDEM RCG Commercial/Industrial Vapor Intrusion Groundwater Screening Levels

Table 2. Access Request and Vapor Intrusion Status Summary
Former O'Neal's Clothes Depot Cleaners
833 East Morgan Street, Martinsville, Indiana
Wilcox Project Number 341.14
State Cleanup Number 0000402

Property Address	Owner	Phone Number	Property Type	Date Access Agreement and Initial Informational Packet Mailed	Date Second Access Agreement Mailed	Date Third Access Agreement Hand Delivered	Date IDEM Access Request Mailed	Access Request Approval/Denial Status	Vapor Intrusion Status			
									First Winter VI Event	Second Winter VI Event	First Summer VI Event	Second Summer VI Event
40 North Colfax Street	Juanita Edwards Trust, 40 North Colfax Street, Martinsville, IN 46151		Residential	1/25/2017	N/A	N/A	N/A	Access agreement executed 1/28/2017.	3/24/2017	N/A	8/31/2017	N/A
660 East Jackson Street	Arlington Investments, LLC, P.O. Box 1807, Martinsville, IN 46151		Residential rental	5/16/2017	N/A	N/A	N/A	Access agreement executed 6/12/2017.	3/6/2018	N/A	9/12/2017	N/A
39 South Ohio Street	Michele L Suter, 39 South Ohio Street, Martinsville, IN 46151		Residential	7/28/2017	8/23/2017	N/A	N/A	Access agreement executed 8/26/2017.	3/8/2018	N/A	9/26/2017	N/A
40 South Ohio Street	Jeanne D Frye, 389 East Morgan Street, Martinsville, IN 46151		Residential rental	7/28/2017	8/16/2017	N/A	N/A	Access agreement executed 8/21/2017.	3/9/2018	N/A	9-6-17[1]	N/A
59 South Ohio Street	Jackson and Debra Davis, 59 South Ohio Street, Martinsville, IN 46151	765-346-1469	Residential	7/28/2017	N/A	N/A	N/A	Access agreement executed 8/9/2017.	Unresponsive to VI sample collection scheduling requests.			
60 South Ohio Street	Andrew and Anne Kominowski, 60 South Ohio Street, Martinsville, IN 46151		Residential	7/28/2017	N/A	N/A	N/A	Access agreement executed 7/31/2017.	3/5/2018	N/A	9/6/2017	N/A
89 South Ohio Street	John and Shirley Basham, 89 South Ohio Street, Martinsville, IN 46151		Residential	7/28/2017	N/A	N/A	N/A	Access agreement executed 8/1/2017.	3/15/2018	N/A	9/12/2017	N/A
90 South Ohio Street	Richard and Marilyn Hornberger, 90 South Ohio Street, Martinsville, IN 46151		Residential	7/28/2017	N/A	N/A	N/A	Access agreement executed 7/31/2017.	3/6/2018	N/A	9/11/2017	N/A
409 East Washington Street	Garrett C Malone, 409 East Washington Street, Martinsville, IN 46151		Residential	7/28/2017	N/A	N/A	N/A	Denied access 7/31/2017.				
445 East Washington Street	Larry and Carolyn Curtis, 445 East Washington Street, Martinsville, IN 46151		Residential	7/28/2017	N/A	N/A	N/A	Denied access 7/31/2017.				
539 East Washington Street	Kennith Costin, 539 East Washington Street, Martinsville, IN 46151		Commercial	7/18/2016	1/25/2017	2/27/2017	N/A	Denied access 7/30/2017.				
560 East Washington Street	Jonathon Carter and Robert Conyers, 560 East Washington Street, Martinsville, IN 46151	765-558-8929 / 317-525-8563	Residential	7/28/2017	8/16/2017	N/A	N/A	Access agreement executed 8/20/2017.	Unresponsive to VI sample collection scheduling requests.			
571 East Washington Street	Lou Modesitt, 571 East Washington Street, Martinsville, IN 46151	765-396-2432	Residential	7/26/2016	8/25/2016	2/27/2017	3/24/2017	Access agreement executed 6/11/2017.	Unresponsive to VI sample collection scheduling requests.			

Table 2. Access Request and Vapor Intrusion Status Summary
Former O'Neal's Clothes Depot Cleaners
833 East Morgan Street, Martinsville, Indiana
Wilcox Project Number 341.14
State Cleanup Number 0000402

Property Address	Owner	Phone Number	Property Type	Date Access Agreement and Initial Informational Packet Mailed	Date Second Access Agreement Mailed	Date Third Access Agreement Hand Delivered	Date IDEM Access Request Mailed	Access Request Approval/Denial Status	Vapor Intrusion Status			
									First Winter VI Event	Second Winter VI Event	First Summer VI Event	Second Summer VI Event
590 East Washington Street	Angie Dipert, 590 East Washington Street, Martinsville, IN 46151	765-318-2051	Residential	7/28/2017	8/16/2017	N/A	N/A	Access agreement executed 8/18/2017.	Unresponsive to VI sample collection scheduling requests.			
605 East Washington Street	Judith Ford, 605 East Washington Street, Martinsville, IN 46151		Residential	7/28/2017	8/16/2017	N/A	N/A	Denied access 8/29/2017.				
625 East Washington Street	Timothy Dunbar, 5085 West Big Hurricane Road, Martinsville, IN 46151	Mr. & Mrs. John Murtlow (Tenant) 765-346-6710 / 765-346-6254	Residential rental	1/25/2017	2/16/2017	2/27/2017	3/24/2017	Access agreement executed 3/22/2017.	Unresponsive to VI sample collection scheduling requests.			
639 East Washington Street	Michael and Charlene Emerson, 639 East Washington Street, Martinsville, IN 46151		Residential	1/25/2017	2/16/2017	2/27/2017	3/24/2017	Denied access 2/25/2017.				
640 East Washington Street	Jason and Michelle Scott, 640 East Washington Street, Martinsville, IN 46151	812-533-1712 / 615-679-0908 Cell - 812-243-6743	Residential	1/25/2017	2/16/2017	2/27/2017	N/A	No contact established. No response received.				
659 East Washington Street	Steven and Rebecca Sonnega, 659 East Washington Street, Martinsville, IN 46151		Residential	1/25/2017	N/A	N/A	N/A	Access agreement executed 1/29/2017.	3/24/2017	N/A	8/28/2018	N/A
	Michael and Lori Feaster - owners as of 8/22/2017		Residential	6/5/2018	N/A	N/A	N/A	Access agreement executed 7/30/2018.				
660 East Washington Street	Kari Palma, 660 East Washington Street, Martinsville, IN 46151	765-318-9365 Cell - 765-318-0243 / 765-318-0213	Residential	1/25/2017	2/16/2017	2/27/2017	N/A	No contact established. No response received.				
689 East Washington Street	Marcia and Tera Miles, 689 East Washington Street, Martinsville, IN 46151		Residential	1/25/2017	2/16/2017	2/27/2017	3/24/2017	Denied access 3/1/2017.				
690 East Washington Street	Michael Gaudzels, 690 East Washington Street, Martinsville, IN 46151	317-318-4117	Residential	1/25/2017	2/16/2017	2/27/2017	3/24/2017	Denied access 2/22/2017.				
700 East Washington Street	Laura Eckart, 700 East Washington Street, Martinsville, IN 46151		Residential	1/25/2017	2/16/2017	2/27/2017	N/A	Denied access 2/12/2019.				
709 East Washington Street	Richard and Victoria Kivett, 709 East Washington Street, Martinsville, IN 46151		Residential	1/25/2017	2/16/2017	2/27/2017	N/A	Denied access 9/24/2017.				
710 East Washington Street	Thomas and Vickie Head, 710 East Washington Street, Martinsville, IN 46151		Residential	1/25/2017	2/16/2017	2/27/2017	N/A	Denied access 2/12/2019.				

Table 2. Access Request and Vapor Intrusion Status Summary
Former O'Neal's Clothes Depot Cleaners
833 East Morgan Street, Martinsville, Indiana
Wilcox Project Number 341.14
State Cleanup Number 0000402

Property Address	Owner	Phone Number	Property Type	Date Access Agreement and Initial Informational Packet Mailed	Date Second Access Agreement Mailed	Date Third Access Agreement Hand Delivered	Date IDEM Access Request Mailed	Access Request Approval/Denial Status	Vapor Intrusion Status			
									First Winter VI Event	Second Winter VI Event	First Summer VI Event	Second Summer VI Event
739 East Washington Street	Daniel L Baldwin, 739 East Washington Street, Martinsville, IN 46151	812-988-6421 / 317-418-7545 / 602-291-4384	Residential	1/25/2017	2/16/2017	2/27/2017	N/A	No contact established. No response received.				
740 East Washington Street	Karen Louise Smith Trust, 740 East Washington Street, Martinsville, IN 46151		Residential	1/25/2017	N/A	N/A	N/A	Access agreement executed 1/30/2017.	3/24/2017	1/31/2020	8/31/2017	5/15/2018[2]
759 East Washington Street	Mark and Joanne Stuttgen, 759 East Washington Street, Martinsville, IN 46151		Residential	1/25/2017	N/A	N/A	N/A	Access agreement executed 8/4/2017.	3/15/2018	N/A	9/12/2017	N/A
760 East Washington Street	Mark and Lyna Chaplin, 760 East Washington Street, Martinsville, IN 46151		Residential	1/25/2017	2/16/2017	N/A	N/A	Access agreement executed 2/11/2017.	3/24/2017	3/15/2018	8/31/2017	N/A
790 East Washington Street	Sandra Long, 790 East Washington Street, Martinsville, IN 46151	765-342-4527 / 812-936-2717 Cell - 317-445-3997	Residential	1/25/2017	2/16/2017	2/27/2017	N/A	No contact established. No response received.				
840 East Washington Street	Gerald & Anne Elsner, 840 East Washington Street, Martinsville, IN 46151	630-778-9191 (Jerry) 317-407-6658 (Anne)	Residential	N/A	N/A	N/A	N/A	Access agreement executed 03/09/2020	3/10/2020	N/A	8/5/2020	N/A
879 East Washington Street	Kenneth L. Duncan, 879 East Washington Street, Martinsville, IN 46151	765-346-5155	Residential	N/A	N/A	N/A	N/A	Access agreement executed 03/08/2020	3/22/2020	N/A	N/A	N/A

= Access Granted

= Access Not Granted Nor Denied. Attempts At Access Discontinued Per IDEM's November 13, 2015 Waste-0065-NPD

= Access Denied

= Non-Compliant VI Sampling Results

= Compliant VI Sampling Results

[1]TCE indoor air exceedance with no corresponding sub-slab result attributed to indoor air source.
[2]VI Event Represents the 30-Day Post-VMS Installation Confirmatory Sampling Event.

Table 3. Cumulative Soil Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, IN
Wilcox Project Number: 341.14
State Cleanup Number: 0000402

Location	Date Sampled	Sample Depth	Sample Type	Tetrachloroethene (mg/kg)	Trichloroethene (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	trans-1,2-Dichloroethene (mg/kg)	Vinyl chloride (mg/kg)
Residential Migration to Groundwater Screening Level				**0.045**	**0.036**	**0.41**	**0.62**	**0.014**
Residential Direct Contact Screening Level				110	5.7	220	1,900	0.83
Commercial Industrial Direct Contact Screening Level				*170*	*19*	*2,300*	*1,900*	*17*
Excavation Direct Contact Screening Level				170	95	2,400	1,900	1300
HA-01	9/29/2014	3-3.5 ft	N	**7.17**	< 0.0043	< 0.0043	< 0.0043	< 0.0043
HA-01	9/29/2014	3.5-4 ft	N	**0.217**	< 0.0045	< 0.0045	< 0.0045	< 0.0045
MW-01	1/20/2015	4-5 ft	N	0.0061	< 0.0043	< 0.0043	< 0.0043	< 0.0043
MW-02	1/20/2015	3-5 ft	N	< 0.0043	< 0.0043	< 0.0043	< 0.0043	< 0.0043
MW-03	1/20/2015	3-5 ft	N	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
B-04	1/20/2015	3-4 ft	N	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042
B-04	1/20/2015	3-4 ft	FD	0.0323	< 0.0039	< 0.0039	< 0.0039	< 0.0039
B-05	1/20/2015	3-5 ft	N	0.0273	< 0.0041	< 0.0041	< 0.0041	< 0.0041
B-06	3/18/2015	2-4 ft	N	0.0095	< 0.0041	< 0.0041	< 0.0041	< 0.0041
B-06	3/18/2015	5-6 ft	N	0.0088	< 0.0041	< 0.0041	< 0.0041	< 0.0041
B-07	3/18/2015	3-4 ft	N	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042
B-07	3/18/2015	6-7 ft	N	< 0.0039	< 0.0039	< 0.0039	< 0.0039	< 0.0039
B-08	3/18/2015	1-2 ft	N	0.0105	< 0.0043	< 0.0043	< 0.0043	< 0.0043
B-08	3/18/2015	1-2 ft	FD	**0.238**	0.0064	< 0.0040	< 0.0040	< 0.0040
B-08	3/18/2015	3-5 ft	N	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
MW-04	3/18/2015	3-4 ft	N	**0.0688**	< 0.0041	< 0.0041	< 0.0041	< 0.0041
MW-06	3/18/2015	5-6.5 ft	N	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
MW-07	9/24/2015	4-5 ft	N	< 0.0035	< 0.0035	< 0.0035	< 0.0035	< 0.0035
MW-08	9/24/2015	4-5 ft	N	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046
MW-09	9/24/2015	4-5 ft	N	0.0186	< 0.0048	< 0.0048	< 0.0048	< 0.0048
MW-10	9/24/2015	3-4 ft	N	**0.0683**	< 0.0033	< 0.0033	< 0.0033	< 0.0033
MW-10	9/24/2015	6-7 ft	N	0.0071	< 0.0042	< 0.0042	< 0.0042	< 0.0042
B-09	9/25/2015	5-6 ft	N	< 0.0039	< 0.0039	< 0.0039	< 0.0039	< 0.0039
B-10	9/25/2015	5-6 ft	N	< 0.0039	< 0.0039	< 0.0039	< 0.0039	< 0.0039
B-11	9/25/2015	5-6 ft	N	0.0106	< 0.0041	< 0.0041	< 0.0041	< 0.0041
SB-045	8/23/2017	4-6 ft	N	0.0143	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB-046	8/23/2017	6-8 ft	N	0.0174	< 0.0041	< 0.0041	< 0.0041	< 0.0041
SB-066	8/22/2017	4-6 ft	N	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046
B-68	6/6/2019	4-5 ft	N	0.0366	< 0.0047	< 0.0047	< 0.0047	< 0.0047
B-69	6/6/2019	9-9.5 ft	N	0.0130	< 0.0048	< 0.0048	< 0.0048	< 0.0048
B-70	6/6/2019	9-9.5 ft	N	< 0.0064	< 0.0064	< 0.0064	< 0.0064	< 0.0064
B-71	6/6/2019	9-9.5 ft	N	0.0440	0.0077	< 0.0051	< 0.0051	< 0.0051
B-71	6/6/2019	9-9.5 ft	FD	0.0094	< 0.0055	< 0.0055	< 0.0055	< 0.0055
B-72	6/6/2019	9-9.5 ft	N	**0.0531**	< 0.0052	< 0.0052	< 0.0052	< 0.0052
B-73	6/6/2019	9-9.5 ft	N	**0.0863**	< 0.0049	< 0.0049	< 0.0049	< 0.0049
B-74	6/6/2019	9-9.5 ft	N	**0.156**	< 0.0049	< 0.0049	< 0.0049	< 0.0049
B-75	6/6/2019	9-9.5 ft	N	**0.0704**	< 0.0047	< 0.0047	< 0.0047	< 0.0047

Notes:
NA = Not Analyzed
N = Normal Field Sample
FD = Field Duplicate Sample
mg/kg = milligrams per kilogram
< = Analyte not detected at the specific detection level
Screening levels obtained from IDEM's Remediation Closure Guide (RCG), March 22, 2012, updated March 2020
Bold values exceed IDEM RCG Residential Migration to Groundwater Screening Levels for Soil

Table 4. Cumulative Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, Indiana
Wilcox Projec Number 341.14
State Cleanup Number 0000402

Well	TOC Elevation (feet)	Screen Interval (feet)	Date Sampled	Sample Type	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
					Residential Groundwater Tap Screening Levels		**5**	**5**	**70**	**100**	**2**
					Residential Vapor Intrusion Groundwater Screening Levels		110	9.1	NE	NE	2.1
					Commercial/Industrial Vapor Intrusion Groundwater Screening Levels		*470*	*38*	*NE*	*NE*	*35*
MW-01	98.57	6-16	01/23/2015	N	10.90	87.67	**53.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	98.57	6-16	01/23/2015	FD	10.90	87.67	**61**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	98.57	6-16	04/21/2015	N	9.93	88.64	**40.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	98.57	6-16	09/28/2015	N	9.88	88.69	**60.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	02/04/2016	WLO	11.02	600.72	Gauged Only				
MW-01	611.74	6-16	09/14/2016	N	10.34	601.40	**65.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	09/14/2016	FD	10.34	601.40	**61.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	11/22/2016	N	11.12	600.62	**26.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	02/03/2017	N	10.71	601.03	**8.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	05/03/2017	N	10.05	601.69	**11.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	09/19/2017	N	10.10	601.64	**31.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	12/06/2017	N	10.87	600.87	**12.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	03/21/2018	N	NA	NA	**32.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	05/30/2018	N	8.94	602.80	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	08/29/2018	N	10.22	601.52	**37.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	11/27/2018	N	10.55	601.19	**67.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	02/21/2019	N	8.27	603.47	**36.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	05/21/2019	N	7.67	604.07	**32.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	08/01/2019	N	7.84	603.90	**43.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	10/30/2019	N	10.04	601.70	**46.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	01/29/2020	N	9.26	602.48	**18.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	04/08/2020	N	8.19	603.55	**24.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-01	611.74	6-16	07/15/2020	N	8.19	603.55	**30.1**	< 5.0	6.5	< 5.0	< 2.0
MW-02	99.99	6-16	01/23/2015	N	12.10	87.89	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	99.99	6-16	04/06/2015	WLO	11.48	88.51	Gauged Only				
MW-02	99.99	6-16	09/28/2015	N	11.02	88.97	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	02/04/2016	WLO	12.25	600.90	Gauged Only				
MW-02	613.15	6-16	09/12/2016	N	11.55	601.60	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	11/21/2016	N	12.41	600.74	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	02/01/2017	N	11.89	601.26	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	05/02/2017	N	11.35	601.80	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	09/18/2017	N	11.26	601.89	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	12/05/2017	N	12.20	600.95	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	03/19/2018	N	11.10	602.05	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	05/29/2018	N	9.98	603.17	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	08/27/2018	N	11.42	601.73	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	11/26/2018	N	11.75	601.40	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	02/20/2019	N	9.40	603.75	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	05/20/2019	N	8.70	604.45	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	07/31/2019	N	8.85	604.30	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	10/29/2019	N	11.22	601.93	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	01/28/2020	N	10.38	602.77	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	04/07/2020	N	9.24	603.91	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-02	613.15	6-16	07/14/2020	N	9.24	603.91	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	99.14	6-16	01/23/2015	N	11.10	88.04	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	99.14	6-16	04/06/2015	WLO	10.47	88.67	Gauged Only				
MW-03	99.14	6-16	09/28/2015	N	10.05	89.09	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	02/04/2016	WLO	11.25	601.08	Gauged Only				
MW-03	612.33	6-16	09/13/2016	N	10.54	601.79	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	11/21/2016	N	11.32	601.01	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	02/02/2017	N	10.91	601.42	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	05/03/2017	N	10.27	602.06	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	09/18/2017	N	10.27	602.06	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	12/05/2017	N	11.20	601.13	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	03/19/2018	N	10.15	602.18	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	05/29/2018	N	9.06	603.27	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	08/28/2018	N	NA	NA	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	11/26/2018	N	10.74	601.59	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	02/20/2019	N	8.43	603.90	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	05/20/2019	N	7.79	604.54	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	07/30/2019	N	7.96	604.37	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	10/29/2019	N	10.20	602.13	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	01/28/2020	N	9.39	602.94	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	04/07/2020	N	8.31	604.02	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-03	612.33	6-16	07/14/2020	N	8.31	604.02	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	98.32	6-16	04/06/2015	N	10.15	88.17	**30.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	98.32	6-16	09/28/2015	N	9.78	88.54	**26.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	02/04/2016	WLO	10.93	600.54	Gauged Only				
MW-04	611.47	6-16	09/14/2016	N	10.26	601.21	**32.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	11/22/2016	N	NA	NA	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	02/03/2017	N	10.60	600.87	**5.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	05/03/2017	N	9.91	601.56	**7.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	09/19/2017	N	10.00	601.47	**12.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	12/06/2017	N	11.03	600.44	**6.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	03/20/2018	N	9.87	601.60	**8.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	05/30/2018	N	8.85	602.62	**25.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	08/29/2018	N	10.11	601.36	**5.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	11/27/2018	N	10.44	601.03	**8.5**	< 5.0	< 5.0	< 5.0	< 2.0

Table 4. Cumulative Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, Indiana
Wilcox Projec Number 341.14
State Cleanup Number 0000402

Well	TOC Elevation (feet)	Screen Interval (feet)	Date Sampled	Sample Type	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
					Residential Groundwater Tap Screening Levels		**5**	**5**	**70**	**100**	**2**
					Residential Vapor Intrusion Groundwater Screening Levels		110	9.1	NE	NE	2.1
					Commercial/Industrial Vapor Intrusion Groundwater Screening Levels		*470*	*38*	*NE*	*NE*	*35*
MW-04	611.47	6-16	02/21/2019	N	8.16	603.31	**34.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	05/21/2019	N	7.62	603.85	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	07/30/2019	N	7.76	603.71	**31.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	10/29/2019	N	9.92	601.55	**7.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	01/29/2020	N	9.15	602.32	**14.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	04/08/2020	N	8.11	603.36	**25.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-04	611.47	6-16	07/14/2020	N	8.11	603.36	**24.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	98.60	6-16	04/06/2015	N	10.12	88.48	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	98.60	6-16	04/06/2015	FD	10.12	88.48	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	98.60	6-16	09/28/2015	N	9.77	88.83	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	02/04/2016	WLO	10.90	600.87	Gauged Only				
MW-05	611.77	6-16	09/12/2016	N	10.19	601.58	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	11/21/2016	N	10.97	600.80	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	02/02/2017	N	10.55	601.22	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	05/03/2017	N	9.87	601.90	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	09/18/2017	N	9.98	601.79	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	12/05/2017	N	10.83	600.94	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	03/19/2018	N	9.85	601.92	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	05/30/2018	N	8.84	602.93	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	08/28/2018	N	10.08	601.69	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	11/26/2018	N	10.41	601.36	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	02/20/2019	N	8.18	603.59	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	05/21/2019	N	7.64	604.13	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	07/30/2019	N	7.80	603.97	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	10/29/2019	N	9.91	601.86	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	01/28/2020	N	9.14	602.63	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	04/07/2020	N	8.11	603.66	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-05	611.77	6-16	07/14/2020	N	8.11	603.66	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	97.56	6-16	04/06/2015	N	10.10	87.46	**119**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	97.56	6-16	09/28/2015	N	9.66	87.90	**142**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	97.56	6-16	09/28/2015	FD	9.66	87.90	**150**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	02/04/2016	WLO	10.82	600.04	Gauged Only				
MW-06	610.86	6-16	09/14/2016	N	10.13	600.73	**141**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	11/23/2016	N	10.94	599.92	**81.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	02/03/2017	N	10.50	600.36	**85.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	05/04/2017	N	9.66	601.20	**78.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	09/20/2017	N	9.89	600.97	**108**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	12/07/2017	N	10.77	600.09	**87.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	03/21/2018	N	9.70	601.16	**69.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	05/31/2018	N	8.75	602.11	**83.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	08/30/2018	N	10.02	600.84	**100**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	11/28/2018	N	10.34	600.52	**80.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	02/21/2019	N	8.11	602.75	**46.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	05/22/2019	N	6.44	604.42	**38.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	08/01/2019	N	7.64	603.22	**82.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	10/30/2019	N	9.86	601.00	**32.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	01/30/2020	N	9.14	601.72	**25.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	04/08/2020	N	8.05	602.81	**36.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-06	610.86	6-16	07/16/2020	N	8.05	602.81	**33.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	97.03	6-16	09/28/2015	N	9.51	87.52	**8.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	02/04/2016	WLO	10.64	599.71	Gauged Only				
MW-07	610.35	6-16	09/13/2016	N	9.94	600.41	**12.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	11/22/2016	N	10.69	599.66	**7.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	02/02/2017	N	10.20	600.15	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	05/03/2017	N	9.64	600.71	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	09/18/2017	N	9.70	600.65	**7.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	12/05/2017	N	10.60	599.75	**6.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	03/19/2018	N	9.55	600.80	**5.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	05/30/2018	N	8.60	601.75	**8.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	08/28/2018	N	9.84	600.51	**14.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	11/26/2018	N	10.16	600.19	**6.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	02/20/2019	N	7.93	602.42	**6.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	05/21/2019	N	7.36	602.99	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	07/30/2019	N	7.53	602.82	**7.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	10/29/2019	N	9.71	600.64	**9.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	01/28/2020	N	9.02	601.33	**7.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	04/07/2020	N	7.96	602.39	**8.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-07	610.35	6-16	07/14/2020	N	7.96	602.39	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	97.52	6-16	09/28/2015	N	9.95	87.57	**65.7**	< 5.0	18.5	< 5.0	< 2.0
MW-08	610.86	6-16	02/04/2016	WLO	11.16	599.70	Gauged Only				
MW-08	610.86	6-16	09/14/2016	N	10.41	600.45	**88.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	09/14/2016	FD	10.41	600.45	**75.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	11/23/2016	N	11.17	599.69	**61.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	02/03/2017	N	10.72	600.14	**18.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	05/03/2017	N	10.15	600.71	**31.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	09/19/2017	N	10.15	600.71	**66.5**	< 5.0	5.5	< 5.0	< 2.0

Table 4. Cumulative Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, Indiana
Wilcox Projec Number 341.14
State Cleanup Number 0000402

Well	TOC Elevation (feet)	Screen Interval (feet)	Date Sampled	Sample Type	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
					Residential Groundwater Tap Screening Levels		**5**	**5**	**70**	**100**	**2**
					Residential Vapor Intrusion Groundwater Screening Levels		110	9.1	NE	NE	2.1
					Commercial/Industrial Vapor Intrusion Groundwater Screening Levels		*470*	*38*	*NE*	*NE*	*35*
MW-08	610.86	6-16	12/07/2017	N	10.71	600.15	**116**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	03/21/2018	N	9.99	600.87	**81.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	05/31/2018	N	9.04	601.82	**52.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	07/31/2018	N	NA	NA	**67.8**	< 5.0	9.0	< 5.0	< 2.0
MW-08	610.86	6-16	08/28/2018	N	10.30	600.56	**84.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	11/27/2018	N	10.62	600.24	**78.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	02/21/2019	N	8.37	602.49	**51.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	05/22/2019	N	7.75	603.11	**13.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	07/31/2019	N	7.94	602.92	**17.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	10/30/2019	N	10.17	600.69	**33.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	01/29/2020	N	9.47	601.39	**31.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	04/08/2020	N	8.38	602.48	**35.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-08	610.86	6-16	07/15/2020	N	8.38	602.48	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	97.48	6-16	09/28/2015	N	10.77	86.71	**276**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	02/04/2016	WLO	11.96	598.85	Gauged Only				
MW-09	610.81	6-16	09/14/2016	N	11.26	599.55	**376**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	11/23/2016	N	12.00	598.81	**310**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	11/23/2016	FD	12.00	598.81	**350**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	02/03/2017	N	11.61	599.20	**145**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	02/03/2017	FD	11.61	599.20	**141**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	05/04/2017	N	11.05	599.76	**80.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	09/20/2017	N	10.96	599.85	**293**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	12/07/2017	N	11.56	599.25	**329**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	03/21/2018	N	10.88	599.93	**290**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	05/31/2018	N	9.82	600.99	**245**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	07/30/2018	N	NA	NA	**291**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	08/29/2018	N	11.15	599.66	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	11/28/2018	N	11.43	599.38	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	02/22/2019	N	9.21	601.60	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	05/23/2019	N	8.53	602.28	**7.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	07/30/2019	N	8.75	602.06	**5.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	10/31/2019	N	11.04	599.77	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	01/30/2020	N	10.43	600.38	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	04/09/2020	N	9.31	601.50	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09	610.81	6-16	07/15/2020	N	9.31	601.50	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	09/20/2017	N	11.10	599.79	**58.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	12/07/2017	N	11.85	599.04	**112**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	03/21/2018	N	11.02	599.87	**31.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	05/31/2018	N	9.99	600.90	**78.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	07/30/2018	N	NA	NA	**82.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	08/29/2018	N	11.30	599.59	**10.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	11/28/2018	N	11.58	599.31	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	02/22/2019	N	9.35	601.54	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	05/23/2019	N	8.70	602.19	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	07/30/2019	N	8.90	601.99	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	10/31/2019	N	11.21	599.68	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	01/30/2020	N	10.59	600.30	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	04/08/2020	N	9.43	601.46	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-09D	610.89	32.5-37.5	07/16/2020	N	9.43	601.46	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	97.88	6-16	09/28/2015	N	10.95	86.93	**33**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	02/04/2016	WLO	12.19	599.01	Gauged Only				
MW-10	611.20	6-16	09/14/2016	N	11.49	599.71	**28.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	11/22/2016	N	12.21	598.99	**20.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	02/02/2017	N	11.83	599.37	**17.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	05/03/2017	N	11.34	599.86	**11.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	09/19/2017	N	11.16	600.04	**17.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	12/07/2017	N	11.92	599.28	**21.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	03/21/2018	N	11.03	600.17	**14.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	05/31/2018	N	9.99	601.21	**17.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	07/30/2018	N	NA	NA	**15.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	08/28/2018	N	11.39	599.81	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	11/27/2018	N	11.68	599.52	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	02/21/2019	N	9.45	601.75	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	05/22/2019	N	8.77	602.43	**6.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	07/31/2019	N	8.94	602.26	**22.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	10/30/2019	N	11.27	599.93	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	01/29/2020	N	10.64	600.56	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	04/08/2020	N	9.51	601.69	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-10	611.20	6-16	07/16/2020	N	9.51	601.69	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	02/04/2016	N	12.71	598.09	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	09/13/2016	N	11.95	598.85	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	11/21/2016	N	12.70	598.10	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	02/02/2017	N	12.35	598.45	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	05/03/2017	N	11.88	598.92	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	09/18/2017	N	11.64	599.16	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	12/05/2017	N	12.65	598.15	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0

Table 4. Cumulative Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, Indiana
Wilcox Projec Number 341.14
State Cleanup Number 0000402

Well	TOC Elevation (feet)	Screen Interval (feet)	Date Sampled	Sample Type	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
					Residential Groundwater Tap Screening Levels		**5**	**5**	**70**	**100**	**2**
					Residential Vapor Intrusion Groundwater Screening Levels		110	9.1	NE	NE	2.1
					Commercial/Industrial Vapor Intrusion Groundwater Screening Levels		*470*	*38*	*NE*	*NE*	*35*
MW-11	610.80	6-16	03/19/2018	N	11.49	599.31	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	05/30/2018	N	10.40	600.40	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	07/31/2018	N	NA	NA	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	07/31/2018	FD	NA	NA	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	08/28/2018	N	11.90	598.90	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	11/26/2018	N	12.20	598.60	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	02/20/2019	N	9.95	600.85	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	05/21/2019	N	9.16	601.64	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	07/30/2019	N	9.35	601.45	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	10/29/2019	N	11.85	598.95	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	01/28/2020	N	11.31	599.49	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	04/07/2020	N	10.07	600.73	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-11	610.80	6-16	07/14/2020	N	10.07	600.73	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	02/04/2016	N	10.26	599.50	**10.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	09/14/2016	N	9.63	600.13	**9.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	11/22/2016	N	11.37	598.39	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	02/02/2017	N	9.91	599.85	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	05/03/2017	N	9.17	600.59	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	09/18/2017	N	9.40	600.36	**7.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	12/05/2017	N	10.28	599.48	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	03/19/2018	N	9.26	600.50	**5.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	05/30/2018	N	8.32	601.44	**9.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	08/28/2018	N	9.52	600.24	**15.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	11/27/2018	N	9.82	599.94	**10.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	02/20/2019	N	7.64	602.12	**11.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	05/21/2019	N	7.16	602.60	**9.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	07/31/2019	N	7.32	602.44	**11.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	10/29/2019	N	9.41	600.35	**16.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	01/28/2020	N	8.75	601.01	**6.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	04/07/2020	N	7.71	602.05	**11.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-12	609.76	6-16	07/14/2020	N	7.71	602.05	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	02/04/2016	N	10.90	598.42	**13.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	09/13/2016	N	10.19	599.13	**19.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	11/22/2016	N	10.94	598.38	**21.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	02/02/2017	N	10.50	598.82	**14.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	05/03/2017	N	9.85	599.47	**16.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	09/19/2017	N	9.95	599.37	**13.1**	< 5.0	10.4	< 5.0	< 2.0
MW-13	609.32	6-16	12/07/2017	N	10.90	598.42	**16.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	03/20/2018	N	9.85	599.47	**19.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	05/30/2018	N	8.85	600.47	**18.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	08/29/2018	N	10.11	599.21	**21.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	11/28/2018	N	10.41	598.91	**23.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	02/21/2019	N	8.22	601.10	**19.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	05/22/2019	N	7.66	601.66	**10.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	07/31/2019	N	7.86	601.46	**21.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	10/30/2019	N	10.04	599.28	**16.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	01/29/2020	N	9.48	599.84	**15.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	04/08/2020	N	8.37	600.95	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-13	609.32	6-16	07/16/2020	N	8.37	600.95	**18.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	02/05/2016	N	10.62	597.43	**9.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	09/13/2016	N	9.90	598.15	**14.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	11/22/2016	N	10.66	597.39	**13.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	02/02/2017	N	10.26	597.79	**10.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	05/03/2017	N	9.67	598.38	**10.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	09/19/2017	N	9.66	598.39	**12.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	12/06/2017	N	10.55	597.50	**11.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	03/20/2018	N	9.59	598.46	**9.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	05/30/2018	N	8.50	599.55	**10.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	08/29/2018	N	9.88	598.17	**14.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	11/27/2018	N	10.16	597.89	**15.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	02/21/2019	N	7.97	600.08	**6.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	05/21/2019	N	7.35	600.70	**5.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	07/31/2019	N	7.55	600.50	**10.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	10/30/2019	N	9.87	598.18	**8.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	01/29/2020	N	9.41	598.64	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	04/08/2020	N	8.20	599.85	**6.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-14	608.05	6-16	07/15/2020	N	8.20	599.85	**8.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	02/05/2016	N	10.72	597.38	**178**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	02/05/2016	FD	10.72	597.38	**202**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	09/14/2016	N	10.06	598.04	**207**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	11/23/2016	N	10.78	597.32	**224**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	02/03/2017	N	10.40	597.70	**233**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	05/04/2017	N	9.70	598.40	**195**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	05/04/2017	FD	9.70	598.40	**212**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	09/20/2017	N	9.72	598.38	**156**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	09/20/2017	FD	9.72	598.38	**142**	< 5.0	< 5.0	< 5.0	< 2.0

Table 4. Cumulative Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, Indiana
Wilcox Projec Number 341.14
State Cleanup Number 0000402

Well	TOC Elevation (feet)	Screen Interval (feet)	Date Sampled	Sample Type	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
					Residential Groundwater Tap Screening Levels		**5**	**5**	**70**	**100**	**2**
					Residential Vapor Intrusion Groundwater Screening Levels		110	9.1	NE	NE	2.1
					Commercial/Industrial Vapor Intrusion Groundwater Screening Levels		*470*	*38*	*NE*	*NE*	*35*
MW-15	608.10	6-16	12/07/2017	N	10.71	597.39	**112**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	12/07/2017	FD	10.71	597.39	**119**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	03/21/2018	N	10.66	597.44	**121**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	03/21/2018	FD	10.66	597.44	**97.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	05/31/2018	N	9.00	599.10	**154**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	05/31/2018	FD	9.00	599.10	**144**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	07/30/2018	N	NA	NA	**165**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	08/30/2018	N	9.99	598.11	**128**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	08/30/2018	FD	9.99	598.11	**132**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	11/28/2018	N	10.27	597.83	**147**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	11/28/2018	FD	10.27	597.83	**167**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	02/22/2019	N	8.05	600.05	**86.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	02/22/2019	FD	8.05	600.05	**95.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	05/23/2019	N	7.40	600.70	**156**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	05/23/2019	FD	7.40	600.70	**185**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	08/01/2019	N	7.54	600.56	**175**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	08/01/2019	FD	7.54	600.56	**156**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	10/31/2019	N	9.98	598.12	**158**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	10/31/2019	FD	9.98	598.12	**162**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	01/30/2020	N	9.52	598.58	**91.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	01/30/2020	FD	9.52	598.58	**99.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	04/09/2020	N	8.25	599.85	**74.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	04/09/2020	FD	8.25	599.85	**70.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	07/15/2020	N	8.25	599.85	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15	608.10	6-16	07/15/2020	FD	8.25	599.85	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	09/20/2017	N	9.90	598.29	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	12/07/2017	N	10.86	597.33	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	03/21/2018	N	9.80	598.39	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	05/31/2018	N	8.75	599.44	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	07/30/2018	N	NA	NA	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	08/30/2018	N	10.12	598.07	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	11/28/2018	N	10.39	597.80	**9.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	02/22/2019	N	8.17	600.02	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	05/23/2019	N	7.47	600.72	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	08/01/2019	N	7.71	600.48	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	10/31/2019	N	10.17	598.02	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	01/30/2020	N	9.69	598.50	**5.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	04/09/2020	N	8.44	599.75	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-15D	608.19	30-35	07/16/2020	N	8.44	599.75	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	02/04/2016	N	12.13	596.75	**19.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	09/14/2016	N	11.48	597.40	**16.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	11/22/2016	N	12.20	596.68	**21.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	02/03/2017	N	11.78	597.10	**18.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	05/04/2017	N	11.26	597.62	**15.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	09/19/2017	N	11.15	597.73	**11.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	12/06/2017	N	11.59	597.29	**24.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	03/21/2018	N	11.13	597.75	**12.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	05/31/2018	N	10.00	598.88	**9.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	07/31/2018	N	NA	NA	**18.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	08/29/2018	N	11.44	597.44	**20.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	11/27/2018	N	11.68	597.20	**30.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	02/21/2019	N	9.47	599.41	**14.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	05/23/2019	N	8.58	600.30	**7.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	07/31/2019	N	8.96	599.92	**17.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	10/30/2019	N	11.46	597.42	**21.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-16	608.88	6-16	01/27/2020	NA	NA	NA	Well Abandoned or Destroyed				
MW-16	608.88	6-16	04/06/2020	NA	NA	NA	Not Sampled				
MW-16	608.88	6-16	07/15/2020	N	10.74	598.14	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	02/05/2016	N	11.39	596.12	**21.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	09/14/2016	N	10.75	596.76	**33.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	11/22/2016	N	11.44	596.07	**17.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	02/03/2017	N	11.03	596.48	**13.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	05/03/2017	N	10.62	596.89	**13.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	09/19/2017	N	10.35	597.16	**24.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	12/06/2017	N	11.19	596.32	**20.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	03/20/2018	N	10.38	597.13	**16.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	05/30/2018	N	9.08	598.43	**25.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	07/30/2018	N	NA	NA	**16.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	08/28/2018	N	10.69	596.82	**26.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	11/28/2018	N	10.94	596.57	**22.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	02/21/2019	N	NA	NA	**17.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	05/22/2019	N	7.91	599.60	**12.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	08/01/2019	N	8.11	599.40	**28.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	10/30/2019	N	10.75	596.76	**18.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	01/29/2020	N	10.42	597.09	**15.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	04/08/2020	N	9.04	598.47	**16.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-17	607.51	6-16	07/15/2020	N	9.04	598.47	**13.8**	< 5.0	< 5.0	< 5.0	< 2.0

Table 4. Cumulative Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, Indiana
Wilcox Projec Number 341.14
State Cleanup Number 0000402

Well	TOC Elevation (feet)	Screen Interval (feet)	Date Sampled	Sample Type	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
Residential Groundwater Tap Screening Levels							**5**	**5**	**70**	**100**	**2**
Residential Vapor Intrusion Groundwater Screening Levels							110	9.1	NE	NE	2.1
Commercial/Industrial Vapor Intrusion Groundwater Screening Levels							*470*	*38*	*NE*	*NE*	*35*
MW-18	606.47	10-20	02/05/2016	N	13.70	592.77	**19.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	09/13/2016	N	13.24	593.23	**25.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	11/22/2016	N	13.88	592.59	**26.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	02/02/2017	N	13.53	592.94	**32.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	05/04/2017	N	13.01	593.46	**39.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	09/20/2017	N	12.85	593.62	**16.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	12/07/2017	N	13.97	592.50	**26.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	03/21/2018	N	12.98	593.49	**12.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	05/31/2018	N	11.51	594.96	**18.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	08/30/2018	N	18.30	588.17	**20.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	11/27/2018	N	13.40	593.07	**23.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	02/21/2019	N	11.33	595.14	**8.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	05/22/2019	N	10.28	596.19	**6.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	07/31/2019	N	10.63	595.84	**8.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	10/30/2019	N	13.52	592.95	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	01/30/2020	N	13.78	592.69	**8.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	04/08/2020	N	11.83	594.64	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-18	606.47	10-20	07/16/2020	N	11.83	594.64	**16.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	02/05/2016	N	14.45	593.43	**93.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	09/14/2016	N	13.92	593.96	**104**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	11/23/2016	N	14.58	593.30	**119**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	02/03/2017	N	14.20	593.68	**96.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	05/04/2017	N	13.64	594.24	**84.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	09/20/2017	N	13.54	594.34	**63.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	12/07/2017	N	14.67	593.21	**103**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	03/21/2018	N	13.63	594.25	**46.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	05/31/2018	N	12.20	595.68	**60.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	07/30/2018	N	NA	NA	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	08/29/2018	N	18.94	588.94	**67.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	11/28/2018	N	14.09	593.79	**69.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	02/22/2019	N	12.00	595.88	**51.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	05/23/2019	N	10.97	596.91	**21.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	08/01/2019	N	11.24	596.64	**43.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	10/31/2019	N	14.13	593.75	**48.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	01/30/2020	N	14.27	593.61	**39.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	04/08/2020	N	12.48	595.40	**25.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-19	607.88	10-20	07/15/2020	N	12.48	595.40	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	02/04/2016	N	13.70	592.05	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	09/12/2016	N	12.31	593.44	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	11/21/2016	N	13.95	591.80	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	02/01/2017	N	13.55	592.20	**61.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	05/04/2017	N	12.93	592.82	**13.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	09/20/2017	N	12.95	592.80	**9.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	12/07/2017	N	14.03	591.72	**47.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	03/21/2018	N	12.98	592.77	**22.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	05/31/2018	N	12.01	593.74	**7.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	08/30/2018	N	13.41	592.34	**12.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	11/28/2018	N	13.45	592.30	**18.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	02/21/2019	N	11.36	594.39	**10.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	05/22/2019	N	10.33	595.42	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	07/31/2019	N	10.74	595.01	**7.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	10/30/2019	N	13.62	592.13	**11.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	01/30/2020	N	14.02	591.73	**25.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	04/08/2020	N	11.88	593.87	**5.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-20	605.75	10-20	07/15/2020	N	11.88	593.87	**6.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	02/04/2016	N	13.25	591.55	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	09/12/2016	N	12.99	591.81	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	11/21/2016	N	13.59	591.21	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	02/01/2017	N	13.17	591.63	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	05/02/2017	N	12.55	592.25	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	09/19/2017	N	12.55	592.25	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	12/06/2017	N	13.68	591.12	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	03/20/2018	N	12.53	592.27	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	05/30/2018	N	11.19	593.61	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	08/28/2018	N	13.07	591.73	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	11/27/2018	N	13.08	591.72	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	02/20/2019	N	10.97	593.83	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	05/22/2019	N	9.98	594.82	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	07/31/2019	N	10.45	594.35	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	10/29/2019	N	13.31	591.49	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	01/28/2020	N	13.84	590.96	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	04/07/2020	N	11.51	593.29	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-21	604.80	10-20	07/14/2020	N	11.51	593.29	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	09/12/2016	N	13.77	593.17	**147**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	11/23/2016	N	14.41	592.53	**133**	< 5.0	< 5.0	< 5.0	< 2.0

Table 4. Cumulative Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, Indiana
Wilcox Projec Number 341.14
State Cleanup Number 0000402

Well	TOC Elevation (feet)	Screen Interval (feet)	Date Sampled	Sample Type	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
					Residential Groundwater Tap Screening Levels		**5**	**5**	**70**	**100**	**2**
					Residential Vapor Intrusion Groundwater Screening Levels		110	9.1	NE	NE	2.1
					Commercial/Industrial Vapor Intrusion Groundwater Screening Levels		*470*	*38*	*NE*	*NE*	*35*
MW-22	606.94	10-20	11/23/2016	FD	14.41	592.53	**107**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	02/02/2017	N	14.02	592.92	**184**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	05/04/2017	N	13.46	593.48	**131**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	05/04/2017	FD	13.46	593.48	**132**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	09/20/2017	N	13.40	593.54	**103**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	12/07/2017	N	13.64	593.30	**92.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	03/21/2018	N	13.49	593.45	**88.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	05/31/2018	N	12.09	594.85	**57.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	08/30/2018	N	13.83	593.11	**97.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	11/28/2018	N	13.94	593.00	**121**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	02/22/2019	N	11.84	595.10	**77.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	05/23/2019	N	10.84	596.10	**24.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	08/01/2019	N	11.16	595.78	**26.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	10/31/2019	N	14.04	592.90	**49.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	01/30/2020	N	14.33	592.61	**66.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	04/09/2020	N	12.37	594.57	**54.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-22	606.94	10-20	07/15/2020	N	12.37	594.57	**53.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	09/13/2016	N	14.01	593.10	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	11/21/2016	N	14.63	592.48	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	02/01/2017	N	14.22	592.89	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	05/02/2017	N	13.76	593.35	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	09/18/2017	N	13.50	593.61	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	12/06/2017	N	14.72	592.39	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	03/20/2018	N	13.60	593.51	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	05/30/2018	N	12.28	594.83	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	08/28/2018	N	14.07	593.04	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	11/27/2018	N	14.15	592.96	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	02/20/2019	N	12.06	595.05	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	05/22/2019	N	11.07	596.04	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	07/31/2019	N	11.41	595.70	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	10/29/2019	N	14.25	592.86	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	01/28/2020	N	14.55	592.56	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	04/07/2020	N	12.58	594.53	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-23	607.11	10-20	07/14/2020	N	12.58	594.53	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	09/14/2016	N	14.05	593.90	**189**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	11/23/2016	N	14.71	593.24	**154**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	02/03/2017	N	14.32	593.63	**208**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	05/02/2017	NA	13.87	594.08	Not Sampled				
MW-24	607.95	10-20	09/20/2017	N	14.64	593.31	**98.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	09/20/2017	FD	14.64	593.31	**89.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	12/07/2017	N	14.82	593.13	**128**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	12/07/2017	FD	14.82	593.13	**112**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	03/21/2018	N	13.77	594.18	**145**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	03/21/2018	FD	13.77	594.18	**141**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	05/31/2018	N	12.35	595.60	**112**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	05/31/2018	FD	12.35	595.60	**122**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	07/30/2018	N	NA	NA	**79.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	08/30/2018	N	14.08	593.87	**108**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	08/30/2018	FD	14.08	593.87	**208**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	11/28/2018	N	14.23	593.72	**157**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	11/28/2018	FD	14.23	593.72	**136**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	02/22/2019	N	NA	NA	**111**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	02/22/2019	FD	NA	NA	**108**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	05/23/2019	N	11.11	596.84	**57.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	05/23/2019	FD	11.11	596.84	**62.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	08/01/2019	N	11.39	596.56	**98.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	08/01/2019	FD	11.39	596.56	**94.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	10/31/2019	N	14.27	593.68	**103**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	10/31/2019	FD	14.27	593.68	**105**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	01/30/2020	N	14.43	593.52	**95.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	01/30/2020	FD	14.43	593.52	**87.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	04/09/2020	N	12.62	595.33	**111**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	04/09/2020	FD	12.62	595.33	**81.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	07/15/2020	N	12.62	595.33	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-24	607.95	10-20	07/15/2020	FD	12.62	595.33	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	09/13/2016	N	15.94	594.43	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	11/21/2016	N	16.60	593.77	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	02/01/2017	N	16.21	594.16	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	05/02/2017	N	15.79	594.58	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	09/19/2017	N	15.55	594.82	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	12/06/2017	N	16.65	593.72	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	03/20/2018	N	15.65	594.72	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	05/30/2018	N	14.20	596.17	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	08/28/2018	N	15.97	594.40	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	11/27/2018	N	15.14	595.23	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	02/20/2019	N	14.02	596.35	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	05/22/2019	N	13.10	597.27	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0

Table 4. Cumulative Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, Indiana
Wilcox Projec Number 341.14
State Cleanup Number 0000402

Well	TOC Elevation (feet)	Screen Interval (feet)	Date Sampled	Sample Type	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
					Residential Groundwater Tap Screening Levels		**5**	**5**	**70**	**100**	**2**
					Residential Vapor Intrusion Groundwater Screening Levels		110	9.1	NE	NE	2.1
					Commercial/Industrial Vapor Intrusion Groundwater Screening Levels		*470*	*38*	*NE*	*NE*	*35*
MW-25	610.37	10-20	07/30/2019	N	13.13	597.24	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	10/29/2019	N	16.13	594.24	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	01/28/2020	N	16.18	594.19	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	04/07/2020	N	14.48	595.89	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-25	610.37	10-20	07/14/2020	N	14.48	595.89	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	09/14/2016	N	10.41	596.96	**223**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	11/21/2016	WLO	11.56	595.81	Gauged Only				
MW-26	607.37	7-17	02/03/2017	N	10.74	596.63	**146**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	02/03/2017	FD	10.74	596.63	**141**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	05/02/2017	NA	10.29	597.08	Not Sampled				
MW-26	607.37	7-17	09/20/2017	N	10.06	597.31	**99.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	12/07/2017	N	10.87	596.50	**180**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	03/19/2018	WLO	10.36	597.01	Gauged Only				
MW-26	607.37	7-17	05/31/2018	N	8.83	598.54	**75.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	07/31/2018	N	NA	NA	**124**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	08/29/2018	N	10.37	597.00	**154**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	11/28/2018	N	10.66	596.71	**163**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	02/22/2019	N	8.43	598.94	**61.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	05/20/2019	NA	NA	NA	Not Sampled				
MW-26	607.37	7-17	07/29/2019	NA	NA	NA	Not Sampled				
MW-26	607.37	7-17	10/28/2019	NA	10.41	596.96	Not Sampled				
MW-26	607.37	7-17	01/28/2020	N	10.07	597.30	**57.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	04/09/2020	N	8.71	598.66	**53.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-26	607.37	7-17	07/15/2020	N	8.71	598.66	**59.2**	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	09/19/2017	N	12.50	594.57	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	12/06/2017	N	13.65	593.42	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	03/20/2018	N	12.71	594.36	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	05/30/2018	N	11.20	595.87	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	08/29/2018	N	12.97	594.10	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	11/27/2018	N	13.13	593.94	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	02/20/2019	N	11.06	596.01	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	05/22/2019	N	10.02	597.05	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	07/30/2019	N	10.26	596.81	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	10/29/2019	N	13.14	593.93	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	01/29/2020	N	13.22	593.85	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	04/07/2020	N	11.50	595.57	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-27	607.07	10-20	07/14/2020	N	11.50	595.57	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	09/19/2017	N	11.10	596.21	**11.5**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	12/06/2017	N	12.21	595.10	**11.0**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	03/20/2018	N	11.24	596.07	**10.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	05/30/2018	N	9.87	597.44	**11.9**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	08/29/2018	N	11.53	595.78	**17.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	11/27/2018	N	11.75	595.56	**16.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	02/21/2019	N	9.62	597.69	**10.8**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	05/20/2019	N	8.66	598.65	**11.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	08/01/2019	N	8.88	598.43	**13.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	10/29/2019	N	11.62	595.69	**13.3**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	01/29/2020	N	11.47	595.84	**11.4**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	04/07/2020	N	9.96	597.35	**9.6**	< 5.0	< 5.0	< 5.0	< 2.0
MW-28	607.31	10-20	07/14/2020	N	9.96	597.35	**9.1**	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	09/19/2017	N	10.70	597.56	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	12/06/2017	N	11.69	596.57	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	03/20/2018	N	10.72	597.54	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	05/30/2018	N	9.53	598.73	**55.7**	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	08/29/2018	N	11.00	597.26	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	11/27/2018	N	11.25	597.01	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	02/21/2019	N	NA	NA	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	05/21/2019	N	8.36	599.90	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	07/30/2019	N	8.59	599.67	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	10/29/2019	N	11.03	597.23	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	01/29/2020	N	10.63	597.63	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	04/07/2020	N	9.35	598.91	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
MW-29	608.26	10-20	07/14/2020	N	9.35	598.91	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0
NPL-MW-04B	603.54	89-99	09/18/2017	WLO	12.75	590.79	Gauged Only				
NPL-MW-04B	603.54	89-99	12/05/2017	WLO	13.80	589.74	Gauged Only				
NPL-MW-04B	603.54	89-99	03/19/2018	WLO	8.44	595.10	Gauged Only				
NPL-MW-04B	603.54	89-99	05/29/2018	WLO	8.09	595.45	Gauged Only				
NPL-MW-04B	603.54	89-99	08/27/2018	WLO	9.64	593.90	Gauged Only				
NPL-MW-04B	603.54	89-99	11/26/2018	WLO	NA	NA	Not Sampled				
NPL-MW-04B	603.54	89-99	05/20/2019	WLO	6.34	597.20	Gauged Only				
NPL-MW-04B	603.54	89-99	07/29/2019	WLO	7.25	596.29	Gauged Only				
NPL-MW-04B	603.54	89-99	10/28/2019	WLO	9.76	593.78	Gauged Only				
NPL-MW-04B	603.54	89-99	01/27/2020	WLO	10.47	593.07	Gauged Only				
NPL-MW-04B	603.54	89-99	04/06/2020	WLO	7.33	596.21	Gauged Only				
NPL-MW-04B	603.54	89-99	07/13/2020	WLO	9.04	594.50	Gauged Only				

