111 Corning Road, Suite 116
Cary, North Carolina 27518
United States
T +1.919.859.5001
www.jacobs.com

January 20, 2020

Delivered via trackable, overnight delivery

Mr. Jeffrey E. Mendenhall
South Carolina Department of Health and Environmental Control
Assessment Section, UST Management Division
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Subject: **Third Quarter 2019 Monitoring Report**
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID Number 18693, "Kinder Morgan Belton Pipeline Release"

Dear Mr. Mendenhall,

On behalf of Plantation Pipe Line Company (Plantation), this Third Quarter 2019 Monitoring Report presents a summary of the work performed at the Lewis Drive Remediation Site in Belton, South Carolina between July 1 and September 30, 2019. As requested, this quarterly report is presented in a condensed format for ease of use; a comprehensive annual report will continue to be submitted, as discussed with the South Carolina Department of Health and Environmental Control (DHEC) during meetings on May 17 and August 12, 2019.

The September 2019 quarterly monitoring event included sitewide gauging, product collection, air sparging (AS) system operation/maintenance, and collection of groundwater and surface water samples for laboratory analysis. These activities were conducted in accordance with Table 1 of the *Monitoring, Reporting, and Product Recovery Plan* submitted on May 31, 2019 (Jacobs, 2019) and agreed upon by DHEC on August 20, 2019 (DHEC, 2019).

Figure 1 presents a map of the site and sampling locations, including monitoring wells, recovery sumps, recovery trenches, recovery wells, and surface water monitoring locations.

Summary of Gauging and Product Recovery

Select monitoring wells and surface water locations were gauged monthly during this reporting period. Sitewide gauging was conducted quarterly and included the product recovery features (recovery sumps, trenches, and wells). Almost all monitoring wells and recovery features (with the exception of RW-09, RW-12, and RW-14) had water levels well within their screened intervals to allow the detection of free-phase product at the site. Field observations made during this reporting period are summarized in Table 1. Stream and groundwater elevations are tabulated in Table 2. Groundwater elevations in the residuum aquifer along with stream elevations are presented on Figure 2A. Groundwater elevations in the bedrock aquifer are presented on Figure 2B.

Water levels from the September 2019 gauging event were used to create potentiometric surface maps for the site (Figures 2A and 2B). Groundwater flow in both the residuum (Figure 2A) and bedrock (Figure 2B) aquifers mimics the topography of the site and generally flows from topographic highs to topographic lows. Cupboard Creek flows intermittently, indicating the primary direction of groundwater flow is northeast toward Browns Creek. The September 2019 water table configurations and direction of groundwater flow are consistent with previous findings.

Product recovery was performed continuously with passive systems in the Browns Creek Protection Zone (BCPZ), Cupboard Creek Protection Zone (CCPZ), and Hayfield Zone in recovery wells, sumps, and trenches. During the quarterly event, the field team recorded the product collected from each canister or sock. The amount of product collected from the canisters was tracked by measuring the fluid volume from the canister in a stainless-steel measuring cup. The amount of product collected from the absorbent socks was measured by weighing the absorbent socks before and after deployment into the recovery feature. Recovered fluids from the canisters were placed into onsite poly tanks for temporary storage, separation, and eventual offsite disposal. Used absorbent socks were placed in a Department of Transportation (DOT)-approved, 55-gallon steel drum for offsite disposal. Table 3 shows the dates and quantities of product that was recovered.

During this third quarter 2019 reporting period, only 0.074 gallon of product was recovered at the site, with 85 percent of that recovered from RW-05. Product thicknesses continue to be minimal across the site. In September 2019, measurable product thicknesses were observed at only 8 of 105 features monitored, ranging from 0.02 foot in MW-11, RS-01, and RW-03 to 0.23 foot in RW-04. Most notably, no recovery features within the BCPZ or the CCPZ contained measurable product; only one monitoring location, MW-20, contained product within the CCPZ. Product thickness and well gauging data are presented in Table 2. Figure 3 presents measurable product data at the site. Hydrographs for select monitoring wells and recovery features representative of approximate product thickness trends are provided in Attachment A.

Summary of Surface Water Results

Inspections of surface water features were performed monthly at the site during this reporting period. The inspection route of surface water features is presented on Figures 1, 2A, and 2B. No signs of distressed vegetation or hydrocarbon sheens were observed during the surface water inspections for this reporting period. Field observations during this reporting period are summarized in Table 1.