Table 4. Cumulative Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, Indiana
Wilcox Projec Number 341.14
State Cleanup Number 0000402

Well	TOC Elevation (feet)	Screen Interval (feet)	Date Sampled	Sample Type	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
					Residential Groundwater Tap Screening Levels		**5**	**5**	**70**	**100**	**2**
					Residential Vapor Intrusion Groundwater Screening Levels		110	9.1	NE	NE	2.1
					Commercial/Industrial Vapor Intrusion Groundwater Screening Levels		*470*	*38*	*NE*	*NE*	*35*
NPL-MW-04M	603.64	50-60	09/18/2017	WLO	9.32	594.32	Gauged Only				
NPL-MW-04M	603.64	50-60	12/05/2017	WLO	10.10	593.54	Gauged Only				
NPL-MW-04M	603.64	50-60	03/19/2018	WLO	8.63	595.01	Gauged Only				
NPL-MW-04M	603.64	50-60	05/29/2018	WLO	8.41	595.23	Gauged Only				
NPL-MW-04M	603.64	50-60	08/27/2018	WLO	9.77	593.87	Gauged Only				
NPL-MW-04M	603.64	50-60	11/26/2018	WLO	9.42	594.22	Gauged Only				
NPL-MW-04M	603.64	50-60	05/20/2019	WLO	6.58	597.06	Gauged Only				
NPL-MW-04M	603.64	50-60	07/29/2019	WLO	7.46	596.18	Gauged Only				
NPL-MW-04M	603.64	50-60	10/28/2019	WLO	9.99	593.65	Gauged Only				
NPL-MW-04M	603.64	50-60	01/27/2020	WLO	10.61	593.03	Gauged Only				
NPL-MW-04M	603.64	50-60	04/06/2020	WLO	7.68	595.96	Gauged Only				
NPL-MW-04M	603.64	50-60	07/13/2020	WLO	9.23	594.41	Gauged Only				
NPL-MW-04S	603.42	8-18	09/18/2017	WLO	9.14	594.28	Gauged Only				
NPL-MW-04S	603.42	8-18	12/05/2017	WLO	9.90	593.52	Gauged Only				
NPL-MW-04S	603.42	8-18	03/19/2018	WLO	12.94	590.48	Gauged Only				
NPL-MW-04S	603.42	8-18	05/29/2018	WLO	11.28	592.14	Gauged Only				
NPL-MW-04S	603.42	8-18	08/27/2018	WLO	13.25	590.17	Gauged Only				
NPL-MW-04S	603.42	8-18	11/26/2018	WLO	13.12	590.30	Gauged Only				
NPL-MW-04S	603.42	8-18	05/20/2019	WLO	10.03	593.39	Gauged Only				
NPL-MW-04S	603.42	8-18	07/29/2019	WLO	10.64	592.78	Gauged Only				
NPL-MW-04S	603.42	8-18	10/28/2019	WLO	15.55	587.87	Gauged Only				
NPL-MW-04S	603.42	8-18	01/27/2020	WLO	14.35	589.07	Gauged Only				
NPL-MW-04S	603.42	8-18	04/06/2020	WLO	11.48	591.94	Gauged Only				
NPL-MW-04S	603.42	8-18	07/13/2020	WLO	12.47	590.95	Gauged Only				
NPL-MW-28S	603.83	11-21	09/18/2017	WLO	13.59	590.24	Gauged Only				
NPL-MW-28S	603.83	11-21	12/05/2017	WLO	14.47	589.36	Gauged Only				
NPL-MW-28S	603.83	11-21	03/19/2018	WLO	13.22	590.61	Gauged Only				
NPL-MW-28S	603.83	11-21	05/29/2018	WLO	12.05	591.78	Gauged Only				
NPL-MW-28S	603.83	11-21	08/27/2018	WLO	14.10	589.73	Gauged Only				
NPL-MW-28S	603.83	11-21	11/26/2018	WLO	13.93	589.90	Gauged Only				
NPL-MW-28S	603.83	11-21	05/20/2019	WLO	10.73	593.10	Gauged Only				
NPL-MW-28S	603.83	11-21	07/29/2019	NA	NA	NA	Not Sampled				
NPL-MW-28S	603.83	11-21	10/28/2019	NA	NA	NA	Not Sampled				
NPL-MW-28S	603.83	11-21	01/27/2020	NA	NA	NA	Well Abandoned or Destroyed				
NPL-MW-28S	603.83	11-21	04/06/2020	NA	NA	NA	Not Sampled				
NPL-MW-28S	603.83	11-21	07/13/2020	NA	NA	NA	Not Sampled				
NPL-MW-29S	603.98	13-23	09/18/2017	WLO	16.40	587.58	Gauged Only				
NPL-MW-29S	603.98	13-23	12/05/2017	WLO	17.24	586.74	Gauged Only				
NPL-MW-29S	603.98	13-23	03/19/2018	WLO	15.24	588.74	Gauged Only				
NPL-MW-29S	603.98	13-23	05/29/2018	WLO	14.86	589.12	Gauged Only				
NPL-MW-29S	603.98	13-23	08/27/2018	WLO	16.93	587.05	Gauged Only				
NPL-MW-29S	603.98	13-23	11/26/2018	WLO	16.38	587.60	Gauged Only				
NPL-MW-29S	603.98	13-23	05/20/2019	WLO	13.15	590.83	Gauged Only				
NPL-MW-29S	603.98	13-23	07/29/2019	WLO	14.10	589.88	Gauged Only				
NPL-MW-29S	603.98	13-23	10/28/2019	WLO	17.33	586.65	Gauged Only				
NPL-MW-29S	603.98	13-23	01/27/2020	WLO	18.77	585.21	Gauged Only				
NPL-MW-29S	603.98	13-23	04/06/2020	WLO	14.41	589.57	Gauged Only				
NPL-MW-29S	603.98	13-23	07/13/2020	WLO	16.37	587.61	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	09/18/2017	WLO	13.65	590.10	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	12/05/2017	WLO	14.63	589.12	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	03/19/2018	WLO	13.16	590.59	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	05/29/2018	WLO	12.21	591.54	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	08/27/2018	WLO	14.11	589.64	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	11/26/2018	WLO	13.92	589.83	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	05/20/2019	WLO	10.89	592.86	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	07/29/2019	WLO	11.58	592.17	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	10/28/2019	WLO	14.41	589.34	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	01/27/2020	WLO	15.53	588.22	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	04/06/2020	WLO	12.24	591.51	Gauged Only				
NPL-MW-32S	603.75	10.5-20.5	07/13/2020	WLO	13.50	590.25	Gauged Only				
NPL-MW-34S	603.67	13-23	09/18/2017	WLO	15.87	587.80	Gauged Only				
NPL-MW-34S	603.67	13-23	03/19/2018	NA	NA	NA	Not Sampled				
NPL-MW-34S	603.67	13-23	05/29/2018	WLO	14.47	589.20	Gauged Only				
NPL-MW-34S	603.67	13-23	08/27/2018	WLO	16.43	587.24	Gauged Only				
NPL-MW-34S	603.67	13-23	11/26/2018	WLO	NA	NA	Not Sampled				
NPL-MW-34S	603.67	13-23	05/20/2019	WLO	12.62	591.05	Gauged Only				
NPL-MW-34S	603.67	13-23	07/29/2019	NA	NA	NA	Not Sampled				
NPL-MW-34S	603.67	13-23	10/28/2019	NA	NA	NA	Not Sampled				
NPL-MW-34S	603.67	13-23	01/27/2020	WLO	18.04	585.63	Gauged Only				
NPL-MW-34S	603.67	13-23	04/06/2020	WLO	13.95	589.72	Gauged Only				
NPL-MW-34S	603.67	13-23	07/13/2020	WLO	15.69	587.98	Gauged Only				
NPL-MW-35S	604.08	11-21	09/18/2017	WLO	12.70	591.38	Gauged Only				
NPL-MW-35S	604.08	11-21	12/05/2017	WLO	13.64	590.44	Gauged Only				

Table 4. Cumulative Groundwater Analytical Results
O'Neal's Clothes Depot Cleaners -- Martinsville, Indiana
Wilcox Projec Number 341.14
State Cleanup Number 0000402

Well	TOC Elevation (feet)	Screen Interval (feet)	Date Sampled	Sample Type	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)
						Residential Groundwater Tap Screening Levels	**5**	**5**	**70**	**100**	**2**
						Residential Vapor Intrusion Groundwater Screening Levels	110	9.1	NE	NE	2.1
						Commercial/Industrial Vapor Intrusion Groundwater Screening Levels	*470*	*38*	*NE*	*NE*	*35*
NPL-MW-35S	604.08	11-21	03/19/2018	WLO	12.42	591.66	Gauged Only				
NPL-MW-35S	604.08	11-21	05/29/2018	WLO	11.25	592.83	Gauged Only				
NPL-MW-35S	604.08	11-21	08/27/2018	WLO	13.18	590.90	Gauged Only				
NPL-MW-35S	604.08	11-21	11/26/2018	WLO	13.15	590.93	Gauged Only				
NPL-MW-35S	604.08	11-21	05/20/2019	WLO	10.06	594.02	Gauged Only				
NPL-MW-35S	604.08	11-21	07/29/2019	WLO	10.89	593.19	Gauged Only				
NPL-MW-35S	604.08	11-21	10/28/2019	WLO	13.45	590.63	Gauged Only				
NPL-MW-35S	604.08	11-21	01/27/2020	WLO	14.14	589.94	Gauged Only				
NPL-MW-35S	604.08	11-21	04/06/2020	WLO	11.54	592.54	Gauged Only				
NPL-MW-35S	604.08	11-21	07/13/2020	WLO	12.43	591.65	Gauged Only				
NPL-MW-36S	605.14	13-23	09/18/2017	WLO	16.50	588.64	Gauged Only				
NPL-MW-36S	605.14	13-23	12/05/2017	WLO	17.42	587.72	Gauged Only				
NPL-MW-36S	605.14	13-23	03/19/2018	WLO	16.37	588.77	Gauged Only				
NPL-MW-36S	605.14	13-23	05/29/2018	WLO	15.05	590.09	Gauged Only				
NPL-MW-36S	605.14	13-23	08/27/2018	WLO	17.23	587.91	Gauged Only				
NPL-MW-36S	605.14	13-23	11/26/2018	WLO	16.85	588.29	Gauged Only				
NPL-MW-36S	605.14	13-23	05/20/2019	WLO	13.47	591.67	Gauged Only				
NPL-MW-36S	605.14	13-23	07/29/2019	WLO	14.32	590.82	Gauged Only				
NPL-MW-36S	605.14	13-23	10/28/2019	WLO	17.62	587.52	Gauged Only				
NPL-MW-36S	605.14	13-23	01/27/2020	WLO	18.34	586.80	Gauged Only				
NPL-MW-36S	605.14	13-23	04/06/2020	WLO	14.85	590.29	Gauged Only				
NPL-MW-36S	605.14	13-23	07/13/2020	WLO	16.14	589.00	Gauged Only				

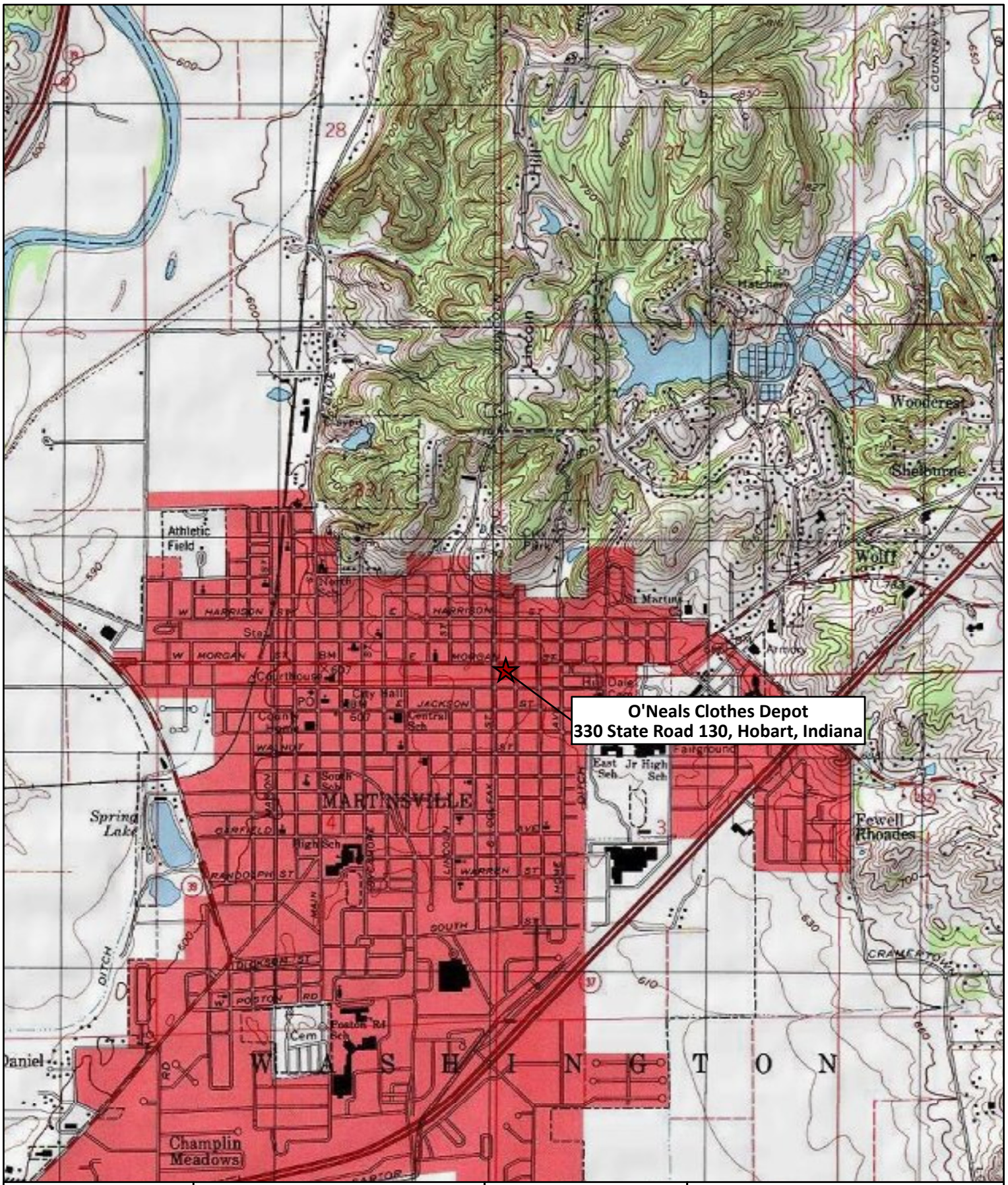
Notes:
N = Normal Field Sample
FD = Field Duplicate Sample
TOC = Top of Casing
WLO = Water Level Only
NA = Not Applicable
NE = Not Established
µg/L = micrograms per liter
< = Analyte not detected at the specified detection level
Screening levels obtained from IDEM's Remediation Closure Guide (RCG) Table A-6, March 22, 2012, updated March 2020
Bold values exceed IDEM RCG Residential Groundwater Tap Screening Levels
Underlined values exceed IDEM RCG Residential Vapor Intrusion Groundwater Screening Levels
Italicized values exceed IDEM RCG Commercial/Industrial Vapor Intrusion Groundwater Screening Levels

Table 5: ISCR Efficacy Evaluation
O'Neal's Clothes Depot Cleaners -- Martinsville, IN
Wilcox Project Number: 341.14
State Cleanup Number: 0000402

Well Location ID	Date of Sample Collection	Time Elapsed Since Injections	Constituents of Concern						Overall Percent Reduction	Field-Measured Geochemical Parameters						Laboratory-Reported Geochemical Parameters										
			Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Vinyl chloride (µg/L)	Total COCs		pH (standard units)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Temperature (Celcius)	Oxidation Reduction Potential (mV)	Turbidity (NTUs)	Nitrate (mg/L)	Nitrite (mg/L)	Total Manganese (µg/L) (Manganese IV and soluble Manganese II)	Dissolved Manganese (µg/L) (Manganese II)	Total Iron (µg/L) (Ferric - Iron III & soluble Ferrous - Iron II)	Dissolved Iron (µg/L) (Ferrous - Iron II)	Sulfate (mg/L)	Sulfide (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Alkalinity (mg/L)	Total Organic Carbon (mg/L)
MW-01	04/08/2020	Baseline	24.8	< 5.0	< 5.0	< 5.0	< 2.0	41.8	--	7.18	0.77	7.08	13.88	158.8	9.67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/15/2020	30 Days	30.1	< 5.0	6.5	< 5.0	< 2.0	48.6	-16.27%	6.80	1.15	1.23	18.85	64.0	46.47	2.0	0.12	1,750	1,660	3,210	318	35.5	< 0.10	< 10.0	< 10.0	< 10.0	410	310
MW-08	04/08/2020	Baseline	35	< 5.0	< 5.0	< 5.0	< 2.0	52.4	--	7.20	0.71	6.63	18.04	153.9	80.98	7.5	7.6	13.5	< 5.0	< 100	< 70.0	23.1	NA	< 10.0	< 10.0	< 10.0	271	NA
	07/15/2020	30 Days	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	22.0	58.02%	6.88	1.49	1.56	22.22	96.3	39.12	6.1	< 0.5	564	539	559	< 100	27.2	< 0.10	< 10.0	< 10.0	< 10.0	262	< 1.0
MW-09	04/09/2020	Baseline	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	22.0	--	7.14	0.72	5.75	15.61	195.5	14.94	7.9	< 0.20	61.0	< 5.0	1,740	< 70.0	19.9	NA	< 10.0	< 10.0	< 10.0	280	NA
	07/15/2020	30 Days	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	22.0	0.00%	7.11	0.97	2.06	24.04	150.7	84.42	3.40	0.10	205	25.8	1,610	< 100	27.5	< 0.10	< 10.0	< 10.0	< 10.0	282	2.0
MW-15	04/09/2020	Baseline	74.9	< 5.0	< 5.0	< 5.0	< 2.0	91.9	--	7.13	0.70	6.82	14.45	158.9	90.95	7.6	< 0.20	90.6	21.9	1,200	< 70.0	18.2	NA	< 10.0	< 10.0	< 10.0	288	NA
	07/15/2020	30 Days	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	22.0	76.06%	7.06	1.00	0.01	31.49	175.8	97.86	4.0	< 1.0	799	675	2,590	< 100	14.3	< 0.10	< 10.0	< 10.0	< 10.0	410	< 10
MW-16	10/30/2019	Baseline	21.8	< 5.0	< 5.0	< 5.0	< 2.0	38.8	--	6.92	0.70	5.58	18.64	176.0	17.83	2.7	2.7	39.0	< 5.0	603.0	< 70.0	12.3	NA	< 10.0	< 10.0	< 10.0	322	NA
	07/16/2020	30 Days	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	22.0	43.30%	6.87	0.83	1.55	19.44	73.0	160.76	1.2	< 10	589	278.0	4,820	< 100	21.6	< 0.10	< 10.0	< 10.0	< 10.0	323	27.2
MW-17	04/08/2020	Baseline	16.6	< 5.0	< 5.0	< 5.0	< 2.0	33.6	--	7.04	0.69	6.30	14.70	119.7	15.3	2.8	< 0.10	489	< 5.0	11,900	< 70.0	23.0	NA	< 10.0	< 10.0	< 10.0	408	NA
	07/15/2020	30 Days	13.8	< 5.0	< 5.0	< 5.0	< 2.0	30.8	8.33%	7.01	0.830	4.57	21.1	55.0	48.1	6.1	< 0.2	43.6	< 10	1,090	< 100	33.4	< 0.10	< 10.0	< 10.0	< 10.0	300	1.2
MW-19	04/08/2020	Baseline	25.6	< 5.0	< 5.0	< 5.0	< 2.0	42.6	--	6.78	0.78	6.30	19.80	143.5	44.51	3.4	< 0.10	910	< 5.0	10,900	< 70.0	19.7	NA	< 10.0	< 10.0	< 10.0	383	NA
	07/15/2020	30 Days	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	22.0	48.36%	7.06	2.630	1.47	26.47	172.9	78.7	1.5	< 0.1	136	73.2	3,340	< 100	34.1	< 0.10	< 10.0	< 10.0	< 10.0	400	< 4.0
MW-20	04/08/2020	Baseline	5.1	< 5.0	< 5.0	< 5.0	< 2.0	22.1	--	7.03	0.77	7.73	16.68	151.3	40.49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/15/2020	30 Days	6.4	< 5.0	< 5.0	< 5.0	< 2.0	23.4	-5.88%	6.79	1.00	5.12	16.05	87.3	100.4	3.6	< 0.1	38	< 10	648	< 100	26.2	< 0.10	< 10.0	< 10.0	< 10.0	356	1.3
MW-22	04/09/2020	Baseline	54.9	< 5.0	< 5.0	< 5.0	< 2.0	71.9	--	6.93	0.75	6.00	14.03	178.8	95.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/15/2020	30 Days	53.1	< 5.0	< 5.0	< 5.0	< 2.0	70.1	2.50%	7.07	0.81	5.21	17.98	175.0	36.5	5.6	< 0.5	86.9	< 10	1,660	< 100	26.1	< 0.10	< 10.0	< 10.0	< 10.0	297	1.0
MW-24	04/09/2020	Baseline	111	< 5.0	< 5.0	< 5.0	< 2.0	128	--	7.01	0.78	5.82	14.45	171.6	47.83	6.7	< 0.20	170	< 5.0	1,750	< 70.0	95.4	NA	< 10.0	< 10.0	< 10.0	356	NA
	07/15/2020	30 Days	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	22.0	82.81%	6.99	0.87	4.22	21.35	181.7	20.3	6.4	< 0.2	13	< 10	573	< 100	29.1	< 0.10	< 10.0	< 10.0	< 10.0	317	< 1.0
MW-26	04/09/2020	Baseline	53.9	< 5.0	< 5.0	< 5.0	< 2.0	70.9	--	6.74	0.83	6.77	13.67	209.5	8.4	5.9	5.9	88.1	57.5	625	< 70.0	13.3	NA	< 10.0	< 10.0	< 10.0	273	NA
	07/15/2020	30 Days	59.2	< 5.0	< 5.0	< 5.0	< 2.0	76.2	-7.48%	7.03	0.66	3.41	23.7	158.5	16.37	5.5	< 0.2	38.6	< 10	625	< 100	14.4	< 0.10	< 10.0	< 10.0	< 10.0	264	< 1.0
MW-28	04/07/2020	Baseline	9.6	< 5.0	< 5.0	< 5.0	< 2.0	26.6	--	6.92	0.94	5.93	18.17	159.1	226.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/14/2020	30 Days	9.1	< 5.0	< 5.0	< 5.0	< 2.0	26.1	1.88%	6.80	0.850	6.18	22.1	155.2	122.3	3.4	< 0.1	69.2	< 10	1,410	< 100	20.5	< 0.10	< 10.0	< 10.0	< 10.0	330	1.3

Notes:
Injections completed April through June 2020.
Baseline laboratory-reported geochemical parameter results collected July 2018.
Percent reduction calculated based on total mass of the COCs.
NA = Not Analyzed
< = Analyte not detected at the specified detection level

FIGURES



WILCOX
ENVIRONMENTAL ENGINEERING

Figure 1 - Site Vicinity Map

Former O'Neals Clothes Depot
833 E. Morgan St. Martinsville, Indiana

Project #: 341.14	
Project Manager: Jeremy Kinman	
File #: 341.14-001	
Drawn By: KC	Checked By: JK

Data Sources:
Topographic Basemap: Published by USGS from National Geographic Society, 2013

0 0.15 0.3 0.45 0.6 0.75 Miles

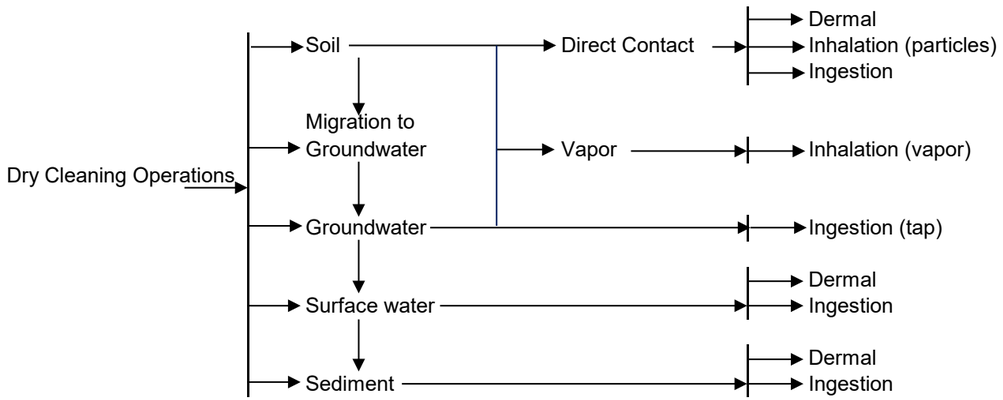
N

SITE PLAN

O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

SCALE 1" = 80'	WILCOX PROJECT # 341.14
DATE 7/13/2020	PROJECT MANAGER J. KINMAN
FIGURE NO. 2	FILE NO. 34114002

WILCOX ENVIRONMENTAL ENGINEERING



	On-Site Receptors				Off-Site Receptors			
	Commercial /Industrial	Excavation	Residential	Recreational	Commercial/ Industrial	Excavation	Residential	Recreational
Dermal	X	X	-	-	-	-	X	-
Inhalation (particles)	X	X	-	-	-	-	X	-
Ingestion	X	X	-	-	-	-	X	-
Inhalation (vapor)	-	-	-	-	-	-	+	-
Ingestion (tap)	+	+	-	-	+	+	+	-
Dermal	-	-	-	-	-	-	-	-
Ingestion	-	-	-	-	-	-	-	-
Dermal	-	-	-	-	-	-	-	-
Ingestion	-	-	-	-	-	-	-	-

Assumptions and Notes

The site operated as a dry cleaning facility from 1987 to 1996 and 1997 to 2011 and is currently operated as a drop-off facility.

Surrounding properties include residential and commercial and are supplied with municipal water.

The site is located within a wellhead protection area.

The CSM assumes surrounding property use will remain the same.

Pathway Key

+	Pathway is complete or potentially complete
X	Pathway incomplete
-	Pathway is not applicable

Remediation Key

- Further Evaluation
- Engineering and/or Institutional Controls
- No Remediation Necessary

CONCEPTUAL SITE MODEL

REMEDIATION WORK PLAN IMPLEMENTATION
O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

SCALE	DATE	FIGURE
---	8/14/2020	3

WILCOX PROJECT #	PROJECT MANAGER	FILE NUMBER
341.14	J. Kinman	

WILCOX
ENVIRONMENTAL ENGINEERING

VAPOR INTRUSION ASSESSMENT
JULY 2020

O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

WILCOX ENVIRONMENTAL ENGINEERING

WILCOX PROJECT # 341.14	SCALE 1" = 80'
PROJECT MANAGER J. KINMAN	DATE 8/11/20
FILE NO. 34114005	FIGURE NO. 4

CUMULATIVE SOIL ANALYTICAL RESULTS

O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

WILCOX PROJECT # 341.14
PROJECT MANAGER J. KINMAN
FILE NUMBER 34114005
SCALE 1" = 60'
DATE 7/13/2020
FIGURE NUMBER 5

WILCOX. ENVIRONMENTAL ENGINEERING

LEGEND

- MW-1 MONITORING WELL LOCATION WITH ID
- HA-1 HAND AUGER LOCATION WITH ID
- B-4 SOIL BORING LOCATION WITH ID
- (M) MANHOLE
- (L) LIGHT POLE
- (U) UTILITY POLE
- (W) WATER METER
- E ELECTRICAL LINE
- OH OVERHEAD UTILITY LINE
- W WATER LINE
- S SEWER LINE
- GAS GAS LINE
- C COMMUNICATION LINE
- UKN UNKNOWN LINE
- SS SANITARY SEWER LATERAL
- PL PROPERTY LINE
- PCE- TETRACHLOROETHENE CONCENTRATION
- 2M- 2-METHYLNAPHTHALENE CONCENTRATION
- 3-5' SAMPLE DEPTH

* INDICATES MIP SAMPLING LOCATION
ONLY DETECTED CHEMICALS OF CONCERN (COCs) ARE SHOWN.
SOIL ANALYTICAL RESULTS ARE REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg).

10 30 50
0 20 40 60 120 FT.

E. MORGAN ST.
N. COLFAX ST.
E. WASHINGTON ST.
N. ST. CLAIR ST.
S. GRANT ST.
S. COLFAX ST.
ALLEY
SIDEWALK
GRASS
ASPHALT
CONCRETE
GRAVEL
PARKING LOT ASPHALT
PICNIC AREA
SHED
GARAGE
DRIVEWAY ASPHALT

RESIDENTIAL 639 E. MORGAN ST.
AMERICAN LEGION 701 E. MORGAN ST.
RESIDENTIAL 789 E. MORGAN ST.
COMMERCIAL 69 N. COLFAX ST.
O'NEAL'S CLOTHES DEPOT CLEANERS 833 E. MORGAN ST.
RESIDENTIAL 859 E. MORGAN ST.
RESIDENTIAL 40 N. COLFAX ST.
RESIDENTIAL 640 E. WASHINGTON ST.
RESIDENTIAL 660 E. WASHINGTON ST.
RESIDENTIAL 690 E. WASHINGTON ST.
RESIDENTIAL 700 E. WASHINGTON ST.
RESIDENTIAL 710 E. WASHINGTON ST.
RESIDENTIAL 740 E. WASHINGTON ST.
RESIDENTIAL 760 E. WASHINGTON ST.
RESIDENTIAL 790 E. WASHINGTON ST.
RESIDENTIAL 809 E. WASHINGTON ST.
RESIDENTIAL 840 E. WASHINGTON ST.
RESIDENTIAL 890 E. WASHINGTON ST.
RESIDENTIAL 639 E. WASHINGTON ST.
RESIDENTIAL 659 E. WASHINGTON ST.
RESIDENTIAL 90 S. GRANT ST.
RESIDENTIAL 709 E. WASHINGTON ST.
RESIDENTIAL 759 E. WASHINGTON ST.
RESIDENTIAL 789 E. WASHINGTON ST.
RESIDENTIAL 809 E. WASHINGTON ST.
RESIDENTIAL 839 E. WASHINGTON ST.
RESIDENTIAL 879 E. WASHINGTON ST.
RESIDENTIAL 660 E. JACKSON ST.
RESIDENTIAL 690 S. GRANT ST.

01/20/2015 3-5' NOT DETECTED
01/20/2015 3-4' NOT DETECTED
09/29/2014 3.0-3.5' 3.5-4.0' PCE- 7.17 0.217
09/25/2015 5-6' NOT DETECTED
06/06/2019 4-5' PCE- 0.0366
01/20/2015 4-5' PCE- 0.0061
03/18/2015 3-4' PCE- 0.0688
03/18/2015 5-6.5' 2M- 0.0082
01/20/2015 3-5' NOT DETECTED
03/18/2015 1-2' PCE- 0.0105 3-5' PCE- <0.004
03/18/2015 2-4' PCE- 0.0095 5-6' PCE- 0.0088
01/20/2015 3-5' NOT DETECTED
03/18/2015 3-4' 6-7' NOT DETECTED
09/24/2015 3-4' PCE- 0.0683 6-7' PCE- 0.0071
09/25/2015 5-6' PCE- 0.0106
06/06/2019 9-9.5' PCE- 0.0531
09/24/2015 4-5' NOT DETECTED
06/06/2019 9-9.5' PCE- 0.0704
06/06/2019 9-9.5' PCE- 0.156
06/06/2019 9-9.5' PCE- 0.0863
06/06/2019 9-9.5' PCE- 0.0440
06/06/2019 4-5' NOT DETECTED
06/06/2019 9-9.5' PCE- 0.0130
03/18/2015 3-4' 6-7' NOT DETECTED
09/24/2015 4-5' NOT DETECTED
08/23/2017 4-6' PCE- 0.0143
09/24/2015 4-5' PCE- 0.0186
09/25/2015 5-6' NOT DETECTED
08/23/2017 6-8' PCE- 0.0174
08/22/2017 4-6' NOT DETECTED

B-52 B-51 B-19 B-12 B-13 B-75 B-74 B-73 B-11 B-72 B-71 B-70 B-69 B-7 B-68 B-6 B-5 B-10 B-8 B-4 B-9 B-17 B-16 B-14 B-15 B-25 B-23 B-21 B-18 B-47 B-30 B-26 B-24 B-22 B-27 B-29 B-66 B-45 B-46

MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-7 MW-8 MW-9 MW-10 MW-11 MW-12 MW-13 MW-14 MW-15D MW-16 MW-20 MW-29 MW-30

HA-1

POTENTIOMETRIC SURFACE
APRIL 2020

O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

SCALE 1" = 80'	DATE 5/4/20	FIGURE NO. 6
WILCOX PROJECT # 341.14	PROJECT MANAGER J. KINMAN	FILE NO. 34114006

WILCOX™ ENVIRONMENTAL ENGINEERING

WILCOX PROJECT # 341.14
PROJECT MANAGER J. KINMAN
FILE NO. 34114003
SCALE 1" = 80'
DATE 5/4/20
FIGURE NO. 7

GROUNDWATER ANALYTICAL RESULTS
APRIL 2020

O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

WILCOX ENVIRONMENTAL ENGINEERING

JACKSON ST.

0 20 40 60 80 160 FT.

N

LEGEND

MW-1	MONITORING WELL LOCATION WITH ID
HA-1	HAND AUGER LOCATION WITH ID
B-4	SOIL BORING LOCATION WITH ID
Ⓜ	MANHOLE
Ⓛ	LIGHT POLE
Ⓤ	UTILITY POLE
Ⓦ	WATER METER
— E — E —	ELECTRICAL LINE
— OH — OH —	OVERHEAD UTILITY LINE
— W — W —	WATER LINE
— S — S —	SEWER LINE
— GAS — GAS —	GAS LINE
— C — C —	COMMUNICATION LINE
— UKN — UKN —	UNKNOWN LINE
— SS — SS —	SANITARY SEWER LATERAL
— PL — PL —	PROPERTY LINE
— 5 µg/L —	RESIDENTIAL GROUNDWATER TAP SCREENING LEVEL TETRACHLOROETHENE ISOCONCENTRATION LINE
— 110 µg/L —	RESIDENTIAL VAPOR INTRUSION GROUNDWATER SCREENING LEVEL (VIGWSL) TETRACHLOROETHENE ISOCONCENTRATION LINE
(orange)	JULY/AUG 2018 ISCR PILOT TEST LOCATION
(blue hatch)	ACCESS GRANTED/COMPLIANT VI SAMPLING RESULTS
(red hatch)	ACCESS DENIED
(purple hatch)	ACCESS GRANTED, UNRESPONSIVE TO VI SAMPLE COLLECTION SCHEDULING REQUESTS
(yellow hatch)	ACCESS NOT GRANTED NOR DENIED
(orange hatch)	VAPOR MITIGATION SYSTEM OPERATION

* INDICATES MIP SAMPLING LOCATION
GROUNDWATER ANALYTICAL RESULTS ARE REPORTED IN MICROGRAMS PER LITER (µg/L); OBTAINED DURING THE APRIL 6-9, 2020 SAMPLING EVENT.

SCALE 1" = 80'	DATE 5/5/20	FIGURE NO. 8
WILCOX PROJECT # 341.14	PROJECT MANAGER J. KINNAN	FILE NO. 34114004

TETRACHLOROETHENE ISOCONCENTRATION
APRIL 2020

O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

WILCOX™
ENVIRONMENTAL ENGINEERING

ISCR DETAIL MAP

O'NEALS CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

SCALE 1" = 80'	DATE 8/11/20	FIGURE NO. 9
WILCOX PROJECT # 341.14	PROJECT MANAGER J. KINMAN	FILE NO. 34114009

WILCOX ENVIRONMENTAL ENGINEERING

POTENTIOMETRIC SURFACE MAP
JULY 2020

O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

SCALE	1" = 80'
DATE	8/10/20
FIGURE NO.	10
WILCOX PROJECT #	341.14
PROJECT MANAGER	J. KINMAN
FILE NO.	34114006

WILCOX
ENVIRONMENTAL ENGINEERING


LEGEND
MW-1 MONITORING WELL LOCATION WITH ID
HA-1 HAND AUGER LOCATION WITH ID
B-4 SOIL BORING LOCATION WITH ID
MANHOLE
LIGHT POLE
UTILITY POLE
WATER METER
ELECTRICAL LINE
OVERHEAD UTILITY LINE
WATER LINE
SEWER LINE
GAS LINE
COMMUNICATION LINE
UNKNOWN LINE
SANITARY SEWER LATERAL
PROPERTY LINE
APRIL-JUNE 2020 ISCR LOCATIONS
JULY/AUG 2018 ISCR PILOT TEST LOCATION
PCE- TETRACHLOROETHENE CONCENTRATION
DCE- cis-1,2-DICHLOROETHENE CONCENTRATION
* INDICATES MIP SAMPLING LOCATION
ONLY DETECTED CHEMICALS OF CONCERN (COCs) ARE SHOWN.
GROUNDWATER ANALYTICAL RESULTS ARE REPORTED IN MICROGRAMS PER LITER (μg/L); OBTAINED DURING THE JULY 13-16, 2020 SAMPLING EVENT.
0 20 40 60 80 160 FT.
E. MORGAN ST.
E. WASHINGTON ST.
JACKSON ST.
E. COLUMBUS ST.
N. JEFFERSON ST.
N. SYCAMORE ST.
N. WAYNE ST.
N. OHIO ST.
N. GRAHAM ST.
N. LINCOLN ST.
N. COLFAX ST.
S. SYCAMORE ST.
S. WAYNE ST.
S. OHIO ST.
S. GRANT ST.
S. COLFAX ST.
ALLEY

SCALE
1" = 80'

DATE
8/10/20

FIGURE NO.
11

WILCOX PROJECT #
341.14

PROJECT MANAGER
J. KINMAN

FILE NO.
34114003

GROUNDWATER ANALYTICAL RESULTS
JULY 2020

O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

WILCOX
ENVIRONMENTAL ENGINEERING

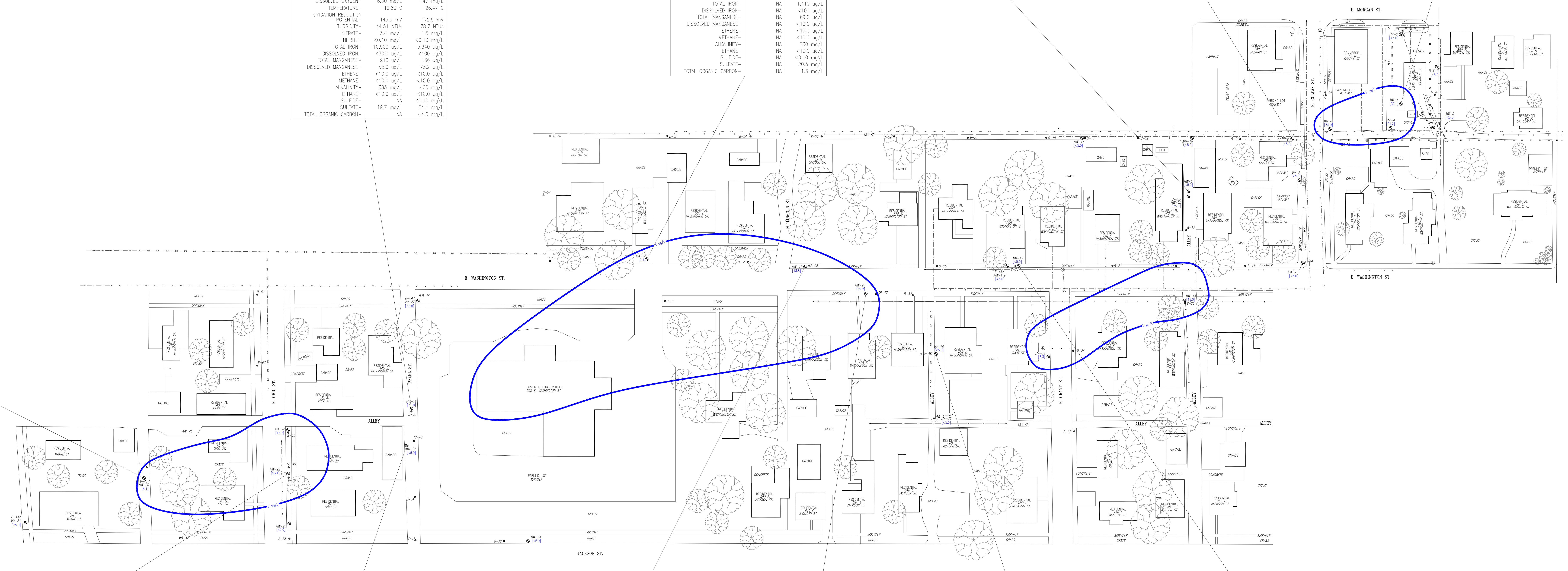
E. MORGAN ST.
E. WASHINGTON ST.
JACKSON ST.
E. COLUMBUS ST.
N. JEFFERSON ST.
S. JEFFERSON ST.
N. SYCAMORE ST.
S. SYCAMORE ST.
N. WAYNE ST.
S. WAYNE ST.
N. OHIO ST.
S. OHIO ST.
N. GRAHAM ST.
N. LINCOLN ST.
S. GRANT ST.
N. COLFAX ST.
S. COLFAX ST.
ALLEY
SUPPLEMENTAL INJECTIONS
BARRIER A
BARRIER B
BARRIER C
0 20 40 60 80 160 FT.
LEGEND
MW-1 MONITORING WELL LOCATION WITH ID
HA-1 HAND AUGER LOCATION WITH ID
B-4 SOIL BORING LOCATION WITH ID
M MANHOLE
L LIGHT POLE
U UTILITY POLE
W WATER METER
ELECTRICAL LINE
OVERHEAD UTILITY LINE
WATER LINE
SEWER LINE
GAS LINE
COMMUNICATION LINE
UNKNOWN LINE
SANITARY SEWER LATERAL
PROPERTY LINE
5 µg/L RESIDENTIAL GROUNDWATER TAP SCREENING LEVEL TETRACHLOROETHENE ISOCONCENTRATION LINE
APRIL–JUNE 2020 ISCR LOCATIONS
JULY/AUG 2018 ISCR PILOT TEST LOCATION
ACCESS GRANTED/COMPLIANT VI SAMPLING RESULTS
ACCESS DENIED
ACCESS GRANTED, UNRESPONSIVE TO VI SAMPLE COLLECTION SCHEDULING REQUESTS
ACCESS NOT GRANTED NOR DENIED
VAPOR MITIGATION SYSTEM OPERATION
* INDICATES MIP SAMPLING LOCATION
GROUNDWATER ANALYTICAL RESULTS ARE REPORTED IN MICROGRAMS PER LITER (µg/L); OBTAINED DURING THE JULY 13–16, 2020 SAMPLING EVENT.
N

TETRACHLOROETHENE ISOCONCENTRATION MAP
JULY 2020

O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

WILCOX PROJECT # 341.14	SCALE 1" = 80'
PROJECT MANAGER J. KINMAN	DATE 8/10/20
FILE NO. 34114004	FIGURE NO. 12

WILCOX ENVIRONMENTAL ENGINEERING



MW-9	04/09/20	07/15/20
PCE–	<5.0 ug/L	<5.0 ug/L
pH–	7.14 standard	7.11 standard
CONDUCTIVITY–	0.72 mS/cm	0.97 mS/cm
DISSOLVED OXYGEN–	5.75 mg/L	2.06 mg/L
TEMPERATURE–	15.61 C	24.04 C
OXIDATION REDUCTION POTENTIAL–	195.5 mV	150.7 mV
TURBIDITY–	14.94 NTUs	84.42 NTUs
NITRATE–	7.9 mg/L	3.40 mg/L
NITRITE–	<0.20 mg/L	0.10 mg/L
TOTAL IRON–	1,740 ug/L	1,610 ug/L
DISSOLVED IRON–	<70.0 ug/L	<100 ug/L
TOTAL MANGANESE–	61.0 ug/L	205 ug/L
DISSOLVED MANGANESE–	<5.0 ug/L	25.8 ug/L
ETHENE–	<10.0 ug/L	<10.0 ug/L
METHANE–	<10.0 ug/L	<10.0 ug/L
ALKALINITY–	280 mg/L	282 mg/L
ETHANE–	<10.0 ug/L	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	19.9 mg/L	27.5 mg/L
TOTAL ORGANIC CARBON–	NA	2.0 mg/L

MW-8	04/08/20	07/15/20
PCE–	35.0 ug/L	<5.0 ug/L
pH–	7.20 standard	6.88 standard
CONDUCTIVITY–	0.71 mS/cm	1.49 mS/cm
DISSOLVED OXYGEN–	6.63 mg/L	1.56 mg/L
TEMPERATURE–	18.04 C	22.22 C
OXIDATION REDUCTION POTENTIAL–	153.9 mV	96.3 mV
TURBIDITY–	80.98 NTUs	39.12 NTUs
NITRATE–	7.5 mg/L	6.1 mg/L
NITRITE–	7.6 mg/L	<0.5 mg/L
TOTAL IRON–	<100 ug/L	559 ug/L
DISSOLVED IRON–	<70.0 ug/L	<100 ug/L
TOTAL MANGANESE–	13.5 ug/L	564 ug/L
DISSOLVED MANGANESE–	<5.0 ug/L	539 ug/L
ETHENE–	<10.0 ug/L	<10.0 ug/L
METHANE–	<10.0 ug/L	<10.0 ug/L
ALKALINITY–	271 mg/L	262 mg/L
ETHANE–	<10.0 ug/L	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	23.1 mg/L	27.2 mg/L
TOTAL ORGANIC CARBON–	NA	<1.0 mg/L

MW-1	04/08/20	07/15/20
PCE–	24.8 ug/L	30.1 ug/L
pH–	7.18 standard	6.80 standard
CONDUCTIVITY–	0.77 mS/cm	1.15 mS/cm
DISSOLVED OXYGEN–	7.08 mg/L	1.23 mg/L
TEMPERATURE–	13.88 C	18.85 C
OXIDATION REDUCTION POTENTIAL–	158.8 mV	64.0 mV
TURBIDITY–	9.67 NTUs	46.47 NTUs
NITRATE–	NA	2.0 mg/L
NITRITE–	NA	0.12 mg/L
TOTAL IRON–	NA	3,210 ug/L
DISSOLVED IRON–	NA	318 ug/L
TOTAL MANGANESE–	NA	1,750 ug/L
DISSOLVED MANGANESE–	NA	1,660 ug/L
ETHENE–	NA	<10.0 ug/L
METHANE–	NA	<10.0 ug/L
ALKALINITY–	NA	410 mg/L
ETHANE–	NA	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	NA	35.5 mg/L
TOTAL ORGANIC CARBON–	NA	310 mg/L

LEGEND

MW-1	MONITORING WELL LOCATION WITH ID
HA-1	HAND AUGER LOCATION WITH ID
B-4	SOIL BORING LOCATION WITH ID
(M)	MANHOLE
(L)	LIGHT POLE
(U)	UTILITY POLE
(W)	WATER METER
—E—	ELECTRICAL LINE
—OH—	OVERHEAD UTILITY LINE
—W—	WATER LINE
—S—	SEWER LINE
—GAS—	GAS LINE
—C—	COMMUNICATION LINE
—UKN—	UNKNOWN LINE
—SS—	SANITARY SEWER LATERAL
—PL—	PROPERTY LINE
NA	NOT ANALYZED
mg/L–	MILIGRAMS PER LITER
mV–	MILLIVOLTS
mS/cm–	MICROSIEMENS PER CENTIMETER
µg/L–	MICROGRAMS PER LITER
C–	CELCIUS
— 5 µg/L —	RESIDENTIAL GROUNDWATER TAP SCREENING LEVEL (RGWTSL) TETRACHLOROETHENE ISOCONCENTRATION LINE
[24.2]	TETRACHLOROETHENE CONCENTRATION

* INDICATES MIP SAMPLING LOCATION

GROUNDWATER ANALYTICAL RESULTS ARE REPORTED IN MICROGRAMS PER LITER (µg/L); OBTAINED DURING THE JULY 13–16, 2020 SAMPLING EVENT.

0 10 20 30 40 80 FT.

MW-28	04/07/20	07/14/20
PCE–	9.6 ug/L	9.1 ug/L
pH–	6.92 standard	6.80 standard
CONDUCTIVITY–	0.94 mS/cm	0.850 mS/cm
DISSOLVED OXYGEN–	5.93 mg/L	6.18 mg/L
TEMPERATURE–	18.17 C	22.10 C
OXIDATION REDUCTION POTENTIAL–	159.1 mV	155.2 mV
TURBIDITY–	226.15 NTUs	122.3 NTUs
NITRATE–	NA	3.4 mg/L
NITRITE–	NA	<0.10 mg/L
TOTAL IRON–	NA	1,410 ug/L
DISSOLVED IRON–	NA	<100 ug/L
TOTAL MANGANESE–	NA	69.2 ug/L
DISSOLVED MANGANESE–	NA	<10.0 ug/L
ETHENE–	NA	<10.0 ug/L
METHANE–	NA	<10.0 ug/L
ALKALINITY–	NA	330 mg/L
ETHANE–	NA	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	NA	20.5 mg/L
TOTAL ORGANIC CARBON–	NA	1.3 mg/L

MW-19	04/08/20	07/15/20
PCE–	25.6 ug/L	<5.0 ug/L
pH–	6.78 standard	7.06 standard
CONDUCTIVITY–	0.78 mS/cm	2.63 mS/cm
DISSOLVED OXYGEN–	6.30 mg/L	1.47 mg/L
TEMPERATURE–	19.80 C	26.47 C
OXIDATION REDUCTION POTENTIAL–	143.5 mV	172.9 mV
TURBIDITY–	44.51 NTUs	78.7 NTUs
NITRATE–	3.4 mg/L	1.5 mg/L
NITRITE–	<0.10 mg/L	<0.10 mg/L
TOTAL IRON–	10,900 ug/L	3,340 ug/L
DISSOLVED IRON–	<70.0 ug/L	<100 ug/L
TOTAL MANGANESE–	910 ug/L	136 ug/L
DISSOLVED MANGANESE–	<5.0 ug/L	73.2 ug/L
ETHENE–	<10.0 ug/L	<10.0 ug/L
METHANE–	<10.0 ug/L	<10.0 ug/L
ALKALINITY–	383 mg/L	400 mg/L
ETHANE–	<10.0 ug/L	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	19.7 mg/L	34.1 mg/L
TOTAL ORGANIC CARBON–	NA	<4.0 mg/L

MW-20	04/08/20	07/15/20
PCE–	5.1 ug/L	6.4 ug/L
pH–	7.03 standard	6.79 standard
CONDUCTIVITY–	0.77 mS/cm	1.00 mS/cm
DISSOLVED OXYGEN–	7.73 mg/L	5.12 mg/L
TEMPERATURE–	16.68 C	16.05 C
OXIDATION REDUCTION POTENTIAL–	151.3 mV	87.3 mV
TURBIDITY–	40.49 NTUs	100.4 NTUs
NITRATE–	NA	3.6 mg/L
NITRITE–	NA	0.1 mg/L
TOTAL IRON–	NA	648 ug/L
DISSOLVED IRON–	NA	<100 ug/L
TOTAL MANGANESE–	NA	38 ug/L
DISSOLVED MANGANESE–	NA	<10.0 ug/L
ETHENE–	NA	<10.0 ug/L
METHANE–	NA	<10.0 ug/L
ALKALINITY–	NA	356 mg/L
ETHANE–	NA	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	NA	26.2 mg/L
TOTAL ORGANIC CARBON–	NA	1.3 mg/L

MW-22	04/09/20	07/15/20
PCE–	54.9 ug/L	53.1 ug/L
pH–	6.93 standard	7.07 standard
CONDUCTIVITY–	0.75 mS/cm	0.81 mS/cm
DISSOLVED OXYGEN–	6.00 mg/L	5.21 mg/L
TEMPERATURE–	14.03 C	17.98 C
OXIDATION REDUCTION POTENTIAL–	178.8 mV	175.0 mV
TURBIDITY–	95.79 NTUs	36.5 NTUs
NITRATE–	NA	5.6 mg/L
NITRITE–	NA	<0.50 mg/L
TOTAL IRON–	NA	1,660 ug/L
DISSOLVED IRON–	NA	<100 ug/L
TOTAL MANGANESE–	NA	86.9 ug/L
DISSOLVED MANGANESE–	NA	<10.0 ug/L
ETHENE–	NA	<10.0 ug/L
METHANE–	NA	<10.0 ug/L
ALKALINITY–	NA	297 mg/L
ETHANE–	NA	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	NA	26.1 mg/L
TOTAL ORGANIC CARBON–	NA	1.0 mg/L

MW-24	04/09/20	07/15/20
PCE–	111 ug/L	<5.0 ug/L
pH–	7.01 standard	6.99 standard
CONDUCTIVITY–	0.78 mS/cm	0.87 mS/cm
DISSOLVED OXYGEN–	5.82 mg/L	4.22 mg/L
TEMPERATURE–	14.45 C	21.35 C
OXIDATION REDUCTION POTENTIAL–	171.6 mV	181.7 mV
TURBIDITY–	47.83 NTUs	20.3 NTUs
NITRATE–	6.7 mg/L	6.4 mg/L
NITRITE–	<0.20 mg/L	<0.20 mg/L
TOTAL IRON–	1,750 ug/L	573 ug/L
DISSOLVED IRON–	<70.0 ug/L	<100 ug/L
TOTAL MANGANESE–	170 ug/L	13.0 ug/L
DISSOLVED MANGANESE–	<5.0 ug/L	<10.0 ug/L
ETHENE–	<10.0 ug/L	<10.0 ug/L
METHANE–	<10.0 ug/L	<10.0 ug/L
ALKALINITY–	356 mg/L	317 mg/L
ETHANE–	<10.0 ug/L	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	95.4 mg/L	29.1 mg/L
TOTAL ORGANIC CARBON–	NA	<1.0 mg/L

MW-17	04/08/20	07/15/20
PCE–	16.6 ug/L	13.8 ug/L
pH–	7.04 standard	7.01 standard
CONDUCTIVITY–	0.69 mS/cm	0.83 mS/cm
DISSOLVED OXYGEN–	6.30 mg/L	4.57 mg/L
TEMPERATURE–	14.70 C	21.10 C
OXIDATION REDUCTION POTENTIAL–	119.7 mV	55.0 mV
TURBIDITY–	15.3 NTUs	48.1 NTUs
NITRATE–	2.8 mg/L	6.1 mg/L
NITRITE–	<0.10 mg/L	<0.2 mg/L
TOTAL IRON–	11,900 ug/L	1,090 ug/L
DISSOLVED IRON–	<70.0 ug/L	<100 ug/L
TOTAL MANGANESE–	489 ug/L	43.6 ug/L
DISSOLVED MANGANESE–	<5.0 ug/L	<10.0 ug/L
ETHENE–	<10.0 ug/L	<10.0 ug/L
METHANE–	<10.0 ug/L	<10.0 ug/L
ALKALINITY–	408 mg/L	300 mg/L
ETHANE–	<10.0 ug/L	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	23.0 mg/L	33.4 mg/L
TOTAL ORGANIC CARBON–	NA	1.2 mg/L

MW-26	04/09/20	07/15/20
PCE–	53.9 ug/L	59.2 ug/L
pH–	6.74 standard	7.03 standard
CONDUCTIVITY–	0.83 mS/cm	0.66 mS/cm
DISSOLVED OXYGEN–	6.77 mg/L	3.41 mg/L
TEMPERATURE–	13.67 C	23.70 C
OXIDATION REDUCTION POTENTIAL–	209.5 mV	158.5 mV
TURBIDITY–	8.4 NTUs	16.37 NTUs
NITRATE–	5.9 mg/L	5.5 mg/L
NITRITE–	5.9 mg/L	<0.2 mg/L
TOTAL IRON–	625 ug/L	625 ug/L
DISSOLVED IRON–	<70.0 ug/L	<100 ug/L
TOTAL MANGANESE–	88.1 ug/L	38.6 ug/L
DISSOLVED MANGANESE–	57.5 ug/L	<10.0 ug/L
ETHENE–	<10.0 ug/L	<10.0 ug/L
METHANE–	<10.0 ug/L	<10.0 ug/L
ALKALINITY–	273 mg/L	264 mg/L
ETHANE–	<10.0 ug/L	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	13.3 mg/L	14.4 mg/L
TOTAL ORGANIC CARBON–	NA	<1.0 mg/L

MW-16	10/30/19	07/16/20
PCE–	21.8 ug/L	<5.0 ug/L
pH–	6.92 standard	6.87 standard
CONDUCTIVITY–	0.70 mS/cm	0.83 mS/cm
DISSOLVED OXYGEN–	5.58 mg/L	1.55 mg/L
TEMPERATURE–	18.64 C	19.44 C
OXIDATION REDUCTION POTENTIAL–	176.0 mV	73.0 mV
TURBIDITY–	17.83 NTUs	160.76 NTUs
NITRATE–	2.7 mg/L	1.2 mg/L
NITRITE–	2.7 mg/L	<10 mg/L
TOTAL IRON–	603 ug/L	4,820 ug/L
DISSOLVED IRON–	<70.0 ug/L	<100 ug/L
TOTAL MANGANESE–	39.0 ug/L	589 ug/L
DISSOLVED MANGANESE–	<5.0 ug/L	278 ug/L
ETHENE–	<10.0 ug/L	<10.0 ug/L
METHANE–	<10.0 ug/L	<10.0 ug/L
ALKALINITY–	322 mg/L	323 mg/L
ETHANE–	<10.0 ug/L	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	12.3 mg/L	21.6 mg/L
TOTAL ORGANIC CARBON–	NA	27.2 mg/L

MW-15	04/09/20	07/15/20
PCE–	74.9 ug/L	<5.0 ug/L
pH–	7.13 standard	7.06 standard
CONDUCTIVITY–	0.70 mS/cm	1.00 mS/cm
DISSOLVED OXYGEN–	6.82 mg/L	0.01 mg/L
TEMPERATURE–	14.45 C	31.49 C
OXIDATION REDUCTION POTENTIAL–	158.9 mV	175.8 mV
TURBIDITY–	90.95 NTUs	97.86 NTUs
NITRATE–	7.6 mg/L	4.0 mg/L
NITRITE–	<0.20 mg/L	<1.0 mg/L
TOTAL IRON–	1,200 ug/L	2,590 ug/L
DISSOLVED IRON–	<70.0 ug/L	<100 ug/L
TOTAL MANGANESE–	90.6 ug/L	799 ug/L
DISSOLVED MANGANESE–	21.9 ug/L	675 ug/L
ETHENE–	<10.0 ug/L	<10.0 ug/L
METHANE–	<10.0 ug/L	<10.0 ug/L
ALKALINITY–	288 mg/L	410 mg/L
ETHANE–	<10.0 ug/L	<10.0 ug/L
SULFIDE–	NA	<0.10 mg\L
SULFATE–	18.2 mg/L	14.3 mg/L
TOTAL ORGANIC CARBON–	NA	<10.0 mg/L

SCALE 1" = 80'

DATE 8/11/20

FIGURE NO. 13

WILCOX PROJECT # 341.14

PROJECT MANAGER J. KINMAN

FILE NO. 34114001 3

ISCR DISSOLVED PCE REDUCTION AND GEOCHEMICAL DATA MAP

O'NEAL'S CLOTHES DEPOT CLEANERS
833 EAST MORGAN STREET, MARTINSVILLE, IN

WILCOX™ ENVIRONMENTAL ENGINEERING

APPENDIX A

Regenesis Technical Specification and Installation Information

PlumeStop® Liquid Activated Carbon™ Technical Description

PlumeStop Liquid Activated Carbon is an innovative groundwater remediation technology designed to rapidly remove and permanently degrade groundwater contaminants. PlumeStop is composed of very fine particles of activated carbon (1-2µm) suspended in water through the use of unique organic polymer dispersion chemistry. Once in the subsurface, the material behaves as a colloidal biomatrix, binding to the aquifer matrix, rapidly removing contaminants from groundwater, and expediting permanent contaminant biodegradation.

This unique remediation technology accomplishes treatment with the use of highly dispersible, fast-acting, sorption-based technology, capturing and concentrating dissolved-phase contaminants within its matrix-like structure. Once contaminants are sorbed onto the regenerative matrix, biodegradation processes achieve complete remediation at an accelerated rate.

Distribution of PlumeStop in water

To see a list of treatable contaminants with the use of PlumeStop, view the Range of Treatable Contaminants Guide.

Chemical Composition

- Water - CAS# 7732-18-5
- Colloidal Activated Carbon ≤2.5 - CAS# µm 7440-44-0
- Proprietary Additives

Properties

- Physical state: Liquid
- Form: Aqueous suspension
- Color: Black
- Odor: Odorless
- pH: 8 - 10

Storage and Handling Guidelines

Storage
Store in original tightly closed container
Store away from incompatible materials
Protect from freezing

Handling
Avoid contact with skin and eyes
Avoid prolonged exposure
Observe good industrial hygiene practices
Wash thoroughly after handling
Wear appropriate personal protective equipment

PlumeStop® Liquid Activated Carbon™ Technical Description

Applications

PlumeStop is easily applied into the subsurface through gravity-feed or low-pressure injection.

Health and Safety

Wash hands after handling. Dispose of waste and residues in accordance with local authority requirements. Please review the Material Safety Data Sheet for additional storage, usage, and handling requirements here: PlumeStop SDS.

REGENESIS

www.regenesis.com
1011 Calle Sombra, San Clemente CA 92673
949.366.8000

HYDROGEN RELEASE COMPOUND

HRC® Technical Description

HRC® is an engineered, hydrogen release compound designed specifically for enhanced, in situ anaerobic bioremediation of chlorinated compounds in groundwater or highly saturated soils. Upon contact with groundwater, this viscous, polylactate ester material becomes hydrated and subject to microbial breakdown producing a controlled-release of hydrogen for periods of up to 18-24 months on a single application.

HRC enables enhanced anaerobic biodegradation by adding hydrogen (an electron donor) to groundwater and/or soil to increase the number and vitality of indigenous microorganisms able to perform the naturally occurring process of enhanced reductive dechlorination. During this process, certain naturally occurring microorganisms replace chlorine atoms on chlorinated contaminants with the newly available hydrogen effectively reducing the contaminant to a less harmful substance with the preferred and innocuous endpoints of ethene or ethane.

For a list of treatable contaminants with the use of HRC, view the Range of Treatable Contaminants Guide.

Example of HRC

Chemical Composition

- Glycerol Tripolylactate- CAS #201167-72-8
- Glycerin- CAS #56-81-5
- Lactic acid- CAS #50-21-5

Properties

- pH - 3 (3% solution/water)
- Appearance – Viscous gel/liquid. Amber color
- Odor – Odorless
- Vapor Pressure – None

Storage and Handling Guidelines

Storage
Store away from incompatible materials
Store in original tightly closed container
Store in a cool, dry, well-ventilated place

Handling
Wash thoroughly after handling
Wear appropriate personal protective equipment
Wear eye/face protection
Provide adequate ventilation
Observe good industrial hygiene practices

HYDROGEN RELEASE COMPOUND

HRC® Technical Description

Applications

- Permanent injection wells
- Direct-push injection (barriers and grids)
- Recirculating wells
- Soil borings
- Excavation applications into soil or on top of bedrock
- Gravity feed into bedrock wells

Application instructions for this product are contained in the HRC Application Instructions.

Health and Safety

Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Please review the HRC Material Safety Data Sheet for additional storage, usage, and handling requirements.

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BDI PLUS® Technical Description

Bio-Dechlor INOCULUM Plus (BDI PLUS®) is an enriched natural consortium containing species of Dehalococcoides sp. (DHC). BDI PLUS has been shown to simulate the rapid and complete dechlorination of chlorinated solvents such as tetrachloroethene (PCE), trichloroethene (TCE), dichloroethene (DCE) and vinyl chloride (VC) to non-toxic end products, ethene, carbon dioxide and water.

The culture also contains microbes capable of dehalogenating halomethanes (e.g., carbon tetrachloride and chloroform) and haloethanes (e.g., 1,1,1-TCA and 1,1-DCA) as well as mixtures of these contaminants.

Species of Dehalococcoides sp. (DHC)

For a list of treatable contaminants with the use of BDI PLUS, view the Range of Treatable Contaminants Guide

Chemical Composition

- Non-hazardous, naturally-occurring, non-altered anaerobic microbes and enzymes in a water-based medium.

Properties

- Appearance – Murky, yellow to grey water
- Odor – Musty
- pH 6.0 to 8.0
- Density – Approximately 1.0 grams per cubic centimeter (0.9 to 1.1 g/cc)
- Solubility – Soluble in Water
- Vapor Pressure – None
- Non-hazardous

Storage and Handling Guidelines

Storage
Store in original tightly closed container
Store away from incompatible materials
Recommended storage containers: plastic lined steel, plastic, glass, aluminum, stainless steel, or reinforced fiberglass
Store in a cool, dry area at 4-5°C (39 - 41°F)
Material may be stored for up to 3 weeks at 2-4°C without aeration

Handling
Avoid prolonged exposure
Observe good industrial hygiene practices
Wear appropriate personal protective equipment

BDI PLUS® Technical Description

Applications

- BDI PLUS is delivered to the site in liquid form and is designed to be injected directly into the saturated zone requiring treatment.
- Most often diluted with de-oxygenated water prior to injection into either hydraulic push injection points or properly constructed injection wells.
- The typical dilution rate of the injected culture is 10 gallons of deoxygenated water to 1 liter of standard BDI PLUS culture.

Application instructions for this product are contained here BDI PLUS Application Instructions.

Health and Safety

Material is non-hazardous and relatively safe to handle; however avoid contact with eyes and prolonged contact with skin. OSHA Level D personal protection equipment including: vinyl or rubber gloves and safety goggles or a splash shield are recommended when handling this product. An eyewash station is recommended. Please review the Material Safety Data Sheet for additional storage, usage, and handling requirements here: BDI PLUS SDS.

REGENESIS

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APPENDIX B

Regenesis Application Summary Reports

Global Headquarters
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5/27/20 **REGENESIS Proposal No. OwM60435**

Jeremy Kinman
Associate Technical Director, Wilcox Environmental Engineering
1552 Main St, Suite 100, Speedway, IN 46224

SUBJECT: Application Summary Report for Remedial Services at the O'Neals Clothes Depot Cleaners Site

Jeremy Kinman,

REGENESIS Remediation Services (RRS) has recently completed an *in-situ* injection application of PlumeStop® Liquid Activated Carbon™ (PlumeStop S), Calcium Chloride, Hydrogen Release Compound (HRC), and Bio-Dechlor Inoculum® Plus (BDI Plus) at the O'Neals Clothes Depot Cleaners Site located at 833 East Morgan Street, Martinsville, IN 46151. The goal of the remedial application was to remediate chlorinated solvents. RRS employed *in-situ* sorption assisted by a parking agent, enhanced anaerobic biodegradation, and bioaugmentation technologies to meet remediation goals.

RRS mobilized a support pickup truck, injection trailer, and personnel to the site to begin work over 25 field days from April 20th, - May 22nd, 2020. The RRS crew arrived on April 20th to stage equipment and conducted initial radius of influence (ROI) testing at Barrier C. An additional RRS crew arrived on April 27th to begin ROI testing and injection at Barrier B. The additional RRS crew departed May 1st, 2020. On Tuesday, May 12th, RRS began injecting in the northernmost barrier, Barrier A. Injection activities concluded the afternoon of Friday, May 22nd, 2020. RRS staffed this project with an experienced Project Supervisor who ensured a safe, successful injection application. Onsite activities included mixing PlumeStop S and BDI; mixing Calcium Chloride, mixing HRC, injecting product into points, ROI testing to verify design, and design verification testing (DVT) coring.

Please review the attached application summary page, injection log, and photo log for more detail on the application.

RRS appreciates the opportunity to work at this site with Wilcox Environmental Engineering. RRS will be available to interpret the field data as it is collected or answer any questions. If you need additional information regarding the application process or attached field notes, please contact Andy Kavanagh at 574.304.4353, Dominic Williams at 949.324.3194, or Bill Disselhorst at 630.740.8815.

Sincerely,

Dominic Williams
Project Supervisor
REGENESIS Remediation Services

Andrew Kavanagh
Central Region Project Manager
REGENESIS Remediation Services

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Application Summary Page

OVERVIEW

Client: Wilcox Environmental Engineering
Client PM: Jeremy Kinman
RRS Project Manager: Andy Kavanagh
RRS Project Supervisors: Dominic Williams, Bill Disselhorst
Site Address: 833 E. Morgan Street, Martinsville, IN 46151
Project Name: O'Neals Clothes Depot Cleaners
Project Dates: 4/20/2020-5/22/2020

TREATMENT TECHNOLOGY

RRS employed PlumeStop to remediate three (3) on-site areas: Barrier A, Barrier B, and Barrier C. PlumeStop is a colloidal form of activated carbon with a surface treatment which reduces its interactions with the soil matrix. This remediation technology accomplishes treatment with the use of highly dispersible, fast-acting, sorption-based mechanisms, capturing and concentrating dissolved-phase contaminants within its matrix-like structure. Calcium Chloride (CaCl) is an inorganic compound that binds to the activated carbon present in PlumeStop, effectively "parking" the PlumeStop where it is injected. It is added to our treatment technologies on sites with particularly fast aquifers, where there is a risk that the PlumeStop will be distributed too widely in the subsurface, thus losing its efficiency. Bio-Dechlor INOCULUM Plus (BDI Plus) is designed for use at sites where chlorinated contaminants are present and unable to be completely biodegraded via the existing microbial communities. BDI Plus is an enriched, natural microbial consortium containing species of *Dehalococcoides sp.* (DHC) which are capable of completely dechlorinating contaminants during *in situ* anaerobic bioremediation processes. This microbial consortium accelerates the extant rate of chlorinated contaminant degradation from parent compounds to intermediates (like dichloroethene (DCE) and vinyl chloride (VC)) and completely through to harmless end products such as ethene and ethane. Hydrogen Release Compound (HRC) is an engineered, hydrogen release compound designed specifically for enhanced, *in situ* anaerobic bioremediation of chlorinated compounds in groundwater or highly saturated soils. Upon contact with groundwater, this viscous, poly-lactate ester material becomes hydrated and subject to microbial breakdown producing a controlled-release of hydrogen for periods of up to 18-24 months on a single application.

RRS employed remediation design specifications as outlined in designs dated 4/9/2020.

DESIGN VERIFICATION TESTING

Prior to injection, a design verification test (DVT) was performed. Four (4) soil cores were taken and analyzed and a monitoring piezometer was installed in each soil core location. Three (3) of these monitoring piezometers were installed downgradient of IP-18 at Barrier C. DVT-1 was located 2 feet South of IP-18 and 3 feet North of IP-19; DVT-2 was located 7 feet Southwest of IP-18; DVT-3 was located

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4 feet Southwest of DVT-2; DVT-4 was located 4 feet Southwest of DVT-3. Additional cores were also taken during and after injection at IP-19, 20, and 21. These cores were analyzed for distribution of PlumeStop. These piezometers were utilized to determine the radius of influence (ROI) and PlumeStop concentration in the subsurface. The injection volume was recorded when the monitoring piezometers were impacted while pumping on adjacent points. After completion of IP-19, DVT-1 exhibited a concentration of 1,400 ppm of PlumeStop. Additionally, with the addition of the salt, increased conductivity was observed highly elevated at a distance of 4 feet. These results verified the initial design; however, 2 ft intervals were implemented to ensure more even distribution in subsurface.

Please see attached Figure 1 for more details.

APPLICATION

RRS applied the REGENESIS product PlumeStop and the parking agent Calcium Chloride by mixing them in the RRS injection trailer. The mixed solution was then injected through direct push borings drilled with either a 3-foot retractable screen or an expendable tip. Product was evenly distributed in three-foot increments to cover the entire treatment zone (two-foot increments were implemented beginning 4/21/20). Mixing water was provided by City of Martinsville via hydrant. The water was then fed by fire hose to the RRS injection trailer where RRS used a dual batch mixing system with two (2) 350-gallon tanks to mix the PlumeStop and Calcium Chloride into solution, injecting from one tank while mixing the other to ensure efficiency. Once in solution, these reagents were delivered into the subsurface using a positive displacement, electrically powered pump. BDI was injected inline with this solution using pressurized Nitrogen gas. Beginning 4/27/20, Calcium Chloride was delivered to the subsurface using a positive displacement, electrically powered pump, via a second boring that was offset 6 inches to 1 foot from the initial (PS) boring. HRC was delivered to the subsurface using a diaphragm pump via a third direct push boring that was offset 6 inches to 1 foot from the second (CaCl) boring.

Soil borings were backfilled with sodium bentonite chips and sealed to match the existing ground cover after injections were completed. Barrier C was broken into two sections, core and extent. The core section was applied in an area spanning approximately 140 linear feet, with the centerline being IP-18. The extent section was applied in an area spanning approximately 30 linear feet, 15 linear feet on each of the North and South ends of the core section of Barrier C. Barrier C was applied in an area spanning 170 total linear feet over the course of the event. Barrier B was applied in an area spanning 310 linear feet over the course of the event. Barrier A was also applied in two sections, East-West and North-South. The East-West section was applied in an area spanning 135 linear feet, with IP-1 located at the junction of the alley and Colfax St. The North-South section was applied in an area spanning 25 linear feet, with IP-29 slightly offline with MW-9. Barrier A was applied in an area spanning 160 total linear feet over the course of the event.

Injection pressures were observed between 0 and 120 PSI, with higher pressures generally being observed in the first interval across all barriers. Injection flow rates were observed between 2.0 and 11.4 GPM, with higher flow rates generally observed in Barrier C.

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Injections were completed by pumping on two (2) to three (3) injection points at a time using the RRS injection trailer manifold system. Although pressures were generally under 120 PSI, the RRS trailer is equipped with a pressure bypass valve that will re-route fluids back into the mix tanks if downhole pressures reach 120 PSI in order to keep pressures at safe levels for field personnel. Surfacing was observed primarily at Barrier C, and most often from current or previous bores. This did not impede the project; however, this was often an indicator that the down hole tooling was compromised and/or heaving sand clogging the rods and/or damaging the tips. For more information, please see attached Tables 1 through 3, and Figures 1 through 5.

Each tote/drum/pail were designated to specific injection points and/or injection areas. Each were monitored while mixing injection solution inside the trailer mixing tanks to ensure that the design concentration was reached for each batch. At the conclusion of each day of injection work, product was inventoried to ensure that the overall design was being adhered to.

As part of our quality assurance methodology, we tested PlumeStop concentrations in samples from nearby monitoring wells to ensure the targeted concentration expectations were being met. See table below.

PlumeStop Concentrations:

MW ID	Date Sample Taken	PlumeStop Concentration (ppm)
MW-19	4/22/20	>5,000
MW-24	4/27/20	50
MW-16	5/1/20	23,000
MW-16	5/1/20	17,000
MW-15	5/5/20	12,000
MW-8	5/12/20	50
MW-8	5/12/20	6,000
MW-8	5/13/20	2,900
MW-9	5/21/20	50
MW-9	5/21/20	50
MW-9	5/21/20	50

The results of our concentration tests in the field generally indicate a high concentration after completing injection on points adjacent to the monitoring wells. This concentration tapers down as injection points moved further from monitoring wells. The concentration gradient observed during the initial DVT at Barrier C indicated that PlumeStop is parking at an average distance great enough to ensure significant overlap as designed. This is due to the combination of the relatively fast speed of the aquifer at this site and the parking solution applied to slow the PlumeStop distribution. Please see attached Photo Log for more information.

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TREATMENT AREA 1 – BARRIER C

A total of 14,248 gallons of PlumeStop and CaCl was mixed and applied as a 15,000 mg/L solution, with a total of 7,200 pounds of PlumeStop and 1,700 pounds of CaCl applied in the core section of the barrier. A total of 3,165 gallons of PlumeStop was mixed and applied as a 16,000 mg/L solution, with a total of 1,600 pounds of PlumeStop and 500 pounds of CaCl applied in a second bore in the extent section of the barrier.

Total Amount Applied:

PlumeStop S	8,800 lbs.
CaCl	2,200 lbs.
Volume	17,413 gal.

Amount Applied Per Point:

	Injection Point ID	Amount Applied
PlumeStop S	IP-1 through 4 and IP-31 through 34	200 lbs.
	IP-13 and 14	415 lbs.
	IP-16	306 lbs.
	IP-17	248 lbs.
	All other injection points	277 lbs

Application Method: Bottom-up direct push drilling with 3-foot retractable screens and expendable tips
Injection Depth: 20 to 12 feet below ground surface
Number of Injection Points: 34

Average Injection Flowrate: 6.5 GPM

Average Injection Pressure: 48.3 PSI

General Observations: At IP-8, surfacing was observed from cracks in asphalt around bore. This surfacing became uncontrollable. IP-8 was pulled up, offset ~3ft east and redriven. At IP-10, surfacing was observed from cracks in asphalt between IP-9 and IP-10. IP-10 was pulled up and redriven through a pile of benseal to alleviate. MW-19 was pressurized while injecting on IP-13. The well cap popped off and surfacing was observed from well riser. At IP-14, surfacing was observed from bore of IP-13. At IP-17, surfacing was observed from soil core bore between IP-17 and IP-18. This surfacing became uncontrollable. IP-17 was abandoned, and the remaining volume was distributed to IP-16. At IP-25, surfacing was observed from cracks in asphalt between IP-22 and 23. IP-25 was pulled up and redriven through a pile of benseal. At IPs 27, 29, and 32, surfacing was observed from the bore. While injecting CaCl, surfacing was observed at IPs 3, 32, 33, and 34. Heaving sand was occasionally observed throughout barrier.

Deviations from Proposal:

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1. Intervals were adjusted from 3-foot to 2-foot intervals beginning 4/21/20.
2. After IP-18, application method changed from 3-foot screens to expendable tips to ensure more even distribution.
3. IP-17 was offset 1.5 ft south due to utilities.
4. IP-13 offset 2 ft north and 3 ft east due to omission of IP-15 and position of MW-19. IP-13 received 274 additional gallons due to omission of IP-15.
5. IP-14 offset 3 ft east due to omission of IP-15. IP-14 received 274 additional gallons due to omission of IP-15.
6. CaCl was injected in a separate bore beginning 4/27/20.
7. IPs 32, 33, and 34 were each moved to a row ~3.5 ft east of MW-24. Each point also received additional BDI due to omission of IP-15.

No other deviations were made in this barrier.

Please see attached Tables 2a and 2b for details on injection flow rates and pressures observed.

TREATMENT AREA 2 – BARRIER B

A total of 30,553 gallons of PlumeStop was mixed and applied as an 15,000 mg/L solution, with a total of 15,445 pounds of PlumeStop and 4,065 pounds of CaCl applied in a second bore in the barrier.

Amount Applied Per Point:

	Injection Point ID	Amount Applied
PlumeStop S	IP-2 and 20	289 lbs.
	IP-4	490 lbs.
	IP-6	158 lbs.
	IP-54 and 56	368 lbs.
	All other injection points	245 lbs

Application Method: Bottom-up direct push drilling with expendable tips
Injection Depth: 16 to 9 feet below ground surface
Number of Injection Points: 62

Average Injection Flowrate: 4.9 GPM

Average Injection Pressure: 24.6 PSI

General Observations: At IP-5, surfacing was observed from cracks in asphalt around piezometer bore. At IP-6, surfacing was observed from cracks in asphalt of road. At IP-26, surfacing was observed through

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asphalt of road. At IP-29, significant back pressure was observed when breaking rod. While injecting CaCl, surfacing was observed at IP-40. Heaving sand was occasionally observed throughout barrier.

Deviations from Proposal:

1. IP-2 and 20 each received an additional 86 gallons from abandonment of IP-6.
2. IP-4 received double the design volume due to removing point to the west due to utility clearance issues. The additional PlumeStop, CaCl, HRC, and BDI used to complete this change was taken from the total designated for Barrier A.
3. IP-46 was offset 2 feet east due to utilities.
4. IP-54 and 56 each received 242 additional gallons due to omission of IP-55.
5. IPs 15, 16, and 17 each received all CaCl volume in top interval of PS bore without driving new points due to homeowner complaints.

No other deviations were made in this barrier.

Please see attached Tables 1a and 1b for details on injection flow rates and pressures observed.

TREATMENT AREA 2 – BARRIER A

A total of 14,242 gallons of PlumeStop was mixed and applied as an 15,000 mg/L solution, with a total of 6,955 pounds of PlumeStop and 1,835 pounds of Calcium Chloride applied in the barrier.

Application Method: Bottom-up direct push drilling with expendable tips
Injection Depth: 16 to 9 feet below ground surface
Number of Injection Points: 32

Average Injection Flowrate: 4.2 GPM

Average Injection Pressure: 24.4 PSI

General Observations: No significant surfacing was observed in this barrier. Heaving sand was occasionally observed throughout barrier.

Deviations from Proposal:

1. The total amount of product allotted for Barrier A was reduced by 245 lbs. PlumeStop, 65 lbs. CaCl, 26.45 lbs. HRC, and 0.387 L BDI to account for IP-4 of Barrier B being a double volume point. The reduced amount was distributed evenly across all points in Barrier A.
2. IP-10 was offset 2 feet West due to utilities.
3. IP-16 was offset 3 feet West due to utilities.
4. IP-20 was offset 2 feet East due to utilities.
5. IP-23 was offset 2 feet East due to utilities.

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6. IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.
7. IP-32 was offset 3 feet North due to utilities.

   No deviations were made in this area of the barrier.

Please see attached Tables 3a and 3b for details on injection flow rates and pressures observed.

PLUME STOP
Liquid Activated Carbon

Wolcox Environmental-O'Neals Clothes Depot Cleaners

PlumeStop Injection Summary Log

Barrier B

Table 1a

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Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Pounds of PlumeStop Stout Injected Per Location	Liters of BDI Per Interval	Pounds of HRC Per Interval	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval							
1	4/30/2020	12:24	16-14	56	4.92	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/30/2020	13:01	14-12	38	5.12	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	13:30	12-10	23	5.03	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	14:14	10-9	15	4.98	415.68	484.96	69.28				0.055	3.77		
2	4/30/2020	9:21	16-14	20	5.04	0.00	138.56	138.56	571	76	289	0.111	7.56		Expendable Tip
	4/30/2020	9:53	14-12	20	5.45	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	10:43	12-10	16	5.10	277.12	467.19	190.07				0.111	7.56	**Design Change: Received an additional 86 gallons from abandonment of IP-6.**	
	4/30/2020	11:32	10-9	20	5.87	467.19	571.10	103.91				0.055	3.77		
3	4/29/2020	9:39	16-14	34	4.78	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	10:16	14-12	27	5.04	138.56	277.12	138.56				0.111	7.56		
	4/29/2020	10:56	12-10	13	5.29	277.12	415.68	138.56				0.111	7.56		
	4/29/2020	11:29	10-9	10	5.17	415.68	484.96	69.28				0.055	3.77		
4	4/30/2020	12:25	16-14	55	5.01	0.00	277.12	277.12	970	129	490	0.221	15.12	**Design Change: IP received 2x volume due to removing point to W due to utility clearance issues**	Expendable Tip
	4/30/2020	13:31	14-12	36	5.19	277.12	554.24	277.12				0.221	15.12		
	4/30/2020	14:32	12-10	30	5.14	554.24	831.36	277.12				0.221	15.12		
	4/30/2020	15:12	10-9	15	4.92	831.36	969.92	138.56				0.111	7.55		
5	4/27/2020	9:18	16-14	15	3.95	0.00	138.56	138.56	485	65	245	0.111	7.56	Surfacing from cracked asphalt of piezometer borings.	Expendable Tip
	4/27/2020	9:55	14-12	20	4.25	138.56	277.12	138.56				0.111	7.56		
	4/27/2020	10:32	12-10	20	4.63	277.12	415.68	138.56				0.111	7.56		
	4/27/2020	12:34	10-9	25	4.81	415.68	484.96	69.28				0.055	3.77		
6	4/30/2020	9:21	16-14	25	5.12	0.00	138.56	138.56	313	42	158	0.111	7.56		Expendable Tip
	4/30/2020	9:53	14-12	30	5.56	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	10:43	12-10	26	5.32	277.12	312.68	35.56				0.111	7.56	Surfacing through cracks in asphalt of road. **Design Change: Abandon point and redistribute remaining volume evenly into IP 2 and IP 20.**	
			10-9			312.68	312.68	0.00				0.055	3.77		
7	4/27/2020	9:19	16-14	17	3.86	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/27/2020	9:55	14-12	20	5.12	138.56	277.12	138.56				0.111	7.56		
	4/27/2020	10:32	12-10	25	4.89	277.12	415.68	138.56				0.111	7.56		
	4/27/2020	12:35	10-9	25	4.38	415.68	484.96	69.28				0.055	3.77		
8	4/28/2020	15:14	16-14	27	4.84	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	9:37	14-12	18	5.01	138.56	277.12	138.56				0.111	7.56		
	4/29/2020	10:12	12-10	10	4.89	277.12	415.68	138.56				0.111	7.56		
	4/29/2020	10:34	10-9	10	4.99	415.68	484.96	69.28				0.055	3.77		
9	4/28/2020	8:50	16-14	20	4.47	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/28/2020	9:19	14-12	18	4.48	138.56	277.12	138.56				0.111	7.56		
	4/28/2020	9:50	12-10	20	4.56	277.12	415.68	138.56				0.111	7.56		
	4/28/2020	10:22	10-9	12	4.73	415.68	484.96	69.28				0.055	3.77		
10	4/29/2020	12:05	16-14	25	5.13	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	12:42	14-12	25	5.21	138.56	277.12	138.56				0.111	7.56		
	4/29/2020	13:15	12-10	16	4.96	277.12	415.68	138.56				0.111	7.56		
	4/29/2020	13:53	10-9	12	4.96	415.68	484.96	69.28				0.055	3.77		
11	4/29/2020	9:39	16-14	28	5.02	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	10:17	14-12	25	5.11	138.56	277.12	138.56				0.111	7.56		
	4/29/2020	10:54	12-10	15	5.06	277.12	415.68	138.56				0.111	7.56		
	4/29/2020	11:28	10-9	15	5.22	415.68	484.96	69.28				0.055	3.77		
12	4/28/2020	8:50	16-14	40	4.60	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/28/2020	9:19	14-12	22	4.36	138.56	277.12	138.56				0.111	7.56		
	4/28/2020	9:51	12-10	20	4.29	277.12	415.68	138.56				0.111	7.56		
	4/28/2020	10:22	10-9	15	4.90	415.68	484.96	69.28				0.055	3.77		
13	4/29/2020	12:05	16-14	25	4.86	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	12:43	14-12	18	4.85	138.56	277.12	138.56				0.111	7.56		
	4/29/2020	13:14	12-10	13	4.98	277.12	415.68	138.56				0.111	7.56		
	4/29/2020	13:53	10-9	10	5.01	415.68	484.96	69.28				0.055	3.77		
14	4/29/2020	14:12	16-14	25	5.10	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	14:52	14-12	20	5.16	138.56	277.12	138.56				0.111	7.56		
	4/29/2020	15:20	12-10	15	5.11	277.12	415.68	138.56				0.111	7.56		
	4/29/2020	15:55	10-9	15	5.03	415.68	484.96	69.28				0.055	3.77		
15	5/5/2020	9:25	16-14	16	3.54	0.00	138.56	138.56	485	65	245	0.111	7.56	Lower flow to reduce chance of surfacing with 3 adjacent points and 2 wells.	Expendable Tip
	5/5/2020	10:05	14-12	18	3.64	138.56	277.12	138.56				0.111	7.56		
	5/5/2020	10:52	12-10	12	3.59	277.12	415.68	138.56				0.111	7.56		
	5/5/2020	11:45	10-9	10	3.60	415.68	484.96	69.28				0.055	3.77		
16	5/5/2020	9:24	16-14	16	3.50	0.00	138.56	138.56	485	65	245	0.111	7.56	Lower flow to reduce chance of surfacing with 3 adjacent points and 2 wells.	Expendable Tip
	5/5/2020	10:05	14-12	22	3.68	138.56	277.12	138.56				0.111	7.56		
	5/5/2020	10:52	12-10	10	3.69	277.12	415.68	138.56				0.111	7.56		
	5/5/2020	11:45	10-9	6	3.55	415.68	484.96	69.28				0.055	3.77		

PLUME STOP Liquid Activated Carbon

Wolcox Environmental-O'Neals Clothes Depot Cleaners

PlumeStop Injection Summary Log

Barrier B

Table 1a

REGENESIS REMEDIATION SERVICES Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Pounds of PlumeStop Stout Injected Per Location	Liters of BDI Per Interval	Pounds of HRC Per Interval	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval							
17	5/5/2020	9:24	16-14	20	3.48	0.00	138.56	138.56	485	65	245	0.111	7.56	Lower flow to reduce chance of surfacing with 3 adjacent points and 2 wells.	Expendable Tip
	5/5/2020	10:05	14-12	35	3.56	138.56	277.12	138.56				0.111	7.56		
	5/5/2020	10:52	12-10	18	3.68	277.12	415.68	138.56				0.111	7.56		
	5/5/2020	11:46	10-9	14	3.63	415.68	484.96	69.28				0.055	3.77		
18	4/28/2020	10:55	16-14	38	4.83	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/28/2020	11:27	14-12	22	4.96	138.56	277.12	138.56				0.111	7.56		
	4/28/2020	11:47	12-10	20	5.22	277.12	415.68	138.56				0.111	7.56		
	4/28/2020	12:20	10-9	14	4.89	415.68	484.96	69.28				0.055	3.77		
19	4/29/2020	14:12	16-14	29	4.99	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	14:51	14-12	25	5.31	138.56	277.12	138.56				0.111	7.56		
	4/29/2020	15:21	12-10	18	5.17	277.12	415.68	138.56				0.111	7.56		
	4/29/2020	15:55	10-9	15	5.34	415.68	484.96	69.28				0.055	3.77		
20	4/30/2020	9:21	16-14	32	5.23	0.00	138.56	138.56	571	76	289	0.111	7.56		Expendable Tip
	4/30/2020	9:53	14-12	40	5.72	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	10:43	12-10	30	5.46	277.12	467.20	190.08				0.111	7.56	**Design Change: Received an additional 86 gallons from abandonment of IP-6.**	
	4/30/2020	11:33	10-9	16	5.53	467.20	571.21	104.01				0.055	3.77		
21	4/28/2020	10:55	16-14	43	5.12	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/28/2020	11:27	14-12	27	5.04	138.56	277.12	138.56				0.111	7.56		
	4/28/2020	11:46	12-10	18	5.12	277.12	415.68	138.56				0.111	7.56		
	4/28/2020	12:20	10-9	15	5.20	415.68	484.96	69.28				0.055	3.77		
22	4/29/2020	12:05	16-14	40	5.10	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	12:43	14-12	31	5.31	138.56	277.12	138.56				0.111	7.56		
	4/29/2020	13:14	12-10	18	5.19	277.12	415.68	138.56				0.111	7.56		
	4/29/2020	13:53	10-9	16	5.08	415.68	484.96	69.28				0.055	3.77		
23	4/29/2020	14:12	16-14	35	5.03	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	14:51	14-12	25	5.18	138.56	277.12	138.56				0.111	7.56		
	4/29/2020	15:21	12-10	15	5.37	277.12	415.68	138.56				0.111	7.56		
	4/29/2020	15:55	10-9	12	5.22	415.68	484.96	69.28				0.055	3.77		
24	4/28/2020	13:03	16-14	42	4.97	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/28/2020	13:27	14-12	30	5.08	138.56	277.12	138.56				0.111	7.56		
	4/28/2020	14:12	12-10	12	4.67	277.12	415.68	138.56				0.111	7.56		
	4/28/2020	14:42	10-9	10	5.19	415.68	484.96	69.28				0.055	3.77		
25	4/30/2020	12:25	16-14	48	4.89	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/30/2020	13:02	14-12	35	5.20	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	13:31	12-10	18	5.09	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	14:15	10-9	15	5.01	415.68	484.96	69.28				0.055	3.77		
26	4/30/2020	15:14	16-14	32	4.80	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/30/2020	15:44	14-12	30	5.23	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	16:15	12-10	25	5.12	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	16:41	10-9	16	4.83	415.68	484.96	69.28				0.055	3.77		
27	5/1/2020	11:22	16-14	40	5.00	0.00	138.56	138.56	485	65	245	0.111	7.56	Surfacing through asphalt of road. Slowed to mitigate	Expendable Tip
	5/1/2020	11:47	14-12	40	5.22	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	12:27	12-10	28	4.10	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	13:13	10-9	10	3.20	415.68	484.96	69.28				0.055	3.77		
28	4/28/2020	13:03	16-14	40	5.06	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/28/2020	13:27	14-12	32	5.02	138.56	277.12	138.56				0.111	7.56		
	4/28/2020	14:11	12-10	15	4.89	277.12	415.68	138.56				0.111	7.56		
	4/28/2020	14:42	10-9	15	5.10	415.68	484.96	69.28				0.055	3.77		
29	5/4/2020	14:17	16-14	45	5.15	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/4/2020	14:59	14-12	20	4.68	138.56	277.12	138.56				0.111	7.56		
	5/4/2020	15:38	12-10	24	4.56	277.12	415.68	138.56				0.111	7.56	Significant backpressure when breaking rod.	
	5/4/2020	16:15	10-9	20	4.43	415.68	484.96	69.28				0.055	3.77		
30	5/1/2020	8:51	16-14	35	5.04	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	9:21	14-12	28	5.17	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	9:54	12-10	32	5.28	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	10:43	10-9	20	5.12	415.68	484.96	69.28				0.055	3.77		
31	4/30/2020	15:13	16-14	30	5.11	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/30/2020	15:44	14-12	30	5.34	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	16:15	12-10	18	4.93	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	16:42	10-9	15	4.70	415.68	484.96	69.28				0.055	3.77		
32	5/1/2020	11:21	16-14	42	5.06	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	11:47	14-12	38	5.19	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	12:27	12-10	25	5.02	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	13:13	10-9	25	5.12	415.68	484.96	69.28				0.055	3.77		

PLUME STOP Liquid Activated Carbon

Wolcox Environmental-O'Neals Clothes Depot Cleaners

PlumeStop Injection Summary Log

Barrier B

Table 1a

REGENESIS REMEDIATION SERVICES Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Pounds of PlumeStop Stout Injected Per Location	Liters of BDI Per Interval	Pounds of HRC Per Interval	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval							
33	5/4/2020	14:19	16-14	50	4.92	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/4/2020	14:59	14-12	18	4.40	138.56	277.12	138.56				0.111	7.56		
	5/4/2020	15:37	12-10	15	4.55	277.12	415.68	138.56				0.111	7.56		
	5/4/2020	16:14	10-9	15	4.60	415.68	484.96	69.28				0.055	3.77		
34	5/1/2020	8:51	16-14	37	5.10	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	9:21	14-12	32	5.05	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	9:05	12-10	30	5.15	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	10:43	10-9	16	5.09	415.68	484.96	69.28				0.055	3.77		
35	5/1/2020	11:21	16-14	45	5.12	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	11:47	14-12	40	5.25	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	12:27	12-10	28	4.95	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	13:13	10-9	25	5.20	415.68	484.96	69.28				0.055	3.77		
36	5/4/2020	14:21	16-14	40	4.98	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/4/2020	14:59	14-12	20	4.60	138.56	277.12	138.56				0.111	7.56		
	5/4/2020	15:37	12-10	20	4.50	277.12	415.68	138.56				0.111	7.56		
	5/4/2020	16:14	10-9	18	4.48	415.68	484.96	69.28				0.055	3.77		
37	5/1/2020	8:51	16-14	39	4.89	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	9:22	14-12	35	5.00	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	9:53	12-10	35	5.22	277.12	415.68	138.56				0.111	7.56	End E-W	
	5/1/2020	10:43	10-9	22	5.17	415.68	484.96	69.28				0.055	3.77		
38	5/4/2020	11:48	16-14	10	4.34	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/4/2020	12:27	14-12	10	4.14	138.56	277.12	138.56				0.111	7.56		
	5/4/2020	13:12	12-10	12	4.88	277.12	415.68	138.56				0.111	7.56		
	5/4/2020	13:42	10-9	16	4.80	415.68	484.96	69.28				0.055	3.77		
39	4/30/2020	12:08	16-14	26	4.66	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/30/2020	12:51	14-12	24	4.74	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	13:21	12-10	20	5.08	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	13:54	10-9	20	5.06	415.68	484.96	69.28				0.055	3.77		
40	5/1/2020	12:18	16-14	60	4.45	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	13:07	14-12	25	4.18	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	14:01	12-10	6	4.72	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	14:43	10-9	4	4.38	415.68	484.96	69.28				0.055	3.77		
41	4/30/2020	12:10	16-14	45	4.52	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/30/2020	12:50	14-12	34	4.82	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	13:20	12-10	12	5.06	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	13:53	10-9	18	5.22	415.68	484.96	69.28				0.055	3.77		
42	5/1/2020	12:16	16-14	18	4.47	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	13:06	14-12	15	4.31	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	14:01	12-10	18	4.68	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	14:43	10-9	12	4.34	415.68	484.96	69.28				0.055	3.78		
43	4/30/2020	12:12	16-14	30	4.10	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/30/2020	12:49	14-12	50	4.91	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	13:20	12-10	16	5.09	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	13:53	10-9	20	4.97	415.68	484.96	69.28				0.056	3.78		
44	5/1/2020	12:14	16-14	52	4.03	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	13:07	14-12	6	4.12	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	14:01	12-10	12	4.72	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	14:43	10-9	10	4.34	415.68	484.96	69.28				0.056	3.78		
45	4/30/2020	9:43	16-14	35	4.25	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/30/2020	10:25	14-12	48	4.44	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	10:59	12-10	35	5.64	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	11:32	10-9	22	4.90	415.68	484.96	69.28				0.056	3.78		
46	5/4/2020	11:45	16-14	60	4.30	0.00	138.56	138.56	485	65	245	0.111	7.56	Offset 2 feet east due to utilities.	Expendable Tip
	5/4/2020	12:27	14-12	50	4.22	138.56	277.12	138.56				0.111	7.56		
	5/4/2020	13:11	12-10	14	4.90	277.12	415.68	138.56				0.111	7.56		
	5/4/2020	13:41	10-9	12	4.78	415.68	484.96	69.28				0.056	3.78		
47	4/30/2020	9:45	16-14	75	3.64	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/30/2020	10:25	14-12	22	5.10	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	10:59	12-10	10	4.38	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	11:32	10-9	18	5.08	415.68	484.96	69.28				0.056	3.78		
48	5/4/2020	11:42	16-14	55	4.56	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/4/2020	12:26	14-12	55	4.17	138.56	277.12	138.56				0.111	7.56		
	5/4/2020	13:11	12-10	16	4.82	277.12	415.68	138.56				0.111	7.56		
	5/4/2020	13:41	10-9	14	4.79	415.68	484.96	69.28				0.056	3.78		

PLUME STOP Liquid Activated Carbon

Wolcox Environmental-O'Neals Clothes Depot Cleaners

PlumeStop Injection Summary Log

Barrier B

Table 1a

REGENESIS REMEDIATION SERVICES Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Pounds of PlumeStop Stout Injected Per Location	Liters of BDI Per Interval	Pounds of HRC Per Interval	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval							
49	4/29/2020	15:44	16-14	26	6.03	0.00	138.56	138.56	485	65	245	0.111	7.56	Tip did not deploy on initial pull. Use knockout rods to pop tip.	Expendable Tip
	4/29/2020	16:20	14-12	38	5.84	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	8:46	12-10	25	5.89	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	9:08	10-9	35	7.00	415.68	484.96	69.28				0.056	3.78		
50	5/4/2020	8:51	16-14	50	3.80	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/4/2020	9:47	14-12	18	4.68	138.56	277.12	138.56				0.111	7.56		
	5/4/2020	10:36	12-10	22	4.80	277.12	415.68	138.56				0.111	7.56		
	5/4/2020	11:06	10-9	16	4.78	415.68	484.96	69.28				0.056	3.78		
51	4/30/2020	9:47	16-14	25	4.36	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/30/2020	10:26	14-12	18	4.88	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	10:59	12-10	15	4.34	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	11:33	10-9	20	5.04	415.68	484.96	69.28				0.056	3.78		
52	5/4/2020	8:50	16-14	30	4.91	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/4/2020	9:47	14-12	16	4.64	138.56	277.12	138.56				0.111	7.56		
	5/4/2020	10:36	12-10	20	4.94	277.12	415.68	138.56				0.111	7.56		
	5/4/2020	11:07	10-9	10	4.80	415.68	484.96	69.28				0.056	3.78		
53	4/29/2020	15:44	16-14	38	6.10	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	16:22	14-12	26	5.78	138.56	277.12	138.56				0.111	7.56		
	4/30/2020	8:46	12-10	18	6.06	277.12	415.68	138.56				0.111	7.56		
	4/30/2020	9:08	10-9	28	6.89	415.68	484.96	69.28				0.056	3.78		
54	4/30/2020	14:29	16-14	36	5.74	0.00	207.84	207.84	727	97	368	0.166	11.34	**Design Change: IP-54 received 242 additional gallons due to omission of IP-55.**	Expendable Tip
	4/30/2020	15:12	14-12	50	5.78	207.84	415.68	207.84				0.166	11.34		
	4/30/2020	15:52	12-10	20	6.02	415.68	623.52	207.84				0.166	11.34		
	4/30/2020	16:31	10-9	20	5.94	623.52	727.44	103.92				0.083	5.67		
55	**Point Omitted**													**Design Change: Point omitted due to utilities.**	
56	4/30/2020	14:29	16-14	68	5.70	0.00	207.84	207.84	727	97	368	0.166	11.34	**Design Change: IP-56 received 242 additional gallons due to omission of IP-55.**	Expendable Tip
	4/30/2020	15:12	14-12	30	5.68	207.84	415.68	207.84				0.166	11.34		
	4/30/2020	15:53	12-10	30	6.10	415.68	623.52	207.84				0.166	11.34		
	4/30/2020	16:31	10-9	25	5.87	623.52	727.44	103.92				0.083	5.67		
57	5/4/2020	8:51	16-14	20	4.31	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/4/2020	9:47	14-12	24	4.62	138.56	277.12	138.56				0.111	7.56		
	5/4/2020	10:36	12-10	18	4.80	277.12	415.68	138.56				0.111	7.56		
	5/4/2020	11:07	10-9	8	4.71	415.68	484.96	69.28				0.056	3.78		
58	4/29/2020	14:10	16-14	62	6.14	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	4/29/2020	14:33	14-12	20	6.26	138.56	277.12	138.56				0.111	7.56		
	4/29/2020	15:01	12-10	24	6.24	277.12	415.68	138.56				0.111	7.56		
	4/29/2020	15:25	10-9	26	6.36	415.68	484.96	69.28				0.056	3.78		
59	5/1/2020	8:51	16-14	40	4.24	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	#REF!	#REF!	14-12	35	4.41	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	10:21	12-10	18	4.51	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	10:45	10-9	20	4.52	415.68	484.96	69.28				0.056	3.78		
60	5/1/2020	8:48	16-14	16	4.15	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	9:27	14-12	12	4.34	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	10:20	12-10	10	4.41	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	10:45	10-9	15	4.39	415.68	484.96	69.28				0.056	3.70		
61	5/1/2020	8:46	16-14	20	4.22	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	9:27	14-12	20	4.40	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	10:19	12-10	16	4.47	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	10:45	10-9	12	4.30	415.68	484.96	69.28				0.056	3.78		
62	5/1/2020	11:53	16-14	40	6.22	0.00	138.56	138.56	485	65	245	0.111	7.56		Expendable Tip
	5/1/2020	11:53	14-12	38	6.16	138.56	277.12	138.56				0.111	7.56		
	5/1/2020	15:01	12-10	25	6.22	277.12	415.68	138.56				0.111	7.56		
	5/1/2020	11:53	10-9	15	6.30	415.68	484.96	69.28				0.056	3.78		

Total Gallons:	Total Lbs. CaCl	Total Lbs. PlumeStop Stout	Total Litres of BDI:	Total Lbs HRC:
30553	4065	15445	24.387	1666.45

Wolcox Environmental-O'Neals Clothes Depot Cleaners

Calcium Chloride Injection Summary Log

Barrier B

Table 1b

REGENESIS REMEDIATION SERVICES
Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval				
1	5/6/2020	16:15	16-14	50	3.47	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	16:23	14-12	34	3.98	18.57	37.14	18.57				
	5/6/2020	16:36	12-10	25	4.28	37.14	55.71	18.57				
	5/6/2020	16:41	10-9	25	4.28	55.71	64.52	8.81				
2	5/7/2020	8:43	16-14	52	3.76	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	8:53	14-12	45	3.90	18.57	37.14	18.57				
	5/7/2020	9:09	12-10	26	4.60	37.14	55.71	18.57				
	5/7/2020	9:15	10-9	22	4.63	55.71	64.52	8.81				
3	5/6/2020	16:15	16-14	15	3.64	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	16:22	14-12	15	3.94	18.57	37.14	18.57				
	5/6/2020	16:36	12-10	22	4.22	37.14	55.71	18.57				
	5/6/2020	16:41	10-9	20	4.24	55.71	64.52	8.81				
4	5/7/2020	8:44	16-14	44	3.71	0.00	37.14	37.14	129	129	**Design Change: IP-4 received double the design volume due to omission of point to the west.**	Expendable Tip
	5/7/2020	8:53	14-12	36	3.83	37.14	74.28	37.14				
	5/7/2020	9:09	12-10	18	4.56	74.28	111.42	37.14				
	5/7/2020	9:22	10-9	20	4.57	111.42	129.04	17.62				
5	5/6/2020	16:56	16-14	35	4.08	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	17:03	14-12	25	4.30	18.57	37.14	18.57				
	5/6/2020	17:09	12-10	22	4.25	37.14	55.71	18.57				
	5/6/2020	17:16	10-9	10	3.01	55.71	64.52	8.81				
6	5/7/2020	9:44	16-14	16	4.41	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	9:51	14-12	16	4.58	18.57	37.14	18.57				
	5/7/2020	10:01	12-10	14	4.42	37.14	55.71	18.57				
	5/7/2020	10:03	10-9	14	4.41	55.71	64.52	8.81				
7	5/6/2020	16:56	16-14	20	4.18	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	17:03	14-12	20	4.07	18.57	37.14	18.57				
	5/6/2020	17:09	12-10	18	3.98	37.14	55.71	18.57				
	5/6/2020	17:16	10-9	10	3.02	55.71	64.52	8.81				
8	5/7/2020	9:44	16-14	20	4.34	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	9:51	14-12	20	4.54	18.57	37.14	18.57				
	5/7/2020	10:01	12-10	14	4.51	37.14	55.71	18.57				
	5/7/2020	10:03	10-9	12	4.55	55.71	64.52	8.81				
9	5/7/2020	10:54	16-14	20	3.91	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	11:01	14-12	15	4.00	18.57	37.14	18.57				
	5/7/2020	11:09	12-10	18	4.36	37.14	55.71	18.57				
	5/7/2020	11:14	10-9	18	4.37	55.71	64.52	8.81				
10	5/7/2020	10:22	16-14	20	4.17	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	10:26	14-12	18	4.34	18.57	37.14	18.57				
	5/7/2020	10:33	12-10	18	4.48	37.14	55.71	18.57				
	5/7/2020	10:37	10-9	14	4.42	55.71	64.52	8.81				
11	5/7/2020	10:54	16-14	40	4.10	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	11:01	14-12	40	4.03	18.57	37.14	18.57				
	5/7/2020	11:09	12-10	20	4.48	37.14	55.71	18.57				
	5/7/2020	11:14	10-9	20	4.48	55.71	64.52	8.81				
12	5/7/2020	10:21	16-14	30	4.44	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	10:26	14-12	25	4.39	18.57	37.14	18.57				
	5/7/2020	10:33	12-10	25	4.46	37.14	55.71	18.57				
	5/7/2020	10:37	10-9	20	4.58	55.71	64.52	8.81				
13	5/7/2020	12:15	16-14	22	4.50	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	12:24	14-12	16	4.27	18.57	37.14	18.57				
	5/7/2020	12:32	12-10	18	4.45	37.14	55.71	18.57				
	5/7/2020	12:35	10-9	18	4.48	55.71	64.52	8.81				
14	5/7/2020	12:19	16-14	30	4.48	0.00	18.57	18.57	65	65	Tip did not deploy on initial lift. Use knockout rods. Tip did not deploy. Pull up ~1 ft. Tip did not deploy. Use knockout rods again. Rod clogged with heave. Pull up and redrive.	Expendable Tip
	5/7/2020	12:24	14-12	30	4.27	18.57	37.14	18.57				
	5/7/2020	12:31	12-10	14	4.44	37.14	55.71	18.57				
	5/7/2020	12:35	10-9	14	4.61	55.71	64.52	8.81				