The stream aerators at Browns Creek were shut off for a 24-hour period prior to conducting site surface water sampling. Surface water samples were collected monthly and were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), naphthalene, and methyl tertiary butyl ether (MTBE) using U.S. Environmental Protection Agency (EPA) Method 8260B.

During this reporting period, dissolved hydrocarbons were detected in surface water at 4 of the 13 locations sampled: SW-01, SW-02, SW-04, and SW-12 (Table 4A). Benzene was the only constituent that exceeded the surface water standard for protection of human health for consumption of water and organisms (2.2 micrograms per liter [µg/L]; DHEC, 2014); benzene was isolated to SW-12 during the August 2019 event, and nondetect during the September 2019 event. Surface water sample results are summarized in Table 4A; historical data for surface water samples are summarized in Table 4B. Trends for surface water sampling locations SW-01, SW-02, SW-04, SW-12, SW-13, and SW-14 are presented in Attachment B. The trend graphs for locations SW-01 and SW-12 show a data gap for March 2019 because these locations were dry and did not allow for sample collection. In addition, locations SW-03, SW-05, and SW-13 were dry during the September 2019 event and did not allow for sample collection. Laboratory reports for surface water samples and chain of custody (COC) records are included in Attachment D.

Summary of Groundwater Results

Three groundwater sampling events were performed during this reporting period. The first event was limited to monitoring wells MW-46, MW-56, and MW-57 (CCPZ), and MW-37 and MW-38 (BCPZ) prior to

oxidant injections in August 2019. The second event was the mid-quarter event. The third event was a comprehensive sitewide quarterly event. Sitewide groundwater gauging was conducted at the beginning of the third sampling event, and select wells were gauged during the first and second events using an oil-water interface probe to measure the depth to water and test for the presence and thickness (if detected) of product. The oil-water interface probe was decontaminated before each use and after the final measurement. Monitoring wells without free product were sampled using either a HydraSleeve, peristaltic pump using low-flow purging, or submersible pump. Samples were analyzed for BTEX, 1,2-dichloroethane, MTBE, and naphthalene using EPA Method 8260B. Groundwater sample results are summarized in Table 5A; historical data for groundwater samples are summarized in Table 5B. (Note: private well sampling is conducted during the second and fourth quarter events and will be discussed in the next quarterly report.)

Groundwater monitoring results for this reporting period demonstrate continued decreases in dissolved concentrations of hydrocarbons and stabilization of the extent of these dissolved concentrations in the BCPZ, CCPZ, and Hayfield Zone. An exception is MW-23 in the CCPZ, which has shown an increase in dissolved concentrations since the previous quarter; this well will continue to be monitored. Most bedrock wells, which are outside the radius of influence of vertical air sparge (VAS) and horizontal air sparge (HAS) systems, and the shallow bedrock zone (SBZ) have stable dissolved concentrations. An exception is MW-15B, which has shown an order of magnitude increase of dissolved concentrations since the previous quarter.

Although site-specific groundwater cleanup targets have not been established, groundwater analytical results are screened against the risk-based screening levels (RBSLs) listed in the South Carolina Quality Assurance Program Plan (QAPP) for the Underground Storage Tank (UST) Management Division, Table D1 (DHEC UST Management Division, 2016), referred to as Target Screening Levels (TSLs).

RBSLs are listed at the top of Tables 5A and 5B. The September 2019 results are shown on Figures 4A and 4B and summarized in the following sections. Trend plots for select groundwater monitoring wells are included in Attachment C. Note that the gray shaded area on the trend charts indicates the operational period of the AS system for wells estimated to be within the radius of influence of the AS system, and monitoring wells that have been nondetect or below TSLs since their installation are not presented. Laboratory analytical reports and COC records for this reporting period are provided in Attachment D.

Browns Creek Protection Zone

Remediation in the BCPZ has exceeded expectations with benzene no longer detected in any of the downgradient wells with the exception of MW-34, which is just above its TSL of 5 µg/L at a concentration of 12.9 µg/L. The only other constituent exceedance in wells downgradient of the AS system is MTBE in MW-34 and MW-39. Constituent concentrations in downgradient residuum monitoring wells MW-24, MW-25, MW-40, MW-41, MW-42, and MW-43 were nondetect during this reporting period. Benzene concentrations have fluctuated at MW-34 since June 2018 but project an overall stable trend. The residual levels in MW-34 likely remain due to its poor hydraulic conductivity with the groundwater. This well purges dry rapidly and is very slow to recharge, indicating its poor hydraulic connection. As a result, the residual levels in this well are not believed to be representative of the nearby groundwater. Benzene concentrations at MW-38 had an increasing trend at the beginning of the year and have since shown a marked decrease of 95.8 percent since the last quarter and following the oxidant injections in this area (950 µg/L in June 2019 to 40.2 µg/L in September 2019).