Wolcox Environmental-O'Neals Clothes Depot Cleaners

Calcium Chloride Injection Summary Log

Barrier B

Table 1b

REGENESIS REMEDIATION SERVICES
Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval				
15	5/5/2020	12:16	16-14	12	3.57	0.00	18.57	18.57	65	65	**Design Change: All CaCl volume injected in top interval without driving new points due to homeowner complaints.**	Expendable Tip
	5/5/2020	12:20	14-12	14	3.84	18.57	37.14	18.57				
	5/5/2020	12:26	12-10	14	3.89	37.14	55.71	18.57				
	5/5/2020	12:33	10-9	14	3.87	55.71	64.52	8.81				
16	5/5/2020	12:16	16-14	18	4.26	0.00	18.57	18.57	65	65	**Design Change: All CaCl volume injected in top interval without driving new points due to homeowner complaints.**	Expendable Tip
	5/5/2020	12:20	14-12	15	4.22	18.57	37.14	18.57				
	5/5/2020	12:26	12-10	15	4.20	37.14	55.71	18.57				
	5/5/2020	12:33	10-9	15	4.23	55.71	64.52	8.81				
17	5/5/2020	12:16	16-14	25	3.90	0.00	18.57	18.57	65	65	**Design Change: All CaCl volume injected in top interval without driving new points due to homeowner complaints.**	Expendable Tip
	5/5/2020	12:21	14-12	25	3.91	18.57	37.14	18.57				
	5/5/2020	12:26	12-10	20	3.94	37.14	55.71	18.57				
	5/5/2020	12:33	10-9	18	3.90	55.71	64.52	8.81				
18	5/7/2020	12:50	16-14	30	4.12	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	12:56	14-12	18	4.66	18.57	37.14	18.57				
	5/7/2020	13:02	12-10	18	4.57	37.14	55.71	18.57				
	5/7/2020	13:07	10-9	18	4.62	55.71	64.52	8.81				
19	5/7/2020	12:50	16-14	20	4.10	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	12:56	14-12	20	4.43	18.57	37.14	18.57				
	5/7/2020	13:02	12-10	20	4.53	37.14	55.71	18.57				
	5/7/2020	13:07	10-9	20	4.58	55.71	64.52	8.81				
20	5/7/2020	13:22	16-14	20	3.94	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	13:28	14-12	20	4.31	18.57	37.14	18.57				
	5/7/2020	13:43	12-10	14	4.43	37.14	55.71	18.57				
	5/7/2020	13:47	10-9	12	4.45	55.71	64.52	8.81				
21	5/6/2020	13:27	16-14	20	4.62	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	13:32	14-12	20	4.34	18.57	37.14	18.57				
	5/6/2020	13:41	12-10	10	4.52	37.14	55.71	18.57				
	5/6/2020	13:46	10-9	10	4.60	55.71	64.52	8.81				
22	5/7/2020	13:22	16-14	40	3.98	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	13:28	14-12	30	4.28	18.57	37.14	18.57				
	5/7/2020	13:43	12-10	16	4.46	37.14	55.71	18.57				
	5/7/2020	13:46	10-9	14	4.48	55.71	64.52	8.81				
23	5/6/2020	13:27	16-14	20	4.02	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	13:32	14-12	18	4.31	18.57	37.14	18.57				
	5/6/2020	13:41	12-10	10	4.62	37.14	55.71	18.57				
	5/6/2020	13:46	10-9	8	4.62	55.71	64.52	8.81				
24	5/7/2020	14:05	16-14	30	5.10	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	14:19	14-12	35	5.06	18.57	37.14	18.57				
	5/7/2020	14:28	12-10	25	5.26	37.14	55.71	18.57				
	5/7/2020	14:34	10-9	20	5.27	55.71	64.52	8.81				
25	5/6/2020	12:44	16-14	12	2.73	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	12:53	14-12	10	2.66	18.57	37.14	18.57				
	5/6/2020	13:00	12-10	0	2.53	37.14	55.71	18.57				
	5/6/2020	13:04	10-9	0	2.39	55.71	64.52	8.81				
26	5/6/2020	14:19	16-14	20	4.38	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	14:25	14-12	20	4.35	18.57	37.14	18.57				
	5/6/2020	14:35	12-10	18	4.74	37.14	55.71	18.57				
	5/6/2020	14:38	10-9	12	4.44	55.71	64.52	8.81				
27	5/6/2020	12:45	16-14	80	2.58	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	12:53	14-12	75	2.65	18.57	37.14	18.57				
	5/6/2020	13:00	12-10	60	2.59	37.14	55.71	18.57				
	5/6/2020	13:04	10-9	70	2.66	55.71	64.52	8.81				
28	5/6/2020	14:19	16-14	20	4.34	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	14:25	14-12	20	4.44	18.57	37.14	18.57				
	5/6/2020	14:35	12-10	20	4.15	37.14	55.71	18.57				
	5/6/2020	14:38	10-9	15	4.51	55.71	64.52	8.81				

Wolcox Environmental-O'Neals Clothes Depot Cleaners

Calcium Chloride Injection Summary Log

Barrier B

Table 1b

REGENESIS REMEDIATION SERVICES
Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval				
29	5/6/2020	11:52	16-14	20	3.88	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	11:57	14-12	22	3.68	18.57	37.14	18.57				
	5/6/2020	12:02	12-10	20	3.64	37.14	55.71	18.57				
	5/6/2020	12:05	10-9	12	3.81	55.71	64.52	8.81				
30	5/6/2020	14:53	16-14	25	4.04	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	15:00	14-12	25	3.97	18.57	37.14	18.57				
	5/6/2020	15:08	12-10	12	4.57	37.14	55.71	18.57				
	5/6/2020	15:11	10-9	18	4.57	55.71	64.52	8.81				
31	5/6/2020	11:52	16-14	55	3.62	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	11:58	14-12	55	3.74	18.57	37.14	18.57				
	5/6/2020	12:03	12-10	50	3.69	37.14	55.71	18.57				
	5/6/2020	12:05	10-9	30	3.95	55.71	64.52	8.81				
32	5/6/2020	14:53	16-14	40	4.00	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	15:00	14-12	40	4.06	18.57	37.14	18.57				
	5/6/2020	15:08	12-10	16	4.52	37.14	55.71	18.57				
	5/6/2020	15:11	10-9	15	4.51	55.71	64.52	8.81				
33	5/6/2020	11:10	16-14	20	4.34	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	11:15	14-12	16	4.51	18.57	37.14	18.57				
	5/6/2020	11:31	12-10	12	4.16	37.14	55.71	18.57				
	5/6/2020	11:33	10-9	12	4.42	55.71	64.52	8.81				
34	5/6/2020	15:26	16-14	45	3.70	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	15:34	14-12	26	4.10	18.57	37.14	18.57				
	5/6/2020	15:40	12-10	20	4.22	37.14	55.71	18.57				
	5/6/2020	15:43	10-9	10	4.86	55.71	64.52	8.81				
35	5/6/2020	11:10	16-14	10	4.41	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	11:15	14-12	10	4.29	18.57	37.14	18.57				
	5/6/2020	11:31	12-10	18	4.70	37.14	55.71	18.57				
	5/6/2020	11:33	10-9	15	4.55	55.71	64.52	8.81				
36	5/6/2020	15:26	16-14	30	3.76	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	15:33	14-12	18	4.14	18.57	37.14	18.57				
	5/6/2020	15:41	12-10	15	4.18	37.14	55.71	18.57				
	5/6/2020	15:43	10-9	12	4.86	55.71	64.52	8.81				
37	5/6/2020	10:37	16-14	45	4.03	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	10:46	14-12	35	4.05	18.57	37.14	18.57				
	5/6/2020	10:52	12-10	12	4.70	37.14	55.71	18.57				
	5/6/2020	10:54	10-9	12	4.75	55.71	64.52	8.81				
38	5/7/2020	11:28	16-14	20	5.08	0.00	18.57	18.57	65	65		Expendable Tip
	5/7/2020	11:32	14-12	20	5.02	18.57	37.14	18.57				
	5/7/2020	11:38	12-10	16	5.13	37.14	55.71	18.57				
	5/7/2020	11:43	10-9	16	5.14	55.71	64.52	8.81				
39	5/6/2020	10:37	16-14	12	3.86	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	10:46	14-12	12	4.00	18.57	37.14	18.57				
	5/6/2020	10:52	12-10	8	4.36	37.14	55.71	18.57				
	5/6/2020	10:54	10-9	8	4.31	55.71	64.52	8.81				
40	5/1/2020	15:47	16-14	15	3.74	0.00	18.57	18.57	65	65	Surfacing observed from PS bore at ~10 gallons injected. Reseal, continue injection	Expendable Tip
	5/1/2020	15:58	14-12	12	4.34	18.57	37.14	18.57				
	5/1/2020	16:00	12-10	6	3.88	37.14	55.71	18.57				
	5/1/2020	16:08	10-9	6	4.01	55.71	64.52	8.81				
41	5/6/2020	10:03	16-14	15	3.95	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	10:10	14-12	10	4.03	18.57	37.14	18.57				
	5/6/2020	10:19	12-10	12	4.51	37.14	55.71	18.57				
	5/6/2020	10:21	10-9	12	4.46	55.71	64.52	8.81				
42	5/1/2020	15:47	16-14	15	3.33	0.00	18.57	18.57	65	65		Expendable Tip
	5/1/2020	15:54	14-12	12	4.10	18.57	37.14	18.57				
	5/1/2020	16:00	12-10	18	3.96	37.14	55.71	18.57				
	5/1/2020	16:08	10-9	8	4.14	55.71	64.52	8.81				

Wolcox Environmental-O'Neals Clothes Depot Cleaners

Calcium Chloride Injection Summary Log

Barrier B

Table 1b

REGENESIS REMEDIATION SERVICES
Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval				
43	5/6/2020	10:03	16-14	40	3.85	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	10:10	14-12	30	4.26	18.57	37.14	18.57				
	5/6/2020	10:19	12-10	14	4.52	37.14	55.71	18.57				
	5/6/2020	10:22	10-9	12	4.57	55.71	64.52	8.81				
44	5/1/2020	15:47	16-14	38	3.98	0.00	18.57	18.57	65	65		Expendable Tip
	5/1/2020	15:54	14-12	8	4.34	18.57	37.14	18.57				
	5/1/2020	16:00	12-10	8	4.14	37.14	55.71	18.57				
	5/1/2020	16:08	10-9	4	3.99	55.71	64.52	8.81				
45	5/6/2020	9:32	16-14	30	3.78	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	9:37	14-12	30	3.88	18.57	37.14	18.57				
	5/6/2020	9:44	12-10	8	4.60	37.14	55.71	18.57				
	5/6/2020	9:47	10-9	10	4.60	55.71	64.52	8.81				
46	5/5/2020	16:21	16-14	50	3.31	0.00	18.57	18.57	65	65		Expendable Tip
	5/5/2020	16:28	14-12	10	3.72	18.57	37.14	18.57				
	5/5/2020	16:38	12-10	10	3.74	37.14	55.71	18.57				
	5/5/2020	16:43	10-9	10	3.76	55.71	64.52	8.81				
47	5/6/2020	9:32	16-14	35	3.92	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	9:37	14-12	28	4.30	18.57	37.14	18.57				
	5/6/2020	9:45	12-10	10	4.55	37.14	55.71	18.57				
	5/6/2020	9:47	10-9	12	4.57	55.71	64.52	8.81				
48	5/5/2020	16:21	16-14	32	3.59	0.00	18.57	18.57	65	65		Expendable Tip
	5/5/2020	16:28	14-12	20	3.70	18.57	37.14	18.57				
	5/5/2020	16:38	12-10	10	3.84	37.14	55.71	18.57				
	5/5/2020	16:43	10-9	10	3.85	55.71	64.52	8.81				
49	5/6/2020	8:50	16-14	24	4.12	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	9:01	14-12	30	4.20	18.57	37.14	18.57				
	5/6/2020	9:08	12-10	10	4.46	37.14	55.71	18.57				
	5/6/2020	9:10	10-9	10	4.50	55.71	64.52	8.81				
50	5/5/2020	15:43	16-14	28	3.76	0.00	18.57	18.57	65	65		Expendable Tip
	5/5/2020	15:51	14-12	30	3.71	18.57	37.14	18.57				
	5/5/2020	15:59	12-10	4	3.86	37.14	55.71	18.57				
	5/5/2020	16:04	10-9	10	3.90	55.71	64.52	8.81				
51	5/6/2020	8:50	16-14	26	4.08	0.00	18.57	18.57	65	65		Expendable Tip
	5/6/2020	9:01	14-12	10	4.26	18.57	37.14	18.57				
	5/6/2020	9:08	12-10	15	4.36	37.14	55.71	18.57				
	5/6/2020	9:10	10-9	15	4.31	55.71	64.52	8.81				
52	5/5/2020	15:43	16-14	12	3.47	0.00	18.57	18.57	65	65		Expendable Tip
	5/5/2020	15:51	14-12	10	3.60	18.57	37.14	18.57				
	5/5/2020	16:00	12-10	8	3.92	37.14	55.71	18.57				
	5/5/2020	16:04	10-9	8	3.92	55.71	64.52	8.81				
53	5/5/2020	13:41	16-14	6	2.68	0.00	18.57	18.57	65	65		Expendable Tip
	5/5/2020	14:32	14-12	6	2.60	18.57	37.14	18.57				
	5/5/2020	14:39	12-10	4	3.52	37.14	55.71	18.57				
	5/5/2020	14:44	10-9	4	3.50	55.71	64.52	8.81				
54	5/5/2020	15:00	16-14	35	3.36	0.00	27.86	27.86	97	97		Expendable Tip
	5/5/2020	15:12	14-12	40	3.19	27.86	55.71	27.85				
	5/5/2020	15:19	12-10	12	3.98	55.71	83.57	27.86				
	5/5/2020	15:26	10-9	12	3.86	83.57	96.78	13.21				
55	**Point Omitted**										**Design Change: Point omitted due to utilities.**	
56	5/5/2020	15:00	16-14	20	3.50	0.00	27.86	27.86	97	97		Expendable Tip
	5/5/2020	15:12	14-12	28	3.97	27.86	55.71	27.85				
	5/5/2020	15:20	12-10	8	3.88	55.71	83.57	27.86				
	5/5/2020	15:26	10-9	10	3.98	83.57	96.78	13.21				

Wolcox Environmental-O'Neals Clothes Depot Cleaners

Calcium Chloride Injection Summary Log

Barrier B

Table 1b

REGENESIS REMEDIATION SERVICES
Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval				
57	5/5/2020	13:41	16-14	6	2.52	0.00	18.57	18.57	65	65	Tip did not deploy on initial lift. Use knockout rods. Tip did not deploy. Pull up ~2 ft. Tip did not deploy. Use knockout rods again. Rod clogged with heave. Pull up and redrive.	Expendable Tip
	5/5/2020	14:32	14-12	4	2.62	18.57	37.14	18.57				
	5/5/2020	14:39	12-10	6	3.50	37.14	55.71	18.57				
	5/5/2020	14:44	10-9	4	3.52	55.71	64.52	8.81				
58	5/5/2020	13:07	16-14	55	5.44	0.00	18.57	18.57	65	65		Expendable Tip
	5/5/2020	13:13	14-12	50	5.62	18.57	37.14	18.57				
	5/5/2020	13:18	12-10	40	5.88	37.14	55.71	18.57				
	5/5/2020	13:24	10-9	20	6.45	55.71	64.52	8.81				
59	5/1/2020	11:26	16-14	18	3.69	0.00	18.57	18.57	65	65		Expendable Tip
	5/1/2020	11:38	14-12	12	4.15	18.57	37.14	18.57				
	5/1/2020	11:46	12-10	12	4.01	37.14	55.71	18.57				
	5/1/2020	11:52	10-9	10	4.25	55.71	64.52	8.81				
60	5/1/2020	11:26	16-14	30	3.55	0.00	18.57	18.57	65	65		Expendable Tip
	5/1/2020	11:38	14-12	10	4.20	18.57	37.14	18.57				
	5/1/2020	11:46	12-10	8	4.58	37.14	55.71	18.57				
	5/1/2020	11:52	10-9	8	4.22	55.71	64.52	8.81				
61	5/1/2020	11:26	16-14	20	3.68	0.00	18.57	18.57	65	65		Expendable Tip
	5/1/2020	11:37	14-12	15	4.15	18.57	37.14	18.57				
	5/1/2020	11:46	12-10	15	3.96	37.14	55.71	18.57				
	5/1/2020	11:52	10-9	14	4.22	55.71	64.52	8.81				
62	5/5/2020	13:07	16-14	20	5.34	0.00	18.57	18.57	65	65		Expendable Tip
	5/5/2020	13:21	14-12	20	5.41	18.57	37.14	18.57				
	5/5/2020	13:18	12-10	32	6.62	37.14	55.71	18.57				
	5/5/2020	13:24	10-9	26	6.25	55.71	64.52	8.81				

Total Gallons:	Total Lbs. CaCl
4065	4065

PLUME STOP Liquid Activated Carbon

Wolcox Environmental-O'Neals Clothes Depot Cleaners

PlumeStop Injection Summary Log

Barrier C

Table 2a

REGENESIS REMEDIATION SERVICES Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Pounds of PlumeStop Stout Injected Per Location	Liters of BDI Per Interval	Pounds of HRC Per Interval	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval							
1	4/27/2020	9:51	20-18	65	5.11	0.00	98.91	98.91	396	63	200	0.094	7.65		Expendable Tip
	4/27/2020	10:28	18-16	25	3.98	98.91	197.82	98.91				0.094	7.65	CaCl settling out at an increased rate compared to core points.	
	4/27/2020	12:10	16-14	22	4.12	197.82	296.72	98.90				0.094	7.65		
	4/27/2020	12:39	14-12	22	4.01	296.72	395.63	98.92				0.093	7.65	Remaining 11 lbs of CaCl injected in separate solution and separate bore ~1 east at ~4.5-5 GPM, and a total volume of 22 gallons.	
2	4/28/2020	9:09	20-18	60	4.20	0.00	98.91	98.91	396	63	200	0.094	7.65		Expendable Tip
	4/28/2020	9:34	18-16	25	4.84	98.91	197.82	98.91				0.094	7.65		
	4/28/2020	9:59	16-14	12	4.82	197.82	296.72	98.90				0.094	7.65		
	4/28/2020	10:24	14-12	10	4.82	296.72	395.63	98.92				0.094	7.65		
3	4/27/2020	9:51	20-18	45	5.14	0.00	98.91	98.91	396	63	200	0.094	7.65		Expendable Tip
	4/27/2020	10:27	18-16	30	4.06	98.91	197.82	98.91				0.094	7.65	CaCl settling out at an increased rate compared to core points.	
	4/27/2020	12:09	16-14	40	4.08	197.82	296.72	98.90				0.094	7.65		
	4/27/2020	12:38	14-12	18	4.05	296.72	395.63	98.92				0.094	7.65	Remaining 11 lbs of CaCl injected in separate solution and separate bore ~1 east at ~4.5-5 GPM, and a total volume of 22 gallons.	
4	4/28/2020	9:05	20-18	38	4.22	0.00	98.91	98.91	396	63	200	0.094	7.65		Expendable Tip
	4/28/2020	9:34	18-16	20	4.87	98.91	197.82	98.91				0.094	7.65		
	4/28/2020	9:59	16-14	15	4.79	197.82	296.72	98.90				0.094	7.65		
	4/28/2020	10:24	14-12	10	4.82	296.72	395.63	98.92				0.094	7.65		
5	4/23/2020	9:15	20-18	95	7.64	0.00	137.00	137.00	548	65	277	0.125	7.65		Expendable Tip
	4/23/2020	9:45	18-16	76	8.82	137.00	274.00	137.00				0.125	7.65		
	4/23/2020	10:11	16-14	50	6.91	274.00	411.00	137.00				0.125	7.65		
	4/23/2020	10:38	14-12	42	6.88	411.00	548.00	137.00				0.125	7.65		
6	4/24/2020	9:20	20-18	50	4.52	0.00	137.00	137.00	548	65	277	0.125	7.65	Drive initial point through pile of benseal.	Expendable Tip
	4/24/2020	9:57	18-16	20	5.13	137.00	274.00	137.00				0.125	7.65		
	4/24/2020	10:24	16-14	18	5.44	274.00	411.00	137.00				0.125	7.65		
	4/24/2020	10:52	14-12	16	5.32	411.00	548.00	137.00				0.125	7.65		
7	4/22/2020	14:00	20-18	98	8.58	0.00	137.00	137.00	548	65	277	0.125	7.65		Expendable Tip
	4/22/2020	14:19	18-16	55	7.65	137.00	274.00	137.00				0.125	7.65		
	4/22/2020	14:41	16-14	42	8.04	274.00	411.00	137.00				0.125	7.65		
	4/22/2020	15:01	14-12	40	8.32	411.00	548.00	137.00				0.125	7.65		
8	4/23/2020	11:08	20-18	90	7.14	0.00	137.00	137.00	548	65	277	0.125	7.65		Expendable Tip
	4/23/2020	11:36	18-16	55	8.08	137.00	274.00	137.00				0.125	7.65		
	4/23/2020	12:15	16-14	32	5.25	274.00	411.00	137.00				0.125	7.65	Surfacing from cracks in asphalt around bore observed at ~280 gallons injected. Attempt to patch. Slow flow to stop recurrence. Surfacing continued at <2 gpm. Pull up, reseal, redrive through pile of benseal. Surfacing continued. Reseal, slow flow, continue injection. Surfacing uncontrollable. Offset 3 ft east, redrill through pile of benseal.	
	4/23/2020	13:17	14-12	30	4.55	411.00	548.00	137.00				0.125	7.65	Surfacing from previous bore observed at ~500 gallons injected. Reseal old bore, slow flow to prevent recurrence.	
9	4/24/2020	9:25	20-18	50	4.27	0.00	137.00	137.00	548	65	277	0.125	7.65	Drive initial point through pile of benseal.	Expendable Tip
	4/24/2020	9:57	18-16	30	5.13	137.00	274.00	137.00				0.125	7.65		
	4/24/2020	10:24	16-14	20	5.30	274.00	411.00	137.00				0.125	7.65		
	4/24/2020	10:52	14-12	22	5.35	411.00	548.00	137.00				0.125	7.65		
10	4/24/2020	13:41	20-18	55	5.06	0.00	137.00	137.00	548	65	277	0.125	7.65	Drive initial point through pile of benseal.	Expendable Tip
	4/24/2020	14:10	18-16	40	5.10	137.00	274.00	137.00				0.125	7.65		
	4/24/2020	14:43	16-14	35	5.10	274.00	411.00	137.00				0.125	7.65		
	4/24/2020	15:20	14-12	35	5.48	411.00	548.00	137.00				0.125	7.65	Sufacing observed from cracks in asphalt between IP-9 and IP-10 at 420 gallons injected. Surfacing uncontrollable. Pull up and redrive through pile of benseal.	
11	4/23/2020	12:36	20-18	54	6.35	0.00	137.00	137.00	548	65	277	0.125	7.65		Expendable Tip
	4/23/2020	13:10	18-16	40	5.64	137.00	274.00	137.00				0.125	7.65		
	4/23/2020	14:02	16-14	20	6.06	274.00	411.00	137.00				0.125	7.65		
	4/23/2020	14:33	14-12	5	5.15	411.00	548.00	137.00				0.125	7.65		
12	4/24/2020	11:33	20-18	50	5.44	0.00	137.00	137.00	548	65	277	0.125	7.65	Drive initial point through pile of benseal.	Expendable Tip
	4/24/2020	12:06	18-16	45	5.48	137.00	274.00	137.00				0.125	7.65		
	4/24/2020	12:41	16-14	38	4.94	274.00	411.00	137.00				0.125	7.65		
	4/24/2020	13:13	14-12	54	5.18	411.00	548.00	137.00				0.125	7.65		

PLUME STOP Liquid Activated Carbon

Wolcox Environmental-O'Neals Clothes Depot Cleaners

PlumeStop Injection Summary Log

Barrier C

Table 2a

REGENESIS REMEDIATION SERVICES Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Pounds of PlumeStop Stout Injected Per Location	Liters of BDI Per Interval	Pounds of HRC Per Interval	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval							
13	4/22/2020	14:00	20-18	95	8.50	0.00	205.50	205.50	822	98	415	0.125	7.65	**Design Change: IP-13 received 274 additional gallons due to omission of IP-15. IP-13 offset 2 ft north and 3 ft east due to omission of IP-15 and position of MW-19.**	Expendable Tip
	4/22/2020	14:25	18-16	70	10.00	205.50	411.00	205.50				0.125	7.65		
	4/22/2020	14:50	16-14	62	9.98	411.00	616.50	205.50				0.125	7.65		
	4/22/2020	15:42	14-12	75	11.44	616.50	822.00	205.50				0.125	7.65	PS observed in MW-19 at ~620 gallons injected. Well pressurized and cap popped off. Downtime for clean up and resecuring well cap. Slow flow and complete injection.	
14	4/23/2020	9:15	20-18	80	7.66	0.00	205.50	205.50	822	98	415	0.125	15.29	**Design Change: IP-14 received 274 additional gallons due to omission of IP-15. IP-14 offset 3 ft east due to omission of IP-15.**	Expendable Tip
	4/23/2020	9:55	18-16	70	8.07	205.50	411.00	205.50				0.125	15.29	Surfacing from bore of IP-13 observed at ~350 gallons injected. Dig down below asphalt, seal with benseal, slow flow to prevent recurrence.	
	4/23/2020	10:38	16-14	18	5.01	411.00	616.50	205.50				0.125	15.29		
	4/23/2020	11:35	14-12	20	3.96	616.50	822.00	205.50				0.125	15.29	Small amount of surfacing from bore at IP-13 at ~800 gallons injected. Reseal, finish injection.	
15	**Point Omitted**													**Design Change: Point omitted due to utilities.**	
16	4/21/2020	14:53	20-18	76	8.17	0.00	137.00	137.00	606	72	306	0.125	7.65	**Design Change: 2 foot intervals beginning 4/21/20**	Expendable Tip
	4/21/2020	15:13	18-16	60	8.46	137.00	274.00	137.00				0.125	7.65		
	4/21/2020	15:30	16-14	48	8.36	274.00	411.00	137.00				0.125	7.65		
	4/21/2020	15:55	14-12	50	8.30	411.00	606.00	195.00				0.125	7.65	Received ~60 additional gallons from IP-17.	
17	4/21/2020	14:53	20-18	76	8.24	0.00	137.00	137.00	490	58	248	0.125	7.65	Point offset 1.5 ft south due to utilities. **Design Change: 2 foot intervals beginning 4/21/20**	Expendable Tip
	4/21/2020	15:11	18-16	74	8.26	137.00	274.00	137.00				0.125	7.65		
	4/21/2020	15:30	16-14	40	8.30	274.00	411.00	137.00				0.125	7.65		
	4/21/2020	15:55	14-12	44	8.33	411.00	490.00	79.00				0.125	7.65	Surfacing observed from core between IP-18 and IP-17 at ~490 gallons injected into IP-17. Surfacing could not be controlled. Remaining volume from IP-17 injected into IP-16 final interval.	
18	4/20/2020	14:39	20-17	20	3.89	0.00	205.50	205.50	548	65	277	0.188	11.47		3-Foot Screen
	4/20/2020	15:29	17-14	34	6.30	205.50	411.00	205.50				0.188	11.47		
	4/20/2020	16:00	14-12	120	9.57	411.00	548.00	137.00				0.125	7.65		
19	4/21/2020	9:10	20-18	110	7.90	0.00	137.00	137.00	548	65	277	0.188	11.47	Intervals inverted to test expendible tip	Expendable Tip
	4/21/2020	9:33	18-15	75	8.50	137.00	342.50	205.50				0.188	11.47		
	4/21/2020	9:54	15-12	110	9.96	342.50	548.00	205.50				0.125	7.65		
20	4/21/2020	11:37	20-18	82	6.14	0.00	137.00	137.00	548	65	277	0.125	7.65	**Design Change: 2 foot intervals beginning 4/21/20**	Expendable Tip
	4/21/2020	12:05	18-16	50	8.88	137.00	274.00	137.00				0.125	7.65		
	4/21/2020	12:47	16-14	52	8.02	274.00	411.00	137.00				0.125	7.65		
	4/21/2020	13:06	14-12	48	8.12	411.00	548.00	137.00				0.125	7.65		
21	4/21/2020	11:30	20-18	90	8.90	0.00	137.00	137.00	548	65	277	0.125	7.65	**Design Change: 2 foot intervals beginning 4/21/20**	Expendable Tip
	4/21/2020	12:05	18-16	48	8.99	137.00	274.00	137.00				0.125	7.65		
	4/21/2020	12:46	16-14	50	8.04	274.00	411.00	137.00				0.125	7.65		
	4/21/2020	13:06	14-12	34	8.19	411.00	548.00	137.00				0.125	7.65		
22	4/21/2020	13:26	20-18	68	8.40	0.00	137.00	137.00	548	65	277	0.125	7.65	**Design Change: 2 foot intervals beginning 4/21/20**	Expendable Tip
	4/21/2020	13:47	18-16	38	8.29	137.00	274.00	137.00				0.125	7.65		
	4/21/2020	14:09	16-14	43	8.72	274.00	411.00	137.00				0.125	7.65		
	4/21/2020	14:29	14-12	42	8.56	411.00	548.00	137.00				0.125	7.65		
23	4/21/2020	13:27	20-18	90	7.70	0.00	137.00	137.00	548	65	277	0.125	7.65	**Design Change: 2 foot intervals beginning 4/21/20**	Expendable Tip
	4/21/2020	13:47	18-16	40	8.20	137.00	274.00	137.00				0.125	7.65		
	4/21/2020	14:08	16-14	43	8.40	274.00	411.00	137.00				0.125	7.65		
	4/21/2020	14:29	14-12	48	8.53	411.00	548.00	137.00				0.125	7.65		
24	4/22/2020	9:21	20-18	82	8.53	0.00	137.00	137.00	548	65	277	0.125	7.65		Expendable Tip
	4/22/2020	9:40	18-16	55	8.40	137.00	274.00	137.00				0.125	7.65		
	4/22/2020	10:00	16-14	42	7.96	274.00	411.00	137.00				0.125	7.65		
	4/22/2020	10:35	14-12	42	7.98	411.00	548.00	137.00				0.125	7.65		
25	4/22/2020	11:19	20-18	95	7.32	0.00	137.00	137.00	548	65	277	0.125	7.65		Expendable Tip
	4/22/2020	11:46	18-16	62	7.56	137.00	274.00	137.00				0.125	7.65		
	4/22/2020	12:25	16-14	76	9.03	274.00	411.00	137.00				0.125	7.65	Small amount of surfacing from bore of IP-24 at ~400 gallons injected. Repatch, continue injection.	
	4/22/2020	12:45	14-12	38	8.22	411.00	548.00	137.00				0.125	7.65	Surfacing observed from crack in asphalt between IP-22 and IP-23 at ~440 gallons injected. Attempt to patch. Slow flow to stop recurrence. Surfacing continued at <2 gpm. Pull up, reseal, redrive through pile of benseal.	

PLUME STOP Liquid Activated Carbon

Wolcox Environmental-O'Neals Clothes Depot Cleaners

PlumeStop Injection Summary Log

Barrier C

Table 2a

REGENESIS REMEDIATION SERVICES Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Pounds of PlumeStop Stout Injected Per Location	Liters of BDI Per Interval	Pounds of HRC Per Interval	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval							
26	4/24/2020	11:33	20-18	48	5.49	0.00	137.00	137.00	548	65	277	0.125	7.65	Drive initial point through pile of benseal.	Expendable Tip
	4/24/2020	12:06	18-16	35	5.44	137.00	274.00	137.00				0.125	7.65		
	4/24/2020	12:40	16-14	34	4.99	274.00	411.00	137.00				0.125	7.65		
	4/24/2020	13:13	14-12	48	5.11	411.00	548.00	137.00				0.125	7.65		
27	4/23/2020	15:07	20-18	65	6.75	0.00	137.00	137.00	548	65	277	0.125	7.65		Expendable Tip
	4/23/2020	15:34	18-16	40	6.40	137.00	274.00	137.00				0.125	7.65		
	4/23/2020	16:03	16-14	40	6.44	274.00	411.00	137.00				0.125	7.65		
	4/23/2020	16:23	14-12	50	6.42	411.00	548.00	137.00				0.125	7.65	Surfacing from cracks in asphalt around bore observed at ~450 gallons injected. Clean up, reseal and slow flow to stop recurrence. Surfacing observed from same cracks at ~510 gallons injected. Reseal, slow flow, finish point.	
28	4/22/2020	9:13	20-18	100	8.42	0.00	137.00	137.00	548	65	277	0.125	7.65		Expendable Tip
	4/22/2020	9:40	18-16	62	8.42	137.00	274.00	137.00				0.125	7.65		
	4/22/2020	10:01	16-14	62	7.94	274.00	411.00	137.00				0.125	7.65		
	4/22/2020	10:35	14-12	55	7.76	411.00	548.00	137.00				0.125	7.65		
29	4/22/2020	11:24	20-18	82	7.31	0.00	137.00	137.00	548	65	277	0.125	7.65		Expendable Tip
	4/22/2020	11:46	18-16	60	7.40	137.00	274.00	137.00				0.125	7.65	Surfacing from bore observed at ~270 gallons injected. Cleaned up, patched, and continued injection.	
	4/22/2020	12:25	16-14	86	8.95	274.00	411.00	137.00				0.125	7.65		
	4/22/2020	12:45	14-12	60	8.34	411.00	548.00	137.00				0.125	7.65		
30	4/23/2020	14:38	20-18	45	5.58	0.00	137.00	137.00	548	65	277	0.125	7.65		Expendable Tip
	4/23/2020	15:10	18-16	62	6.23	137.00	274.00	137.00				0.125	7.65		
	4/23/2020	15:34	16-14	40	6.55	274.00	411.00	137.00				0.125	7.65		
	4/23/2020	16:03	14-12	40	6.36	411.00	548.00	137.00				0.125	7.65		
31	4/28/2020	11:42	20-18	45	4.22	0.00	98.91	98.91	396	63	200	0.094	7.65		Expendable Tip
	4/28/2020	12:07	18-16	35	4.34	98.91	197.82	98.91				0.094	7.65		
	4/28/2020	12:32	16-14	12	4.46	197.82	296.72	98.90				0.094	7.65		
	4/28/2020	13:17	14-12	10	4.58	296.72	395.63	98.92				0.093	7.65		
32	4/27/2020	14:13	20-18	84	3.22	0.00	98.91	98.91	396	63	200	0.136	7.65	**Design Change: Point moved to row ~3.5 ft east of MW-24. Point received additional BDI due to omission of IP-15.**	Expendable Tip
	4/27/2020	15:05	18-16	65	3.86	98.91	197.82	98.91				0.136	7.65	Surfacing observed out of bore at ~110 gallons injected. Reseal, continue injection.	
	4/27/2020	15:28	16-14	20	3.71	197.82	296.72	98.90				0.136	7.65		
	4/27/2020	16:04	14-12	20	4.18	296.72	395.63	98.92				0.136	7.53		
33	4/27/2020	14:13	20-18	82	3.46	0.00	98.91	98.91	396	63	200	0.136	7.65	**Design Change: Point moved to row ~3.5 ft east of MW-24. Point received additional BDI due to omission of IP-15.**	Expendable Tip
	4/27/2020	15:05	18-16	20	3.92	98.91	197.82	98.91				0.136	7.65		
	4/27/2020	15:28	16-14	8	3.87	197.82	296.72	98.90				0.136	7.65		
	4/27/2020	16:04	14-12	12	4.17	296.72	395.63	98.92				0.136	7.54		
34	4/27/2020	14:13	20-18	80	3.34	0.00	98.91	98.91	396	63	200	0.136	7.65	**Design Change: Point moved to row ~3.5 ft east of MW-24. Point received additional BDI due to omission of IP-15.**	Expendable Tip
	4/27/2020	15:05	18-16	12	3.72	98.91	197.82	98.91				0.136	7.65		
	4/27/2020	15:28	16-14	10	4.00	197.82	296.72	98.90				0.136	7.65		
	4/27/2020	16:04	14-12	12	4.26	296.72	395.63	98.92				0.136	7.54		

Total Gallons:	Total Lbs. CaCl	Total Lbs. PlumeStop Stout	Total Litres of BDI:	Total Lbs HRC:
17413	2200	8800	16.000	1040.00

Wolcox Environmental-O'Neals Clothes Depot Cleaners

Calcium Chloride Injection Summary Log

Barrier C

Table 2b

REGENESIS REMEDIATION SERVICES
Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval				
1	4/27/2020	13:12	20-18	50	4.72	0.00	5.50	5.50	22	11	**Design Change: CaCl injected separately beginning 4/27/20**	Expendable Tip
	4/27/2020	13:13	18-16	15	5.06	5.50	11.00	5.50				
	4/27/2020	13:16	16-14	12	5.14	11.00	16.50	5.50				
	4/27/2020	13:17	14-12	12	5.21	16.50	22.00	5.50				
2	4/28/2020	11:05	20-18	42	3.29	0.00	20.00	20.00	80	63	Experimenting with finding the minimum amount of volume needed to get CaCl into solution for injection.	Expendable Tip
	4/28/2020	11:13	18-16	26	3.31	20.00	40.00	20.00				
	4/28/2020	11:21	16-14	8	3.69	40.00	60.00	20.00				
	4/28/2020	11:26	14-12	5	3.70	60.00	80.00	20.00				
3	4/27/2020	13:25	20-18	38	4.63	0.00	5.50	5.50	22	11	**Design Change: CaCl injected separately beginning 4/27/20**	Expendable Tip
	4/27/2020	13:31	18-16	30	4.61	5.50	11.00	5.50			Surfacing observed from IP-3 PS bore at ~15 gal injected. Surfacing observed from cracks in asphalt ~2 ft east of IP-6 at 18 gal injected.	
	4/27/2020	13:33	16-14	26	4.74	11.00	16.50	5.50				
	4/27/2020	13:35	14-12	18	4.67	16.50	22.00	5.50				
4	4/28/2020	11:04	20-18	45	3.26	0.00	20.00	20.00	80	63	Experimenting with finding the minimum amount of volume needed to get CaCl into solution for injection.	Expendable Tip
	4/28/2020	11:13	18-16	18	3.34	20.00	40.00	20.00				
	4/28/2020	11:21	16-14	3	3.67	40.00	60.00	20.00				
	4/28/2020	11:26	14-12	2	3.69	60.00	80.00	20.00				
31	4/28/2020	13:48	20-18	55	4.12	0.00	15.75	15.75	63	63	Experimenting with finding the minimum amount of volume needed to get CaCl into solution for injection.	Expendable Tip
	4/28/2020	13:50	18-16	30	4.30	15.75	31.50	15.75				
	4/28/2020	14:07	16-14	10	4.72	31.50	47.25	15.75				
	4/28/2020	14:23	14-12	6	4.65	47.25	63.00	15.75				
32	4/27/2020	16:59	20-18	70	3.52	0.00	31.50	31.50	126	63	**Design Change: CaCl injected separately beginning 4/27/20.** Surfacing observed from PS bore at ~30 gal injected. Reseal, continue injection.	Expendable Tip
	4/27/2020	17:19	18-16	6	3.27	31.50	63.00	31.50			Surfacing observed from curb area ~9 ft east at ~40 gallons injected into IP-32, 33, and 34. Seal with benseal, continue injection.	
	4/27/2020	17:40	16-14	6	3.42	63.00	94.50	31.50				
	4/27/2020	17:47	14-12	6	3.47	94.50	126.00	31.50				
33	4/27/2020	16:59	20-18	52	3.38	0.00	31.50	31.50	126	63	**Design Change: CaCl injected separately beginning 4/27/20**	Expendable Tip
	4/27/2020	17:28	18-16	6	3.24	31.50	63.00	31.50			Surfacing observed from curb area ~9 ft east at ~40 gallons injected into IP-32, 33, and 34. Seal with benseal, continue injection.	
	4/27/2020	17:40	16-14	6	3.36	63.00	94.50	31.50				
	4/27/2020	17:47	14-12	4	3.40	94.50	126.00	31.50				
34	4/27/2020	17:00	20-18	48	3.62	0.00	31.50	31.50	126	63	**Design Change: CaCl injected separately beginning 4/27/20**	Expendable Tip
	4/27/2020	17:19	18-16	6	3.20	31.50	63.00	31.50			Surfacing observed from curb area ~9 ft east at ~40 gallons injected into IP-32, 33, and 34. Seal with benseal, continue injection.	
	4/27/2020	17:40	16-14	4	3.40	63.00	94.50	31.50				
	4/27/2020	17:47	14-12	4	3.48	94.50	126.00	31.50				

Total Gallons:	Total Lbs. CaCl
645	401

PLUME STOP Liquid Activated Carbon

Wolcox Environmental-O'Neals Clothes Depot Cleaners

PlumeStop Injection Summary Log

Barrier A

Table 3a

REGENESIS REMEDIATION SERVICES Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Pounds of PlumeStop Stout Injected Per Location	Liters of BDI Per Interval	Pounds of HRC Per Interval	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval							
1	5/13/2020	8:45	16-14	40	3.90	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/13/2020	9:30	14-12	30	4.29	127.16	254.32	127.16				0.086	5.84		
	5/13/2020	9:57	12-10	25	4.22	254.32	381.48	127.16				0.086	5.84		
	5/13/2020	10:33	10-9	20	4.36	381.48	445.06	63.58				0.042	2.92		
2	5/12/2020	9:20	16-14	70	3.80	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/12/2020	9:54	14-12	24	4.94	127.16	254.32	127.16				0.086	5.84		
	5/12/2020	10:29	12-10	20	4.91	254.32	381.48	127.16				0.086	5.84		
	5/12/2020	10:58	10-9	18	4.96	381.48	445.06	63.58				0.042	2.92		
3	5/13/2020	8:45	16-14	18	3.74	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/13/2020	9:30	14-12	18	4.20	127.16	254.32	127.16				0.086	5.84		
	5/13/2020	9:57	12-10	12	4.20	254.32	381.48	127.16				0.086	5.84		
	5/13/2020	10:33	10-9	10	4.24	381.48	445.06	63.58				0.042	2.92		
4	5/12/2020	9:20	16-14	20	4.40	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/12/2020	9:54	14-12	28	4.86	127.16	254.32	127.16				0.086	5.84		
	5/12/2020	10:29	12-10	24	4.86	254.32	381.48	127.16				0.086	5.84		
	5/12/2020	10:58	10-9	24	4.94	381.48	445.06	63.58				0.042	2.92		
5	5/13/2020	8:45	16-14	35	3.94	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/13/2020	9:30	14-12	20	4.29	127.16	254.32	127.16				0.086	5.84		
	5/13/2020	9:57	12-10	10	4.25	254.32	381.48	127.16				0.086	5.84		
	5/13/2020	10:33	10-9	20	4.20	381.48	445.06	63.58				0.042	2.92		
6	5/12/2020	9:20	16-14	28	4.38	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/12/2020	9:54	14-12	18	4.83	127.16	254.32	127.16				0.086	5.84		
	5/12/2020	10:29	12-10	16	4.90	254.32	381.48	127.16				0.086	5.84		
	5/12/2020	10:58	10-9	16	4.92	381.48	445.06	63.58				0.042	2.92		
7	5/15/2020	8:26	16-14	96	4.07	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/15/2020	9:07	14-12	22	4.75	127.16	254.32	127.16				0.086	5.84		
	5/15/2020	9:38	12-10	12	4.46	254.32	381.48	127.16				0.086	5.84		
	5/15/2020	10:04	10-9	12	4.55	381.48	445.06	63.58				0.042	2.92		
8	5/18/2020	8:30	16-14	40	5.04	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/18/2020	9:07	14-12	40	5.24	127.16	254.32	127.16				0.086	5.84		
	5/18/2020	9:35	12-10	40	5.40	254.32	381.48	127.16				0.086	5.84		
	5/18/2020	9:55	10-9	30	5.36	381.48	445.06	63.58				0.042	2.92		
9	5/15/2020	8:26	16-14	22	4.45	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/15/2020	9:07	14-12	30	4.79	127.16	254.32	127.16				0.086	5.84		
	5/15/2020	9:38	12-10	22	4.47	254.32	381.48	127.16				0.086	5.84		
	5/15/2020	10:04	10-9	16	4.62	381.48	445.06	63.58				0.042	2.92		
10	5/18/2020	8:30	16-14	25	4.98	0.00	127.16	127.16	445	57	217	0.086	5.84	Offset ~2 ft west due to utilities.	Expendable Tip
	5/18/2020	10:10	14-12	40	6.04	127.16	254.32	127.16				0.086	5.84		
	5/18/2020	10:36	12-10	40	6.76	254.32	381.48	127.16				0.086	5.84		
	5/18/2020	10:54	10-9	35	6.87	381.48	445.06	63.58				0.042	2.92		
11	5/15/2020	8:26	16-14	65	4.75	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/15/2020	9:06	14-12	20	4.80	127.16	254.32	127.16				0.086	5.84		
	5/15/2020	9:39	12-10	30	4.82	254.32	381.48	127.16				0.086	5.84		
	5/15/2020	10:04	10-9	16	4.65	381.48	445.06	63.58				0.042	2.92		
12	5/12/2020	11:34	16-14	30	3.93	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/12/2020	12:16	14-12	20	4.47	127.16	254.32	127.16				0.086	5.84		
	5/12/2020	12:53	12-10	26	4.42	254.32	381.48	127.16				0.086	5.84		
	5/12/2020	13:34	10-9	22	4.42	381.48	445.06	63.58				0.042	2.92		
13	5/14/2020	11:38	16-14	14	3.42	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/14/2020	13:00	14-12	12	3.38	127.16	254.32	127.16				0.086	5.84		
	5/14/2020	14:05	12-10	10	3.42	254.32	381.48	127.16				0.086	5.84		
	5/14/2020	14:56	10-9	10	3.48	381.48	445.06	63.58				0.042	2.92		
14	5/12/2020	11:34	16-14	50	3.92	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/12/2020	12:16	14-12	18	4.48	127.16	254.32	127.16				0.086	5.84		
	5/12/2020	12:53	12-10	16	4.48	254.32	381.48	127.16				0.086	5.84		
	5/12/2020	13:33	10-9	14	4.48	381.48	445.06	63.58				0.042	2.92		
15	5/13/2020	11:20	16-14	40	2.24	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/13/2020	13:11	14-12	5	2.46	127.16	254.32	127.16				0.086	5.84		
	5/13/2020	13:54	12-10	10	4.53	254.32	381.48	127.16				0.086	5.84		
	5/13/2020	14:36	10-9	5	2.70	381.48	445.06	63.58				0.042	2.92		
16	5/12/2020	11:34	16-14	20	4.10	0.00	127.16	127.16	445	57	217	0.086	5.84	Offset ~3 ft west due to utilities.	Expendable Tip
	5/12/2020	12:16	14-12	18	4.48	127.16	254.32	127.16				0.086	5.84		
	5/12/2020	12:53	12-10	18	4.39	254.32	381.48	127.16				0.086	5.84		
	5/12/2020	13:34	10-9	16	4.43	381.48	445.06	63.58				0.042	2.92		
17	5/13/2020	11:20	16-14	20	2.38	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/13/2020	13:11	14-12	10	2.70	127.16	254.32	127.16				0.086	5.84		
	5/13/2020	13:54	12-10	12	4.62	254.32	381.48	127.16				0.086	5.84		
	5/13/2020	14:36	10-9	8	2.83	381.48	445.06	63.58				0.042	2.92		
18	5/12/2020	14:04	16-14	55	4.10	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/12/2020	14:42	14-12	30	4.54	127.16	254.32	127.16				0.086	5.84		
	5/12/2020	15:13	12-10	24	4.66	254.32	381.48	127.16				0.086	5.84		
	5/12/2020	15:45	10-9	24	4.52	381.48	445.06	63.58				0.042	2.92		

PLUME STOP Liquid Activated Carbon

Wolcox Environmental-O'Neals Clothes Depot Cleaners

PlumeStop Injection Summary Log

Barrier A

Table 3a

REGENESIS REMEDIATION SERVICES Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Pounds of PlumeStop Stout Injected Per Location	Liters of BDI Per Interval	Pounds of HRC Per Interval	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval							
19	5/13/2020	11:19	16-14	50	2.40	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/13/2020	13:11	14-12	10	3.00	127.16	254.32	127.16				0.086	5.84		
	5/13/2020	13:54	12-10	12	4.59	254.32	381.48	127.16				0.086	5.84		
	5/13/2020	14:35	10-9	8	2.77	381.48	445.06	63.58				0.042	2.92		
20	5/12/2020	14:04	16-14	15	3.92	0.00	127.16	127.16	445	57	217	0.086	5.84	Offset ~2 ft east due to utilities.	Expendable Tip
	5/12/2020	14:42	14-12	16	4.52	127.16	254.32	127.16				0.086	5.84		
	5/12/2020	15:13	12-10	20	4.64	254.32	381.48	127.16				0.086	5.84		
	5/12/2020	15:45	10-9	20	4.76	381.48	445.06	63.58				0.042	2.92		
21	5/15/2020	11:01	16-14	20	4.79	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/15/2020	11:32	14-12	20	4.84	127.16	254.32	127.16				0.086	5.84		
	5/15/2020	12:21	12-10	16	4.86	254.32	381.48	127.16				0.086	5.84		
	5/15/2020	13:28	10-9	15	4.98	381.48	445.06	63.58				0.042	2.92		
22	5/12/2020	14:04	16-14	18	3.91	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/12/2020	14:42	14-12	20	4.62	127.16	254.32	127.16				0.086	5.84		
	5/12/2020	15:13	12-10	20	4.70	254.32	381.48	127.16				0.086	5.84		
	5/12/2020	15:45	10-9	18	4.72	381.48	445.06	63.58				0.042	2.92		
23	5/14/2020	11:38	16-14	24	3.48	0.00	127.16	127.16	445	57	217	0.086	5.84	Offset ~2 ft east due to utilities.	Expendable Tip
	5/14/2020	13:00	14-12	20	3.60	127.16	254.32	127.16				0.086	5.84		
	5/14/2020	14:05	12-10	14	3.48	254.32	381.48	127.16				0.086	5.84		
	5/14/2020	14:56	10-9	14	3.52	381.48	445.06	63.58				0.042	2.92		
24	5/15/2020	11:01	16-14	20	4.66	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/15/2020	11:32	14-12	16	4.87	127.16	254.32	127.16				0.086	5.84		
	5/15/2020	12:21	12-10	14	4.80	254.32	381.48	127.16				0.086	5.84		
	5/15/2020	13:27	10-9	20	4.57	381.48	445.06	63.58				0.042	2.92		
25	5/14/2020	11:38	16-14	18	3.34	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/14/2020	13:00	14-12	12	3.45	127.16	254.32	127.16				0.086	5.84		
	5/14/2020	14:06	12-10	10	3.48	254.32	381.48	127.16				0.086	5.84		
	5/14/2020	14:56	10-9	8	3.45	381.48	445.06	63.58				0.042	2.92		
26	5/15/2020	11:02	16-14	15	4.83	0.00	127.16	127.16	445	57	217	0.086	5.84		Expendable Tip
	5/15/2020	11:32	14-12	16	4.76	127.16	254.32	127.16				0.086	5.84		
	5/15/2020	12:21	12-10	12	4.82	254.32	381.48	127.16				0.086	5.84		
	5/15/2020	13:27	10-9	10	4.57	381.48	445.06	63.58				0.042	2.92		
27	5/21/2020	8:40	16-14	20	2.82	0.00	127.16	127.16	445	57	217	0.086	5.84	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.**	Expendable Tip
	5/21/2020	9:25	14-12	30	2.87	127.16	254.32	127.16				0.086	5.84		
	5/21/2020	10:16	12-10	5	3.22	254.32	381.48	127.16				0.086	5.84		
	5/21/2020	11:00	10-9	5	2.81	381.48	445.06	63.58				0.042	2.92		
28	5/21/2020	12:04	16-14	10	4.25	0.00	127.16	127.16	445	57	217	0.086	5.84	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.**	Expendable Tip
	5/21/2020	12:54	14-12	12	4.20	127.16	254.32	127.16				0.086	5.84		
	5/21/2020	13:43	12-10	15	4.58	254.32	381.48	127.16				0.086	5.84		
	5/21/2020	14:21	10-9	12	4.48	381.48	445.06	63.58				0.042	2.92		
29	5/21/2020	8:40	16-14	20	2.81	0.00	127.16	127.16	445	57	217	0.086	5.84	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.**	Expendable Tip
	5/21/2020	9:25	14-12	15	3.16	127.16	254.32	127.16				0.086	5.84		
	5/21/2020	10:16	12-10	10	3.10	254.32	381.48	127.16				0.086	5.84		
	5/21/2020	11:00	10-9	8	3.12	381.48	445.06	63.58				0.042	2.92		
30	5/21/2020	12:04	16-14	35	4.16	0.00	127.16	127.16	445	57	217	0.086	5.84	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.**	Expendable Tip
	5/21/2020	12:54	14-12	28	4.30	127.16	254.32	127.16				0.086	5.84		
	5/21/2020	13:43	12-10	20	4.58	254.32	381.48	127.16				0.086	5.84		
	5/21/2020	14:22	10-9	16	4.42	381.48	445.06	63.58				0.042	2.92		
31	5/21/2020	8:40	16-14	100	2.74	0.00	127.16	127.16	445	57	217	0.086	5.84	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.**	Expendable Tip
	5/21/2020	9:25	14-12	100	2.59	127.16	254.32	127.16				0.086	5.84		
	5/21/2020	10:16	12-10	100	2.50	254.32	381.48	127.16				0.086	5.84		
	5/21/2020	11:00	10-9	110	2.35	381.48	445.06	63.58				0.042	2.92		
32	5/21/2020	12:04	16-14	35	4.14	0.00	127.16	127.16	445	57	217	0.086	5.84	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.** Offset ~3 ft north due to utilities.	Expendable Tip
	5/21/2020	12:55	14-12	30	4.22	127.16	254.32	127.16				0.086	5.84		
	5/21/2020	13:43	12-10	10	4.70	254.32	381.48	127.16				0.086	5.84		
	5/21/2020	14:22	10-9	12	4.39	381.48	445.06	63.58				0.042	2.92		