Groundwater in residuum wells that are side-gradient of and within the AS system show that dissolved concentrations have remained stable or nondetect with concentrations remaining below TSLs or nondetect in monitoring wells MW-12, MW-15, MW-35, and MW-37. Bedrock wells within the influence of the AS system have decreased benzene concentrations in MW-12B and increased concentrations in MW-15B since the last quarterly event. At MW-15B, it is possible that the upgradient AS wells added during the system expansion are impacting the concentrations. BTEX constituents were nondetect in all other BCPZ bedrock monitoring wells during this reporting period.

Cupboard Creek Protection Zone

Since AS was initiated in March 2017, dissolved concentrations in the CCPZ have stabilized in residuum well MW-20 but fluctuated in wells MW-23 and MW-46. MW-19 is within the AS system and has been sampled regularly since June 2018 with detections below TSLs during the previous quarterly event in June 2019; however, it did not have sufficient water for sample collection during this quarterly event. MW-20 is also within the influence of the AS system and has been sampled regularly since February 2019, showing a trend of decreasing product occurrence and stable constituent concentrations. MW-20 was not sampled during this quarterly event due to the presence of product. MW-23 is downgradient of the system and has shown an increase in BTEX concentrations in 2019. The impacts at MW-23 need to be continually monitored to assess if those impacts are not being sufficiently treated by the system and if alternative treatment needs to be focused in that area. No constituents were detected in downgradient bedrock monitoring wells (MW-23B and MW-26B) in the CCPZ.

Since the last quarterly event and oxidant injections performed in August 2019, downgradient monitoring wells MW-46, MW-56, and MW-57 have shown decreasing trends for all constituents analyzed. Benzene concentrations from June 2019 to September 2019 decreased in MW-46 by 45.8 percent, while concentrations at MW-56 and MW-57 decreased almost 95 percent. Only benzene and MTBE concentrations are now above their respective TSLs at these locations.

Hayfield Zone

The vast majority of the Hayfield area monitoring wells are below TSL levels with only five residuum and three bedrock wells still showing detections above TSLs. Of these wells, only two (MW-16 and MW-18) are within the influence of the AS system, demonstrating the effectiveness of the system. Benzene was detected above the TSL in 4 of 27 residuum monitoring wells (MW-07, MW-16, MW-36, and MW-45). Though benzene and toluene concentrations continue to exceed the TSL in MW-07, concentrations have decreased slightly since the last quarter, and this location is upgradient of the CCPZ. Benzene and MTBE concentrations at MW-45 exceed TSLs and have increased slightly since last quarter. Naphthalene concentrations exceeded the TSL in MW-16 and MW-18 in September 2019. Measurable product has not been detected at any residuum or bedrock monitoring wells within the Hayfield Zone this year. MW-36 benzene concentrations have decreased by nearly 70 percent since the last quarterly event, while MW-09 and MW-14 concentrations have remained below the respective TSLs. The analytical results for MW-51 through MW-55 continue to remain below the TSLs. Four of the residuum wells were not sampled due to insufficient water (MW-03, MW-13, MW-17, and MW-30). TSL exceedances during the September 2019 event for residuum monitoring wells are shown in Exhibit 1.

Exhibit 1. TSL Exceedances in Residuum Wells in September 2019

Well	Date	Units	Benzene	Toluene	MTBE	Naphthalene
		TSLs (µg/L):	**5**	**1,000**	**40**	**25**
MW-07	9/19/2019	µg/L	1,580	2,550	50 U	250 U
MW-16	9/18/2019	µg/L	8.36	73.9	1 U	132
MW-18	9/18/2019	µg/L	1 U	10.7	15.4	48.7
MW-36	9/19/2019	µg/L	360	46.0	10 U	50 U
MW-45	9/17/2019	µg/L	5.24	1 U	103	5 U

Gray shading indicates the analyte exceeded TSL

U = analyte was not detected above the reported sample quantitation limit

Dissolved concentrations were detected above TSLs in 3 of the 10 bedrock wells, with each of these locations being outside the influence of the AS system. Benzene concentrations ranged from 25.6 µg/L in MW-50B to 7,700 µg/L in MW-17B during the September 2019 event. Concentrations of ethylbenzene, toluene, naphthalene, and MTBE exceeded the TSLs at MW-17B, which is upgradient of the Cupboard Creek AS curtain. MTBE also exceeded its TSL in MW-13B and MW-50B. All other bedrock wells in the Hayfield Zone were nondetect or below TSLs during this reporting period.