Total Gallons:	Total Lbs. CaCl	Total Lbs. PlumeStop Stout	Total Litres of BDI:	Total Lbs HRC:
14242	1835	6955	9.613	654

Wolcox Environmental-O'Neals Clothes Depot Cleaners

Calcium Chloride Injection Summary Log

Barrier A

Table 3b

REGENESIS REMEDIATION SERVICES
Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval				
1	5/14/2020	9:25	16-14	30	2.00	0.00	16.38	16.38	57	57		Expendable Tip
	5/14/2020	9:32	14-12	18	2.42	16.38	32.77	16.39				
	5/14/2020	9:42	12-10	18	2.55	32.77	49.15	16.38				
	5/14/2020	9:48	10-9	18	2.94	49.15	57.34	8.19				
2	5/14/2020	9:24	16-14	40	2.52	0.00	16.38	16.38	57	57		Expendable Tip
	5/14/2020	9:32	14-12	8	2.47	16.38	32.77	16.39				
	5/14/2020	9:42	12-10	5	2.11	32.77	49.15	16.38				
	5/14/2020	9:48	10-9	5	2.03	49.15	57.34	8.19				
3	5/14/2020	10:14	16-14	10	3.55	0.00	16.38	16.38	57	57		Expendable Tip
	5/14/2020	10:22	14-12	10	3.64	16.38	32.77	16.39				
	5/14/2020	10:32	12-10	10	3.64	32.77	49.15	16.38				
	5/14/2020	10:35	10-9	12	3.69	49.15	57.34	8.19				
4	5/14/2020	10:14	16-14	20	3.56	0.00	16.38	16.38	57	57		Expendable Tip
	5/14/2020	10:22	14-12	12	3.82	16.38	32.77	16.39				
	5/14/2020	10:32	12-10	10	3.62	32.77	49.15	16.38				
	5/14/2020	10:35	10-9	10	3.66	49.15	57.34	8.19				
5	5/14/2020	10:51	16-14	20	3.81	0.00	16.38	16.38	57	57		Expendable Tip
	5/14/2020	11:01	14-12	16	4.12	16.38	32.77	16.39				
	5/14/2020	11:05	12-10	12	4.13	32.77	49.15	16.38				
	5/14/2020	11:07	10-9	12	4.18	49.15	57.34	8.19				
6	5/14/2020	10:50	16-14	25	3.88	0.00	16.38	16.38	57	57		Expendable Tip
	5/14/2020	11:02	14-12	14	4.13	16.38	32.77	16.39				
	5/14/2020	11:05	12-10	14	4.12	32.77	49.15	16.38				
	5/14/2020	11:07	10-9	10	4.18	49.15	57.34	8.19				
7	5/19/2020	8:31	16-14	25	3.68	0.00	16.38	16.38	57	57		Expendable Tip
	5/19/2020	8:39	14-12	25	3.48	16.38	32.77	16.39				
	5/19/2020	8:46	12-10	15	3.48	32.77	49.15	16.38				
	5/19/2020	8:51	10-9	15	3.58	49.15	57.34	8.19				
8	5/19/2020	8:31	16-14	40	3.31	0.00	16.38	16.38	57	57		Expendable Tip
	5/19/2020	8:39	14-12	45	3.26	16.38	32.77	16.39				
	5/19/2020	8:46	12-10	20	4.06	32.77	49.15	16.38				
	5/19/2020	8:51	10-9	20	3.89	49.15	57.34	8.19				
9	5/19/2020	9:09	16-14	50	3.09	0.00	16.38	16.38	57	57		Expendable Tip
	5/19/2020	9:15	14-12	50	3.08	16.38	32.77	16.39				
	5/19/2020	9:23	12-10	15	3.50	32.77	49.15	16.38				
	5/19/2020	9:27	10-9	15	4.08	49.15	57.34	8.19				
10	5/19/2020	9:09	16-14	40	3.28	0.00	16.38	16.38	57	57		Expendable Tip
	5/19/2020	9:15	14-12	40	3.06	16.38	32.77	16.39				
	5/19/2020	9:23	12-10	20	3.80	32.77	49.15	16.38				
	5/19/2020	9:27	10-9	15	3.36	49.15	57.34	8.19				
11	5/19/2020	9:42	16-14	50	4.15	0.00	16.38	16.38	57	57		Expendable Tip
	5/19/2020	9:53	14-12	25	4.84	16.38	32.77	16.39				
	5/19/2020	10:02	12-10	25	4.79	32.77	49.15	16.38				
	5/19/2020	10:07	10-9	20	4.84	49.15	57.34	8.19				
12	5/20/2020	11:11	16-14	18	2.02	0.00	16.38	16.38	57	57		Expendable Tip
	5/20/2020	11:26	14-12	10	2.16	16.38	32.77	16.39				
	5/20/2020	11:36	12-10	14	3.82	32.77	49.15	16.38				
	5/20/2020	11:40	10-9	12	4.02	49.15	57.34	8.19				

Wolcox Environmental-O'Neals Clothes Depot Cleaners

Calcium Chloride Injection Summary Log

Barrier A

Table 3b

REGENESIS REMEDIATION SERVICES
Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval				
13	5/20/2020	11:11	16-14	16	2.10	0.00	16.38	16.38	57	57		Expendable Tip
	5/20/2020	11:26	14-12	12	2.16	16.38	32.77	16.39				
	5/20/2020	11:36	12-10	18	3.82	32.77	49.15	16.38				
	5/20/2020	11:40	10-9	14	3.73	49.15	57.34	8.19				
14	5/20/2020	11:59	16-14	24	3.38	0.00	16.38	16.38	57	57		Expendable Tip
	5/20/2020	12:09	14-12	20	3.46	16.38	32.77	16.39				
	5/20/2020	12:15	12-10	10	3.54	32.77	49.15	16.38				
	5/20/2020	12:19	10-9	12	3.54	49.15	57.34	8.19				
15	5/20/2020	11:59	16-14	22	3.40	0.00	16.38	16.38	57	57		Expendable Tip
	5/20/2020	12:09	14-12	20	3.42	16.38	32.77	16.39				
	5/20/2020	12:15	12-10	15	3.78	32.77	49.15	16.38				
	5/20/2020	12:18	10-9	15	3.68	49.15	57.34	8.19				
16	5/20/2020	12:33	16-14	60	4.42	0.00	16.38	16.38	57	57		Expendable Tip
	5/20/2020	12:38	14-12	35	5.30	16.38	32.77	16.39				
	5/20/2020	12:43	12-10	22	5.52	32.77	49.15	16.38				
	5/20/2020	12:46	10-9	22	5.59	49.15	57.34	8.19				
17	5/18/2020	15:18	16-14	12	3.64	0.00	16.38	16.38	57	57		Expendable Tip
	5/18/2020	15:26	14-12	12	4.06	16.38	32.77	16.39				
	5/18/2020	15:32	12-10	14	4.08	32.77	49.15	16.38				
	5/18/2020	15:43	10-9	10	4.05	49.15	57.34	8.19				
18	5/18/2020	15:19	16-14	28	3.51	0.00	16.38	16.38	57	57		Expendable Tip
	5/18/2020	15:26	14-12	10	4.15	16.38	32.77	16.39				
	5/18/2020	15:33	12-10	10	3.99	32.77	49.15	16.38				
	5/18/2020	15:43	10-9	10	4.00	49.15	57.34	8.19				
19	5/18/2020	14:38	16-14	12	2.72	0.00	16.38	16.38	57	57		Expendable Tip
	5/18/2020	14:48	14-12	10	2.77	16.38	32.77	16.39				
	5/18/2020	14:54	12-10	8	2.76	32.77	49.15	16.38				
	5/18/2020	15:03	10-9	14	4.02	49.15	57.34	8.19				
20	5/18/2020	14:39	16-14	6	2.76	0.00	16.38	16.38	57	57		Expendable Tip
	5/18/2020	14:48	14-12	6	2.73	16.38	32.77	16.39				
	5/18/2020	14:54	12-10	6	2.72	32.77	49.15	16.38				
	5/18/2020	15:03	10-9	10	3.98	49.15	57.34	8.19				
21	5/18/2020	14:03	16-14	36	3.24	0.00	16.38	16.38	57	57		Expendable Tip
	5/18/2020	14:14	14-12	18	3.68	16.38	32.77	16.39				
	5/18/2020	14:23	12-10	14	3.76	32.77	49.15	16.38				
	5/18/2020	14:28	10-9	10	3.80	49.15	57.34	8.19				
22	5/18/2020	14:03	16-14	40	3.31	0.00	16.38	16.38	57	57		Expendable Tip
	5/18/2020	14:14	14-12	14	3.74	16.38	32.77	16.39				
	5/18/2020	14:24	12-10	8	3.83	32.77	49.15	16.38				
	5/18/2020	14:28	10-9	6	3.86	49.15	57.34	8.19				
23	5/18/2020	12:18	16-14	70	2.84	0.00	16.38	16.38	57	57		Expendable Tip
	5/18/2020	12:29	14-12	80	2.51	16.38	32.77	16.39				
	5/18/2020	12:40	12-10	80	2.26	32.77	49.15	16.38				
	5/18/2020	12:46	10-9	90	2.24	49.15	57.34	8.19				

Wolcox Environmental-O'Neals Clothes Depot Cleaners

Calcium Chloride Injection Summary Log

Barrier A

Table 3b

REGENESIS REMEDIATION SERVICES
Technology-Based Solutions for the Environment

Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of PlumeStop Injected			Total Gallons Per Location	Pounds of CaCl Injected Per Location	Comments	Injection Tooling
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval				
24	5/18/2020	12:18	16-14	10	2.86	0.00	16.38	16.38	57	57		Expendable Tip
	5/18/2020	12:29	14-12	8	2.63	16.38	32.77	16.39				
	5/18/2020	12:40	12-10	4	2.23	32.77	49.15	16.38				
	5/18/2020	12:46	10-9	0	2.23	49.15	57.34	8.19				
25	5/18/2020	11:41	16-14	40	2.82	0.00	16.38	16.38	57	57		Expendable Tip
	5/18/2020	11:49	14-12	16	2.96	16.38	32.77	16.39				
	5/18/2020	12:00	12-10	10	3.12	32.77	49.15	16.38				
	5/18/2020	12:06	10-9	8	3.17	49.15	57.34	8.19				
26	5/18/2020	11:41	16-14	30	3.05	0.00	16.38	16.38	57	57		Expendable Tip
	5/18/2020	11:50	14-12	30	2.97	16.38	32.77	16.39				
	5/18/2020	12:00	12-10	18	3.10	32.77	49.15	16.38				
	5/18/2020	12:06	10-9	12	3.11	49.15	57.34	8.19				
27	5/21/2020	16:30	16-14	20	3.20	0.00	16.38	16.38	57	57	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.**	Expendable Tip
	5/21/2020	16:36	14-12	14	3.36	16.38	32.77	16.39				
	5/21/2020	16:45	12-10	10	3.64	32.77	49.15	16.38				
	5/21/2020	16:53	10-9	10	3.86	49.15	57.34	8.19				
28	5/21/2020	16:30	16-14	10	3.40	0.00	16.38	16.38	57	57	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.**	Expendable Tip
	5/21/2020	16:36	14-12	4	3.34	16.38	32.77	16.39				
	5/21/2020	16:46	12-10	4	3.42	32.77	49.15	16.38				
	5/21/2020	16:53	10-9	4	3.68	49.15	57.34	8.19				
29	5/21/2020	15:48	16-14	35	4.08	0.00	16.38	16.38	57	57	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.**	Expendable Tip
	5/21/2020	15:58	14-12	18	3.83	16.38	32.77	16.39				
	5/21/2020	16:07	12-10	10	2.96	32.77	49.15	16.38				
	5/21/2020	16:12	10-9	8	2.86	49.15	57.34	8.19				
30	5/21/2020	15:51	16-14	60	3.28	0.00	16.38	16.38	57	57	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.**	Expendable Tip
	5/21/2020	15:58	14-12	48	2.72	16.38	32.77	16.39				
	5/21/2020	16:07	12-10	40	2.88	32.77	49.15	16.38				
	5/21/2020	16:12	10-9	45	2.82	49.15	57.34	8.19				
31	5/21/2020	15:22	16-14	25	4.24	0.00	16.38	16.38	57	57	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.** Small amount of surfacing from PS bore at start. Let chips swell for 5-10 minuotes and restart.	Expendable Tip
	5/21/2020	15:26	14-12	18	4.45	16.38	32.77	16.39				
	5/21/2020	15:30	12-10	14	4.42	32.77	49.15	16.38				
	5/21/2020	15:33	10-9	12	4.46	49.15	57.34	8.19				
32	5/21/2020	15:05	16-14	60	5.42	0.00	16.38	16.38	57	57	**Design Change: IP-27 through IP-32 moved to row running north south upgradient of MW-9, roughly centered on IP-29.**	Expendable Tip
	5/21/2020	15:07	14-12	30	4.51	16.38	32.77	16.39				
	5/21/2020	15:14	12-10	15	4.75	32.77	49.15	16.38				
	5/21/2020	15:20	10-9	15	4.78	49.15	57.34	8.19				
									Total Gallons:	**Total Lbs. CaCl**		
									1835	1835		

PLUME STOP® Liquid Activated Carbon

BDI® PLUS BIO-DECHLOR INOCULUM

HRC® HYDROGEN RELEASE COMPOUND

Figure 1 – Barrier C DVT Location Map
O'Neals Clothes Depot Cleaners
833 East Morgan Street
Martinsville, IN

REGENESIS® REMEDIATION SERVICES
Technology-Based Solutions for the Environment

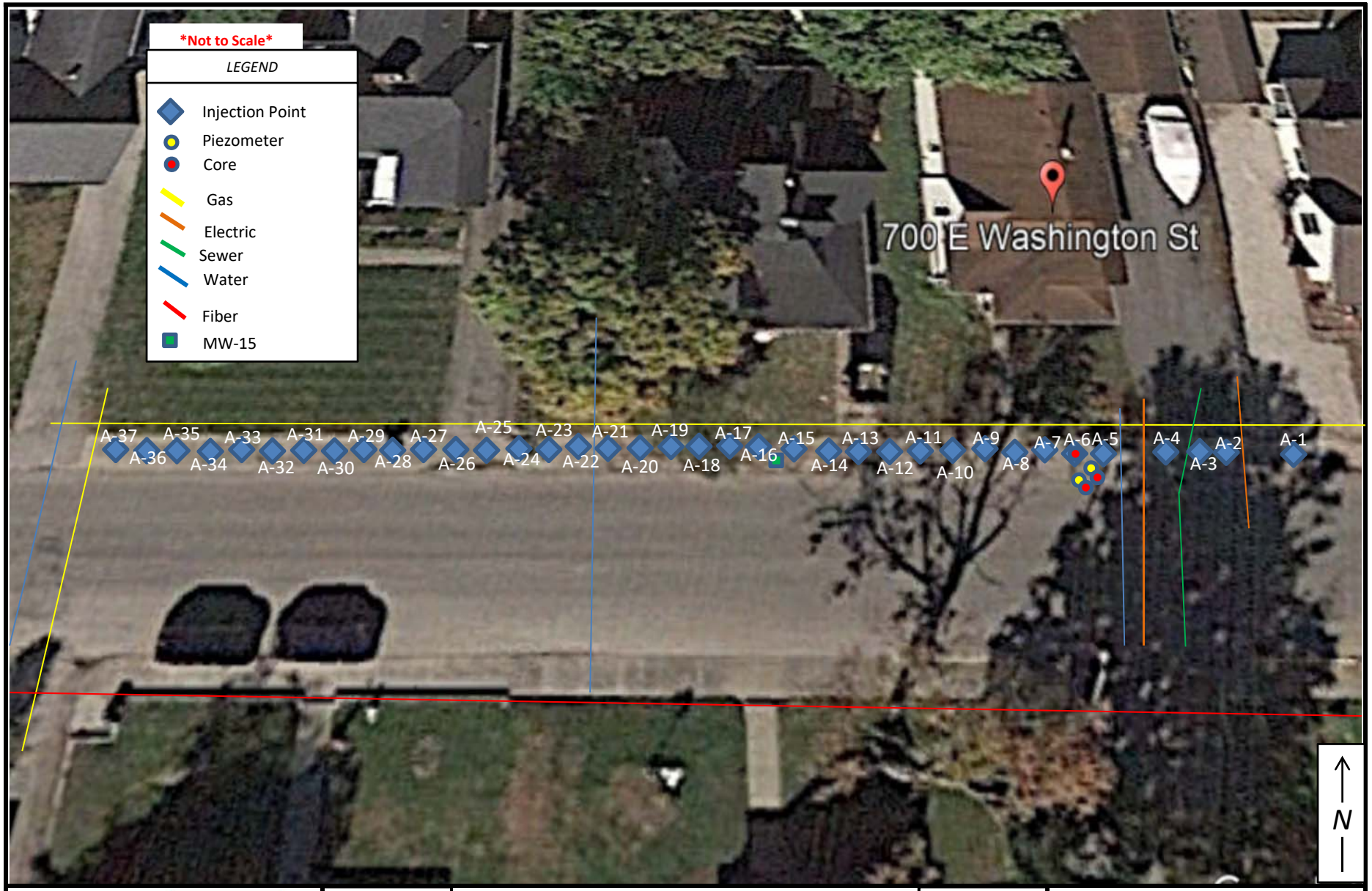
PLUME STOP® Liquid Activated Carbon
BDI® BIO-DECHLOR INOCULUM
HRC® HYDROGEN RELEASE COMPOUND

Prepared By: *DW*

Figure 2 – Injection Locations Map
O'Neals Clothes Depot Cleaners – Barrier C
833 East Morgan Street
Martinsville, Indiana

Date Prepared: *May 2020*

REGENESIS® REMEDIATION SERVICES
Technology-Based Solutions for the Environment



PLUME STOP® Liquid Activated Carbon
BDI® PLUS BIO-DECHLOR INOCULUM
HRC® HYDROGEN RELEASE COMPOUND

Prepared By: *JDM*

Figure 3 – Barrier B E-W Locations Map
O'Neals Clothes Depot Cleaners
833 East Morgan Street
Martinsville, Indiana

Date Prepared: *May 2020*

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PLUME STOP® Liquid Activated Carbon

BDI PLUS BIO-DECHLOR INOCULUM

HRC HYDROGEN RELEASE COMPOUND

Figure 4 – Barrier B N-S Locations Map
O'Neals Clothes Depot Cleaners
833 East Morgan Street
Martinsville, IN

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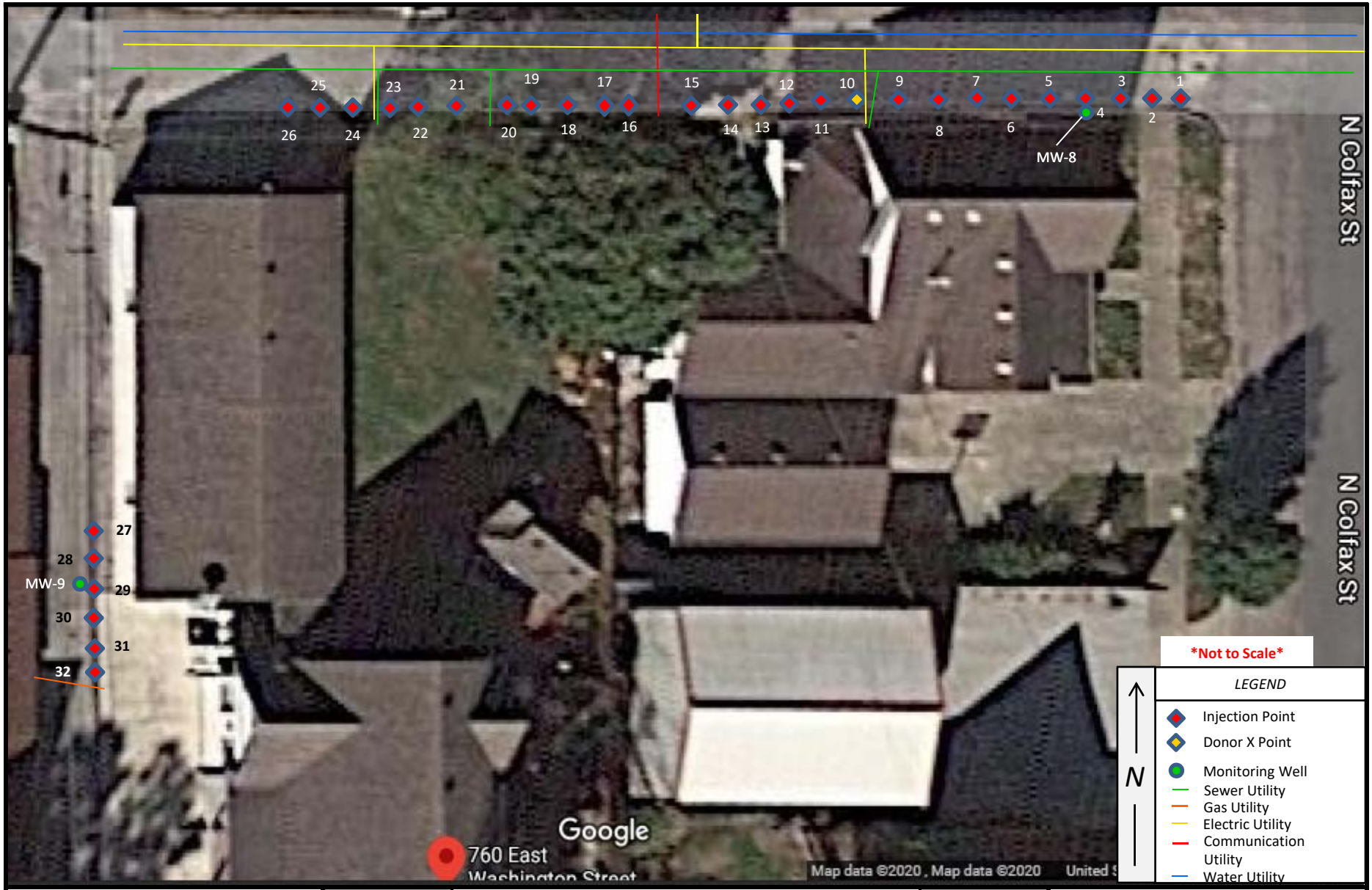

PLUME STOP® Liquid Activated Carbon
BDI® BIO-DECHLOR INOCULUM
HRC® HYDROGEN RELEASE COMPOUND

Prepared By: *DW*

Figure 5 – Barrier A Injection Locations Map
O'Neals Clothes Depot Cleaners
833 East Morgan Street
Martinsville, Indiana

Date Prepared: *May 2020*

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Photo Log O'Neals Clothes Depot Cleaners – Wilcox Environmental Engineering

Barrier C:

Photo 1: View looking southeast. Injection equipment and safety cones in view. (*Apr 24, 2020*).

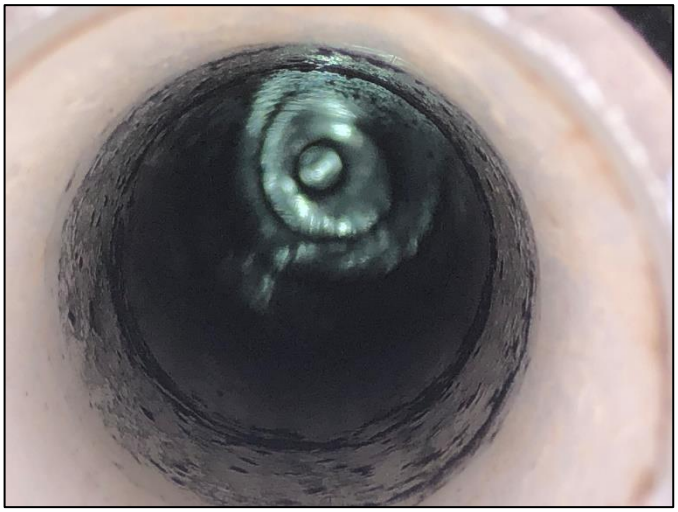

Photo 2: View looking down MW-19. PlumeStop and CaCl influence in view. (Apr 22*, 2020*).

Photo 3: View looking northwest. Bailer drawn from MW-24 showing influence of PlumeStop. (*Apr 27, 2020*).

Photo 4: View looking north. PlumeStop qualitative concentration test showing influence in MW-24. (*Apr 27, 2020*).

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Barrier B:

Photo 5: View looking east. Injection equipment, drill rig, and RRS truck in view. (*May 4, 2020*).

Photo 6: View looking southwest. Midway personnel, drill rig, safety cones, and injection equipment in view. (Apr 30*, 2020*).

Photo 7: View looking east. PlumeStop qualitative concentration test showing influence in MW-16. (May 1*, 2020*).

Photo 8: View looking west. Injection equipment, drill rig, and asphalt truck in view. (*May 1, 2020*).

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Barrier A:

Photo 9: View looking west. Injection equipment and drill rig in view. (*May 13, 2020*).

Photo 10: View looking east. PlumeStop qualitative concentration test showing influence in MW-8. (May 13*, 2020*).

Photo 11: View looking south. Injection equipment, drill rig, and MW-9 in view. (*May 21, 2020*).

Photo 12: View looking east. PlumeStop qualitative concentration test showing influence in MW-9. (*May 21, 2020*).

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June 30, 2020

Mr. Jeremy Kinman
Wilcox Environmental Engineering
1552 Main St. Suite 100
Speedway, IN 46224

SUBJECT: Application Summary Report for Donor-X application at the O'Neal's Clothes Depot Site in Martinsville, IN

Dear Mr. Jeremy Kinman:

REGENESIS Remediation Services (RRS) has recently completed an in-situ injection application of our new groundwater remediation technology to assist in the biodegradation of chlorinated solvents present in groundwater at the O'Neal's Clothes Depot Cleaners. The new experimental technology, referred to in this document as Donor X, is in development by REGENESIS Research & Development (R&D) team. In addition to applying Donor X, Bio-Dechlor INOCLUM® Plus (BDI Plus) was slipped stream injected with the Donor X solution mix as part of the remediation design. The site is located at 833 East Morgan Street in Martinsville, Indiana.

RRS mobilized a support pickup truck, injection trailer, and personnel to the site to begin work on June 17th, 2020 and demobilized later that week on June 19th, 2020. Work was completed within an approximately 400 square feet (ft^2) treatment area at the Southwest corner of the on-site building near monitoring well MW-1. RRS subcontracted Midway Services, Inc. to provide direct push drilling services. The on-site REGENESIS project team oversaw all elements of field work and ensured a safe, successful injection application. Please review the attached application summary page, injection log, injection point location figure for more detail on the application.

RRS appreciates the opportunity to work at this site with Wilcox Environmental Engineering (Wilcox). Our project team will be available to interpret the field data as it is collected, or answer any questions. If you need additional information regarding the application process or attached field notes, please contact Steve Barnes at 574-349-0650 or Paul Erickson at 949-218-0725.

Sincerely,

Steve Barnes
Remediation Services Director of Operations
REGENESIS Remediation Services

Paul Erickson
Technology Development Manager
REGENESIS Research & Development

cc: Brett Hicks, Keith Gaskill, Owen Miller

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Application Summary Page

OVERVIEW

Client: Wilcox Environmental Engineering
Client PM: Jeremy Kinman
Project Dates: 6/17/20 to 6/19/20

Site Address: 833 East Morgan St., Martinsville, IN
Project Name: O'Neal's Clothes Depot
REGENESIS Personnel: Steve Barnes, Jaren Miller, Keith Gaskill, Brett Hicks, Paul Erickson

TREATMENT TECHNOLOGY

RRS applied an experimental electron donor, Donor X, into direct push injection points upgradient of monitoring well MW-1. Donor X is a concentrated aqueous suspension of fast and slow-release electron donors, including a solid-phase form of lactate. This formulation is designed to provide both a rapid release of organic carbon to quickly establish a reducing environment and also serve as a hydrogen source to dechlorinating bacteria to promote the long-term reductive dechlorination of cVOCs.

DESIGN

This application was designed using 4,400 pounds (lbs) of Donor X and 8.0 liters of BDI Plus mixed with water and injected for a total treatment volume of 4,100 gallons distributed across 6 injection point locations just upgradient of monitoring well MW-1. The approach was to perform a bottom-up injection targeting a treatment interval 7.0 to 17 feet below ground surface.

Due to surfacing related issues, minor deviations from the design were implemented. These deviations to the planned scope of work were implemented throughout the project implementation phase based on real time observations and discussions with REGENESIS R&D and REGENESIS Technical Services personnel. Some deviation to note were overall volumes were decreased, additional injection point location used, and a smaller injection interval was used at some locations. The details of these changes are further explained in this report.

APPLICATION

RRS personnel arrived on-site the morning of Wednesday, June 17th, 2020 and completed several pre-application activities including site reconnaissance, H&S meeting, equipment staging, utility locating, injection point locating, and piezometer installation. Additionally, the remediation technologies (4,400 lbs of Donor X and 8.0 liters of BDI Plus) were brought to the site and stage accordingly near the RRS injection trailer.

RRS applied the Donor X by mixing the remediation technology in the RRS injection trailer and injected through direct push borings drilled with a leading 1.5-inch retractable injection screen (3-foot length). The RRS injection trailer is fully enclosed and equipped with dedicated power, mixing tanks, transfer pumps, and various other equipment to connect directly to the downhole tooling and continuously monitor flow rates and pressures for each injection locations.

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Non-potable mixing water was provided by Wilcox mostly from the City of Martinsville's public water supply located at the water department just down the street. The water was transported by Wilcox personnel in an empty 275-gallon tote that was left on-site from the full-scale injection application that had been completed a few weeks prior. The empty tote previously contained PlumeStop but had been rinsed clean and was void of any residual material.

RRS used a dual batch mixing system with 350-gallon tanks and transferred the mix water via air powered diaphragm pump to the mixing tanks inside the injection trailer. The Donor X was then transferred from the shipping containers to the water filled mixing tanks via the same diaphragm pump. The Donor X was diluted with water in primarily 300-gallon batches until the total designed volume was achieved. A relatively small amount of Sodium Hydroxide (NaOH) was added after the Donor X until the pH was between 6.5 and 7.0. Approximately 640 milliliters of 25% NaOH was added to each 300-gallon batch to adjust the pH accordingly. The Donor X was mixed as either a 12.7% by volume solution or a 25.4% by volume solution in the mix tanks using a low speed vortex mixer and applied using an electrically powered positive displacement pump. For clarification, a 12.7% solution consisted of approximately 262-gallons of mix water and 38-gallons of Donor X to make a 300-gallon batch, whereas, a 25.4% solution consisted of approximately 223-gallons of water and 76-gallons of Donor X. During the application of Donor X, the bioaugmentation culture, BDI Plus, was slipped stream injected to minimize atmospheric exposure.

Injections were completed typically by pumping on a single point at a time, while constantly monitoring flow rates and pressures. Injection pressures were observed on average at less than 20 pounds per square inch (psi) and flow rates average roughly 3.40 gallons per minute (gpm). Surfacing of the injection solution material was observed towards the end of the application and resulted in abandoning injection point locations, reducing overall volumes, and adding additional point locations. Upon completion of an injection point, each boring location was backfilled with bentonite chips to seal the boring and top patched with asphalt.

The injection application was completed late in the afternoon on Friday, June 19th, 2020.

DONOR X STUDY AREA, MW-1 (400 SQ FT)

A total of 3,274 gallons of Donor X was mixed and applied upgradient of monitoring well MW-1, with the injection points located between the on-site building and monitoring well. Approximately 2,915 lbs of Donor X was mixed and applied as a 12.7% by volume solution, which is the equivalent of approximately 2,751 gallons. The remaining 1,485 lbs of Donor X was mixed and applied as a 25.7% solution, which is the equivalent of approximately 523 gallons.

Application Method: Bottom-up direct push drilling with retractable injection screens — 3 feet screens
Injection Depth: Varied – between 7.0 to 17 feet below ground surface
Number of Injection Points: 10
Point Spacing: Approximately 2.25 ft within rows
Average Injection Flowrates: 3.4 gpm
Average Injection Pressures: 18.5 psi

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Deviations from Proposal: Surfacing related issues/concerns warranted a change in the injection concentration, and, therefore, some of the injection locations did not receive the total planned volume of 690-gallons. Of the anticipated 6 injection point locations, 3 did not receive the planned volume. Additionally, 4 new point locations were marked out and advance to depth to help distribute the remaining injection volume that was mixed as an increased injection solution.

Distribution Monitoring: While injecting, depth to water measurements and groundwater parameters were collected from the temporary piezometer, PZ-1, and monitoring well MW-1 by Wilcox and REGENESIS' personnel. This was done prior to injections as a baseline and during injections to help identified subsurface distribution and influence within the immediate area.

Though no visible Donor X was observed in the monitoring well or piezometer, groundwater parameters did indicate changes that likely can be corelated to the injection of the new technology. As an example, decreases in depth to water, DO, and pH were all observed around 350 gallons when injecting on IP-1 and monitoring MW-1.

Please see Appendix A – MW-1 Field Trial Injection Log for details on injection flow rates and pressures observed.

Please see Appendix B – MW-1 Field Trial Groundwater Parameter Log for details on groundwater data collected during the application.

Please see Appendix C – MW-1 Field Trial Photo Log.

Please see Figure 1 – Injection Point Locations Map for location of injection points.

Wilcox Environmental Engineering-O'Neal Clothes Depot Cleaners

Donor-X Injection Summary Log

MW-1 Field Trial Test

Appendix A

REGENESIS REMEDIATION SERVICES
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Injection Point	Date	Time	Injection Depth (feet)	Injection Pressure (psi)	Flow Rate (gpm)	Volume of Donor-X Injected			Total Gallons Per Location	Pounds of Donor-X Injected Per Location	Liters of BDI Per Interval	Comments
						Beginning Flow Meter (gal)	Ending Flow Meter (gal)	Gallons Injected Per Interval				
1	6/17/2020	12:10	17-16'	16	3.17	0.00	69.06	69.06	690	731	0.13	
	6/17/2020	12:27	16-13'	8	3.24	69.06	274.92	205.86			0.39	Minor surfacing around rods. Pressure slightly increasing with volume, at 200 gal pressure reading was 12 psi.
	6/17/2020	1:41	13-10'	5	3.00	274.92	483.15	208.23			0.39	When initially pulled up into this interval seal was lost and started to surface. Had to pull, fill with bentonite, and redrive point. Turned pump up at 325 gallons to 5.35 gpm, pressure observed at 16 psi.
	6/17/2020	2:29	10-7'	9	5.40	483.15	690.00	206.85			0.39	Completed point at 3:30 PM.
2	6/18/2020	8:12	17-16'	50	2.74	0.00	67.00	67.00	690	731	0.13	Higher pressure at start, screen likely not open all the way.
	6/18/2020	8:36	16-13'	9	4.15	67.00	276.56	209.56			0.39	Increase flowrate once we pulled to next interval, pressure decrease from previous interval. Pressure increasing with volume (@197 gallons, 15 PSI).
	6/18/2020	9:24	13-10'	14	4.64	276.56	483.00	206.44			0.39	At 369 gallons, flowrate was 4.97 gpm with a pressure of 14 psi. Minor surfacing around rods.
	6/18/2020	10:07	10-7'	14	5.22	483.00	690.07	207.07			0.39	Completed point at 10:55 AM.
3	6/18/2020	10:40	17-16'	10	5.01	0.00	125.00	125.00	690	731	0.13	Surfacing out of IP-2. Stopping to reset bentonite and plug. Single point pressure increases to 18 psi.
	6/18/2020	11:31	16-13'	14	4.96	125.00	276.12	151.12			0.39	Rods wanna dropped back down in hole after pulling upward.
	6/18/2020	12:06	13-10	8	3.40	276.12	480.00	203.88			0.39	
	6/18/2020	1:15	10-7'	8	3.67	480.00	690.04	210.04			0.39	As volume increases, intentionally increasing flowrate.
4	6/18/2020	12:00	17-16'	45	2.37	0.00	68.74	68.74	529	561	0.13	
	6/18/2020	12:32	16-13	15	3.31	68.74	276.25	207.51			0.39	
	6/18/2020	1:45	13-10'	16	3.71	276.25	482.93	206.68			0.39	As volume increases, intentionally increasing flowrate.
	6/18/2020	2:56	10-7'	10	3.83	482.93	529.00	46.07				Surfacing breakthrough asphalt at 506 gallons. Stop to let sit. Surfacing material whitish. Due to surfacing, point was abandoned.
5	6/18/2020	2:28	17-16'	14	3.67	0.00	68.89	68.89	152	161	0.13	
	6/18/2020	2:48	16-13'	11	3.98	68.89	152.00	83.11			0.39	Surfacing breakthrough asphalt at 117 gal.. Stop to let sit. Surfacing material white in color - more representative of what is in the shipping container.
	6/19/2020	8:27	16-13'	8	2.12	0.00	70.00	70.00	72	205	-	Due to surfacing, volume of water was reduced by 50% (25 percent solution). Product qty will stay the same per point.
	6/19/2020	9:23	13-10'	8	3.36	70.00	72.00	2.00			-	Surfacing once we pulled upward - abandoned point.
6	6/19/2020	8:23	17-15'	36	1.98	0.00	34.58	34.58	95	270	0.13	High pressure at first, likely due to screen not opening entirely - pulled up another foot.
	6/19/2020	8:44	16-13'	12	2.03	34.58	95.00	60.42			0.39	25% Solution. Continued surfacing throughout asphalt pavement surrounding point - point location abandoned.
7	6/19/2020	9:43	17-16'	22	3.30	0.00	33.34	33.34	33	95	--	25% Solution. Surfacing throughout pavement area - abandoned point.
8	6/19/2020	10:20	17-14'	28	2.13	0.00	112.60	112.60	164	466	0.78	25% Solution. Had to pull up 3' to open entire screen.
	6/19/2020	11:16	14-11'	20	3.28	112.60	164.00	51.40			0.78	Surfacing through pavement area at 164 gallons. Stopped point to let settle. Decided to drive another point - same location as PZ-1.
9	6/19/2020	11:38	17-14'	6	2.06	0.00	12.25	12.25	12	35	0.59	25% solution. Same location as PZ-1. Location didn't work due to lack of seal around injection rods.
10	6/19/2020	11:58	17-14'	70	2.60	0.00	123.46	123.46	147	415	--	25% solution. Exp. Pt. Point located north of IP-3.
	6/19/2020	12:39	14-11'	14	2.80	123.46	146.70	23.24				
									Total Gallons:	**Total Lbs. Donor-X**	**Total Liters of BDI:**	
									3274	4400	8.00	

Wilcox Environmental Engineering-O'Neal Clothes Depot Cleaners
Groundwater Paramter Log
MW-1 Field Trial Test
Appendix B

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Date	Gallons Applied	Location	Water Depth (feet)	Temperature (Celsius)	Conductivity (uS/cm)	Dissolved Oxygen (%)	pH	ORP (mV)	Comments
6/17/20	0	MW-1	8.73	14.3	658	75.2	6.93	206.2	Pre-Application baseline. GW sample from MW-1 prior to any injection work. Bailed appr. 4 gallons before collecting sample. Sample to be sent to Microbial Insights.
	50		8.73	-	653	76.3	6.99	224.7	Gallons applied refers to gallons applied while injecting on IP-1. Single point injection.
	100		8.73	14.3	641	72.9	6.97	253.2	
	150		8.73	14.2	640	73.8	6.96	266.4	
	200		-	14.3	648	74.8	-	274.9	
	250		-	14.3	635	76.9	7.01	280.5	
	300		8.73	14.3	624	75.6	6.99	289.6	
	350		8.64	14.3	627	76.1	7	293.6	
	400		8.6	14.4	602	74.2	6.97	297.3	
	450		8.6	14.5	580	60.5	6.89	300.8	
	500		8.61	14.6	535	44.8	6.88	303.7	
	550		8.6	14.7	525	44.9	6.88	304.8	
	600		-	14.7	506	42	6.87	306.3	
	650		8.6	14.73	472	41.7	6.85	307.3	
	690		8.6	14.8	456.2	43.1	6.84	307.8	
6/18/20	0	MW-1	8.82	15.10	486.10	64.30	7.06	129.40	Gallons applied refers to gallons applied while injecting on IP-2. Single point injection until end at 665 gallons when IP-3 was started.
	70		8.7	15.2	369	48	6.91	232.2	
	150		8.7	15.3	348.8	44.9	6.92	248.5	
	230		8.68	15.3	309.7	42.2	6.82	257.1	
	310		8.67	15.3	289.1	41	6.74	263	
	400		8.65	15.3	259	39.6	6.58	268.7	
	480		8.65	15.3	251.6	40.6	6.59	273	
	600		8.62	15.2	251.2	41.7	6.56	214.1	Started IP-3 at 665 gallons.
	690		8.61	15.1	309.1	39.8	6.71	242.9	

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APPENDIX C - Photo Log

Photo 1: N – MW-1 Injection work area

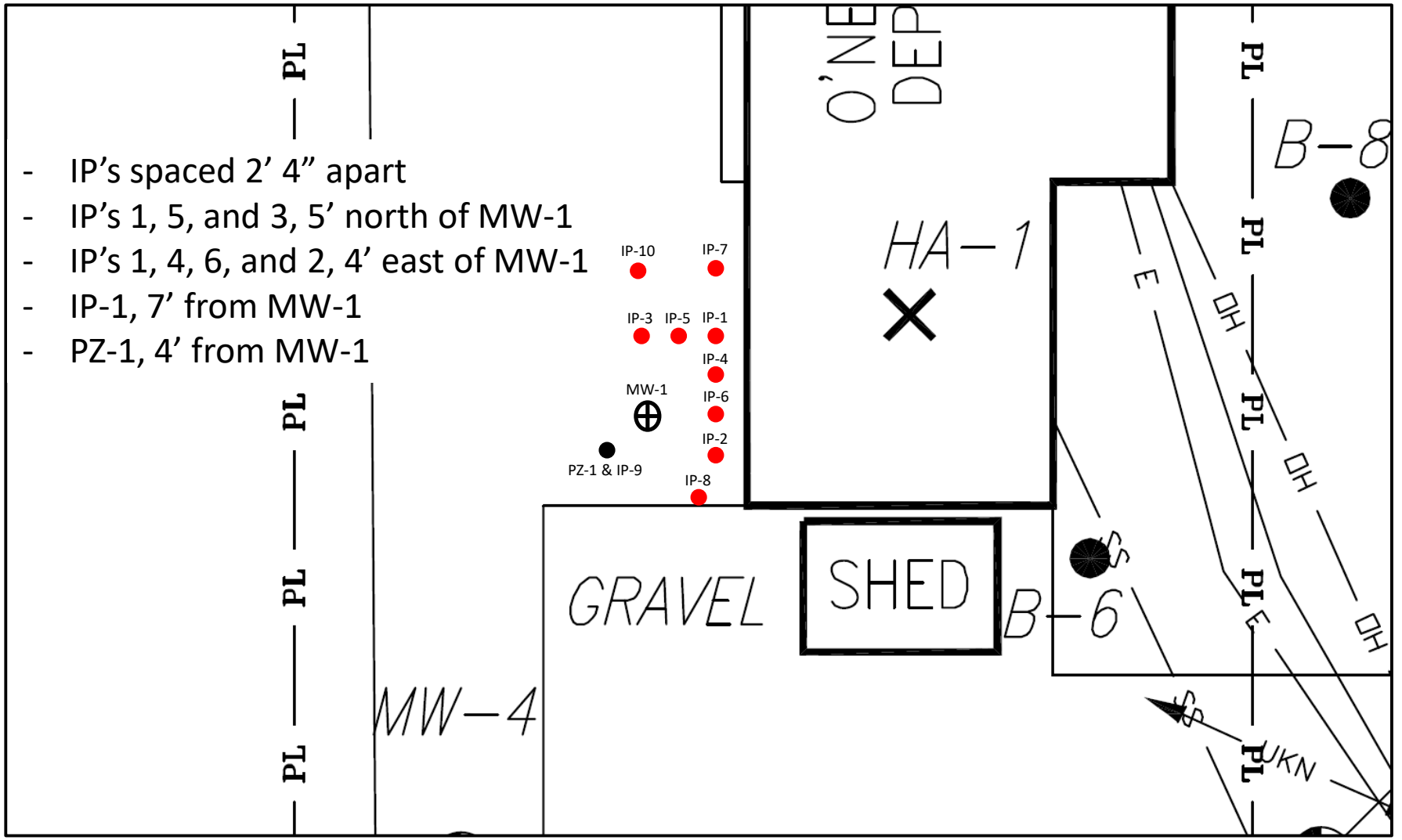
Photo 2: S – Injection point layout (red locations)

Photo 3: E – Injection point layout

Photo 4: E – Injection trailer and product trailer staged in alley behind on-site building

Photo 5: NE – Injecting on IP-1 and monitoring MW-1 and PZ-1

Photo 6: E – Surfacing material through asphalt



LEGEND

- Injection Point
- Monitoring Well
- Piezometer

N

Prepared By: *SRB*

Not to Scale

Figure 1 – Injection Locations Map
O'Neal's Clothes Depot Cleaners
833 East Morgan Street
Martinsville, IN

Date Prepared: *June 2020*

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APPENDIX C

Laboratory Reports and Chain-of-Custody Forms

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

July 23, 2020

Mr. Jeremy Kinman
Wilcox Environmental Engineering
1552 Main Street
Suite 100
Indianapolis, IN 46224

RE: Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Dear Mr. Kinman:

Enclosed are the analytical results for sample(s) received by the laboratory on July 16, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Regina Bedel
regina.bedel@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Ms. Jessica Murphy, Wilcox Environmental Engineering
Data Services, Wilcox

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50262409001	**MW-01_WG_200715**	Water	07/15/20 10:37	07/16/20 07:51
50262409002	**MW-08_WG200715**	Water	07/15/20 12:47	07/16/20 07:51
50262409003	**MW-09_WG200715**	Water	07/15/20 11:56	07/16/20 07:51
50262409004	**MW-15_WG200715**	Water	07/15/20 16:42	07/16/20 07:51
50262409005	**MW-16_WG200715**	Water	07/15/20 14:20	07/16/20 07:51
50262409006	**MW-17_WG200715**	Water	07/15/20 11:39	07/16/20 07:51
50262409007	**MW-19_WG200715**	Water	07/15/20 10:48	07/16/20 07:51
50262409008	**MW-20_WG200715**	Water	07/15/20 15:42	07/16/20 07:51
50262409009	**MW-22_WG200715**	Water	07/15/20 14:26	07/16/20 07:51
50262409010	**MW-24_WG200715**	Water	07/15/20 15:31	07/16/20 07:51
50262409011	**MW-26_WG200715**	Water	07/15/20 13:03	07/16/20 07:51
50262409012	**MW-28_WG200714**	Water	07/14/20 15:32	07/16/20 07:51

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(317)228-3100

SAMPLE ANALYTE COUNT

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50262409001	**MW-01_WG_200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SLB	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409002	**MW-08_WG200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SLB	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409003	**MW-09_WG200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SLB	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409004	**MW-15_WG200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SCM	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409005	**MW-16_WG200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SLB	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409006	**MW-17_WG200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SLB	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409007	**MW-19_WG200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SCM	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409008	**MW-20_WG200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SLB	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409009	**MW-22_WG200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SLB	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409010	**MW-24_WG200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I

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SAMPLE ANALYTE COUNT

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SLB	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409011	**MW-26_WG200715**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SLB	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I
50262409012	**MW-28_WG200714**	RSK 175 Modified	MEH	3	PASI-I
		EPA 6010	KJE	2	PASI-I
		EPA 6010	RAM	2	PASI-I
		SM 2320B	SLB	1	PASI-I
		SM 4500-S2-D	ZM	1	PASI-I
		ASTM D516-90,02	DAS	1	PASI-I
		EPA 353.2	DAC1	2	PASI-I
		SM 5310C	GWA	1	PASI-I

PASI-I = Pace Analytical Services - Indianapolis

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SUMMARY OF DETECTION

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50262409001	**MW-01_WG_200715**					
EPA 6010	Iron	3210	ug/L	100	07/21/20 11:17	
EPA 6010	Manganese	1750	ug/L	10.0	07/21/20 11:17	
EPA 6010	Iron, Dissolved	318	ug/L	100	07/21/20 11:12	
EPA 6010	Manganese, Dissolved	1660	ug/L	10.0	07/21/20 11:12	
SM 2320B	Alkalinity, Total as CaCO3	410	mg/L	2.0	07/20/20 13:37	
ASTM D516-90,02	Sulfate	35.5	mg/L	10.0	07/20/20 14:07	
EPA 353.2	Nitrogen, Nitrate	2.0	mg/L	0.10	07/16/20 15:24	
EPA 353.2	Nitrogen, Nitrite	0.12	mg/L	0.10	07/16/20 15:24	
SM 5310C	Total Organic Carbon	310	mg/L	40.0	07/20/20 13:32	
50262409002	**MW-08_WG200715**					
EPA 6010	Iron	559	ug/L	100	07/21/20 11:19	
EPA 6010	Manganese	564	ug/L	10.0	07/21/20 11:19	
EPA 6010	Manganese, Dissolved	539	ug/L	10.0	07/21/20 11:14	
SM 2320B	Alkalinity, Total as CaCO3	262	mg/L	2.0	07/20/20 13:37	
ASTM D516-90,02	Sulfate	27.8	mg/L	10.0	07/20/20 14:23	
EPA 353.2	Nitrogen, Nitrate	6.1	mg/L	0.50	07/16/20 15:48	
50262409003	**MW-09_WG200715**					
EPA 6010	Iron	1610	ug/L	100	07/21/20 11:30	
EPA 6010	Manganese	205	ug/L	10.0	07/21/20 11:30	
EPA 6010	Manganese, Dissolved	25.8	ug/L	10.0	07/21/20 11:17	
SM 2320B	Alkalinity, Total as CaCO3	282	mg/L	2.0	07/20/20 13:37	
ASTM D516-90,02	Sulfate	27.5	mg/L	10.0	07/20/20 14:23	
EPA 353.2	Nitrogen, Nitrate	3.4	mg/L	0.10	07/16/20 15:47	
EPA 353.2	Nitrogen, Nitrite	0.10	mg/L	0.10	07/16/20 15:47	
SM 5310C	Total Organic Carbon	2.0	mg/L	1.0	07/18/20 01:57	
50262409004	**MW-15_WG200715**					
EPA 6010	Iron	2590	ug/L	100	07/21/20 11:32	
EPA 6010	Manganese	799	ug/L	10.0	07/21/20 11:32	
EPA 6010	Manganese, Dissolved	675	ug/L	10.0	07/21/20 11:32	
SM 2320B	Alkalinity, Total as CaCO3	410	mg/L	2.0	07/23/20 10:41	
ASTM D516-90,02	Sulfate	14.3	mg/L	10.0	07/20/20 14:23	
EPA 353.2	Nitrogen, Nitrate	4.0	mg/L	1.0	07/16/20 15:39	
50262409005	**MW-16_WG200715**					
EPA 6010	Iron	4820	ug/L	100	07/21/20 11:39	
EPA 6010	Manganese	589	ug/L	10.0	07/21/20 11:39	
EPA 6010	Manganese, Dissolved	278	ug/L	10.0	07/21/20 11:34	
SM 2320B	Alkalinity, Total as CaCO3	323	mg/L	2.0	07/20/20 13:37	
ASTM D516-90,02	Sulfate	21.6	mg/L	10.0	07/20/20 14:45	
EPA 353.2	Nitrogen, Nitrate	1.2	mg/L	0.10	07/16/20 15:52	
SM 5310C	Total Organic Carbon	27.2	mg/L	4.0	07/20/20 11:59	
50262409006	**MW-17_WG200715**					
EPA 6010	Iron	1090	ug/L	100	07/21/20 11:41	
EPA 6010	Manganese	43.6	ug/L	10.0	07/21/20 11:41	
SM 2320B	Alkalinity, Total as CaCO3	300	mg/L	2.0	07/20/20 13:37	

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SUMMARY OF DETECTION

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50262409006	**MW-17_WG200715**					
ASTM D516-90,02	Sulfate	33.4	mg/L	10.0	07/20/20 14:45	
EPA 353.2	Nitrogen, Nitrate	6.1	mg/L	0.20	07/16/20 15:46	
SM 5310C	Total Organic Carbon	1.2	mg/L	1.0	07/18/20 03:08	
50262409007	**MW-19_WG200715**					
EPA 6010	Iron	3340	ug/L	100	07/21/20 11:43	
EPA 6010	Manganese	136	ug/L	10.0	07/21/20 11:43	
EPA 6010	Manganese, Dissolved	73.2	ug/L	10.0	07/21/20 11:38	
SM 2320B	Alkalinity, Total as CaCO3	400	mg/L	2.0	07/23/20 10:47	
ASTM D516-90,02	Sulfate	34.1	mg/L	10.0	07/20/20 14:45	
EPA 353.2	Nitrogen, Nitrate	1.5	mg/L	0.10	07/16/20 15:25	
50262409008	**MW-20_WG200715**					
EPA 6010	Iron	648	ug/L	100	07/21/20 11:45	
EPA 6010	Manganese	38.4	ug/L	10.0	07/21/20 11:45	
SM 2320B	Alkalinity, Total as CaCO3	356	mg/L	2.0	07/20/20 13:37	
ASTM D516-90,02	Sulfate	26.2	mg/L	10.0	07/20/20 14:45	
EPA 353.2	Nitrogen, Nitrate	3.6	mg/L	0.10	07/16/20 15:58	
SM 5310C	Total Organic Carbon	1.3	mg/L	1.0	07/18/20 04:31	
50262409009	**MW-22_WG200715**					
EPA 6010	Iron	1660	ug/L	100	07/21/20 11:48	
EPA 6010	Manganese	86.9	ug/L	10.0	07/21/20 11:48	
SM 2320B	Alkalinity, Total as CaCO3	297	mg/L	2.0	07/20/20 13:37	
ASTM D516-90,02	Sulfate	26.1	mg/L	10.0	07/20/20 14:46	
EPA 353.2	Nitrogen, Nitrate	5.6	mg/L	0.50	07/16/20 15:53	
SM 5310C	Total Organic Carbon	1.0	mg/L	1.0	07/18/20 04:57	
50262409010	**MW-24_WG200715**					
EPA 6010	Iron	573	ug/L	100	07/21/20 11:50	
EPA 6010	Manganese	13.1	ug/L	10.0	07/21/20 11:50	
SM 2320B	Alkalinity, Total as CaCO3	317	mg/L	2.0	07/20/20 13:37	
ASTM D516-90,02	Sulfate	29.1	mg/L	10.0	07/20/20 14:46	
EPA 353.2	Nitrogen, Nitrate	6.4	mg/L	0.20	07/16/20 15:55	
50262409011	**MW-26_WG200715**					
EPA 6010	Iron	625	ug/L	100	07/21/20 11:52	
EPA 6010	Manganese	38.6	ug/L	10.0	07/21/20 11:52	
SM 2320B	Alkalinity, Total as CaCO3	264	mg/L	2.0	07/20/20 13:37	
ASTM D516-90,02	Sulfate	14.4	mg/L	10.0	07/20/20 14:47	
EPA 353.2	Nitrogen, Nitrate	5.5	mg/L	0.20	07/16/20 15:51	
50262409012	**MW-28_WG200714**					
EPA 6010	Iron	1410	ug/L	100	07/21/20 11:54	
EPA 6010	Manganese	69.2	ug/L	10.0	07/21/20 11:54	
SM 2320B	Alkalinity, Total as CaCO3	330	mg/L	2.0	07/20/20 13:37	
ASTM D516-90,02	Sulfate	20.5	mg/L	10.0	07/20/20 14:47	
EPA 353.2	Nitrogen, Nitrate	3.4	mg/L	0.10	07/16/20 15:23	
SM 5310C	Total Organic Carbon	1.3	mg/L	1.0	07/18/20 06:51	

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PROJECT NARRATIVE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Method: **RSK 175 Modified**
Description: RSK 175 Headspace
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

General Information:
12 samples were analyzed for RSK 175 Modified by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

General Information:
12 samples were analyzed for EPA 6010 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Method: **EPA 6010**
Description: 6010 MET ICP, Lab Filtered
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

General Information:
12 samples were analyzed for EPA 6010 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

General Information:
12 samples were analyzed for SM 2320B by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Method: **SM 4500-S2-D**
Description: 4500S2D Sulfide Water
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

General Information:
12 samples were analyzed for SM 4500-S2-D by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 572581

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50262409001,50262437001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2641079)
  - Sulfide

Additional Comments:

Analyte Comments:

QC Batch: 572581

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-15_WG200715 (Lab ID: 50262409004)
  - Sulfide

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PROJECT NARRATIVE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Method: **ASTM D516-90,02**
Description: ASTM D516-9002 Sulfate Water
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

General Information:
12 samples were analyzed for ASTM D516-90,02 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 572882

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50262187001,50262409001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2642213)
  - Sulfate

M3: Matrix spike recovery was outside laboratory control limits due to matrix interferences.