Shallow Bedrock Zone

The SBZ has shown stable concentrations since March 2019 with all monitoring wells below TSLs or nondetect with the exception of MW-11. Product has not been detected at MW-11 since December 2018, and it has been sampled quarterly since March 2019 with stable BTEX concentrations. This well is in the area of the recently expanded AS system, which is expected to directly influence BTEX concentrations in groundwater in the area of and downgradient to MW-11 before it connects with the Browns Creek area (Figure 4A). Residuum wells MW-22 and MW-44 were nondetect during the previous 2019 sampling events, but had insufficient water for sampling during this quarterly event. No constituents were detected above TSLs in bedrock monitoring wells MW-01B, MW-27B, and MW-44B.

Summary of Air Sparging System Operation/Maintenance and Efficiency

The average runtime for the AS system during this reporting period was approximately 46 percent. Air compressor downtime experienced during this reporting period was associated with routine maintenance visits and sampling, high temperature shutdowns, and breaker tripping causing one or both compressors to fail.

There were approximately 11 days of scheduled downtime associated with surface water sampling at the site. Prior to conducting the sampling, the stream aerators at Browns Creek were shut off for a 24-hour period and then restarted once sampling was completed. Thirty-nine days of unscheduled downtime occurred because one or both compressors failed due to the tripping of a faulty breaker. Troubleshooting of the system occurred to determine the cause of the faulty breaker. Initially, a fan was installed to reduce temperatures in the breaker panel; however, when the breaker continued to trip, it was determined that an upgrade was needed from 300 amperes (amps) to 350 amps. This upgrade to the breaker is scheduled to be performed during the next reporting period.

Activities associated with operation and maintenance of the AS system are summarized by remediation area below:

- BCPZ: AS in the BCPZ was performed using 35 VAS wells screened from approximately 13 to 72 feet below ground surface (bgs). The flow rates in these wells averaged approximately 7.65 standard cubic feet per minute (scfm) per sparging well during the reporting period. Additionally, air was injected into two surface water submersible diffusion aerators installed in Browns Creek. The flow rates in the aerators averaged approximately 14.45 scfm each during this reporting period.
- CCPZ: AS in the CCPZ was performed using a curtain of 24 VAS wells screened between approximately 9 and 31 feet bgs. The flow rates in these wells averaged approximately 7.79 scfm per sparging well during this reporting period.
- Hayfield Zone: AS in the Hayfield Zone was performed at three HAS wells (HAS-01, HAS-02, and HAS-03), which have screen lengths of approximately 752, 715, and 377 feet, respectively. The flow rates in each of the three HAS wells were maintained at approximately 0.63 scfm per foot of screen during this reporting period, resulting in average flow rates of 494, 406, and 249 scfm per well, respectively. Sparging at the HAS wells was continuous during system operation. Decreasing flows to the HAS wells and increasing flows to other areas of the site is being considered to optimize the AS system.

The average runtime for the AS system reported above is lower than the values reported in the monthly operation and maintenance updates due to a calculation error that was discovered in November 2019, which has been corrected in this report. The average AS system runtimes for July, August, and September 2019 should have been reported as 69, 33, and 37 percent, respectively.

Additional Activities

Below is a summary of the additional activities performed during July through September 2019:

- Four soil samples were collected on July 18, 2019, one each at four sample locations (SS-01 through SS-04) on the west side of Browns Creek in the vicinity of MW-34 and SW-12, to assess the potential presence of free-phase petroleum that was not being detected in nearby monitoring wells and that could be adversely impacting the surface water (Figure 1). Each sample location was advanced to the capillary fringe; samples were collected approximately between 20 and 32 inches bgs using a hand auger. Volatile organic compound (VOC) readings were recorded using a photoionization detector (PID) during the advancement of the hand auger at each soil sample location. The readings ranged from less than 1.0 parts per million (ppm) (SS-01 and SS-04) to 370 ppm (SS-02). Each soil sample was analyzed for BTEX and naphthalene by Method SW-846 8260B. A product sheen field test was performed on soils collected from each sampling location that involved mixing distilled water with the soil in a clean bucket. Only the test for the SS-02 location showed a faint visible sheen from this field test.