- MS (Lab ID: 2642211)
  - Sulfate
- MSD (Lab ID: 2642212)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

General Information:
12 samples were analyzed for EPA 353.2 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 572455

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-15_WG200715 (Lab ID: 50262409004)
  - Nitrogen, Nitrite

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PROJECT NARRATIVE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Method: **SM 5310C**
Description: 5310C TOC
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

General Information:
12 samples were analyzed for SM 5310C by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 572626

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-15_WG200715 (Lab ID: 50262409004)
  - Total Organic Carbon
- MW-19_WG200715 (Lab ID: 50262409007)
  - Total Organic Carbon

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-01_WG_200715 **Lab ID: 50262409001** Collected: 07/15/20 10:37 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 17:49	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 17:49	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 17:49	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**3210**	ug/L	100	1	07/20/20 13:44	07/21/20 11:17	7439-89-6	
Manganese	**1750**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:17	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	**318**	ug/L	100	1	07/20/20 13:30	07/21/20 11:12	7439-89-6	
Manganese, Dissolved	**1660**	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:12	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**410**	mg/L	2.0	1		07/20/20 13:37		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**35.5**	mg/L	10.0	1		07/20/20 14:07	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**2.0**	mg/L	0.10	1		07/16/20 15:24	14797-55-8	
Nitrogen, Nitrite	**0.12**	mg/L	0.10	1		07/16/20 15:24	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	**310**	mg/L	40.0	40		07/20/20 13:32	7440-44-0	

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-08_WG200715 **Lab ID: 50262409002** Collected: 07/15/20 12:47 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 18:09	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 18:09	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 18:09	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**559**	ug/L	100	1	07/20/20 13:44	07/21/20 11:19	7439-89-6	
Manganese	**564**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:19	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:14	7439-89-6	
Manganese, Dissolved	**539**	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:14	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**262**	mg/L	2.0	1		07/20/20 13:37		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**27.8**	mg/L	10.0	1		07/20/20 14:23	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**6.1**	mg/L	0.50	5		07/16/20 15:48	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.50	5		07/16/20 15:48	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	ND	mg/L	1.0	1		07/20/20 11:40	7440-44-0	

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-09_WG200715 **Lab ID: 50262409003** Collected: 07/15/20 11:56 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 18:28	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 18:28	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 18:28	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**1610**	ug/L	100	1	07/20/20 13:44	07/21/20 11:30	7439-89-6	
Manganese	**205**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:30	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:17	7439-89-6	
Manganese, Dissolved	**25.8**	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:17	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**282**	mg/L	2.0	1		07/20/20 13:37		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**27.5**	mg/L	10.0	1		07/20/20 14:23	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**3.4**	mg/L	0.10	1		07/16/20 15:47	14797-55-8	
Nitrogen, Nitrite	**0.10**	mg/L	0.10	1		07/16/20 15:47	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	**2.0**	mg/L	1.0	1		07/18/20 01:57	7440-44-0	

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-15_WG200715 **Lab ID: 50262409004** Collected: 07/15/20 16:42 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	200	20		07/16/20 18:48	74-84-0	
Ethene	ND	ug/L	200	20		07/16/20 18:48	74-85-1	
Methane	ND	ug/L	200	20		07/16/20 18:48	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**2590**	ug/L	100	1	07/20/20 13:44	07/21/20 11:32	7439-89-6	
Manganese	**799**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:32	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:32	7439-89-6	
Manganese, Dissolved	**675**	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:32	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**410**	mg/L	2.0	1		07/23/20 10:41		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.50	5		07/17/20 13:50	18496-25-8	D3
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**14.3**	mg/L	10.0	1		07/20/20 14:23	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**4.0**	mg/L	1.0	10		07/16/20 15:39	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	1.0	10		07/16/20 15:39	14797-65-0	D3
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	ND	mg/L	10.0	10		07/18/20 02:22	7440-44-0	D3

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-16_WG200715 **Lab ID: 50262409005** Collected: 07/15/20 14:20 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 19:07	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 19:07	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 19:07	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**4820**	ug/L	100	1	07/20/20 13:44	07/21/20 11:39	7439-89-6	
Manganese	**589**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:39	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:34	7439-89-6	
Manganese, Dissolved	**278**	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:34	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**323**	mg/L	2.0	1		07/20/20 13:37		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**21.6**	mg/L	10.0	1		07/20/20 14:45	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**1.2**	mg/L	0.10	1		07/16/20 15:52	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	1		07/16/20 15:52	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	**27.2**	mg/L	4.0	4		07/20/20 11:59	7440-44-0	

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-17_WG200715 **Lab ID: 50262409006** Collected: 07/15/20 11:39 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 19:26	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 19:26	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 19:26	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**1090**	ug/L	100	1	07/20/20 13:44	07/21/20 11:41	7439-89-6	
Manganese	**43.6**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:41	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:36	7439-89-6	
Manganese, Dissolved	ND	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:36	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**300**	mg/L	2.0	1		07/20/20 13:37		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**33.4**	mg/L	10.0	1		07/20/20 14:45	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**6.1**	mg/L	0.20	2		07/16/20 15:46	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.20	2		07/16/20 15:46	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	**1.2**	mg/L	1.0	1		07/18/20 03:08	7440-44-0	

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-19_WG200715 **Lab ID: 50262409007** Collected: 07/15/20 10:48 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 19:45	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 19:45	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 19:45	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**3340**	ug/L	100	1	07/20/20 13:44	07/21/20 11:43	7439-89-6	
Manganese	**136**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:43	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:38	7439-89-6	
Manganese, Dissolved	**73.2**	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:38	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**400**	mg/L	2.0	1		07/23/20 10:47		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**34.1**	mg/L	10.0	1		07/20/20 14:45	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**1.5**	mg/L	0.10	1		07/16/20 15:25	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	1		07/16/20 15:25	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	ND	mg/L	4.0	4		07/18/20 03:27	7440-44-0	D3

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-20_WG200715 **Lab ID: 50262409008** Collected: 07/15/20 15:42 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 20:05	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 20:05	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 20:05	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**648**	ug/L	100	1	07/20/20 13:44	07/21/20 11:45	7439-89-6	
Manganese	**38.4**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:45	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:41	7439-89-6	
Manganese, Dissolved	ND	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:41	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**356**	mg/L	2.0	1		07/20/20 13:37		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**26.2**	mg/L	10.0	1		07/20/20 14:45	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**3.6**	mg/L	0.10	1		07/16/20 15:58	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	1		07/16/20 15:58	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	**1.3**	mg/L	1.0	1		07/18/20 04:31	7440-44-0	

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-22_WG200715 **Lab ID: 50262409009** Collected: 07/15/20 14:26 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 20:43	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 20:43	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 20:43	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**1660**	ug/L	100	1	07/20/20 13:44	07/21/20 11:48	7439-89-6	
Manganese	**86.9**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:48	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:43	7439-89-6	
Manganese, Dissolved	ND	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:43	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**297**	mg/L	2.0	1		07/20/20 13:37		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**26.1**	mg/L	10.0	1		07/20/20 14:46	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**5.6**	mg/L	0.50	5		07/16/20 15:53	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.50	5		07/16/20 15:53	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	**1.0**	mg/L	1.0	1		07/18/20 04:57	7440-44-0	

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-24_WG200715 **Lab ID: 50262409010** Collected: 07/15/20 15:31 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 21:02	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 21:02	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 21:02	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**573**	ug/L	100	1	07/20/20 13:44	07/21/20 11:50	7439-89-6	
Manganese	**13.1**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:50	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:50	7439-89-6	
Manganese, Dissolved	ND	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:50	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**317**	mg/L	2.0	1		07/20/20 13:37		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**29.1**	mg/L	10.0	1		07/20/20 14:46	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**6.4**	mg/L	0.20	2		07/16/20 15:55	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.20	2		07/16/20 15:55	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	ND	mg/L	1.0	1		07/18/20 05:22	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-26_WG200715 **Lab ID: 50262409011** Collected: 07/15/20 13:03 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 21:22	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 21:22	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 21:22	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**625**	ug/L	100	1	07/20/20 13:44	07/21/20 11:52	7439-89-6	
Manganese	**38.6**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:52	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:52	7439-89-6	
Manganese, Dissolved	ND	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:52	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**264**	mg/L	2.0	1		07/20/20 13:37		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**14.4**	mg/L	10.0	1		07/20/20 14:47	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**5.5**	mg/L	0.20	2		07/16/20 15:51	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.20	2		07/16/20 15:51	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	ND	mg/L	1.0	1		07/18/20 06:26	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Sample: MW-28_WG200714 **Lab ID: 50262409012** Collected: 07/14/20 15:32 Received: 07/16/20 07:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 Headspace	Analytical Method: RSK 175 Modified Pace Analytical Services - Indianapolis							
Ethane	ND	ug/L	10.0	1		07/16/20 22:00	74-84-0	
Ethene	ND	ug/L	10.0	1		07/16/20 22:00	74-85-1	
Methane	ND	ug/L	10.0	1		07/16/20 22:00	74-82-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron	**1410**	ug/L	100	1	07/20/20 13:44	07/21/20 11:54	7439-89-6	
Manganese	**69.2**	ug/L	10.0	1	07/20/20 13:44	07/21/20 11:54	7439-96-5	
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Iron, Dissolved	ND	ug/L	100	1	07/20/20 13:30	07/21/20 11:54	7439-89-6	
Manganese, Dissolved	ND	ug/L	10.0	1	07/20/20 13:30	07/21/20 11:54	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**330**	mg/L	2.0	1		07/20/20 13:37		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2-D Pace Analytical Services - Indianapolis							
Sulfide	ND	mg/L	0.10	1		07/17/20 13:50	18496-25-8	
ASTM D516-9002 Sulfate Water	Analytical Method: ASTM D516-90,02 Pace Analytical Services - Indianapolis							
Sulfate	**20.5**	mg/L	10.0	1		07/20/20 14:47	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis							
Nitrogen, Nitrate	**3.4**	mg/L	0.10	1		07/16/20 15:23	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	1		07/16/20 15:23	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Indianapolis							
Total Organic Carbon	**1.3**	mg/L	1.0	1		07/18/20 06:51	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

QC Batch: 572425
QC Batch Method: RSK 175 Modified
Analysis Method: RSK 175 Modified
Analysis Description: RSK 175 HEADSPACE
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

METHOD BLANK: 2640141 Matrix: Water
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethane	ug/L	ND	10.0	07/16/20 17:30	
Ethene	ug/L	ND	10.0	07/16/20 17:30	
Methane	ug/L	ND	10.0	07/16/20 17:30	

LABORATORY CONTROL SAMPLE: 2640142

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethane	ug/L	1980	2060	104	67-148	
Ethene	ug/L	2250	2360	105	79-140	
Methane	ug/L	1980	1980	100	59-135	

SAMPLE DUPLICATE: 2640143

Parameter	Units	50262409011 Result	Dup Result	RPD	Max RPD	Qualifiers
Ethane	ug/L	ND	ND		20	
Ethene	ug/L	ND	ND		20	
Methane	ug/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

QC Batch: 572440
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

METHOD BLANK: 2640241 Matrix: Water
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	100	07/21/20 11:13	
Manganese	ug/L	ND	10.0	07/21/20 11:13	

LABORATORY CONTROL SAMPLE: 2640242

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9080	91	80-120	
Manganese	ug/L	1000	959	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2640243 2640244

Parameter	Units	50262409002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	559	10000	10000	9280	9290	87	87	75-125	0	20	
Manganese	ug/L	564	1000	1000	1480	1490	91	92	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

QC Batch: 572763
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET Dissolved
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

METHOD BLANK: 2641862 Matrix: Water
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	100	07/21/20 11:06	
Manganese, Dissolved	ug/L	ND	10.0	07/21/20 11:06	

LABORATORY CONTROL SAMPLE: 2641863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	9020	90	80-120	
Manganese, Dissolved	ug/L	1000	918	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2641864 2641865

Parameter	Units	50262409003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	ND	10000	10000	9130	9090	91	91	75-125	0	20	
Manganese, Dissolved	ug/L	25.8	1000	1000	954	950	93	92	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

QC Batch: 572768 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409005, 50262409006, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

METHOD BLANK: 2641868 Matrix: Water
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409005, 50262409006, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	2.0	07/20/20 13:37	

LABORATORY CONTROL SAMPLE: 2641869

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	47.6	95	90-110	

SAMPLE DUPLICATE: 2641870

Parameter	Units	50262409001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	410	412	1	20	

SAMPLE DUPLICATE: 2641871

Parameter	Units	50262506001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	150	151	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

QC Batch: 573453
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262409004, 50262409007

METHOD BLANK: 2644550 Matrix: Water
Associated Lab Samples: 50262409004, 50262409007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	2.0	07/23/20 10:16	

LABORATORY CONTROL SAMPLE: 2644551

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.0	100	90-110	

SAMPLE DUPLICATE: 2644552

Parameter	Units	50262301004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	950	970	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

QC Batch: 572581 Analysis Method: SM 4500-S2-D
QC Batch Method: SM 4500-S2-D Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

METHOD BLANK: 2641075 Matrix: Water
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	07/17/20 13:50	

LABORATORY CONTROL SAMPLE: 2641076

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.55	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2641077 2641078

Parameter	Units	50262409001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.54	0.56	95	98	90-110	3	20	

MATRIX SPIKE SAMPLE: 2641079

Parameter	Units	50262437001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	ND	0.5	0.32	64	90-110	M0

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

QC Batch: 572882
QC Batch Method: ASTM D516-90,02
Analysis Method: ASTM D516-90,02
Analysis Description: ASTM D516-9002 Sulfate Water
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

METHOD BLANK: 2642209 Matrix: Water
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	10.0	07/20/20 14:06	

LABORATORY CONTROL SAMPLE: 2642210

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	21.5	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2642211 2642212

Parameter	Units	50262409001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	35.5	100	100	158	156	123	121	90-110	1	20	M3

MATRIX SPIKE SAMPLE: 2642213

Parameter	Units	50262187001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	<10.0	20	21.4	85	90-110	M0

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

QC Batch: 572455
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

METHOD BLANK: 2640345 Matrix: Water
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007, 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	07/16/20 15:20	
Nitrogen, Nitrite	mg/L	ND	0.10	07/16/20 15:20	

LABORATORY CONTROL SAMPLE: 2640346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	1.1	112	90-110	
Nitrogen, Nitrite	mg/L	1	1.1	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2640347 2640348

Parameter	Units	50262409002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Nitrate	mg/L	6.1	5	5	12.6	12.5	131	129	90-110	1	20	
Nitrogen, Nitrite	mg/L	ND	5	5	5.4	5.4	108	108	90-110	0	20	

MATRIX SPIKE SAMPLE: 2640349

Parameter	Units	50262409009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	5.6	5	12.1	130	90-110	
Nitrogen, Nitrite	mg/L	ND	5	5.3	106	90-110	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

QC Batch: 572626 | Analysis Method: SM 5310C
QC Batch Method: SM 5310C | Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007

METHOD BLANK: 2641324 Matrix: Water
Associated Lab Samples: 50262409001, 50262409002, 50262409003, 50262409004, 50262409005, 50262409006, 50262409007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	07/17/20 16:55	

LABORATORY CONTROL SAMPLE: 2641325

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2641326 2641327

Parameter	Units	50262403003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	1.8	10	10	12.3	12.1	105	103	80-120	1	20	

MATRIX SPIKE SAMPLE: 2641328

Parameter	Units	50261955008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1220 ug/L	10	11.3	101	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

QC Batch: 572627 | Analysis Method: SM 5310C
QC Batch Method: SM 5310C | Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

METHOD BLANK: 2641339 Matrix: Water
Associated Lab Samples: 50262409008, 50262409009, 50262409010, 50262409011, 50262409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	07/18/20 03:53	

LABORATORY CONTROL SAMPLE: 2641340

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	10	10.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2641341 2641342

Parameter	Units	50261956001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	61.2	10	10	71.0	70.8	98	96	80-120	0	20	

MATRIX SPIKE SAMPLE: 2641343

Parameter	Units	50261967003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	4430 ug/L	10	14.8	104	80-120	

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

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

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

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50262409001	MW-01_WG_200715	RSK 175 Modified	572425		
50262409002	MW-08_WG200715	RSK 175 Modified	572425		
50262409003	MW-09_WG200715	RSK 175 Modified	572425		
50262409004	MW-15_WG200715	RSK 175 Modified	572425		
50262409005	MW-16_WG200715	RSK 175 Modified	572425		
50262409006	MW-17_WG200715	RSK 175 Modified	572425		
50262409007	MW-19_WG200715	RSK 175 Modified	572425		
50262409008	MW-20_WG200715	RSK 175 Modified	572425		
50262409009	MW-22_WG200715	RSK 175 Modified	572425		
50262409010	MW-24_WG200715	RSK 175 Modified	572425		
50262409011	MW-26_WG200715	RSK 175 Modified	572425		
50262409012	MW-28_WG200714	RSK 175 Modified	572425		
50262409001	MW-01_WG_200715	EPA 3010	572440	EPA 6010	572999
50262409002	MW-08_WG200715	EPA 3010	572440	EPA 6010	572999
50262409003	MW-09_WG200715	EPA 3010	572440	EPA 6010	572999
50262409004	MW-15_WG200715	EPA 3010	572440	EPA 6010	572999
50262409005	MW-16_WG200715	EPA 3010	572440	EPA 6010	572999
50262409006	MW-17_WG200715	EPA 3010	572440	EPA 6010	572999
50262409007	MW-19_WG200715	EPA 3010	572440	EPA 6010	572999
50262409008	MW-20_WG200715	EPA 3010	572440	EPA 6010	572999
50262409009	MW-22_WG200715	EPA 3010	572440	EPA 6010	572999
50262409010	MW-24_WG200715	EPA 3010	572440	EPA 6010	572999
50262409011	MW-26_WG200715	EPA 3010	572440	EPA 6010	572999
50262409012	MW-28_WG200714	EPA 3010	572440	EPA 6010	572999
50262409001	MW-01_WG_200715	EPA 3010	572763	EPA 6010	573003
50262409002	MW-08_WG200715	EPA 3010	572763	EPA 6010	573003
50262409003	MW-09_WG200715	EPA 3010	572763	EPA 6010	573003
50262409004	MW-15_WG200715	EPA 3010	572763	EPA 6010	573003
50262409005	MW-16_WG200715	EPA 3010	572763	EPA 6010	573003
50262409006	MW-17_WG200715	EPA 3010	572763	EPA 6010	573003
50262409007	MW-19_WG200715	EPA 3010	572763	EPA 6010	573003
50262409008	MW-20_WG200715	EPA 3010	572763	EPA 6010	573003
50262409009	MW-22_WG200715	EPA 3010	572763	EPA 6010	573003
50262409010	MW-24_WG200715	EPA 3010	572763	EPA 6010	573003
50262409011	MW-26_WG200715	EPA 3010	572763	EPA 6010	573003
50262409012	MW-28_WG200714	EPA 3010	572763	EPA 6010	573003
50262409001	MW-01_WG_200715	SM 2320B	572768		
50262409002	MW-08_WG200715	SM 2320B	572768		
50262409003	MW-09_WG200715	SM 2320B	572768		
50262409004	MW-15_WG200715	SM 2320B	573453		
50262409005	MW-16_WG200715	SM 2320B	572768		
50262409006	MW-17_WG200715	SM 2320B	572768		
50262409007	MW-19_WG200715	SM 2320B	573453		
50262409008	MW-20_WG200715	SM 2320B	572768		
50262409009	MW-22_WG200715	SM 2320B	572768		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50262409010	MW-24_WG200715	SM 2320B	572768		
50262409011	MW-26_WG200715	SM 2320B	572768		
50262409012	MW-28_WG200714	SM 2320B	572768		
50262409001	MW-01_WG_200715	SM 4500-S2-D	572581		
50262409002	MW-08_WG200715	SM 4500-S2-D	572581		
50262409003	MW-09_WG200715	SM 4500-S2-D	572581		
50262409004	MW-15_WG200715	SM 4500-S2-D	572581		
50262409005	MW-16_WG200715	SM 4500-S2-D	572581		
50262409006	MW-17_WG200715	SM 4500-S2-D	572581		
50262409007	MW-19_WG200715	SM 4500-S2-D	572581		
50262409008	MW-20_WG200715	SM 4500-S2-D	572581		
50262409009	MW-22_WG200715	SM 4500-S2-D	572581		
50262409010	MW-24_WG200715	SM 4500-S2-D	572581		
50262409011	MW-26_WG200715	SM 4500-S2-D	572581		
50262409012	MW-28_WG200714	SM 4500-S2-D	572581		
50262409001	MW-01_WG_200715	ASTM D516-90,02	572882		
50262409002	MW-08_WG200715	ASTM D516-90,02	572882		
50262409003	MW-09_WG200715	ASTM D516-90,02	572882		
50262409004	MW-15_WG200715	ASTM D516-90,02	572882		
50262409005	MW-16_WG200715	ASTM D516-90,02	572882		
50262409006	MW-17_WG200715	ASTM D516-90,02	572882		
50262409007	MW-19_WG200715	ASTM D516-90,02	572882		
50262409008	MW-20_WG200715	ASTM D516-90,02	572882		
50262409009	MW-22_WG200715	ASTM D516-90,02	572882		
50262409010	MW-24_WG200715	ASTM D516-90,02	572882		
50262409011	MW-26_WG200715	ASTM D516-90,02	572882		
50262409012	MW-28_WG200714	ASTM D516-90,02	572882		
50262409001	MW-01_WG_200715	EPA 353.2	572455		
50262409002	MW-08_WG200715	EPA 353.2	572455		
50262409003	MW-09_WG200715	EPA 353.2	572455		
50262409004	MW-15_WG200715	EPA 353.2	572455		
50262409005	MW-16_WG200715	EPA 353.2	572455		
50262409006	MW-17_WG200715	EPA 353.2	572455		
50262409007	MW-19_WG200715	EPA 353.2	572455		
50262409008	MW-20_WG200715	EPA 353.2	572455		
50262409009	MW-22_WG200715	EPA 353.2	572455		
50262409010	MW-24_WG200715	EPA 353.2	572455		
50262409011	MW-26_WG200715	EPA 353.2	572455		
50262409012	MW-28_WG200714	EPA 353.2	572455		
50262409001	MW-01_WG_200715	SM 5310C	572626		
50262409002	MW-08_WG200715	SM 5310C	572626		
50262409003	MW-09_WG200715	SM 5310C	572626		
50262409004	MW-15_WG200715	SM 5310C	572626		
50262409005	MW-16_WG200715	SM 5310C	572626		
50262409006	MW-17_WG200715	SM 5310C	572626		
50262409007	MW-19_WG200715	SM 5310C	572626		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: O'Neal's/341.14-105.03
Pace Project No.: 50262409

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50262409008	**MW-20_WG200715**	SM 5310C	572627		
50262409009	**MW-22_WG200715**	SM 5310C	572627		
50262409010	**MW-24_WG200715**	SM 5310C	572627		
50262409011	**MW-26_WG200715**	SM 5310C	572627		
50262409012	**MW-28_WG200714**	SM 5310C	572627		

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CHAIN-OF-CUSTODY / Analytic

The Chain-of-Custody is a LEGAL DOCUMENT. All releva

WO# : 50262409

50262409

Page: 1 of 1

Section A Required Client Information	Section B Required Project Information:	Section C Invoice Information:
Company: Wilcox Environmental Engineering	Report To: Alexis Litz	Attention: Jessica Murphy
Address: 1552 Main Street, Suite 100 Speedway, IN 46224	Copy To: jmurphy@wilcoxenv.com	Company Name: Wilcox Environmental Engineering
	N/A	Address: 1552 Main Street, Suite 100 Speedway, Indiana 46224
Email To: alitz@wilcoxenv.com dataservices@wilcoxenv.com	Purchase Order No.: N/A	Pace Quote Reference: N/A
Phone: 317-472-0999 Fax: N/A	Project Name: O'Neal's	Pace Project Manager: Regina Bedel
Requested Due Date/TAT: Standard, QAQC level II	Project Number: 341.14-105.03	Pace Profile #: N/A

REGULATORY AGENCY

NPDES X GROUND WATER DRINKING WATER

UST RCRA OTHER_____

SITE

LOCATION

GA IL X IN MI NC

OH SC WI OTHER_____

Filtered (Y/N)

Requested Analysis:

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
	WP
	AR
	OT
	TS

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	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	Nitrate 353.2	Nitrite 353.2	Sulfate ASTM D516-9002	Sulfide SM 4500SD/SW 846-9034	TOC 415.2/SM 5310/EPA 9c	Alkalinity SM 2320B	Methane,ethane,ethene RSK 175	Total Manganese 6010 MET ICP	D. Manganese 6010 MET ICP	Total Iron EPA 6010 MET ICP	Dissolved Iron 6010 MET ICP	Residual Chlorine (Y/N)	Pace Project No. Lab I.D.
1	MW-01_WG_200715	WT	G	7/15/2020	1037		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		001
2	MW-08_WG_200715	WT	G	7/15/2020	1247		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		002
3	MW-09_WG_200715	WT	G	7/15/2020	1156		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		003
4	MW-15_WG_200715	WT	G	7/15/2020	1642		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		004
5	MW-16_WG_200715	WT	G	7/15/2020	1420		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		005
6	MW-17_WG_200715	WT	G	7/15/2020	1139		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		006
7	MW-19_WG_200715	WT	G	7/15/2020	1048		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		007
8	MW-20_WG_200715	WT	G	7/15/2020	1542		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		008
9	MW-22_WG_200715	WT	G	7/15/2020	1426		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		009
10	MW-24_WG_200715	WT	G	7/15/2020	1531		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		010
11	MW-26_WG_200715	WT	G	7/15/2020	1303		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		011
12	MW-28_WG_200714	WT	G	7/14/2020	1532		8	X	x	X		X			X	X	X	X	X	X	X	X	X	X	X	X		012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
Please bill to 341.14 - 105.03. The Dissolved Manganese 6010 MET ICP and Dissolved Iron 6010 MET ICP analyses require lab filtering by the lab.	/Wilcox	7/16/2020	0751	Pace	7/16/20	751	5.9	Y/N	Y/N	Y/N
							1.6	Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Sean Jensen

SIGNATURE of SAMPLER: Sean Jensen

DATE Signed (MM/DD/YY): 7/16/2020

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50262469

Date/Time and Initials of person examining contents: MRP 7/16/20 0905

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: 6.8/5.9 , 2.5/1.6 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:** NO_3	✓		Headspace Wisconsin Sulfide			✓
Time 5035A TC placed in Freezer or Short Holds To Lab: 0925				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 Labels (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Custody Seals?:		✓	
Extra labels on Terracore Vials (soils only)?		✓				

Comments:

COC PAGE ____ of ____

Sample Container Count

Sample Line Item	WGFU	SBS DI BK Kit R	DG9H VG9H	VOA VIALS (>6mm)	VG9U	DG9U	DG9T	AG0U	AG1H	AG1U	AG3S	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H					Matrix	pH <2	pH >9	pH>12
1					3						1	1			1	1				1						WT	✓	✓	
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpres amber glass
DG9H	40mL HCl amber voa vial	AG1H	1L HCl amber glass
DG9M	40mL MeOH clear vial	AG1S	1L H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1L Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpres 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 unpres amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 amber glass
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpres amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1L HCl clear glass
VSG	Headspace septa vial & HCl	BG1S	1L H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1L Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1L unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
CG3H	250mL clear glass HCl	BG3U	250mL Unpres Clear Glass

Plastic / Misc.

BP1A	1L NaOH, Asc Acid plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn, Ac
BP2A	500mL NaOH, Asc Acid plastic
BP2N	500mL HNO3 plastic
BP2O	500mL NaOH plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Ac
BP3B	250mL NaOH plastic
BP3N	250mL HNO3 plastic
BP3F	250mL HNO3 plastic (field filtered)

BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Ac plastic

AF	Air Filter
C	Air Cassettes
R	Terra core kit
SP5T	120mL Coliform Na Thiosulfate
U	Summa Can
ZPLC	Ziploc Bag

WT	Water
SL	Solid
NAL	Non-aqueous liquid
WP	Wipe

Pace Analytical Services, LLC
7726 Moller Road
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(317)228-3100

July 23, 2020

Alexis Litz
Wilcox Environmental Engineering
1552 Main Street
Suite 100
Indianapolis, IN 46224

RE: Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Dear Alexis Litz:

Enclosed are the analytical results for sample(s) received by the laboratory on July 17, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Regina Bedel
regina.bedel@pacelabs.com
(317)228-3100
Project Manager

Enclosures

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50262532001	MW-01_WG_200715	Water	07/15/20 10:37	07/17/20 08:02
50262532002	MW-02_WG_200714	Water	07/14/20 10:34	07/17/20 08:02
50262532003	MW-03_WG_200714	Water	07/14/20 10:29	07/17/20 08:02
50262532004	MW-04_WG_200714	Water	07/14/20 16:31	07/17/20 08:02
50262532005	MW-05_WG_200714	Water	07/14/20 11:20	07/17/20 08:02
50262532006	MW-06_WG_200716	Water	07/16/20 10:42	07/17/20 08:02
50262532007	MW-07_WG_200714	Water	07/14/20 11:25	07/17/20 08:02
50262532008	MW-08_WG_200715	Water	07/15/20 12:47	07/17/20 08:02
50262532009	MW-09_WG_200715	Water	07/15/20 11:56	07/17/20 08:02
50262532010	MW-09D_WG_200716	Water	07/16/20 11:38	07/17/20 08:02
50262532011	MW-10_WG_200716	Water	07/16/20 12:37	07/17/20 08:02
50262532012	MW-11_WG_200714	Water	07/14/20 12:11	07/17/20 08:02
50262532013	MW-12_WG_200714	Water	07/14/20 12:12	07/17/20 08:02
50262532014	MW-13_WG_200716	Water	07/16/20 11:33	07/17/20 08:02
50262532015	MW-14_WG_200715	Water	07/15/20 16:49	07/17/20 08:02
50262532016	MW-15_WG_200715	Water	07/15/20 16:42	07/17/20 08:02
50262532017	MW-15D_WG_200716	Water	07/16/20 13:01	07/17/20 08:02
50262532018	MW-16_WG_200715	Water	07/16/20 14:20	07/17/20 08:02
50262532019	MW-17_WG_200715	Water	07/15/20 11:39	07/17/20 08:02
50262532020	MW-18_WG_200716	Water	07/16/20 13:31	07/17/20 08:02
50262532021	MW-19_WG_200715	Water	07/15/20 10:48	07/17/20 08:02
50262532022	MW-20_WG_200715	Water	07/15/20 15:42	07/17/20 08:02
50262532023	MW-21_WG_200714	Water	07/14/20 13:21	07/17/20 08:02
50262532024	MW-22_WG_200715	Water	07/15/20 14:26	07/17/20 08:02
50262532025	MW-23_WG_200714	Water	07/14/20 13:06	07/17/20 08:02
50262532026	MW-24_WG_200715	Water	07/15/20 15:31	07/17/20 08:02
50262532027	MW-25_WG_200714	Water	07/14/20 14:12	07/17/20 08:02
50262532028	MW-26_WG_200715	Water	07/15/20 13:03	07/17/20 08:02
50262532029	MW-27_WG_200714	Water	07/14/20 14:26	07/17/20 08:02
50262532030	MW-28_WG_200714	Water	07/14/20 15:32	07/17/20 08:02
50262532031	MW-29_WG_200714	Water	07/14/20 16:07	07/17/20 08:02
50262532032	TB-01_WD_200713	Water	07/13/20 00:00	07/17/20 08:02
50262532033	Dup-01_WG_200715	Water	07/15/20 00:00	07/17/20 08:02
50262532034	Dup-02_WG_200715	Water	07/15/20 00:00	07/17/20 08:02
50262532035	EQB-01_WD_200716	Water	07/16/20 12:15	07/17/20 08:02
50262532036	EQB-02_WD_200716	Water	07/16/20 13:15	07/17/20 08:02

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SAMPLE ANALYTE COUNT

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50262532001	MW-01_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532002	MW-02_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532003	MW-03_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532004	MW-04_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532005	MW-05_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532006	MW-06_WG_200716	EPA 5030/8260	TMW	75	PASI-I
50262532007	MW-07_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532008	MW-08_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532009	MW-09_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532010	MW-09D_WG_200716	EPA 5030/8260	TMW	75	PASI-I
50262532011	MW-10_WG_200716	EPA 5030/8260	TMW	75	PASI-I
50262532012	MW-11_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532013	MW-12_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532014	MW-13_WG_200716	EPA 5030/8260	TMW	75	PASI-I
50262532015	MW-14_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532016	MW-15_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532017	MW-15D_WG_200716	EPA 5030/8260	TMW	75	PASI-I
50262532018	MW-16_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532019	MW-17_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532020	MW-18_WG_200716	EPA 5030/8260	TMW	75	PASI-I
50262532021	MW-19_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532022	MW-20_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532023	MW-21_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532024	MW-22_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532025	MW-23_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532026	MW-24_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532027	MW-25_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532028	MW-26_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532029	MW-27_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532030	MW-28_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532031	MW-29_WG_200714	EPA 5030/8260	TMW	75	PASI-I
50262532032	TB-01_WD_200713	EPA 5030/8260	TMW	75	PASI-I
50262532033	Dup-01_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532034	Dup-02_WG_200715	EPA 5030/8260	TMW	75	PASI-I
50262532035	EQB-01_WD_200716	EPA 5030/8260	TMW	75	PASI-I
50262532036	EQB-02_WD_200716	EPA 5030/8260	TMW	75	PASI-I

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SAMPLE ANALYTE COUNT

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory

PASI-I = Pace Analytical Services - Indianapolis

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SUMMARY OF DETECTION

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50262532001	**MW-01_WG_200715**					
EPA 5030/8260	2-Butanone (MEK)	62.0	ug/L	25.0	07/21/20 05:03	
EPA 5030/8260	cis-1,2-Dichloroethene	6.5	ug/L	5.0	07/21/20 05:03	
EPA 5030/8260	Tetrachloroethene	30.1	ug/L	5.0	07/21/20 05:03	
50262532004	**MW-04_WG_200714**					
EPA 5030/8260	Tetrachloroethene	24.2	ug/L	5.0	07/21/20 07:56	
50262532006	**MW-06_WG_200716**					
EPA 5030/8260	Tetrachloroethene	33.0	ug/L	5.0	07/21/20 09:06	
50262532014	**MW-13_WG_200716**					
EPA 5030/8260	Tetrachloroethene	18.0	ug/L	5.0	07/22/20 14:53	
50262532015	**MW-14_WG_200715**					
EPA 5030/8260	Tetrachloroethene	8.3	ug/L	5.0	07/22/20 15:28	
50262532019	**MW-17_WG_200715**					
EPA 5030/8260	Tetrachloroethene	13.8	ug/L	5.0	07/22/20 12:52	
50262532020	**MW-18_WG_200716**					
EPA 5030/8260	Tetrachloroethene	16.7	ug/L	5.0	07/22/20 13:26	
50262532022	**MW-20_WG_200715**					
EPA 5030/8260	Tetrachloroethene	6.4	ug/L	5.0	07/22/20 14:36	
50262532024	**MW-22_WG_200715**					
EPA 5030/8260	Tetrachloroethene	53.1	ug/L	5.0	07/22/20 15:45	
50262532028	**MW-26_WG_200715**					
EPA 5030/8260	Tetrachloroethene	59.2	ug/L	5.0	07/22/20 18:05	
50262532030	**MW-28_WG_200714**					
EPA 5030/8260	Tetrachloroethene	9.1	ug/L	5.0	07/22/20 17:48	

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PROJECT NARRATIVE

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Method: **EPA 5030/8260**
Description: 8260 MSV Indiana
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

General Information:
36 samples were analyzed for EPA 5030/8260 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 573142

S2: Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

- Dup-02_WG_200715 (Lab ID: 50262532034)
  - 4-Bromofluorobenzene (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 573141

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 2643319)
  - 1,2,4-Trichlorobenzene

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 573141

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50262532016

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MSD (Lab ID: 2643321)

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PROJECT NARRATIVE

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Method: **EPA 5030/8260**
Description: 8260 MSV Indiana
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

QC Batch: 573141

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50262532016

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- 1,2,4-Trichlorobenzene

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2643320)
  - 1-Methylnaphthalene
  - 2-Methylnaphthalene
- MSD (Lab ID: 2643321)
  - 1,2,3-Trichlorobenzene
  - 1-Methylnaphthalene
  - 2-Methylnaphthalene
  - Naphthalene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2643321)
  - 1,1,1-Trichloroethane
  - 1,1-Dichloroethene
  - 1,1-Dichloropropene
  - 1,2,3-Trichlorobenzene
  - 1,2,4-Trichlorobenzene
  - 1,2,4-Trimethylbenzene
  - 1,2-Dichlorobenzene
  - 1,3,5-Trimethylbenzene
  - 1,3-Dichlorobenzene
  - 1,4-Dichlorobenzene
  - 2,2-Dichloropropane
  - Carbon disulfide
  - Carbon tetrachloride
  - Chloroethane
  - Chloromethane
  - Dichlorodifluoromethane
  - Hexachloro-1,3-butadiene
  - Iodomethane
  - Naphthalene
  - Tetrachloroethene
  - Trichloroethene
  - Trichlorofluoromethane
  - Vinyl chloride
  - n-Butylbenzene
  - n-Hexane
  - p-Isopropyltoluene
  - sec-Butylbenzene
  - trans-1,2-Dichloroethene

Additional Comments:

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PROJECT NARRATIVE

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Method: **EPA 5030/8260**
Description: 8260 MSV Indiana
Client: Wilcox Environmental Engineering, Inc.
Date: July 23, 2020

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-01_WG_200715 **Lab ID: 50262532001** Collected: 07/15/20 10:37 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 05:03	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 05:03	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 05:03	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 05:03	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 05:03	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 05:03	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 05:03	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 05:03	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 05:03	74-83-9	
2-Butanone (MEK)	**62.0**	ug/L	25.0	1		07/21/20 05:03	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 05:03	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 05:03	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 05:03	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 05:03	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 05:03	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 05:03	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 05:03	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 05:03	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 05:03	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 05:03	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 05:03	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 05:03	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 05:03	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 05:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 05:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 05:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 05:03	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 05:03	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 05:03	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 05:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 05:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 05:03	75-35-4	
cis-1,2-Dichloroethene	**6.5**	ug/L	5.0	1		07/21/20 05:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 05:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 05:03	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 05:03	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 05:03	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 05:03	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 05:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 05:03	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 05:03	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 05:03	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 05:03	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 05:03	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 05:03	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 05:03	74-88-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-01_WG_200715 **Lab ID: 50262532001** Collected: 07/15/20 10:37 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 05:03	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 05:03	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 05:03	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 05:03	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 05:03	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 05:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 05:03	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 05:03	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 05:03	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 05:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 05:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 05:03	79-34-5	
Tetrachloroethene	**30.1**	ug/L	5.0	1		07/21/20 05:03	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 05:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 05:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 05:03	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 05:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 05:03	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 05:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 05:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 05:03	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 05:03	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 05:03	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 05:03	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 05:03	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 05:03	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	75-120	1		07/21/20 05:03	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-116	1		07/21/20 05:03	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/21/20 05:03	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-02_WG_200714 **Lab ID: 50262532002** Collected: 07/14/20 10:34 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 05:38	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 05:38	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 05:38	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 05:38	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 05:38	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 05:38	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 05:38	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 05:38	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 05:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/21/20 05:38	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 05:38	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 05:38	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 05:38	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 05:38	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 05:38	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 05:38	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 05:38	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 05:38	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 05:38	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 05:38	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 05:38	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 05:38	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 05:38	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 05:38	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 05:38	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 05:38	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 05:38	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 05:38	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 05:38	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 05:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 05:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 05:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 05:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 05:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 05:38	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 05:38	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 05:38	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 05:38	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 05:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 05:38	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 05:38	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 05:38	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 05:38	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 05:38	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 05:38	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 05:38	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-02_WG_200714 **Lab ID: 50262532002** Collected: 07/14/20 10:34 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 05:38	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 05:38	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 05:38	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 05:38	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 05:38	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 05:38	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 05:38	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 05:38	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 05:38	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 05:38	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 05:38	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 05:38	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/21/20 05:38	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 05:38	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 05:38	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 05:38	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 05:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 05:38	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 05:38	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 05:38	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 05:38	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 05:38	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 05:38	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 05:38	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 05:38	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 05:38	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	75-120	1		07/21/20 05:38	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-116	1		07/21/20 05:38	460-00-4	
Toluene-d8 (S)	98	%.	83-111	1		07/21/20 05:38	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-03_WG_200714 **Lab ID: 50262532003** Collected: 07/14/20 10:29 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 07:22	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 07:22	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 07:22	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 07:22	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 07:22	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 07:22	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 07:22	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 07:22	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 07:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/21/20 07:22	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 07:22	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 07:22	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 07:22	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 07:22	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 07:22	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 07:22	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 07:22	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 07:22	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 07:22	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 07:22	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 07:22	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 07:22	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 07:22	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 07:22	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 07:22	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 07:22	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 07:22	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 07:22	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 07:22	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 07:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 07:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 07:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 07:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 07:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 07:22	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 07:22	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 07:22	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 07:22	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 07:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 07:22	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 07:22	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 07:22	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 07:22	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 07:22	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 07:22	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 07:22	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-03_WG_200714 **Lab ID: 50262532003** Collected: 07/14/20 10:29 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 07:22	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 07:22	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 07:22	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 07:22	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 07:22	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 07:22	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 07:22	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 07:22	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 07:22	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 07:22	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 07:22	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 07:22	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/21/20 07:22	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 07:22	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 07:22	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 07:22	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 07:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 07:22	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 07:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 07:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 07:22	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 07:22	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 07:22	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 07:22	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 07:22	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 07:22	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	75-120	1		07/21/20 07:22	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-116	1		07/21/20 07:22	460-00-4	
Toluene-d8 (S)	98	%.	83-111	1		07/21/20 07:22	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-04_WG_200714 **Lab ID: 50262532004** Collected: 07/14/20 16:31 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 07:56	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 07:56	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 07:56	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 07:56	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 07:56	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 07:56	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 07:56	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 07:56	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 07:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/21/20 07:56	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 07:56	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 07:56	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 07:56	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 07:56	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 07:56	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 07:56	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 07:56	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 07:56	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 07:56	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 07:56	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 07:56	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 07:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 07:56	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 07:56	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 07:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 07:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 07:56	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 07:56	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 07:56	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 07:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 07:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 07:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 07:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 07:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 07:56	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 07:56	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 07:56	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 07:56	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 07:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 07:56	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 07:56	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 07:56	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 07:56	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 07:56	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 07:56	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 07:56	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-04_WG_200714 **Lab ID: 50262532004** Collected: 07/14/20 16:31 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 07:56	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 07:56	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 07:56	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 07:56	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 07:56	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 07:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 07:56	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 07:56	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 07:56	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 07:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 07:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 07:56	79-34-5	
Tetrachloroethene	**24.2**	ug/L	5.0	1		07/21/20 07:56	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 07:56	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 07:56	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 07:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 07:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 07:56	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 07:56	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 07:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 07:56	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 07:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 07:56	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 07:56	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 07:56	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 07:56	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	75-120	1		07/21/20 07:56	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-116	1		07/21/20 07:56	460-00-4	
Toluene-d8 (S)	98	%.	83-111	1		07/21/20 07:56	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-05_WG_200714 **Lab ID: 50262532005** Collected: 07/14/20 11:20 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 08:31	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 08:31	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 08:31	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 08:31	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 08:31	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 08:31	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 08:31	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 08:31	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 08:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/21/20 08:31	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 08:31	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 08:31	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 08:31	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 08:31	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 08:31	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 08:31	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 08:31	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 08:31	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 08:31	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 08:31	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 08:31	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 08:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 08:31	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 08:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 08:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 08:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 08:31	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 08:31	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 08:31	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 08:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 08:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 08:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 08:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 08:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 08:31	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 08:31	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 08:31	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 08:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 08:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 08:31	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 08:31	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 08:31	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 08:31	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 08:31	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 08:31	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 08:31	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
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(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-05_WG_200714 **Lab ID: 50262532005** Collected: 07/14/20 11:20 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 08:31	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 08:31	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 08:31	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 08:31	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 08:31	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 08:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 08:31	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 08:31	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 08:31	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 08:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 08:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 08:31	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/21/20 08:31	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 08:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 08:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 08:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 08:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 08:31	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 08:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 08:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 08:31	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 08:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 08:31	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 08:31	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 08:31	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 08:31	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	75-120	1		07/21/20 08:31	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-116	1		07/21/20 08:31	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/21/20 08:31	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
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(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-06_WG_200716 **Lab ID: 50262532006** Collected: 07/16/20 10:42 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 09:06	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 09:06	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 09:06	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 09:06	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 09:06	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 09:06	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 09:06	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 09:06	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 09:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/21/20 09:06	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 09:06	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 09:06	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 09:06	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 09:06	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 09:06	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 09:06	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 09:06	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 09:06	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 09:06	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 09:06	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 09:06	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 09:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 09:06	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 09:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 09:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 09:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 09:06	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 09:06	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 09:06	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 09:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 09:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 09:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 09:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 09:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 09:06	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 09:06	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 09:06	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 09:06	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 09:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 09:06	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 09:06	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 09:06	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 09:06	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 09:06	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 09:06	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 09:06	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-06_WG_200716 **Lab ID: 50262532006** Collected: 07/16/20 10:42 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 09:06	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 09:06	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 09:06	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 09:06	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 09:06	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 09:06	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 09:06	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 09:06	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 09:06	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 09:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 09:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 09:06	79-34-5	
Tetrachloroethene	**33.0**	ug/L	5.0	1		07/21/20 09:06	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 09:06	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 09:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 09:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 09:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 09:06	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 09:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 09:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 09:06	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 09:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 09:06	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 09:06	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 09:06	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 09:06	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	75-120	1		07/21/20 09:06	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-116	1		07/21/20 09:06	460-00-4	
Toluene-d8 (S)	98	%.	83-111	1		07/21/20 09:06	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-07_WG_200714 **Lab ID: 50262532007** Collected: 07/14/20 11:25 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 09:41	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 09:41	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 09:41	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 09:41	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 09:41	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 09:41	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 09:41	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 09:41	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 09:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/21/20 09:41	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 09:41	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 09:41	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 09:41	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 09:41	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 09:41	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 09:41	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 09:41	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 09:41	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 09:41	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 09:41	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 09:41	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 09:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 09:41	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 09:41	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 09:41	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 09:41	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 09:41	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 09:41	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 09:41	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 09:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 09:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 09:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 09:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 09:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 09:41	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 09:41	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 09:41	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 09:41	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 09:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 09:41	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 09:41	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 09:41	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 09:41	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 09:41	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 09:41	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 09:41	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-07_WG_200714 **Lab ID: 50262532007** Collected: 07/14/20 11:25 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 09:41	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 09:41	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 09:41	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 09:41	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 09:41	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 09:41	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 09:41	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 09:41	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 09:41	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 09:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 09:41	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 09:41	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/21/20 09:41	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 09:41	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 09:41	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 09:41	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 09:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 09:41	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 09:41	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 09:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 09:41	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 09:41	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 09:41	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 09:41	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 09:41	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 09:41	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	75-120	1		07/21/20 09:41	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-116	1		07/21/20 09:41	460-00-4	
Toluene-d8 (S)	97	%.	83-111	1		07/21/20 09:41	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-08_WG_200715 **Lab ID: 50262532008** Collected: 07/15/20 12:47 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 10:16	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 10:16	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 10:16	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 10:16	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 10:16	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 10:16	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 10:16	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 10:16	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 10:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/21/20 10:16	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 10:16	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 10:16	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 10:16	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 10:16	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 10:16	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 10:16	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 10:16	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 10:16	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 10:16	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 10:16	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 10:16	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 10:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 10:16	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 10:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 10:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 10:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 10:16	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 10:16	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 10:16	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 10:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 10:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 10:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 10:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 10:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 10:16	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 10:16	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 10:16	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 10:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 10:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 10:16	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 10:16	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 10:16	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 10:16	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 10:16	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 10:16	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 10:16	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-08_WG_200715 **Lab ID: 50262532008** Collected: 07/15/20 12:47 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 10:16	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 10:16	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 10:16	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 10:16	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 10:16	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 10:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 10:16	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 10:16	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 10:16	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 10:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 10:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 10:16	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/21/20 10:16	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 10:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 10:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 10:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 10:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 10:16	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 10:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 10:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 10:16	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 10:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 10:16	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 10:16	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 10:16	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 10:16	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	75-120	1		07/21/20 10:16	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-116	1		07/21/20 10:16	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/21/20 10:16	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-09_WG_200715 **Lab ID: 50262532009** Collected: 07/15/20 11:56 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 16:21	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 16:21	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 16:21	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 16:21	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 16:21	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 16:21	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 16:21	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 16:21	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 16:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/21/20 16:21	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 16:21	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 16:21	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 16:21	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 16:21	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 16:21	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 16:21	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 16:21	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 16:21	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 16:21	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 16:21	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 16:21	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 16:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 16:21	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 16:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 16:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 16:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 16:21	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 16:21	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 16:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 16:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 16:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 16:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 16:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 16:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 16:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 16:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 16:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 16:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 16:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 16:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 16:21	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 16:21	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 16:21	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 16:21	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 16:21	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 16:21	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-09_WG_200715 **Lab ID: 50262532009** Collected: 07/15/20 11:56 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 16:21	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 16:21	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 16:21	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 16:21	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 16:21	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 16:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 16:21	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 16:21	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 16:21	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 16:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 16:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 16:21	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/21/20 16:21	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 16:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 16:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 16:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 16:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 16:21	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 16:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 16:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 16:21	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 16:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 16:21	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 16:21	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 16:21	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 16:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	75-120	1		07/21/20 16:21	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/21/20 16:21	460-00-4	
Toluene-d8 (S)	100	%.	83-111	1		07/21/20 16:21	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-09D_WG_200716 **Lab ID: 50262532010** Collected: 07/16/20 11:38 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 17:13	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 17:13	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 17:13	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 17:13	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 17:13	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 17:13	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 17:13	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 17:13	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 17:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/21/20 17:13	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 17:13	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 17:13	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 17:13	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 17:13	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 17:13	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 17:13	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 17:13	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 17:13	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 17:13	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 17:13	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 17:13	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 17:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 17:13	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 17:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 17:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 17:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 17:13	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 17:13	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 17:13	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 17:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 17:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 17:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 17:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 17:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 17:13	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 17:13	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 17:13	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 17:13	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 17:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 17:13	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 17:13	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 17:13	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 17:13	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 17:13	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 17:13	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 17:13	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-09D_WG_200716 **Lab ID: 50262532010** Collected: 07/16/20 11:38 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 17:13	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 17:13	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 17:13	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 17:13	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 17:13	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 17:13	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 17:13	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 17:13	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 17:13	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 17:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 17:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 17:13	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/21/20 17:13	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 17:13	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 17:13	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 17:13	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 17:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 17:13	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 17:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 17:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 17:13	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 17:13	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 17:13	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 17:13	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 17:13	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 17:13	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	75-120	1		07/21/20 17:13	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-116	1		07/21/20 17:13	460-00-4	
Toluene-d8 (S)	97	%.	83-111	1		07/21/20 17:13	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-10_WG_200716 **Lab ID: 50262532011** Collected: 07/16/20 12:37 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/21/20 18:04	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/21/20 18:04	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/21/20 18:04	107-13-1	
Benzene	ND	ug/L	5.0	1		07/21/20 18:04	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/21/20 18:04	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/21/20 18:04	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/21/20 18:04	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/21/20 18:04	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/21/20 18:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/21/20 18:04	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/21/20 18:04	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/21/20 18:04	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/21/20 18:04	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/21/20 18:04	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/21/20 18:04	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/21/20 18:04	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/21/20 18:04	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/21/20 18:04	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/21/20 18:04	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 18:04	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/21/20 18:04	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/21/20 18:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/21/20 18:04	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/21/20 18:04	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 18:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 18:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/21/20 18:04	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/21/20 18:04	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/21/20 18:04	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/21/20 18:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/21/20 18:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/21/20 18:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 18:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/21/20 18:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 18:04	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/21/20 18:04	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/21/20 18:04	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/21/20 18:04	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 18:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/21/20 18:04	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/21/20 18:04	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/21/20 18:04	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/21/20 18:04	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/21/20 18:04	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/21/20 18:04	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/21/20 18:04	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-10_WG_200716 **Lab ID: 50262532011** Collected: 07/16/20 12:37 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/21/20 18:04	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/21/20 18:04	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/21/20 18:04	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 18:04	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/21/20 18:04	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/21/20 18:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/21/20 18:04	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/21/20 18:04	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/21/20 18:04	103-65-1	
Styrene	ND	ug/L	5.0	1		07/21/20 18:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 18:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/21/20 18:04	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/21/20 18:04	127-18-4	
Toluene	ND	ug/L	5.0	1		07/21/20 18:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 18:04	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/21/20 18:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/21/20 18:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/21/20 18:04	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/21/20 18:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/21/20 18:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/21/20 18:04	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 18:04	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/21/20 18:04	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/21/20 18:04	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/21/20 18:04	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/21/20 18:04	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	75-120	1		07/21/20 18:04	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-116	1		07/21/20 18:04	460-00-4	
Toluene-d8 (S)	98	%.	83-111	1		07/21/20 18:04	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-11_WG_200714 **Lab ID: 50262532012** Collected: 07/14/20 12:11 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 10:50	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 10:50	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 10:50	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 10:50	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 10:50	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 10:50	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 10:50	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 10:50	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 10:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 10:50	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 10:50	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 10:50	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 10:50	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 10:50	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 10:50	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 10:50	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 10:50	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 10:50	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 10:50	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 10:50	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 10:50	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 10:50	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 10:50	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 10:50	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 10:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 10:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 10:50	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 10:50	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 10:50	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 10:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 10:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 10:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 10:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 10:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 10:50	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 10:50	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 10:50	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 10:50	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 10:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 10:50	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 10:50	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 10:50	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 10:50	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 10:50	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 10:50	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 10:50	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-11_WG_200714 **Lab ID: 50262532012** Collected: 07/14/20 12:11 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 10:50	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 10:50	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 10:50	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 10:50	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 10:50	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 10:50	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 10:50	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 10:50	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 10:50	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 10:50	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 10:50	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 10:50	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 10:50	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 10:50	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 10:50	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 10:50	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 10:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 10:50	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 10:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 10:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 10:50	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 10:50	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 10:50	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 10:50	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 10:50	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 10:50	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	75-120	1		07/22/20 10:50	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/22/20 10:50	460-00-4	
Toluene-d8 (S)	97	%.	83-111	1		07/22/20 10:50	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-12_WG_200714 **Lab ID: 50262532013** Collected: 07/14/20 12:12 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 13:44	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 13:44	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 13:44	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 13:44	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 13:44	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 13:44	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 13:44	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 13:44	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 13:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 13:44	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 13:44	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 13:44	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 13:44	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 13:44	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 13:44	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 13:44	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 13:44	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 13:44	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 13:44	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 13:44	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 13:44	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 13:44	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 13:44	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 13:44	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:44	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 13:44	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 13:44	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 13:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 13:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 13:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 13:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 13:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 13:44	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 13:44	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 13:44	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 13:44	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 13:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 13:44	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 13:44	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 13:44	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 13:44	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 13:44	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 13:44	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 13:44	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-12_WG_200714 **Lab ID: 50262532013** Collected: 07/14/20 12:12 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 13:44	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 13:44	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 13:44	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 13:44	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 13:44	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 13:44	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 13:44	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 13:44	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 13:44	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 13:44	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 13:44	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 13:44	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 13:44	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 13:44	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:44	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:44	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 13:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 13:44	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 13:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 13:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 13:44	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 13:44	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 13:44	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 13:44	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 13:44	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 13:44	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	75-120	1		07/22/20 13:44	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/22/20 13:44	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/22/20 13:44	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-13_WG_200716 **Lab ID: 50262532014** Collected: 07/16/20 11:33 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 14:53	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 14:53	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 14:53	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 14:53	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 14:53	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 14:53	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 14:53	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 14:53	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 14:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 14:53	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:53	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:53	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:53	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 14:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 14:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 14:53	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 14:53	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 14:53	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 14:53	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 14:53	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 14:53	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 14:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 14:53	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 14:53	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:53	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 14:53	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 14:53	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 14:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 14:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:53	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:53	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:53	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:53	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 14:53	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 14:53	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 14:53	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 14:53	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 14:53	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 14:53	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-13_WG_200716 **Lab ID: 50262532014** Collected: 07/16/20 11:33 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 14:53	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 14:53	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 14:53	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 14:53	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 14:53	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 14:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 14:53	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 14:53	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 14:53	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 14:53	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 14:53	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 14:53	79-34-5	
Tetrachloroethene	**18.0**	ug/L	5.0	1		07/22/20 14:53	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 14:53	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:53	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 14:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 14:53	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 14:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 14:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 14:53	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 14:53	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 14:53	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 14:53	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 14:53	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 14:53	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	75-120	1		07/22/20 14:53	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-116	1		07/22/20 14:53	460-00-4	
Toluene-d8 (S)	98	%.	83-111	1		07/22/20 14:53	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-14_WG_200715 **Lab ID: 50262532015** Collected: 07/15/20 16:49 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 15:28	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 15:28	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 15:28	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 15:28	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 15:28	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 15:28	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 15:28	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 15:28	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 15:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 15:28	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 15:28	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 15:28	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 15:28	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 15:28	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 15:28	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 15:28	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 15:28	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 15:28	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 15:28	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 15:28	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 15:28	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 15:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 15:28	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 15:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:28	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 15:28	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 15:28	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 15:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 15:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 15:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 15:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 15:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 15:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 15:28	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 15:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 15:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 15:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 15:28	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 15:28	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 15:28	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 15:28	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 15:28	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 15:28	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 15:28	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-14_WG_200715 **Lab ID: 50262532015** Collected: 07/15/20 16:49 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 15:28	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 15:28	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 15:28	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 15:28	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 15:28	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 15:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 15:28	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 15:28	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 15:28	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 15:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 15:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 15:28	79-34-5	
Tetrachloroethene	**8.3**	ug/L	5.0	1		07/22/20 15:28	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 15:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:28	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 15:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 15:28	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 15:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 15:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 15:28	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 15:28	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 15:28	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 15:28	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 15:28	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 15:28	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	75-120	1		07/22/20 15:28	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-116	1		07/22/20 15:28	460-00-4	
Toluene-d8 (S)	95	%.	83-111	1		07/22/20 15:28	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-15_WG_200715 **Lab ID: 50262532016** Collected: 07/15/20 16:42 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 09:48	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 09:48	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 09:48	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 09:48	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 09:48	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 09:48	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 09:48	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 09:48	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 09:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 09:48	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 09:48	104-51-8	R1
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 09:48	135-98-8	R1
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 09:48	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 09:48	75-15-0	R1
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 09:48	56-23-5	R1
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 09:48	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 09:48	75-00-3	R1
Chloroform	ND	ug/L	5.0	1		07/22/20 09:48	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 09:48	74-87-3	R1
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 09:48	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 09:48	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 09:48	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 09:48	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 09:48	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 09:48	95-50-1	R1
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 09:48	541-73-1	R1
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 09:48	106-46-7	R1
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 09:48	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 09:48	75-71-8	R1
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 09:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 09:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 09:48	75-35-4	R1
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 09:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 09:48	156-60-5	R1
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 09:48	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 09:48	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 09:48	594-20-7	R1
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 09:48	563-58-6	R1
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 09:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 09:48	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 09:48	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 09:48	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 09:48	87-68-3	R1
n-Hexane	ND	ug/L	5.0	1		07/22/20 09:48	110-54-3	R1
2-Hexanone	ND	ug/L	25.0	1		07/22/20 09:48	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 09:48	74-88-4	R1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-15_WG_200715 **Lab ID: 50262532016** Collected: 07/15/20 16:42 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 09:48	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 09:48	99-87-6	R1
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 09:48	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 09:48	90-12-0	M1
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 09:48	91-57-6	M1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 09:48	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 09:48	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 09:48	91-20-3	M1,R1
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 09:48	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 09:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 09:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 09:48	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 09:48	127-18-4	R1
Toluene	ND	ug/L	5.0	1		07/22/20 09:48	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 09:48	87-61-6	M1,R1
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 09:48	120-82-1	L2,M0,R1
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 09:48	71-55-6	R1
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 09:48	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 09:48	79-01-6	R1
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 09:48	75-69-4	R1
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 09:48	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 09:48	95-63-6	R1
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 09:48	108-67-8	R1
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 09:48	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 09:48	75-01-4	R1
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 09:48	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108	%.	75-120	1		07/22/20 09:48	1868-53-7	
4-Bromofluorobenzene (S)	97	%.	85-116	1		07/22/20 09:48	460-00-4	
Toluene-d8 (S)	97	%.	83-111	1		07/22/20 09:48	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-15D_WG_200716 **Lab ID: 50262532017** Collected: 07/16/20 13:01 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 11:43	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 11:43	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 11:43	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 11:43	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 11:43	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 11:43	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 11:43	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 11:43	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 11:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 11:43	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 11:43	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 11:43	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 11:43	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 11:43	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 11:43	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 11:43	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 11:43	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 11:43	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 11:43	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 11:43	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 11:43	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 11:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 11:43	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 11:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 11:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 11:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 11:43	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 11:43	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 11:43	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 11:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 11:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 11:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 11:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 11:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 11:43	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 11:43	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 11:43	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 11:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 11:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 11:43	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 11:43	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 11:43	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 11:43	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 11:43	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 11:43	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 11:43	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-15D_WG_200716 **Lab ID: 50262532017** Collected: 07/16/20 13:01 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
	Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 11:43	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 11:43	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 11:43	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 11:43	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 11:43	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 11:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 11:43	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 11:43	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 11:43	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 11:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 11:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 11:43	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 11:43	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 11:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 11:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 11:43	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 11:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 11:43	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 11:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 11:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 11:43	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 11:43	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 11:43	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 11:43	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 11:43	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 11:43	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108	%.	75-120	1		07/22/20 11:43	1868-53-7	
4-Bromofluorobenzene (S)	104	%.	85-116	1		07/22/20 11:43	460-00-4	
Toluene-d8 (S)	100	%.	83-111	1		07/22/20 11:43	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-16_WG_200715 **Lab ID: 50262532018** Collected: 07/16/20 14:20 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 12:17	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 12:17	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 12:17	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 12:17	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 12:17	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 12:17	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 12:17	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 12:17	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 12:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 12:17	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:17	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:17	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:17	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 12:17	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 12:17	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 12:17	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 12:17	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 12:17	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 12:17	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 12:17	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 12:17	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 12:17	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 12:17	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 12:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:17	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 12:17	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 12:17	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 12:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 12:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:17	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:17	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:17	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:17	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:17	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 12:17	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 12:17	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 12:17	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 12:17	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 12:17	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 12:17	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-16_WG_200715 **Lab ID: 50262532018** Collected: 07/16/20 14:20 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 12:17	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 12:17	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 12:17	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 12:17	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 12:17	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 12:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 12:17	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 12:17	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 12:17	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 12:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 12:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 12:17	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 12:17	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 12:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:17	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 12:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 12:17	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 12:17	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 12:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 12:17	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 12:17	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 12:17	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 12:17	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 12:17	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 12:17	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	75-120	1		07/22/20 12:17	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-116	1		07/22/20 12:17	460-00-4	
Toluene-d8 (S)	98	%.	83-111	1		07/22/20 12:17	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-17_WG_200715 **Lab ID: 50262532019** Collected: 07/15/20 11:39 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 12:52	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 12:52	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 12:52	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 12:52	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 12:52	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 12:52	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 12:52	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 12:52	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 12:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 12:52	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:52	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:52	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:52	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 12:52	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 12:52	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 12:52	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 12:52	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 12:52	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 12:52	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 12:52	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 12:52	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 12:52	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 12:52	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 12:52	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:52	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 12:52	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 12:52	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 12:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 12:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:52	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:52	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:52	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:52	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:52	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 12:52	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 12:52	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 12:52	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 12:52	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 12:52	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 12:52	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-17_WG_200715 **Lab ID: 50262532019** Collected: 07/15/20 11:39 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
	Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 12:52	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 12:52	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 12:52	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 12:52	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 12:52	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 12:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 12:52	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 12:52	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 12:52	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 12:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 12:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 12:52	79-34-5	
Tetrachloroethene	**13.8**	ug/L	5.0	1		07/22/20 12:52	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 12:52	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:52	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:52	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 12:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 12:52	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 12:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 12:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 12:52	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 12:52	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 12:52	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 12:52	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 12:52	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 12:52	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	107	%.	75-120	1		07/22/20 12:52	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-116	1		07/22/20 12:52	460-00-4	
Toluene-d8 (S)	97	%.	83-111	1		07/22/20 12:52	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-18_WG_200716 **Lab ID: 50262532020** Collected: 07/16/20 13:31 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 13:26	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 13:26	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 13:26	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 13:26	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 13:26	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 13:26	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 13:26	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 13:26	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 13:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 13:26	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 13:26	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 13:26	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 13:26	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 13:26	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 13:26	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 13:26	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 13:26	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 13:26	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 13:26	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 13:26	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 13:26	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 13:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 13:26	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 13:26	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:26	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 13:26	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 13:26	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 13:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 13:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 13:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 13:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 13:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 13:26	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 13:26	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 13:26	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 13:26	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 13:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 13:26	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 13:26	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 13:26	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 13:26	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 13:26	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 13:26	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 13:26	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-18_WG_200716 **Lab ID: 50262532020** Collected: 07/16/20 13:31 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
	Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 13:26	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 13:26	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 13:26	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 13:26	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 13:26	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 13:26	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 13:26	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 13:26	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 13:26	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 13:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 13:26	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 13:26	79-34-5	
Tetrachloroethene	**16.7**	ug/L	5.0	1		07/22/20 13:26	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 13:26	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:26	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:26	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 13:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 13:26	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 13:26	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 13:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 13:26	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 13:26	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 13:26	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 13:26	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 13:26	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 13:26	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	75-120	1		07/22/20 13:26	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/22/20 13:26	460-00-4	
Toluene-d8 (S)	95	%.	83-111	1		07/22/20 13:26	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-19_WG_200715 **Lab ID: 50262532021** Collected: 07/15/20 10:48 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 14:01	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 14:01	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 14:01	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 14:01	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 14:01	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 14:01	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 14:01	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 14:01	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 14:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 14:01	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:01	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:01	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:01	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 14:01	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 14:01	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 14:01	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 14:01	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 14:01	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 14:01	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 14:01	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 14:01	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 14:01	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 14:01	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 14:01	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:01	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 14:01	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 14:01	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 14:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 14:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:01	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:01	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:01	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:01	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:01	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 14:01	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 14:01	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 14:01	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 14:01	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 14:01	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 14:01	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-19_WG_200715 **Lab ID: 50262532021** Collected: 07/15/20 10:48 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 14:01	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 14:01	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 14:01	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 14:01	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 14:01	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 14:01	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 14:01	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 14:01	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 14:01	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 14:01	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 14:01	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 14:01	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 14:01	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 14:01	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:01	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:01	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 14:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 14:01	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 14:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 14:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 14:01	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 14:01	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 14:01	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 14:01	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 14:01	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 14:01	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	75-120	1		07/22/20 14:01	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-116	1		07/22/20 14:01	460-00-4	
Toluene-d8 (S)	97	%.	83-111	1		07/22/20 14:01	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-20_WG_200715 **Lab ID: 50262532022** Collected: 07/15/20 15:42 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 14:36	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 14:36	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 14:36	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 14:36	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 14:36	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 14:36	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 14:36	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 14:36	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 14:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 14:36	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:36	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:36	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:36	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 14:36	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 14:36	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 14:36	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 14:36	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 14:36	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 14:36	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 14:36	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 14:36	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 14:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 14:36	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 14:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:36	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 14:36	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 14:36	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 14:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 14:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:36	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:36	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:36	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:36	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:36	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 14:36	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 14:36	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 14:36	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 14:36	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 14:36	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 14:36	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-20_WG_200715 **Lab ID: 50262532022** Collected: 07/15/20 15:42 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 14:36	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 14:36	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 14:36	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 14:36	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 14:36	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 14:36	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 14:36	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 14:36	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 14:36	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 14:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 14:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 14:36	79-34-5	
Tetrachloroethene	**6.4**	ug/L	5.0	1		07/22/20 14:36	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 14:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:36	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 14:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 14:36	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 14:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 14:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 14:36	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 14:36	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 14:36	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 14:36	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 14:36	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 14:36	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	75-120	1		07/22/20 14:36	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-116	1		07/22/20 14:36	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/22/20 14:36	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-21_WG_200714 **Lab ID: 50262532023** Collected: 07/14/20 13:21 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 15:10	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 15:10	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 15:10	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 15:10	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 15:10	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 15:10	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 15:10	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 15:10	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 15:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 15:10	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 15:10	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 15:10	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 15:10	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 15:10	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 15:10	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 15:10	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 15:10	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 15:10	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 15:10	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 15:10	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 15:10	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 15:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 15:10	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 15:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:10	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 15:10	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 15:10	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 15:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 15:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 15:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 15:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 15:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 15:10	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 15:10	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 15:10	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 15:10	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 15:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 15:10	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 15:10	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 15:10	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 15:10	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 15:10	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 15:10	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 15:10	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-21_WG_200714 **Lab ID: 50262532023** Collected: 07/14/20 13:21 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 15:10	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 15:10	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 15:10	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 15:10	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 15:10	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 15:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 15:10	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 15:10	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 15:10	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 15:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 15:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 15:10	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 15:10	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 15:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:10	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 15:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 15:10	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 15:10	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 15:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 15:10	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 15:10	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 15:10	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 15:10	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 15:10	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 15:10	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	75-120	1		07/22/20 15:10	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-116	1		07/22/20 15:10	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/22/20 15:10	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-22_WG_200715 **Lab ID: 50262532024** Collected: 07/15/20 14:26 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 15:45	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 15:45	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 15:45	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 15:45	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 15:45	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 15:45	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 15:45	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 15:45	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 15:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 15:45	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 15:45	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 15:45	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 15:45	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 15:45	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 15:45	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 15:45	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 15:45	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 15:45	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 15:45	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 15:45	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 15:45	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 15:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 15:45	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 15:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:45	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 15:45	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 15:45	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 15:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 15:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 15:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 15:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 15:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 15:45	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 15:45	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 15:45	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 15:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 15:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 15:45	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 15:45	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 15:45	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 15:45	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 15:45	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 15:45	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 15:45	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
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ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-22_WG_200715 **Lab ID: 50262532024** Collected: 07/15/20 14:26 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 15:45	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 15:45	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 15:45	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 15:45	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 15:45	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 15:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 15:45	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 15:45	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 15:45	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 15:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 15:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 15:45	79-34-5	
Tetrachloroethene	**53.1**	ug/L	5.0	1		07/22/20 15:45	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 15:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 15:45	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 15:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 15:45	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 15:45	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 15:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 15:45	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 15:45	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 15:45	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 15:45	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 15:45	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 15:45	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	75-120	1		07/22/20 15:45	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/22/20 15:45	460-00-4	
Toluene-d8 (S)	97	%.	83-111	1		07/22/20 15:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-23_WG_200714 **Lab ID: 50262532025** Collected: 07/14/20 13:06 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 16:20	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 16:20	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 16:20	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 16:20	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 16:20	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 16:20	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 16:20	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 16:20	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 16:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 16:20	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 16:20	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 16:20	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 16:20	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 16:20	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 16:20	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 16:20	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 16:20	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 16:20	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 16:20	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 16:20	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 16:20	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 16:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 16:20	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 16:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:20	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 16:20	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 16:20	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 16:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 16:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 16:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 16:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 16:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 16:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 16:20	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 16:20	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 16:20	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 16:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 16:20	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 16:20	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 16:20	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 16:20	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 16:20	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 16:20	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 16:20	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
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ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-23_WG_200714 **Lab ID: 50262532025** Collected: 07/14/20 13:06 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 16:20	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 16:20	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 16:20	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 16:20	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 16:20	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 16:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 16:20	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 16:20	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 16:20	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 16:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 16:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 16:20	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 16:20	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 16:20	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:20	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:20	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 16:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 16:20	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 16:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 16:20	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 16:20	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 16:20	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 16:20	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 16:20	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 16:20	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 16:20	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	75-120	1		07/22/20 16:20	1868-53-7	
4-Bromofluorobenzene (S)	97	%.	85-116	1		07/22/20 16:20	460-00-4	
Toluene-d8 (S)	95	%.	83-111	1		07/22/20 16:20	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
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ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-24_WG_200715 **Lab ID: 50262532026** Collected: 07/15/20 15:31 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 16:55	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 16:55	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 16:55	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 16:55	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 16:55	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 16:55	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 16:55	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 16:55	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 16:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 16:55	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 16:55	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 16:55	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 16:55	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 16:55	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 16:55	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 16:55	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 16:55	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 16:55	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 16:55	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 16:55	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 16:55	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 16:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 16:55	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 16:55	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:55	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 16:55	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 16:55	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 16:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 16:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 16:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 16:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 16:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 16:55	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 16:55	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 16:55	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 16:55	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 16:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 16:55	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 16:55	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 16:55	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 16:55	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 16:55	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 16:55	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 16:55	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-24_WG_200715 **Lab ID: 50262532026** Collected: 07/15/20 15:31 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 16:55	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 16:55	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 16:55	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 16:55	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 16:55	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 16:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 16:55	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 16:55	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 16:55	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 16:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 16:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 16:55	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 16:55	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 16:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:55	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:55	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 16:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 16:55	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 16:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 16:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 16:55	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 16:55	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 16:55	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 16:55	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 16:55	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 16:55	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	75-120	1		07/22/20 16:55	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/22/20 16:55	460-00-4	
Toluene-d8 (S)	95	%.	83-111	1		07/22/20 16:55	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-25_WG_200714 **Lab ID: 50262532027** Collected: 07/14/20 14:12 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 17:30	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 17:30	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 17:30	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 17:30	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 17:30	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 17:30	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 17:30	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 17:30	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 17:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 17:30	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 17:30	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 17:30	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 17:30	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 17:30	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 17:30	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 17:30	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 17:30	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 17:30	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 17:30	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 17:30	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 17:30	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 17:30	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 17:30	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 17:30	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:30	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 17:30	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 17:30	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 17:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 17:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 17:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 17:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 17:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 17:30	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 17:30	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 17:30	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 17:30	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 17:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 17:30	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 17:30	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 17:30	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 17:30	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 17:30	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 17:30	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 17:30	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-25_WG_200714 **Lab ID: 50262532027** Collected: 07/14/20 14:12 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 17:30	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 17:30	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 17:30	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 17:30	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 17:30	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 17:30	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 17:30	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 17:30	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 17:30	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 17:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 17:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 17:30	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 17:30	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 17:30	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:30	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:30	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 17:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 17:30	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 17:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 17:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 17:30	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 17:30	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 17:30	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 17:30	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 17:30	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 17:30	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	75-120	1		07/22/20 17:30	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-116	1		07/22/20 17:30	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/22/20 17:30	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-26_WG_200715 **Lab ID: 50262532028** Collected: 07/15/20 13:03 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 18:05	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 18:05	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 18:05	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 18:05	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 18:05	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 18:05	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 18:05	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 18:05	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 18:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 18:05	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 18:05	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 18:05	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 18:05	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 18:05	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 18:05	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 18:05	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 18:05	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 18:05	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 18:05	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 18:05	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 18:05	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 18:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 18:05	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 18:05	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 18:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 18:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 18:05	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 18:05	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 18:05	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 18:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 18:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 18:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 18:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 18:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 18:05	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 18:05	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 18:05	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 18:05	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 18:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 18:05	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 18:05	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 18:05	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 18:05	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 18:05	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 18:05	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 18:05	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-26_WG_200715 **Lab ID: 50262532028** Collected: 07/15/20 13:03 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260							
	Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 18:05	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 18:05	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 18:05	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 18:05	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 18:05	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 18:05	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 18:05	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 18:05	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 18:05	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 18:05	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 18:05	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 18:05	79-34-5	
Tetrachloroethene	**59.2**	ug/L	5.0	1		07/22/20 18:05	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 18:05	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 18:05	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 18:05	120-82-1	L2
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 18:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 18:05	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 18:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 18:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 18:05	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 18:05	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 18:05	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 18:05	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 18:05	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 18:05	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	75-120	1		07/22/20 18:05	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/22/20 18:05	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/22/20 18:05	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-27_WG_200714 **Lab ID: 50262532029** Collected: 07/14/20 14:26 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 17:13	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 17:13	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 17:13	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 17:13	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 17:13	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 17:13	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 17:13	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 17:13	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 17:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 17:13	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 17:13	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 17:13	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 17:13	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 17:13	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 17:13	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 17:13	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 17:13	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 17:13	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 17:13	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 17:13	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 17:13	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 17:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 17:13	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 17:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:13	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 17:13	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 17:13	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 17:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 17:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 17:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 17:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 17:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 17:13	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 17:13	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 17:13	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 17:13	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 17:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 17:13	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 17:13	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 17:13	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 17:13	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 17:13	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 17:13	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 17:13	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-27_WG_200714 **Lab ID: 50262532029** Collected: 07/14/20 14:26 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 17:13	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 17:13	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 17:13	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 17:13	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 17:13	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 17:13	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 17:13	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 17:13	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 17:13	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 17:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 17:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 17:13	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 17:13	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 17:13	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:13	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:13	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 17:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 17:13	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 17:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 17:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 17:13	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 17:13	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 17:13	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 17:13	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 17:13	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 17:13	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	75-120	1		07/22/20 17:13	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/22/20 17:13	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/22/20 17:13	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-28_WG_200714 **Lab ID: 50262532030** Collected: 07/14/20 15:32 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 17:48	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 17:48	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 17:48	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 17:48	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 17:48	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 17:48	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 17:48	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 17:48	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 17:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 17:48	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 17:48	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 17:48	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 17:48	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 17:48	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 17:48	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 17:48	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 17:48	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 17:48	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 17:48	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 17:48	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 17:48	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 17:48	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 17:48	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 17:48	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:48	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 17:48	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 17:48	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 17:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 17:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 17:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 17:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 17:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 17:48	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 17:48	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 17:48	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 17:48	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 17:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 17:48	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 17:48	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 17:48	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 17:48	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 17:48	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 17:48	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 17:48	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-28_WG_200714 **Lab ID: 50262532030** Collected: 07/14/20 15:32 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 17:48	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 17:48	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 17:48	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 17:48	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 17:48	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 17:48	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 17:48	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 17:48	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 17:48	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 17:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 17:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 17:48	79-34-5	
Tetrachloroethene	**9.1**	ug/L	5.0	1		07/22/20 17:48	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 17:48	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:48	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 17:48	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 17:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 17:48	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 17:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 17:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 17:48	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 17:48	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 17:48	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 17:48	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 17:48	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 17:48	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	107	%.	75-120	1		07/22/20 17:48	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/22/20 17:48	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/22/20 17:48	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-29_WG_200714 **Lab ID: 50262532031** Collected: 07/14/20 16:07 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 13:09	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 13:09	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 13:09	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 13:09	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 13:09	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 13:09	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 13:09	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 13:09	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 13:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 13:09	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 13:09	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 13:09	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 13:09	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 13:09	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 13:09	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 13:09	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 13:09	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 13:09	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 13:09	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 13:09	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 13:09	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 13:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 13:09	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 13:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:09	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 13:09	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 13:09	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 13:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 13:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 13:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 13:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 13:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 13:09	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 13:09	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 13:09	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 13:09	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 13:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 13:09	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 13:09	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 13:09	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 13:09	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 13:09	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 13:09	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 13:09	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: MW-29_WG_200714 **Lab ID: 50262532031** Collected: 07/14/20 16:07 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 13:09	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 13:09	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 13:09	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 13:09	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 13:09	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 13:09	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 13:09	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 13:09	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 13:09	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 13:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 13:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 13:09	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 13:09	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 13:09	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:09	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 13:09	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 13:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 13:09	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 13:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 13:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 13:09	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 13:09	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 13:09	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 13:09	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 13:09	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 13:09	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	75-120	1		07/22/20 13:09	1868-53-7	
4-Bromofluorobenzene (S)	98	%.	85-116	1		07/22/20 13:09	460-00-4	
Toluene-d8 (S)	97	%.	83-111	1		07/22/20 13:09	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: TB-01_WD_200713 **Lab ID: 50262532032** Collected: 07/13/20 00:00 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 14:18	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 14:18	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 14:18	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 14:18	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 14:18	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 14:18	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 14:18	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 14:18	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 14:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 14:18	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:18	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:18	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 14:18	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 14:18	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 14:18	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 14:18	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 14:18	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 14:18	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 14:18	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 14:18	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 14:18	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 14:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 14:18	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 14:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:18	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 14:18	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 14:18	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 14:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 14:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 14:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:18	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:18	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 14:18	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 14:18	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 14:18	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 14:18	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 14:18	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 14:18	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 14:18	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 14:18	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: TB-01_WD_200713 **Lab ID: 50262532032** Collected: 07/13/20 00:00 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 14:18	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 14:18	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 14:18	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 14:18	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 14:18	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 14:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 14:18	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 14:18	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 14:18	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 14:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 14:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 14:18	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 14:18	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 14:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 14:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 14:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 14:18	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 14:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 14:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 14:18	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 14:18	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 14:18	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 14:18	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 14:18	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 14:18	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104	%.	75-120	1		07/22/20 14:18	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/22/20 14:18	460-00-4	
Toluene-d8 (S)	96	%.	83-111	1		07/22/20 14:18	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: Dup-01_WG_200715 **Lab ID: 50262532033** Collected: 07/15/20 00:00 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 11:25	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 11:25	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 11:25	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 11:25	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 11:25	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 11:25	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 11:25	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 11:25	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 11:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 11:25	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 11:25	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 11:25	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 11:25	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 11:25	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 11:25	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 11:25	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 11:25	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 11:25	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 11:25	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 11:25	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 11:25	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 11:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 11:25	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 11:25	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 11:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 11:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 11:25	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 11:25	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 11:25	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 11:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 11:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 11:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 11:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 11:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 11:25	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 11:25	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 11:25	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 11:25	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 11:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 11:25	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 11:25	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 11:25	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 11:25	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 11:25	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 11:25	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 11:25	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: Dup-01_WG_200715 **Lab ID: 50262532033** Collected: 07/15/20 00:00 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 11:25	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 11:25	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 11:25	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 11:25	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 11:25	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 11:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 11:25	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 11:25	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 11:25	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 11:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 11:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 11:25	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 11:25	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 11:25	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 11:25	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 11:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 11:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 11:25	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 11:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 11:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 11:25	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 11:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 11:25	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 11:25	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 11:25	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 11:25	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	75-120	1		07/22/20 11:25	1868-53-7	
4-Bromofluorobenzene (S)	99	%.	85-116	1		07/22/20 11:25	460-00-4	
Toluene-d8 (S)	99	%.	83-111	1		07/22/20 11:25	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: Dup-02_WG_200715 **Lab ID: 50262532034** Collected: 07/15/20 00:00 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 12:00	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 12:00	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 12:00	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 12:00	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 12:00	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 12:00	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 12:00	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 12:00	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 12:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 12:00	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:00	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:00	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:00	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 12:00	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 12:00	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 12:00	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 12:00	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 12:00	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 12:00	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 12:00	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 12:00	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 12:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 12:00	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 12:00	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:00	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 12:00	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 12:00	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 12:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 12:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:00	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:00	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:00	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:00	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:00	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 12:00	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 12:00	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 12:00	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 12:00	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 12:00	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 12:00	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: Dup-02_WG_200715 **Lab ID: 50262532034** Collected: 07/15/20 00:00 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 12:00	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 12:00	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 12:00	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 12:00	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 12:00	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 12:00	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 12:00	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 12:00	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 12:00	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 12:00	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 12:00	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 12:00	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 12:00	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 12:00	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:00	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 12:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 12:00	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 12:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 12:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 12:00	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 12:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 12:00	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 12:00	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 12:00	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 12:00	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	115	%.	75-120	1		07/22/20 12:00	1868-53-7	
4-Bromofluorobenzene (S)	84	%.	85-116	1		07/22/20 12:00	460-00-4	S2
Toluene-d8 (S)	111	%.	83-111	1		07/22/20 12:00	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: EQB-01_WD_200716 **Lab ID: 50262532035** Collected: 07/16/20 12:15 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 16:03	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 16:03	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 16:03	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 16:03	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 16:03	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 16:03	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 16:03	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 16:03	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 16:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 16:03	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 16:03	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 16:03	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 16:03	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 16:03	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 16:03	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 16:03	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 16:03	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 16:03	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 16:03	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 16:03	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 16:03	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 16:03	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 16:03	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 16:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:03	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 16:03	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 16:03	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 16:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 16:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 16:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 16:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 16:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 16:03	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 16:03	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 16:03	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 16:03	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 16:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 16:03	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 16:03	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 16:03	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 16:03	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 16:03	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 16:03	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 16:03	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: EQB-01_WD_200716 **Lab ID: 50262532035** Collected: 07/16/20 12:15 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 16:03	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 16:03	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 16:03	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 16:03	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 16:03	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 16:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 16:03	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 16:03	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 16:03	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 16:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 16:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 16:03	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 16:03	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 16:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 16:03	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 16:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 16:03	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 16:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 16:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 16:03	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 16:03	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 16:03	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 16:03	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 16:03	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 16:03	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	107	%.	75-120	1		07/22/20 16:03	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-116	1		07/22/20 16:03	460-00-4	
Toluene-d8 (S)	97	%.	83-111	1		07/22/20 16:03	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: EQB-02_WD_200716 **Lab ID: 50262532036** Collected: 07/16/20 13:15 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Acetone	ND	ug/L	100	1		07/22/20 12:34	67-64-1	
Acrolein	ND	ug/L	50.0	1		07/22/20 12:34	107-02-8	
Acrylonitrile	ND	ug/L	100	1		07/22/20 12:34	107-13-1	
Benzene	ND	ug/L	5.0	1		07/22/20 12:34	71-43-2	
Bromobenzene	ND	ug/L	5.0	1		07/22/20 12:34	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1		07/22/20 12:34	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		07/22/20 12:34	75-27-4	
Bromoform	ND	ug/L	5.0	1		07/22/20 12:34	75-25-2	
Bromomethane	ND	ug/L	5.0	1		07/22/20 12:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		07/22/20 12:34	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:34	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:34	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	1		07/22/20 12:34	98-06-6	
Carbon disulfide	ND	ug/L	10.0	1		07/22/20 12:34	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		07/22/20 12:34	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		07/22/20 12:34	108-90-7	
Chloroethane	ND	ug/L	5.0	1		07/22/20 12:34	75-00-3	
Chloroform	ND	ug/L	5.0	1		07/22/20 12:34	67-66-3	
Chloromethane	ND	ug/L	5.0	1		07/22/20 12:34	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 12:34	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	1		07/22/20 12:34	106-43-4	
Dibromochloromethane	ND	ug/L	5.0	1		07/22/20 12:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		07/22/20 12:34	106-93-4	
Dibromomethane	ND	ug/L	5.0	1		07/22/20 12:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:34	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1		07/22/20 12:34	110-57-6	
Dichlorodifluoromethane	ND	ug/L	5.0	1		07/22/20 12:34	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		07/22/20 12:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		07/22/20 12:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		07/22/20 12:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	1		07/22/20 12:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		07/22/20 12:34	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		07/22/20 12:34	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		07/22/20 12:34	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	1		07/22/20 12:34	87-68-3	
n-Hexane	ND	ug/L	5.0	1		07/22/20 12:34	110-54-3	
2-Hexanone	ND	ug/L	25.0	1		07/22/20 12:34	591-78-6	
Iodomethane	ND	ug/L	10.0	1		07/22/20 12:34	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Sample: EQB-02_WD_200716 **Lab ID: 50262532036** Collected: 07/16/20 13:15 Received: 07/17/20 08:02 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Indiana	Analytical Method: EPA 5030/8260 Pace Analytical Services - Indianapolis							
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		07/22/20 12:34	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	1		07/22/20 12:34	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		07/22/20 12:34	75-09-2	
1-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 12:34	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1		07/22/20 12:34	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		07/22/20 12:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		07/22/20 12:34	1634-04-4	
Naphthalene	ND	ug/L	1.7	1		07/22/20 12:34	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	1		07/22/20 12:34	103-65-1	
Styrene	ND	ug/L	5.0	1		07/22/20 12:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 12:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		07/22/20 12:34	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		07/22/20 12:34	127-18-4	
Toluene	ND	ug/L	5.0	1		07/22/20 12:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		07/22/20 12:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		07/22/20 12:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		07/22/20 12:34	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		07/22/20 12:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		07/22/20 12:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		07/22/20 12:34	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 12:34	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	1		07/22/20 12:34	108-67-8	
Vinyl acetate	ND	ug/L	50.0	1		07/22/20 12:34	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		07/22/20 12:34	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		07/22/20 12:34	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	109	%.	75-120	1		07/22/20 12:34	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-116	1		07/22/20 12:34	460-00-4	
Toluene-d8 (S)	98	%.	83-111	1		07/22/20 12:34	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

QC Batch: 572929
QC Batch Method: EPA 5030/8260
Analysis Method: EPA 5030/8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262532001, 50262532002, 50262532003, 50262532004, 50262532005, 50262532006, 50262532007, 50262532008

METHOD BLANK: 2642493
Matrix: Water
Associated Lab Samples: 50262532001, 50262532002, 50262532003, 50262532004, 50262532005, 50262532006, 50262532007, 50262532008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	07/21/20 00:26	
1,1,1-Trichloroethane	ug/L	ND	5.0	07/21/20 00:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	07/21/20 00:26	
1,1,2-Trichloroethane	ug/L	ND	5.0	07/21/20 00:26	
1,1-Dichloroethane	ug/L	ND	5.0	07/21/20 00:26	
1,1-Dichloroethene	ug/L	ND	5.0	07/21/20 00:26	
1,1-Dichloropropene	ug/L	ND	5.0	07/21/20 00:26	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	07/21/20 00:26	
1,2,3-Trichloropropane	ug/L	ND	5.0	07/21/20 00:26	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	07/21/20 00:26	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	07/21/20 00:26	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	07/21/20 00:26	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/21/20 00:26	
1,2-Dichloroethane	ug/L	ND	5.0	07/21/20 00:26	
1,2-Dichloropropane	ug/L	ND	5.0	07/21/20 00:26	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	07/21/20 00:26	
1,3-Dichlorobenzene	ug/L	ND	5.0	07/21/20 00:26	
1,3-Dichloropropane	ug/L	ND	5.0	07/21/20 00:26	
1,4-Dichlorobenzene	ug/L	ND	5.0	07/21/20 00:26	
1-Methylnaphthalene	ug/L	ND	10.0	07/21/20 00:26	
2,2-Dichloropropane	ug/L	ND	5.0	07/21/20 00:26	
2-Butanone (MEK)	ug/L	ND	25.0	07/21/20 00:26	
2-Chlorotoluene	ug/L	ND	5.0	07/21/20 00:26	
2-Hexanone	ug/L	ND	25.0	07/21/20 00:26	
2-Methylnaphthalene	ug/L	ND	10.0	07/21/20 00:26	
4-Chlorotoluene	ug/L	ND	5.0	07/21/20 00:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	07/21/20 00:26	
Acetone	ug/L	ND	100	07/21/20 00:26	
Acrolein	ug/L	ND	50.0	07/21/20 00:26	
Acrylonitrile	ug/L	ND	100	07/21/20 00:26	
Benzene	ug/L	ND	5.0	07/21/20 00:26	
Bromobenzene	ug/L	ND	5.0	07/21/20 00:26	
Bromochloromethane	ug/L	ND	5.0	07/21/20 00:26	
Bromodichloromethane	ug/L	ND	5.0	07/21/20 00:26	
Bromoform	ug/L	ND	5.0	07/21/20 00:26	
Bromomethane	ug/L	ND	5.0	07/21/20 00:26	
Carbon disulfide	ug/L	ND	10.0	07/21/20 00:26	
Carbon tetrachloride	ug/L	ND	5.0	07/21/20 00:26	
Chlorobenzene	ug/L	ND	5.0	07/21/20 00:26	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

METHOD BLANK: 2642493 Matrix: Water

Associated Lab Samples: 50262532001, 50262532002, 50262532003, 50262532004, 50262532005, 50262532006, 50262532007, 50262532008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroethane	ug/L	ND	5.0	07/21/20 00:26	
Chloroform	ug/L	ND	5.0	07/21/20 00:26	
Chloromethane	ug/L	ND	5.0	07/21/20 00:26	
cis-1,2-Dichloroethene	ug/L	ND	5.0	07/21/20 00:26	
cis-1,3-Dichloropropene	ug/L	ND	5.0	07/21/20 00:26	
Dibromochloromethane	ug/L	ND	5.0	07/21/20 00:26	
Dibromomethane	ug/L	ND	5.0	07/21/20 00:26	
Dichlorodifluoromethane	ug/L	ND	5.0	07/21/20 00:26	
Ethyl methacrylate	ug/L	ND	100	07/21/20 00:26	
Ethylbenzene	ug/L	ND	5.0	07/21/20 00:26	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	07/21/20 00:26	
Iodomethane	ug/L	ND	10.0	07/21/20 00:26	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	07/21/20 00:26	
Methyl-tert-butyl ether	ug/L	ND	4.0	07/21/20 00:26	
Methylene Chloride	ug/L	ND	5.0	07/21/20 00:26	
n-Butylbenzene	ug/L	ND	5.0	07/21/20 00:26	
n-Hexane	ug/L	ND	5.0	07/21/20 00:26	
n-Propylbenzene	ug/L	ND	5.0	07/21/20 00:26	
Naphthalene	ug/L	ND	1.7	07/21/20 00:26	
p-Isopropyltoluene	ug/L	ND	5.0	07/21/20 00:26	
sec-Butylbenzene	ug/L	ND	5.0	07/21/20 00:26	
Styrene	ug/L	ND	5.0	07/21/20 00:26	
tert-Butylbenzene	ug/L	ND	5.0	07/21/20 00:26	
Tetrachloroethene	ug/L	ND	5.0	07/21/20 00:26	
Toluene	ug/L	ND	5.0	07/21/20 00:26	
trans-1,2-Dichloroethene	ug/L	ND	5.0	07/21/20 00:26	
trans-1,3-Dichloropropene	ug/L	ND	5.0	07/21/20 00:26	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	07/21/20 00:26	
Trichloroethene	ug/L	ND	5.0	07/21/20 00:26	
Trichlorofluoromethane	ug/L	ND	5.0	07/21/20 00:26	
Vinyl acetate	ug/L	ND	50.0	07/21/20 00:26	
Vinyl chloride	ug/L	ND	2.0	07/21/20 00:26	
Xylene (Total)	ug/L	ND	5.0	07/21/20 00:26	
4-Bromofluorobenzene (S)	%.	100	85-116	07/21/20 00:26	
Dibromofluoromethane (S)	%.	106	75-120	07/21/20 00:26	
Toluene-d8 (S)	%.	98	83-111	07/21/20 00:26	

LABORATORY CONTROL SAMPLE: 2642494

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	52.5	105	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	46.2	92	64-126	
1,1-Dichloroethene	ug/L	50	55.9	112	79-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

LABORATORY CONTROL SAMPLE: 2642494

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	50	49.7	99	76-119	
1,2-Dibromoethane (EDB)	ug/L	50	55.7	111	76-122	
1,2-Dichloroethane	ug/L	50	52.0	104	66-127	
1,2-Dichloropropane	ug/L	50	52.1	104	75-127	
Benzene	ug/L	50	52.8	106	75-118	
Chlorobenzene	ug/L	50	50.0	100	80-115	
Chloroform	ug/L	50	45.8	92	75-117	
cis-1,2-Dichloroethene	ug/L	50	51.8	104	76-120	
Ethylbenzene	ug/L	50	52.3	105	78-120	
Isopropylbenzene (Cumene)	ug/L	50	50.9	102	82-122	
Methyl-tert-butyl ether	ug/L	50	54.4	109	79-125	
Naphthalene	ug/L	50	50.8	102	70-130	
Tetrachloroethene	ug/L	50	53.1	106	70-123	
Toluene	ug/L	50	51.5	103	72-114	
trans-1,2-Dichloroethene	ug/L	50	53.6	107	79-126	
Trichloroethene	ug/L	50	52.9	106	78-120	
Vinyl chloride	ug/L	50	53.4	107	55-122	
Xylene (Total)	ug/L	150	154	103	81-118	
4-Bromofluorobenzene (S)	%.			99	85-116	
Dibromofluoromethane (S)	%.			100	75-120	
Toluene-d8 (S)	%.			100	83-111	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2642495 2642496

Parameter	Units	50262532002 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	45.8	48.6	92	97	56-144	6	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	42.2	42.3	84	85	47-137	0	20	
1,1-Dichloroethene	ug/L	ND	50	50	48.8	50.9	98	102	60-140	4	20	
1,2,4-Trimethylbenzene	ug/L	ND	50	50	44.6	44.9	89	90	13-152	1	20	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	51.5	52.6	103	105	56-136	2	20	
1,2-Dichloroethane	ug/L	ND	50	50	46.9	48.3	94	97	46-145	3	20	
1,2-Dichloropropane	ug/L	ND	50	50	47.6	48.8	95	98	55-141	3	20	
Benzene	ug/L	ND	50	50	47.7	49.7	95	99	49-135	4	20	
Chlorobenzene	ug/L	ND	50	50	46.1	48.6	92	97	42-135	5	20	
Chloroform	ug/L	ND	50	50	41.2	43.2	82	86	57-130	5	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	47.1	49.1	94	98	53-134	4	20	
Ethylbenzene	ug/L	ND	50	50	47.5	49.9	95	100	28-147	5	20	
Isopropylbenzene (Cumene)	ug/L	ND	50	50	45.9	48.4	92	97	27-151	5	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	50.0	51.2	100	102	60-142	2	20	
Naphthalene	ug/L	ND	50	50	46.4	47.6	93	95	41-139	3	20	
Tetrachloroethene	ug/L	ND	50	50	47.3	50.3	95	101	32-140	6	20	
Toluene	ug/L	ND	50	50	46.4	49.1	93	98	42-131	6	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	46.2	49.6	92	99	57-138	7	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2642495 2642496

Parameter	Units	50262532002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Trichloroethene	ug/L	ND	50	50	45.7	49.0	91	98	47-137	7	20	
Vinyl chloride	ug/L	ND	50	50	44.8	47.9	90	96	36-136	7	20	
Xylene (Total)	ug/L	ND	150	150	138	145	92	96	30-145	4	20	
4-Bromofluorobenzene (S)	%.						99	98	85-116			
Dibromofluoromethane (S)	%.						95	96	75-120			
Toluene-d8 (S)	%.						98	98	83-111			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

QC Batch: 573136
QC Batch Method: EPA 5030/8260
Analysis Method: EPA 5030/8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50262532009

METHOD BLANK: 2643295 Matrix: Water
Associated Lab Samples: 50262532009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	07/21/20 13:28	
1,1,1-Trichloroethane	ug/L	ND	5.0	07/21/20 13:28	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	07/21/20 13:28	
1,1,2-Trichloroethane	ug/L	ND	5.0	07/21/20 13:28	
1,1-Dichloroethane	ug/L	ND	5.0	07/21/20 13:28	
1,1-Dichloroethene	ug/L	ND	5.0	07/21/20 13:28	
1,1-Dichloropropene	ug/L	ND	5.0	07/21/20 13:28	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	07/21/20 13:28	
1,2,3-Trichloropropane	ug/L	ND	5.0	07/21/20 13:28	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	07/21/20 13:28	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	07/21/20 13:28	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	07/21/20 13:28	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/21/20 13:28	
1,2-Dichloroethane	ug/L	ND	5.0	07/21/20 13:28	
1,2-Dichloropropane	ug/L	ND	5.0	07/21/20 13:28	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	07/21/20 13:28	
1,3-Dichlorobenzene	ug/L	ND	5.0	07/21/20 13:28	
1,3-Dichloropropane	ug/L	ND	5.0	07/21/20 13:28	
1,4-Dichlorobenzene	ug/L	ND	5.0	07/21/20 13:28	
1-Methylnaphthalene	ug/L	ND	10.0	07/21/20 13:28	
2,2-Dichloropropane	ug/L	ND	5.0	07/21/20 13:28	
2-Butanone (MEK)	ug/L	ND	25.0	07/21/20 13:28	
2-Chlorotoluene	ug/L	ND	5.0	07/21/20 13:28	
2-Hexanone	ug/L	ND	25.0	07/21/20 13:28	
2-Methylnaphthalene	ug/L	ND	10.0	07/21/20 13:28	
4-Chlorotoluene	ug/L	ND	5.0	07/21/20 13:28	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	07/21/20 13:28	
Acetone	ug/L	ND	100	07/21/20 13:28	
Acrolein	ug/L	ND	50.0	07/21/20 13:28	
Acrylonitrile	ug/L	ND	100	07/21/20 13:28	
Benzene	ug/L	ND	5.0	07/21/20 13:28	
Bromobenzene	ug/L	ND	5.0	07/21/20 13:28	
Bromochloromethane	ug/L	ND	5.0	07/21/20 13:28	
Bromodichloromethane	ug/L	ND	5.0	07/21/20 13:28	
Bromoform	ug/L	ND	5.0	07/21/20 13:28	
Bromomethane	ug/L	ND	5.0	07/21/20 13:28	
Carbon disulfide	ug/L	ND	10.0	07/21/20 13:28	
Carbon tetrachloride	ug/L	ND	5.0	07/21/20 13:28	
Chlorobenzene	ug/L	ND	5.0	07/21/20 13:28	
Chloroethane	ug/L	ND	5.0	07/21/20 13:28	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