  BTEX and naphthalene concentrations from the soil samples collected were below the RBSLs for surficial soil (Table D6 of the QAPP), but above the leaching RBSLs for clay-rich soil with <10 feet separation distance (Table D4 of the QAPP). Soil sample results are summarized in Table 6 of this report. Laboratory analytical reports and COC records are included in Attachment D.

- Oxidant injections were conducted from August 9 through 28, 2019, in the area of MW-46, MW-56, and MW-57 in the CCPZ and MW-38 in the BCPZ. This was performed as an interim step to address the increased dissolved hydrocarbon concentrations located outside the direct influence of the AS system in the area upgradient from Cupboard Creek and Browns Creek. The selected amendment, Oxygen BioChem (OBC), was injected into the subsurface to reduce the dissolved hydrocarbon concentrations in groundwater. OBC, supplied by Redox Tech, LLC, is a mixture of sodium persulfate and calcium peroxide that supports a two-fold mechanism for treating petroleum hydrocarbons. OBC delivers a strong oxidant (sodium persulfate) that provides short-term in situ chemical oxidation, as well as long-term electron acceptors (oxygen and sulfate) for biological oxidation. A total of 42 injection locations in the MW-46 area of Cupboard Creek and 23 injection locations in the area of MW-38 of Browns Creek were installed approximately 15 feet apart, perpendicular to groundwater flow. A Geoprobe direct-push drill rig was used to advance borings at each location to deliver an OBC solution that was approximately 600 pounds of OBC mixed with 360 gallons of potable water. The solution was injected from the top of bedrock (approximately 20 feet bgs) to 6 feet bgs. Additional details regarding the injections can be found in the field summary report provided by Redox Tech, LLC, included as Attachment E.

Summary of Findings

The following conclusions are based on site work performed during this reporting period between July 1 and September 30, 2019:

- The presence of free-phase petroleum has been virtually eliminated at the site. Of the 105 monitoring features gauged, only 4 of 7 locations with measurable product had a product thickness greater than 0.1 foot. Free-phase product continues to be absent within the treatment zones at Cupboard and Brown's Creeks with the exception of MW-20 in CCPZ.
- The sitewide remedial efforts have been effective in establishing treatment zones before Brown's Creek and Cupboard Creek from continued migration of contaminated groundwater to these surface waters. Groundwater monitoring results in the area of influence in the Hayfield area have cleaned up all impacts to below TSLs with the exception of MW-16 (benzene and naphthalene) and MW-18 (naphthalene). Only minor impacts still remain downgradient of the Brown's Creek treatment system in MW-34 and MW-39. It is believed that MW-34 is not hydraulically connected to the groundwater and is not representative of groundwater in that area. Treatment at Cupboard Creek shows only two areas of continued impact at MW-20 and MW-23. The impacts at MW-23 need to be monitored more frequently to assess if those impacts are not being sufficiently treated by the system, and treatment needs to be focused in that area if possible.

- Oxidant injections, outside the direct influence of the AS system and upgradient from Cupboard Creek (CCPZ) and Browns Creek (BCPZ), decreased benzene concentrations substantially (i.e., at MW-38 and MW-46 by 95.8 and 45.8 percent, respectively, and by almost 95 percent at MW-56 and MW-57 from July 2019 to September 2019).
- The analytical results for recently installed monitoring wells MW-51 through MW-55 have continued to be below the TSLs since installation (between August 2018 and March 2019):
  - MW-51 and MW-52 results did not indicate an upgradient source from these locations that may account for the dissolved hydrocarbon concentrations at MW-38.
  - MW-53 and MW-54 results defined the northern edge of the plume in the area of MW-30.
  - MW-55 results defined the western edge of the plume in the area of MW-36.
- Although AS treatment zones have been established upgradient of both surface water bodies, an exceedance of the benzene surface water screening value was recorded at SW-12 in August 2019. However, benzene was nondetect for all surface water sampling locations analyzed during the September 2019 event.
- During this reporting period, the AS system operated far less than desired primarily due to a problem with the breaker system. Uptime was only approximately 46 percent. Operating flows in the stream aerators, HAS wells, and VAS wells were maintained near design rates (i.e., at approximately 96 percent, 84 percent, and 51 percent of design flow capacity, respectively).
- There are a few locations that show residual impacts outside the influence of the AS system. These locations are downgradient or side-gradient of the system and will be addressed with activities currently being considered. This includes MW-38 (BCPZ), MW-23, MW-46, MW-56, and MW-57 (CCPZ), and MW-7, MW-36, and MW-45 (Hayfield Zone). The recent oxidant injections focused on these areas, with the exception of MW-23 and the Hayfield Zone wells.