METHOD BLANK: 2643295 Matrix: Water
Associated Lab Samples: 50262532009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	5.0	07/21/20 13:28	
Chloromethane	ug/L	ND	5.0	07/21/20 13:28	
cis-1,2-Dichloroethene	ug/L	ND	5.0	07/21/20 13:28	
cis-1,3-Dichloropropene	ug/L	ND	5.0	07/21/20 13:28	
Dibromochloromethane	ug/L	ND	5.0	07/21/20 13:28	
Dibromomethane	ug/L	ND	5.0	07/21/20 13:28	
Dichlorodifluoromethane	ug/L	ND	5.0	07/21/20 13:28	
Ethyl methacrylate	ug/L	ND	100	07/21/20 13:28	
Ethylbenzene	ug/L	ND	5.0	07/21/20 13:28	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	07/21/20 13:28	
Iodomethane	ug/L	ND	10.0	07/21/20 13:28	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	07/21/20 13:28	
Methyl-tert-butyl ether	ug/L	ND	4.0	07/21/20 13:28	
Methylene Chloride	ug/L	ND	5.0	07/21/20 13:28	
n-Butylbenzene	ug/L	ND	5.0	07/21/20 13:28	
n-Hexane	ug/L	ND	5.0	07/21/20 13:28	
n-Propylbenzene	ug/L	ND	5.0	07/21/20 13:28	
Naphthalene	ug/L	ND	1.7	07/21/20 13:28	
p-Isopropyltoluene	ug/L	ND	5.0	07/21/20 13:28	
sec-Butylbenzene	ug/L	ND	5.0	07/21/20 13:28	
Styrene	ug/L	ND	5.0	07/21/20 13:28	
tert-Butylbenzene	ug/L	ND	5.0	07/21/20 13:28	
Tetrachloroethene	ug/L	ND	5.0	07/21/20 13:28	
Toluene	ug/L	ND	5.0	07/21/20 13:28	
trans-1,2-Dichloroethene	ug/L	ND	5.0	07/21/20 13:28	
trans-1,3-Dichloropropene	ug/L	ND	5.0	07/21/20 13:28	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	07/21/20 13:28	
Trichloroethene	ug/L	ND	5.0	07/21/20 13:28	
Trichlorofluoromethane	ug/L	ND	5.0	07/21/20 13:28	
Vinyl acetate	ug/L	ND	50.0	07/21/20 13:28	
Vinyl chloride	ug/L	ND	2.0	07/21/20 13:28	
Xylene (Total)	ug/L	ND	5.0	07/21/20 13:28	
4-Bromofluorobenzene (S)	%.	99	85-116	07/21/20 13:28	
Dibromofluoromethane (S)	%.	106	75-120	07/21/20 13:28	
Toluene-d8 (S)	%.	97	83-111	07/21/20 13:28	

LABORATORY CONTROL SAMPLE: 2643296

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	46.2	92	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	40.7	81	64-126	
1,1-Dichloroethene	ug/L	50	50.1	100	79-128	
1,2,4-Trimethylbenzene	ug/L	50	48.1	96	76-119	
1,2-Dibromoethane (EDB)	ug/L	50	50.0	100	76-122	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

LABORATORY CONTROL SAMPLE: 2643296

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	46.5	93	66-127	
1,2-Dichloropropane	ug/L	50	46.4	93	75-127	
Benzene	ug/L	50	47.6	95	75-118	
Chlorobenzene	ug/L	50	47.3	95	80-115	
Chloroform	ug/L	50	40.0	80	75-117	
cis-1,2-Dichloroethene	ug/L	50	47.0	94	76-120	
Ethylbenzene	ug/L	50	49.5	99	78-120	
Isopropylbenzene (Cumene)	ug/L	50	47.9	96	82-122	
Methyl-tert-butyl ether	ug/L	50	48.3	97	79-125	
Naphthalene	ug/L	50	48.5	97	70-130	
Tetrachloroethene	ug/L	50	50.8	102	70-123	
Toluene	ug/L	50	47.4	95	72-114	
trans-1,2-Dichloroethene	ug/L	50	49.1	98	79-126	
Trichloroethene	ug/L	50	47.1	94	78-120	
Vinyl chloride	ug/L	50	46.1	92	55-122	
Xylene (Total)	ug/L	150	147	98	81-118	
4-Bromofluorobenzene (S)	%.			99	85-116	
Dibromofluoromethane (S)	%.			95	75-120	
Toluene-d8 (S)	%.			100	83-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

QC Batch: 573140
QC Batch Method: EPA 5030/8260
Analysis Method: EPA 5030/8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262532010, 50262532011

METHOD BLANK: 2643311
Matrix: Water
Associated Lab Samples: 50262532010, 50262532011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	07/21/20 13:45	
1,1,1-Trichloroethane	ug/L	ND	5.0	07/21/20 13:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	07/21/20 13:45	
1,1,2-Trichloroethane	ug/L	ND	5.0	07/21/20 13:45	
1,1-Dichloroethane	ug/L	ND	5.0	07/21/20 13:45	
1,1-Dichloroethene	ug/L	ND	5.0	07/21/20 13:45	
1,1-Dichloropropene	ug/L	ND	5.0	07/21/20 13:45	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	07/21/20 13:45	
1,2,3-Trichloropropane	ug/L	ND	5.0	07/21/20 13:45	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	07/21/20 13:45	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	07/21/20 13:45	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	07/21/20 13:45	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/21/20 13:45	
1,2-Dichloroethane	ug/L	ND	5.0	07/21/20 13:45	
1,2-Dichloropropane	ug/L	ND	5.0	07/21/20 13:45	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	07/21/20 13:45	
1,3-Dichlorobenzene	ug/L	ND	5.0	07/21/20 13:45	
1,3-Dichloropropane	ug/L	ND	5.0	07/21/20 13:45	
1,4-Dichlorobenzene	ug/L	ND	5.0	07/21/20 13:45	
1-Methylnaphthalene	ug/L	ND	10.0	07/21/20 13:45	
2,2-Dichloropropane	ug/L	ND	5.0	07/21/20 13:45	
2-Butanone (MEK)	ug/L	ND	25.0	07/21/20 13:45	
2-Chlorotoluene	ug/L	ND	5.0	07/21/20 13:45	
2-Hexanone	ug/L	ND	25.0	07/21/20 13:45	
2-Methylnaphthalene	ug/L	ND	10.0	07/21/20 13:45	
4-Chlorotoluene	ug/L	ND	5.0	07/21/20 13:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	07/21/20 13:45	
Acetone	ug/L	ND	100	07/21/20 13:45	
Acrolein	ug/L	ND	50.0	07/21/20 13:45	
Acrylonitrile	ug/L	ND	100	07/21/20 13:45	
Benzene	ug/L	ND	5.0	07/21/20 13:45	
Bromobenzene	ug/L	ND	5.0	07/21/20 13:45	
Bromochloromethane	ug/L	ND	5.0	07/21/20 13:45	
Bromodichloromethane	ug/L	ND	5.0	07/21/20 13:45	
Bromoform	ug/L	ND	5.0	07/21/20 13:45	
Bromomethane	ug/L	ND	5.0	07/21/20 13:45	
Carbon disulfide	ug/L	ND	10.0	07/21/20 13:45	
Carbon tetrachloride	ug/L	ND	5.0	07/21/20 13:45	
Chlorobenzene	ug/L	ND	5.0	07/21/20 13:45	
Chloroethane	ug/L	ND	5.0	07/21/20 13:45	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

METHOD BLANK: 2643311 Matrix: Water
Associated Lab Samples: 50262532010, 50262532011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	5.0	07/21/20 13:45	
Chloromethane	ug/L	ND	5.0	07/21/20 13:45	
cis-1,2-Dichloroethene	ug/L	ND	5.0	07/21/20 13:45	
cis-1,3-Dichloropropene	ug/L	ND	5.0	07/21/20 13:45	
Dibromochloromethane	ug/L	ND	5.0	07/21/20 13:45	
Dibromomethane	ug/L	ND	5.0	07/21/20 13:45	
Dichlorodifluoromethane	ug/L	ND	5.0	07/21/20 13:45	
Ethyl methacrylate	ug/L	ND	100	07/21/20 13:45	
Ethylbenzene	ug/L	ND	5.0	07/21/20 13:45	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	07/21/20 13:45	
Iodomethane	ug/L	ND	10.0	07/21/20 13:45	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	07/21/20 13:45	
Methyl-tert-butyl ether	ug/L	ND	4.0	07/21/20 13:45	
Methylene Chloride	ug/L	ND	5.0	07/21/20 13:45	
n-Butylbenzene	ug/L	ND	5.0	07/21/20 13:45	
n-Hexane	ug/L	ND	5.0	07/21/20 13:45	
n-Propylbenzene	ug/L	ND	5.0	07/21/20 13:45	
Naphthalene	ug/L	ND	1.7	07/21/20 13:45	
p-Isopropyltoluene	ug/L	ND	5.0	07/21/20 13:45	
sec-Butylbenzene	ug/L	ND	5.0	07/21/20 13:45	
Styrene	ug/L	ND	5.0	07/21/20 13:45	
tert-Butylbenzene	ug/L	ND	5.0	07/21/20 13:45	
Tetrachloroethene	ug/L	ND	5.0	07/21/20 13:45	
Toluene	ug/L	ND	5.0	07/21/20 13:45	
trans-1,2-Dichloroethene	ug/L	ND	5.0	07/21/20 13:45	
trans-1,3-Dichloropropene	ug/L	ND	5.0	07/21/20 13:45	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	07/21/20 13:45	
Trichloroethene	ug/L	ND	5.0	07/21/20 13:45	
Trichlorofluoromethane	ug/L	ND	5.0	07/21/20 13:45	
Vinyl acetate	ug/L	ND	50.0	07/21/20 13:45	
Vinyl chloride	ug/L	ND	2.0	07/21/20 13:45	
Xylene (Total)	ug/L	ND	5.0	07/21/20 13:45	
4-Bromofluorobenzene (S)	%.	99	85-116	07/21/20 13:45	
Dibromofluoromethane (S)	%.	105	75-120	07/21/20 13:45	
Toluene-d8 (S)	%.	98	83-111	07/21/20 13:45	

LABORATORY CONTROL SAMPLE: 2643312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	52.4	105	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	44.1	88	64-126	
1,1-Dichloroethene	ug/L	50	55.9	112	79-128	
1,2,4-Trimethylbenzene	ug/L	50	52.3	105	76-119	
1,2-Dibromoethane (EDB)	ug/L	50	54.3	109	76-122	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

LABORATORY CONTROL SAMPLE: 2643312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	52.3	105	66-127	
1,2-Dichloropropane	ug/L	50	54.0	108	75-127	
Benzene	ug/L	50	52.9	106	75-118	
Chlorobenzene	ug/L	50	53.2	106	80-115	
Chloroform	ug/L	50	48.6	97	75-117	
cis-1,2-Dichloroethene	ug/L	50	52.9	106	76-120	
Ethylbenzene	ug/L	50	55.2	110	78-120	
Isopropylbenzene (Cumene)	ug/L	50	53.3	107	82-122	
Methyl-tert-butyl ether	ug/L	50	52.3	105	79-125	
Naphthalene	ug/L	50	53.2	106	70-130	
Tetrachloroethene	ug/L	50	57.6	115	70-123	
Toluene	ug/L	50	52.9	106	72-114	
trans-1,2-Dichloroethene	ug/L	50	57.2	114	79-126	
Trichloroethene	ug/L	50	53.0	106	78-120	
Vinyl chloride	ug/L	50	49.0	98	55-122	
Xylene (Total)	ug/L	150	160	107	81-118	
4-Bromofluorobenzene (S)	%.			98	85-116	
Dibromofluoromethane (S)	%.			97	75-120	
Toluene-d8 (S)	%.			99	83-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

QC Batch: 573141
QC Batch Method: EPA 5030/8260
Analysis Method: EPA 5030/8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262532016, 50262532017, 50262532018, 50262532019, 50262532020, 50262532021, 50262532022, 50262532023, 50262532024, 50262532025, 50262532026, 50262532027, 50262532028

METHOD BLANK: 2643318
Matrix: Water
Associated Lab Samples: 50262532016, 50262532017, 50262532018, 50262532019, 50262532020, 50262532021, 50262532022, 50262532023, 50262532024, 50262532025, 50262532026, 50262532027, 50262532028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	07/22/20 09:14	
1,1,1-Trichloroethane	ug/L	ND	5.0	07/22/20 09:14	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	07/22/20 09:14	
1,1,2-Trichloroethane	ug/L	ND	5.0	07/22/20 09:14	
1,1-Dichloroethane	ug/L	ND	5.0	07/22/20 09:14	
1,1-Dichloroethene	ug/L	ND	5.0	07/22/20 09:14	
1,1-Dichloropropene	ug/L	ND	5.0	07/22/20 09:14	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	07/22/20 09:14	
1,2,3-Trichloropropane	ug/L	ND	5.0	07/22/20 09:14	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	07/22/20 09:14	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	07/22/20 09:14	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	07/22/20 09:14	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/22/20 09:14	
1,2-Dichloroethane	ug/L	ND	5.0	07/22/20 09:14	
1,2-Dichloropropane	ug/L	ND	5.0	07/22/20 09:14	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	07/22/20 09:14	
1,3-Dichlorobenzene	ug/L	ND	5.0	07/22/20 09:14	
1,3-Dichloropropane	ug/L	ND	5.0	07/22/20 09:14	
1,4-Dichlorobenzene	ug/L	ND	5.0	07/22/20 09:14	
1-Methylnaphthalene	ug/L	ND	10.0	07/22/20 09:14	
2,2-Dichloropropane	ug/L	ND	5.0	07/22/20 09:14	
2-Butanone (MEK)	ug/L	ND	25.0	07/22/20 09:14	
2-Chlorotoluene	ug/L	ND	5.0	07/22/20 09:14	
2-Hexanone	ug/L	ND	25.0	07/22/20 09:14	
2-Methylnaphthalene	ug/L	ND	10.0	07/22/20 09:14	
4-Chlorotoluene	ug/L	ND	5.0	07/22/20 09:14	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	07/22/20 09:14	
Acetone	ug/L	ND	100	07/22/20 09:14	
Acrolein	ug/L	ND	50.0	07/22/20 09:14	
Acrylonitrile	ug/L	ND	100	07/22/20 09:14	
Benzene	ug/L	ND	5.0	07/22/20 09:14	
Bromobenzene	ug/L	ND	5.0	07/22/20 09:14	
Bromochloromethane	ug/L	ND	5.0	07/22/20 09:14	
Bromodichloromethane	ug/L	ND	5.0	07/22/20 09:14	
Bromoform	ug/L	ND	5.0	07/22/20 09:14	
Bromomethane	ug/L	ND	5.0	07/22/20 09:14	
Carbon disulfide	ug/L	ND	10.0	07/22/20 09:14	
Carbon tetrachloride	ug/L	ND	5.0	07/22/20 09:14	
Chlorobenzene	ug/L	ND	5.0	07/22/20 09:14	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

METHOD BLANK: 2643318 Matrix: Water

Associated Lab Samples: 50262532016, 50262532017, 50262532018, 50262532019, 50262532020, 50262532021, 50262532022, 50262532023, 50262532024, 50262532025, 50262532026, 50262532027, 50262532028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroethane	ug/L	ND	5.0	07/22/20 09:14	
Chloroform	ug/L	ND	5.0	07/22/20 09:14	
Chloromethane	ug/L	ND	5.0	07/22/20 09:14	
cis-1,2-Dichloroethene	ug/L	ND	5.0	07/22/20 09:14	
cis-1,3-Dichloropropene	ug/L	ND	5.0	07/22/20 09:14	
Dibromochloromethane	ug/L	ND	5.0	07/22/20 09:14	
Dibromomethane	ug/L	ND	5.0	07/22/20 09:14	
Dichlorodifluoromethane	ug/L	ND	5.0	07/22/20 09:14	
Ethyl methacrylate	ug/L	ND	100	07/22/20 09:14	
Ethylbenzene	ug/L	ND	5.0	07/22/20 09:14	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	07/22/20 09:14	
Iodomethane	ug/L	ND	10.0	07/22/20 09:14	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	07/22/20 09:14	
Methyl-tert-butyl ether	ug/L	ND	4.0	07/22/20 09:14	
Methylene Chloride	ug/L	ND	5.0	07/22/20 09:14	
n-Butylbenzene	ug/L	ND	5.0	07/22/20 09:14	
n-Hexane	ug/L	ND	5.0	07/22/20 09:14	
n-Propylbenzene	ug/L	ND	5.0	07/22/20 09:14	
Naphthalene	ug/L	ND	1.7	07/22/20 09:14	
p-Isopropyltoluene	ug/L	ND	5.0	07/22/20 09:14	
sec-Butylbenzene	ug/L	ND	5.0	07/22/20 09:14	
Styrene	ug/L	ND	5.0	07/22/20 09:14	
tert-Butylbenzene	ug/L	ND	5.0	07/22/20 09:14	
Tetrachloroethene	ug/L	ND	5.0	07/22/20 09:14	
Toluene	ug/L	ND	5.0	07/22/20 09:14	
trans-1,2-Dichloroethene	ug/L	ND	5.0	07/22/20 09:14	
trans-1,3-Dichloropropene	ug/L	ND	5.0	07/22/20 09:14	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	07/22/20 09:14	
Trichloroethene	ug/L	ND	5.0	07/22/20 09:14	
Trichlorofluoromethane	ug/L	ND	5.0	07/22/20 09:14	
Vinyl acetate	ug/L	ND	50.0	07/22/20 09:14	
Vinyl chloride	ug/L	ND	2.0	07/22/20 09:14	
Xylene (Total)	ug/L	ND	5.0	07/22/20 09:14	
4-Bromofluorobenzene (S)	%.	100	85-116	07/22/20 09:14	
Dibromofluoromethane (S)	%.	104	75-120	07/22/20 09:14	
Toluene-d8 (S)	%.	98	83-111	07/22/20 09:14	

LABORATORY CONTROL SAMPLE: 2643319

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	46.1	92	78-120	
1,1,1-Trichloroethane	ug/L	50	46.4	93	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	37.5	75	64-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

LABORATORY CONTROL SAMPLE: 2643319

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2-Trichloroethane	ug/L	50	39.1	78	73-125	
1,1-Dichloroethane	ug/L	50	44.5	89	77-123	
1,1-Dichloroethene	ug/L	50	51.0	102	79-128	
1,1-Dichloropropene	ug/L	50	45.5	91	78-120	
1,2,3-Trichlorobenzene	ug/L	50	40.2	80	75-126	
1,2,3-Trichloropropane	ug/L	50	42.4	85	71-131	
1,2,4-Trichlorobenzene	ug/L	50	37.5	75	76-130	L2
1,2,4-Trimethylbenzene	ug/L	50	40.9	82	76-119	
1,2-Dibromoethane (EDB)	ug/L	50	45.7	91	76-122	
1,2-Dichlorobenzene	ug/L	50	42.2	84	79-113	
1,2-Dichloroethane	ug/L	50	41.8	84	66-127	
1,2-Dichloropropane	ug/L	50	43.1	86	75-127	
1,3,5-Trimethylbenzene	ug/L	50	42.3	85	78-116	
1,3-Dichlorobenzene	ug/L	50	40.5	81	79-120	
1,3-Dichloropropane	ug/L	50	41.8	84	81-121	
1,4-Dichlorobenzene	ug/L	50	39.1	78	77-117	
1-Methylnaphthalene	ug/L	50	46.0	92	65-142	
2,2-Dichloropropane	ug/L	50	42.9	86	56-134	
2-Butanone (MEK)	ug/L	250	211	85	61-138	
2-Chlorotoluene	ug/L	50	41.8	84	73-125	
2-Hexanone	ug/L	250	194	78	58-138	
2-Methylnaphthalene	ug/L	50	44.7	89	60-136	
4-Chlorotoluene	ug/L	50	42.4	85	75-118	
4-Methyl-2-pentanone (MIBK)	ug/L	250	188	75	60-131	
Acetone	ug/L	250	184	74	57-126	
Acrolein	ug/L	1000	706	71	56-120	
Acrylonitrile	ug/L	200	169	85	65-127	
Benzene	ug/L	50	46.2	92	75-118	
Bromobenzene	ug/L	50	41.5	83	68-127	
Bromochloromethane	ug/L	50	39.4	79	66-126	
Bromodichloromethane	ug/L	50	40.1	80	75-120	
Bromoform	ug/L	50	41.1	82	61-119	
Bromomethane	ug/L	50	54.8	110	12-184	
Carbon disulfide	ug/L	50	47.5	95	71-123	
Carbon tetrachloride	ug/L	50	48.0	96	73-125	
Chlorobenzene	ug/L	50	43.2	86	80-115	
Chloroethane	ug/L	50	44.8	90	46-133	
Chloroform	ug/L	50	38.7	77	75-117	
Chloromethane	ug/L	50	41.2	82	33-124	
cis-1,2-Dichloroethene	ug/L	50	44.9	90	76-120	
cis-1,3-Dichloropropene	ug/L	50	43.5	87	73-130	
Dibromochloromethane	ug/L	50	40.9	82	69-124	
Dibromomethane	ug/L	50	43.4	87	76-124	
Dichlorodifluoromethane	ug/L	50	48.8	98	36-145	
Ethyl methacrylate	ug/L	200	150	75	67-140	
Ethylbenzene	ug/L	50	46.0	92	78-120	
Hexachloro-1,3-butadiene	ug/L	50	42.5	85	79-137	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

LABORATORY CONTROL SAMPLE: 2643319

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iodomethane	ug/L	100	92.8	93	10-184	
Isopropylbenzene (Cumene)	ug/L	50	44.2	88	82-122	
Methyl-tert-butyl ether	ug/L	50	45.2	90	79-125	
Methylene Chloride	ug/L	50	44.8	90	68-126	
n-Butylbenzene	ug/L	50	37.4	75	73-123	
n-Hexane	ug/L	50	49.2	98	71-143	
n-Propylbenzene	ug/L	50	42.0	84	75-119	
Naphthalene	ug/L	50	41.5	83	70-130	
p-Isopropyltoluene	ug/L	50	41.3	83	82-119	
sec-Butylbenzene	ug/L	50	42.2	84	79-119	
Styrene	ug/L	50	43.1	86	80-121	
tert-Butylbenzene	ug/L	50	34.3	69	58-106	
Tetrachloroethene	ug/L	50	46.6	93	70-123	
Toluene	ug/L	50	43.9	88	72-114	
trans-1,2-Dichloroethene	ug/L	50	45.8	92	79-126	
trans-1,3-Dichloropropene	ug/L	50	40.9	82	68-122	
trans-1,4-Dichloro-2-butene	ug/L	200	118	59	34-130	
Trichloroethene	ug/L	50	45.0	90	78-120	
Trichlorofluoromethane	ug/L	50	48.0	96	57-156	
Vinyl acetate	ug/L	200	111	56	50-116	
Vinyl chloride	ug/L	50	45.3	91	55-122	
Xylene (Total)	ug/L	150	133	89	81-118	
4-Bromofluorobenzene (S)	%.			97	85-116	
Dibromofluoromethane (S)	%.			98	75-120	
Toluene-d8 (S)	%.			97	83-111	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2643320 2643321

Parameter	Units	50262532016 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	47.2	51.0	94	102	51-135	8	20	
1,1,1-Trichloroethane	ug/L	ND	50	50	35.3	46.1	71	92	56-144	27	20	R1
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	41.7	43.4	83	87	47-137	4	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	42.9	46.2	86	92	55-136	7	20	
1,1-Dichloroethane	ug/L	ND	50	50	40.1	48.6	80	97	53-140	19	20	
1,1-Dichloroethene	ug/L	ND	50	50	37.2	50.8	74	102	60-140	31	20	R1
1,1-Dichloropropene	ug/L	ND	50	50	34.0	45.6	68	91	54-136	29	20	R1
1,2,3-Trichlorobenzene	ug/L	ND	50	50	18.9	6.8	38	14	35-140	94	20	M1,R1
1,2,3-Trichloropropane	ug/L	ND	50	50	48.9	49.7	98	99	54-142	2	20	
1,2,4-Trichlorobenzene	ug/L	ND	50	50	20.8	7.6	42	15	31-143	93	20	M0,R1
1,2,4-Trimethylbenzene	ug/L	ND	50	50	33.9	22.2	68	44	13-152	42	20	R1
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	51.5	53.6	103	107	56-136	4	20	
1,2-Dichlorobenzene	ug/L	ND	50	50	42.4	31.5	85	63	38-133	29	20	R1
1,2-Dichloroethane	ug/L	ND	50	50	42.6	47.1	85	94	46-145	10	20	
1,2-Dichloropropane	ug/L	ND	50	50	41.5	46.8	83	94	55-141	12	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2643320 2643321

Parameter	Units	50262532016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,3,5-Trimethylbenzene	ug/L	ND	50	50	34.2	25.6	68	51	23-145	29	20	R1
1,3-Dichlorobenzene	ug/L	ND	50	50	39.5	30.2	79	60	31-144	27	20	R1
1,3-Dichloropropane	ug/L	ND	50	50	47.1	49.8	94	100	60-139	6	20	
1,4-Dichlorobenzene	ug/L	ND	50	50	38.6	29.1	77	58	31-138	28	20	R1
1-Methylnaphthalene	ug/L	ND	50	50	8.4J	2.6J	17	5	40-150		20	M1
2,2-Dichloropropane	ug/L	ND	50	50	33.0	42.6	66	85	34-137	25	20	R1
2-Butanone (MEK)	ug/L	ND	250	250	219	230	88	92	42-150	5	20	
2-Chlorotoluene	ug/L	ND	50	50	39.8	36.0	80	72	28-148	10	20	
2-Hexanone	ug/L	ND	250	250	214	220	85	88	43-146	3	20	
2-Methylnaphthalene	ug/L	ND	50	50	8J	2.3J	16	5	32-142		20	M1
4-Chlorotoluene	ug/L	ND	50	50	40.9	35.4	82	71	25-145	14	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	250	250	204	214	82	86	42-142	5	20	
Acetone	ug/L	ND	250	250	187	195	75	78	36-142	4	20	
Acrolein	ug/L	ND	1000	1000	633	647	63	65	28-122	2	20	
Acrylonitrile	ug/L	ND	200	200	177	182	89	91	48-137	3	20	
Benzene	ug/L	ND	50	50	41.0	48.9	82	98	49-135	18	20	
Bromobenzene	ug/L	ND	50	50	42.8	43.4	86	87	37-144	1	20	
Bromochloromethane	ug/L	ND	50	50	40.1	43.1	80	86	47-140	7	20	
Bromodichloromethane	ug/L	ND	50	50	39.5	44.6	79	89	55-133	12	20	
Bromoform	ug/L	ND	50	50	45.2	48.2	90	96	45-125	7	20	
Bromomethane	ug/L	ND	50	50	46.3	53.5	93	107	10-191	14	20	
Carbon disulfide	ug/L	ND	50	50	36.4	47.3	73	95	49-136	26	20	R1
Carbon tetrachloride	ug/L	ND	50	50	35.6	47.3	71	95	55-134	28	20	R1
Chlorobenzene	ug/L	ND	50	50	41.6	46.1	83	92	42-135	10	20	
Chloroethane	ug/L	ND	50	50	35.7	45.3	71	91	25-154	24	20	R1
Chloroform	ug/L	ND	50	50	36.0	41.5	72	83	57-130	14	20	
Chloromethane	ug/L	ND	50	50	34.2	42.2	68	84	17-129	21	20	R1
cis-1,2-Dichloroethene	ug/L	ND	50	50	41.3	48.5	83	97	53-134	16	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	46.5	49.9	93	100	50-136	7	20	
Dibromochloromethane	ug/L	ND	50	50	45.1	47.9	90	96	53-133	6	20	
Dibromomethane	ug/L	ND	50	50	44.7	48.2	89	96	57-139	7	20	
Dichlorodifluoromethane	ug/L	ND	50	50	32.9	47.1	66	94	21-154	35	20	R1
Ethyl methacrylate	ug/L	ND	200	200	166	175	83	88	56-148	5	20	
Ethylbenzene	ug/L	ND	50	50	40.9	46.0	82	92	28-147	12	20	
Hexachloro-1,3-butadiene	ug/L	ND	50	50	11.8	9.2	24	18	10-168	25	20	R1
Iodomethane	ug/L	ND	100	100	79.6	100	80	100	10-186	23	20	R1
Isopropylbenzene (Cumene)	ug/L	ND	50	50	37.3	37.4	75	75	27-151	0	20	
Methyl-tert-butyl ether	ug/L	ND	50	50	47.0	52.0	94	104	60-142	10	20	
Methylene Chloride	ug/L	ND	50	50	41.6	46.5	83	93	46-138	11	20	
n-Butylbenzene	ug/L	ND	50	50	21.5	12.7	43	25	10-153	52	20	R1
n-Hexane	ug/L	ND	50	50	34.1	47.1	68	94	46-155	32	20	R1
n-Propylbenzene	ug/L	ND	50	50	35.4	31.6	71	63	20-149	11	20	
Naphthalene	ug/L	ND	50	50	27.0	9.5	54	19	41-139	96	20	M1,R1
p-Isopropyltoluene	ug/L	ND	50	50	28.1	19.1	56	38	15-155	38	20	R1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2643320 2643321

Parameter	Units	50262532016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
sec-Butylbenzene	ug/L	ND	50	50	28.0	21.0	56	42	17-153	29	20	R1
Styrene	ug/L	ND	50	50	41.8	40.4	84	81	42-139	3	20	
tert-Butylbenzene	ug/L	ND	50	50	25.3	21.1	51	42	18-123	18	20	
Tetrachloroethene	ug/L	ND	50	50	38.2	48.2	76	96	32-140	23	20	R1
Toluene	ug/L	ND	50	50	40.6	47.5	81	95	42-131	16	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	38.7	47.9	77	96	57-138	21	20	R1
trans-1,3-Dichloropropene	ug/L	ND	50	50	45.3	46.8	91	94	47-128	3	20	
trans-1,4-Dichloro-2-butene	ug/L	ND	200	200	129	131	65	66	10-135	2	20	
Trichloroethene	ug/L	ND	50	50	36.9	47.0	74	94	47-137	24	20	R1
Trichlorofluoromethane	ug/L	ND	50	50	33.4	47.3	67	95	42-163	35	20	R1
Vinyl acetate	ug/L	ND	200	200	81.3	84.8	41	42	10-114	4	20	
Vinyl chloride	ug/L	ND	50	50	33.8	45.1	68	90	36-136	29	20	R1
Xylene (Total)	ug/L	ND	150	150	123	128	82	85	30-145	4	20	
4-Bromofluorobenzene (S)	%.						97	97	85-116			
Dibromofluoromethane (S)	%.						95	100	75-120			
Toluene-d8 (S)	%.						99	98	83-111			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

QC Batch: 573142
QC Batch Method: EPA 5030/8260
Analysis Method: EPA 5030/8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50262532012, 50262532013, 50262532014, 50262532015, 50262532029, 50262532030, 50262532031, 50262532032, 50262532033, 50262532034, 50262532035, 50262532036

METHOD BLANK: 2643322
Matrix: Water
Associated Lab Samples: 50262532012, 50262532013, 50262532014, 50262532015, 50262532029, 50262532030, 50262532031, 50262532032, 50262532033, 50262532034, 50262532035, 50262532036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	07/22/20 09:31	
1,1,1-Trichloroethane	ug/L	ND	5.0	07/22/20 09:31	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	07/22/20 09:31	
1,1,2-Trichloroethane	ug/L	ND	5.0	07/22/20 09:31	
1,1-Dichloroethane	ug/L	ND	5.0	07/22/20 09:31	
1,1-Dichloroethene	ug/L	ND	5.0	07/22/20 09:31	
1,1-Dichloropropene	ug/L	ND	5.0	07/22/20 09:31	
1,2,3-Trichlorobenzene	ug/L	ND	5.0	07/22/20 09:31	
1,2,3-Trichloropropane	ug/L	ND	5.0	07/22/20 09:31	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	07/22/20 09:31	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	07/22/20 09:31	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	07/22/20 09:31	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/22/20 09:31	
1,2-Dichloroethane	ug/L	ND	5.0	07/22/20 09:31	
1,2-Dichloropropane	ug/L	ND	5.0	07/22/20 09:31	
1,3,5-Trimethylbenzene	ug/L	ND	5.0	07/22/20 09:31	
1,3-Dichlorobenzene	ug/L	ND	5.0	07/22/20 09:31	
1,3-Dichloropropane	ug/L	ND	5.0	07/22/20 09:31	
1,4-Dichlorobenzene	ug/L	ND	5.0	07/22/20 09:31	
1-Methylnaphthalene	ug/L	ND	10.0	07/22/20 09:31	
2,2-Dichloropropane	ug/L	ND	5.0	07/22/20 09:31	
2-Butanone (MEK)	ug/L	ND	25.0	07/22/20 09:31	
2-Chlorotoluene	ug/L	ND	5.0	07/22/20 09:31	
2-Hexanone	ug/L	ND	25.0	07/22/20 09:31	
2-Methylnaphthalene	ug/L	ND	10.0	07/22/20 09:31	
4-Chlorotoluene	ug/L	ND	5.0	07/22/20 09:31	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	07/22/20 09:31	
Acetone	ug/L	ND	100	07/22/20 09:31	
Acrolein	ug/L	ND	50.0	07/22/20 09:31	
Acrylonitrile	ug/L	ND	100	07/22/20 09:31	
Benzene	ug/L	ND	5.0	07/22/20 09:31	
Bromobenzene	ug/L	ND	5.0	07/22/20 09:31	
Bromochloromethane	ug/L	ND	5.0	07/22/20 09:31	
Bromodichloromethane	ug/L	ND	5.0	07/22/20 09:31	
Bromoform	ug/L	ND	5.0	07/22/20 09:31	
Bromomethane	ug/L	ND	5.0	07/22/20 09:31	
Carbon disulfide	ug/L	ND	10.0	07/22/20 09:31	
Carbon tetrachloride	ug/L	ND	5.0	07/22/20 09:31	
Chlorobenzene	ug/L	ND	5.0	07/22/20 09:31	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

METHOD BLANK: 2643322 Matrix: Water

Associated Lab Samples: 50262532012, 50262532013, 50262532014, 50262532015, 50262532029, 50262532030, 50262532031, 50262532032, 50262532033, 50262532034, 50262532035, 50262532036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroethane	ug/L	ND	5.0	07/22/20 09:31	
Chloroform	ug/L	ND	5.0	07/22/20 09:31	
Chloromethane	ug/L	ND	5.0	07/22/20 09:31	
cis-1,2-Dichloroethene	ug/L	ND	5.0	07/22/20 09:31	
cis-1,3-Dichloropropene	ug/L	ND	5.0	07/22/20 09:31	
Dibromochloromethane	ug/L	ND	5.0	07/22/20 09:31	
Dibromomethane	ug/L	ND	5.0	07/22/20 09:31	
Dichlorodifluoromethane	ug/L	ND	5.0	07/22/20 09:31	
Ethyl methacrylate	ug/L	ND	100	07/22/20 09:31	
Ethylbenzene	ug/L	ND	5.0	07/22/20 09:31	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	07/22/20 09:31	
Iodomethane	ug/L	ND	10.0	07/22/20 09:31	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	07/22/20 09:31	
Methyl-tert-butyl ether	ug/L	ND	4.0	07/22/20 09:31	
Methylene Chloride	ug/L	ND	5.0	07/22/20 09:31	
n-Butylbenzene	ug/L	ND	5.0	07/22/20 09:31	
n-Hexane	ug/L	ND	5.0	07/22/20 09:31	
n-Propylbenzene	ug/L	ND	5.0	07/22/20 09:31	
Naphthalene	ug/L	ND	1.7	07/22/20 09:31	
p-Isopropyltoluene	ug/L	ND	5.0	07/22/20 09:31	
sec-Butylbenzene	ug/L	ND	5.0	07/22/20 09:31	
Styrene	ug/L	ND	5.0	07/22/20 09:31	
tert-Butylbenzene	ug/L	ND	5.0	07/22/20 09:31	
Tetrachloroethene	ug/L	ND	5.0	07/22/20 09:31	
Toluene	ug/L	ND	5.0	07/22/20 09:31	
trans-1,2-Dichloroethene	ug/L	ND	5.0	07/22/20 09:31	
trans-1,3-Dichloropropene	ug/L	ND	5.0	07/22/20 09:31	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	07/22/20 09:31	
Trichloroethene	ug/L	ND	5.0	07/22/20 09:31	
Trichlorofluoromethane	ug/L	ND	5.0	07/22/20 09:31	
Vinyl acetate	ug/L	ND	50.0	07/22/20 09:31	
Vinyl chloride	ug/L	ND	2.0	07/22/20 09:31	
Xylene (Total)	ug/L	ND	5.0	07/22/20 09:31	
4-Bromofluorobenzene (S)	%.	97	85-116	07/22/20 09:31	
Dibromofluoromethane (S)	%.	106	75-120	07/22/20 09:31	
Toluene-d8 (S)	%.	97	83-111	07/22/20 09:31	

LABORATORY CONTROL SAMPLE: 2643323

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	53.1	106	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	45.6	91	64-126	
1,1-Dichloroethene	ug/L	50	58.6	117	79-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

LABORATORY CONTROL SAMPLE: 2643323

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	50	48.7	97	76-119	
1,2-Dibromoethane (EDB)	ug/L	50	54.0	108	76-122	
1,2-Dichloroethane	ug/L	50	53.1	106	66-127	
1,2-Dichloropropane	ug/L	50	53.7	107	75-127	
Benzene	ug/L	50	54.7	109	75-118	
Chlorobenzene	ug/L	50	53.3	107	80-115	
Chloroform	ug/L	50	49.7	99	75-117	
cis-1,2-Dichloroethene	ug/L	50	53.0	106	76-120	
Ethylbenzene	ug/L	50	54.7	109	78-120	
Isopropylbenzene (Cumene)	ug/L	50	53.0	106	82-122	
Methyl-tert-butyl ether	ug/L	50	51.6	103	79-125	
Naphthalene	ug/L	50	50.7	101	70-130	
Tetrachloroethene	ug/L	50	56.2	112	70-123	
Toluene	ug/L	50	53.4	107	72-114	
trans-1,2-Dichloroethene	ug/L	50	56.8	114	79-126	
Trichloroethene	ug/L	50	52.3	105	78-120	
Vinyl chloride	ug/L	50	50.5	101	55-122	
Xylene (Total)	ug/L	150	158	105	81-118	
4-Bromofluorobenzene (S)	%.			96	85-116	
Dibromofluoromethane (S)	%.			96	75-120	
Toluene-d8 (S)	%.			100	83-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

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.
R1	RPD value was outside control limits.
S2	Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

Pace Analytical Services, LLC
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(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 341.14 / O'Neal's
Pace Project No.: 50262532

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50262532001	MW-01_WG_200715	EPA 5030/8260	572929		
50262532002	MW-02_WG_200714	EPA 5030/8260	572929		
50262532003	MW-03_WG_200714	EPA 5030/8260	572929		
50262532004	MW-04_WG_200714	EPA 5030/8260	572929		
50262532005	MW-05_WG_200714	EPA 5030/8260	572929		
50262532006	MW-06_WG_200716	EPA 5030/8260	572929		
50262532007	MW-07_WG_200714	EPA 5030/8260	572929		
50262532008	MW-08_WG_200715	EPA 5030/8260	572929		
50262532009	MW-09_WG_200715	EPA 5030/8260	573136		
50262532010	MW-09D_WG_200716	EPA 5030/8260	573140		
50262532011	MW-10_WG_200716	EPA 5030/8260	573140		
50262532012	MW-11_WG_200714	EPA 5030/8260	573142		
50262532013	MW-12_WG_200714	EPA 5030/8260	573142		
50262532014	MW-13_WG_200716	EPA 5030/8260	573142		
50262532015	MW-14_WG_200715	EPA 5030/8260	573142		
50262532016	MW-15_WG_200715	EPA 5030/8260	573141		
50262532017	MW-15D_WG_200716	EPA 5030/8260	573141		
50262532018	MW-16_WG_200715	EPA 5030/8260	573141		
50262532019	MW-17_WG_200715	EPA 5030/8260	573141		
50262532020	MW-18_WG_200716	EPA 5030/8260	573141		
50262532021	MW-19_WG_200715	EPA 5030/8260	573141		
50262532022	MW-20_WG_200715	EPA 5030/8260	573141		
50262532023	MW-21_WG_200714	EPA 5030/8260	573141		
50262532024	MW-22_WG_200715	EPA 5030/8260	573141		
50262532025	MW-23_WG_200714	EPA 5030/8260	573141		
50262532026	MW-24_WG_200715	EPA 5030/8260	573141		
50262532027	MW-25_WG_200714	EPA 5030/8260	573141		
50262532028	MW-26_WG_200715	EPA 5030/8260	573141		
50262532029	MW-27_WG_200714	EPA 5030/8260	573142		
50262532030	MW-28_WG_200714	EPA 5030/8260	573142		
50262532031	MW-29_WG_200714	EPA 5030/8260	573142		
50262532032	TB-01_WD_200713	EPA 5030/8260	573142		
50262532033	Dup-01_WG_200715	EPA 5030/8260	573142		
50262532034	Dup-02_WG_200715	EPA 5030/8260	573142		
50262532035	EQB-01_WD_200716	EPA 5030/8260	573142		
50262532036	EQB-02_WD_200716	EPA 5030/8260	573142		

WO#: 50262532

50262532

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A / Section B Required Project Information:		Section C Invoice Information:
Company: Wilcox Environmental Engineering	Report To: Alexis Litz	Attention: Jessica Murphy
Address: 1552 Main Street, Suite 100 Speedway, IN 46224	Copy To: jmurphy@wilcoxenv.com	Company Name: Wilcox Environmental Engineering
	N/A	Address: 1552 Main Street, Suite 100 Speedway, Indiana 46224
Email To: alitz@wilcoxenv.com dataservices@wilcoxenv.com	Purchase Order No.: N/A	Pace Quote Reference: N/A
Phone: 317-472-0999 Fax: N/A	Project Name: O'Neal's	Pace Project Manager: Regina Bedel
Requested Due Date/TAT: Standard, QAQC level II	Project Number: 341.14	Pace Profile #: N/A

REGULATORY AGENCY

NPDES | X GROUND WATER | DRINKING WATER
UST | RCRA | OTHER________

SITE LOCATION: GA | IL | X IN | MI | NC | OH | SC | WI | OTHER____

Filtered (Y/N)

Requested Analysis: VOCs 8260; Residual Chlorine (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	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED [redacted]	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	VOCs 8260	Residual Chlorine (Y/N)
1	MW-01_WG_200715	WT	G		7/15/2020	10:37		3				X					X	
2	MW-02_WG_200714	WT	G		7/14/2020	10:34		9				X					X	
3	MW-03_WG_200714	WT	G		7/14/2020	10:29		3				X					X	
4	MW-04_WG_200714	WT	G		7/14/2020	16:31		3				X					X	
5	MW-05_WG_200714	WT	G		7/14/2020	11:20		3				X					X	
6	MW-06_WG_200716	WT	G		7/16/2020	10:42		3				X					X	
7	MW-07_WG_200714	WT	G		7/14/2020	11:25		3				X					X	
8	MW-08_WG_200715	WT	G		7/15/2020	12:47		3				X					X	
9	MW-09_WG_200715	WT	G		7/15/2020	11:56		3				X					X	
10	MW-09D_WG_200716	WT	G		7/16/2020	11:38		3				X					X	
11	~~MW-10_WG_200716~~	WT	G		7/16/2020	12:37		3				X					X	
12	MW-11_WG_200714	WT	G		7/14/2020	12:11		3				X					X	

Pace Project No./Lab I.D.:

ITEM #	Lab I.D.
1	001
2	002
3	003
4	004
5	005
6	006
7	007
8	008
9	009
10	010
11	011
12	012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
MW-02 (MS-MSD)	[signature] /Wilcox	7/17/20	0802	[signature]	7-17-20	802	1.1	Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Sean Jonsen

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7/17/2020

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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.

Section A Required Client Information

Company: Wilcox Environmental Engineering

Address: 1552 Main Street, Suite 100 Speedway, IN 46224

Email To: alitz@wilcoxenv.com; dataservices@wilcoxenv.com

Phone: 317-472-0999 Fax: N/A

Requested Due Date/TAT: Standard, QAQC level II

Section B Required Project Information:

Report To: Alexis Litz

Copy To: jmurphy@wilcoxenv.com

N/A

Purchase Order No.: N/A

Project Name: O'Neal's

Project Number: 341.14

Section C Invoice Information:

Attention: Jessica Murphy

Company Name: Wilcox Environmental Engineering

Address: 1552 Main Street, Suite 100 Speedway, Indiana 46224

Pace Quote Reference: N/A

Pace Project Manager: Regina Bedel

Pace Profile #: N/A

REGULATORY AGENCY

NPDES X GROUND WATER DRINKING WATER

UST RCRA OTHER_____

SITE

LOCATION

GA IL X IN MI NC

OH SC WI OTHER____

Filtered (Y/N)

Requested Analysis:

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
	WP
	AR
	OT
	TS

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	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	VOCs 8260	Residual Chlorine (Y/N)	Pace Project No. Lab I.D.
1	MW-12_WG_200714	WT	G	7/14/2020	12:12		3				X					X		013
2	MW-13_WG_200716	WT	G	7/16/2020	11:33		3				X					X		014
3	MW-14_WG_200715	WT	G	7/15/2020	16:49		3				X					X		015
4	MW-15_WG_200715	WT	G	7/15/2020	16:42		3				X					X		016
5	MW-15D_WG_200716	WT	G	7/16/2020	13:01		3				X					X		017
6	MW-16_WG_200715	WT	G	7/15/2020	14:20		3				X					X		018
7	MW-17_WG_200715	WT	G	7/15/2020	11:39		3				X					X		019
8	MW-18_WG_200716	WT	G	7/16/2020	13:31		3				X					X		020
9	MW-19_WG_200715	WT	G	7/15/2020	10:48		3				X					X		021
10	MW-20_WG_200715	WT	G	7/15/2020	15:42		3				X					X		022
11	MW-21_WG_200714	WT	G	7/14/2020	13:21		3				X					X		023
12	MW-22_WG_200715	WT	G	7/15/2020	14:26		3				X					X		024

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	/Wilcox	7/17/20	0802		7-17-20	802

SAMPLE CONDITIONS

1.1	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Sean Jensen

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 7/17/20

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical™ www.pacelabs.com

Section A Required Client Information

Company:	Wilcox Environmental Engineering
Address:	1552 Main Street, Suite 100 Speedway, IN 46224
Email To:	alitz@wilcoxenv.com dataservices@wilcoxenv.com
Phone:	317-472-0999
Fax:	N/A
Requested Due Date/TAT:	Standard, QAQC level II

Section B Required Project Information:

Report To:	Alexis Litz
Copy To:	jmurphy@wilcoxenv.com
	N/A
Purchase Order No.:	N/A
Project Name:	O'Neal's
Project Number:	341.14

Section C Invoice Information:

Attention:	Jessica Murphy
Company Name:	Wilcox Environmental Engineering
Address:	1552 Main Street, Suite 100 Speedway, Indiana 46224
Pace Quote Reference:	N/A
Pace Project Manager:	Regina Bedel
Pace Profile #:	N/A

REGULATORY AGENCY

NPDES | X GROUND WATER | DRINKING WATER

UST | RCRA | OTHER_____

SITE / LOCATION: GA IL X IN MI NC OH SC WI OTHER____

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; WP; AR; OT; TB

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis: VOCs 8260	Residual Chlorine (Y/N)	Filtered (Y/N)	Pace Project No. Lab I.D.
1	MW-23_WG_200714	WT	G	7/14/2020	13:06		3				X					X			025
2	MW-24_WG_200715	WT	G	7/15/2020	15:31		3				X					X			026
3	MW-25_WG_200714	WT	G	7/14/2020	14:12		3				X					X			027
4	MW-26_WG_200715	WT	G	7/15/2020	13:03		3				X					X			028
5	MW-27_WG_200714	WT	G	7/14/2020	14:26		3				X					X			029
6	MW-28_WG_200714	WT	G	7/14/2020	15:32		3				X					X			030
7	MW-29_WG_200714	WT	G	7/14/2020	16:07		3				X					X			031
8	TB-01_WD_200713	WT	G	7/13/2020	0:00		3				X					X			032
9	Dup-01_WG_200715	WT	G	7/15/2020	0:00		3				X					X			033
10	Dup-02_WG_200715	WT	G	7/15/2020	0:00		3				X					X			034
11	EQB-01_WD_200716	WT	G	7/16/2020	12:15		3				X					X			035
12	EQB-02_WD_200716	WT	G	7/16/2020	13:15		3				X					X			036

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	/Wilcox	7/17/20	0802		7-17-20	802

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
1.1	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Sean Jensen

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 7/17/20

SAMPLE CONDITION UPON RECEIPT FORM

Pace Analytical

Project #: 50262532 **Date/Time and Initials of person examining contents:** JH 7-17-20 853

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.		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)		Y				
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 Labels (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID		X	Trip Blank Custody Seals?:	X		
Extra labels on Terracore Vials (soils only)?		X				

Comments: did not receive sample MW-24 received 2 sets labeled MW-22 w/ different times one sets times match MW22 the other sets times match MW-24. ~~Notified~~ PM. ~~That~~ PM said assume extra set is MW-24 Notified JH 7-17-20 JH 7-17-20

COC PAGE 1 of 3

Sample Container Count

Sample Line Item	WGFU	SBS DI BK Kit R	DG9H VG9H	VOA VIALS (>6mm)	VG9U	DG9U	DG9T	AG0U	AG1H	AG1U	AG3S	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H					Matrix	pH <2	pH >9	pH>12
1			3																							Wt			
2			9																										
3			3																										
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpres amber glass
DG9H	40mL HCl amber voa vial	AG1H	1L HCl amber glass
DG9M	40mL MeOH clear vial	AG1S	1L H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1L Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpres 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 unpres amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 amber glass
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpres amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1L HCl clear glass
VSG	Headspace septa vial & HCl	BG1S	1L H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1L Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1L unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
CG3H	250mL clear glass HCl	BG3U	250mL Unpres Clear Glass

Plastic / Misc.

BP1A	1L NaOH, Asc Acid plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn, Ac
BP2A	500mL NaOH, Asc Acid plastic
BP2N	500mL HNO3 plastic
BP2O	500mL NaOH plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Ac
BP3B	250mL NaOH plastic
BP3N	250mL HNO3 plastic
BP3F	250mL HNO3 plastic (field filtered)
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Ac plastic

AF	Air Filter
C	Air Cassettes
R	Terra core kit
SP5T	120mL Coliform Na Thiosulfate
U	Summa Can
ZPLC	Ziploc Bag

WT	Water
SL	Solid
NAL	Non-aqueous liquid
WP	Wipe

COC PAGE 2 of 3

Sample Container Count

Sample Line Item	WGFU	SBS DI BK Kit R	DG9H	VG9H	VOA VIALS (>6mm)	VG9U	DG9U	DG9T	AG0U	AG1H	AG1U	AG3S	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H					Matrix	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 unpres amber glass
DG9H	40mL HCl amber voa vial	AG1H	1L HCl amber glass
DG9M	40mL MeOH clear vial	AG1S	1L H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1L Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpres 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 unpres amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 amber glass
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpres amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1L HCl clear glass
VSG	Headspace septa vial & HCl	BG1S	1L H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1L Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1L unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
CG3H	250mL clear glass HCl	BG3U	250mL Unpres Clear Glass

Plastic / Misc.

BP1A	1L NaOH, Asc Acid plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn, Ac
BP2A	500mL NaOH, Asc Acid plastic
BP2N	500mL HNO3 plastic
BP2O	500mL NaOH plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Ac
BP3B	250mL NaOH plastic
BP3N	250mL HNO3 plastic
BP3F	250mL HNO3 plastic (field filtered)
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Ac plastic

AF	Air Filter
C	Air Cassettes
R	Terra core kit
SP5T	120mL Coliform Na Thiosulfate
U	Summa Can
ZPLC	Ziploc Bag

WT	Water
SL	Solid
NAL	Non-aqueous liquid
WP	Wipe

COC PAGE 3 of 3

Sample Container Count

Sample Line Item	WGFU	SBS DI BK Kit R	DG9H VG9H	VOA VIALS (>6mm)	VG9U	DG9U	DG9T	AG0U	AG1H	AG1U	AG3S	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H					Matrix	pH <2	pH >9	pH>12
1			3																							U			
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpres amber glass	BP1A	1L NaOH, Asc Acid plastic
DG9H	40mL HCl amber voa vial	AG1H	1L HCl amber glass	BP1N	1L HNO3 plastic
DG9M	40mL MeOH clear vial	AG1S	1L H2SO4 amber glass	BP1S	1L H2SO4 plastic
DG9P	40mL TSP amber vial	AG1T	1L Na Thiosulfate amber glass	BP1U	1L unpreserved plastic
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpres amber glass	BP1Z	1L NaOH, Zn, Ac
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass	BP2N	500mL HNO3 plastic
VG9H	40mL HCl clear vial	AG2U	500mL unpres amber glass	BP2O	500mL NaOH plastic
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 amber glass	BP2S	500mL H2SO4 plastic
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpres amber glass	BP2U	500mL unpreserved plastic
VGFX	40mL w/hexane wipe vial	BG1H	1L HCl clear glass	BP2Z	500mL NaOH, Zn Ac
VSG	Headspace septa vial & HCl	BG1S	1L H2SO4 clear glass	BP3B	250mL NaOH plastic
WGKU	8oz unpreserved clear jar	BG1T	1L Na Thiosulfate clear glass	BP3N	250mL HNO3 plastic
WGFU	4oz clear soil jar	BG1U	1L unpreserved glass	BP3F	250mL HNO3 plastic (field filtered)
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass		
CG3H	250mL clear glass HCl	BG3U	250mL Unpres Clear Glass		

Plastic / Misc.

BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Ac plastic

AF	Air Filter
C	Air Cassettes
R	Terra core kit
SP5T	120mL Coliform Na Thiosulfate
U	Summa Can
ZPLC	Ziploc Bag

WT	Water
SL	Solid
NAL	Non-aqueous liquid
WP	Wipe