Future Activities

Future activities planned for the Lewis Drive site include the following:

- Ongoing monitoring and reporting will be conducted according to Table 1 of the *Monitoring, Reporting, and Product Recovery Plan* (Jacobs, 2019). Groundwater concentration trends in the monitoring well network will continue to be assessed to optimize the monitoring well network, to optimize air sparging efforts, and to identify areas for potential additional remediation, if necessary.
- Concentrations in areas of MW-46, MW-56, and MW-57 (CCPZ), and monitoring well MW-38 (BCPZ) will be monitored to assess the effectiveness of the oxidant injections conducted in August 2019 and to evaluate the need to expand the AS system in those areas. A plan for expanding the air sparge systems at Cupboard Creek and Brown's Creek will be developed should an expansion be needed.
- Additional monitoring wells will be installed in the CCPZ, including a shallow well and a bedrock well downgradient of MW-56 and MW-57, and a well side-gradient from MW-46, to further delineate petroleum contamination in this area.
- A bedrock well will be installed in the area of MW-38 in the BCPZ to further delineate petroleum contamination downgradient of MW-14B.
- The pilot test air sparge wells will be converted to monitoring wells for use in assessing residual impacts in the bedrock in that area of the site.
- A plan to address select bedrock and residuum wells that are not under the direct influence of the air sparge systems will be submitted for DHEC approval.
- Petroleum-contaminated water will be removed from the onsite storage tanks and disposed at a permitted facility during the next reporting period.
- The faulty breaker that was causing the air compressors to fail will be replaced during the next reporting period.

JACOBS

References

Jacobs. 2019. *Monitoring, Reporting, and Product Recovery Plan (April 1, 2019 through March 30, 2020). Lewis Drive Remediation Site, Plantation Pipe Line Company, Belton, South Carolina. Site ID Number 18693, "Kinder Morgan Belton Pipeline Release."* May 31.

South Carolina Department of Health and Environmental Control (DHEC). 2014. *R. 61-68, Water Classifications & Standards.* June 27.

South Carolina Department of Health and Environmental Control, Underground Storage Tank Management Division (DHEC UST Management Division). 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management Division.* Title: Programmatic QAPP. Revision Number: 3.1. Revision Date: February 2016. 215 pp.

South Carolina Department of Health and Environmental Control (DHEC). 2019. *Review of Monitoring, Reporting, and Product Recovery Plan (April 1, 2019 through March 31, 2020) and concurrence with Table 1. Lewis Drive Remediation Site, Plantation Pipe Line Company, Belton, South Carolina. Site ID Number 18693, "Kinder Morgan Belton Pipeline Release."* August 20.

If you have any questions regarding this report or the project in general, please call me at (919) 859-5789, Tom Wiley/Jacobs at (678) 530-4388, or Jerry Aycock/Plantation at (770) 751-4165.

Regards,

William M. Waldron, P.E.
Program Manager

The material and data presented in this report were prepared consistent with current and generally accepted consulting principles and practices. This work was supervised by the following Jacobs licensed professional.

JONATHAN E. GRIMES
REGISTERED
No.
2235
SOUTH CAROLINA
PROFESSIONAL GEOLOGIST

Jonathan Grimes, P.G.
South Carolina Registered Professional Geologist No. 2235

January 20, 2020
Date

GES0918191047ATL

Copies to: Jerry Aycock/Plantation (Digital, Jerry_Aycock@kindermorgan.com)
Mary Clair Lyons, Esq., Plantation (Digital, Mary_Lyons@kindermorgan.com)
Richard Morton, Esq., Womble Bond Dickinson, LLP (Digital, ric.morton@wbd-us.com)
File

Attachments:

Table 1 – Field Observation Log
Table 2 – Groundwater Elevation and Product Thickness Data
Table 3 – Product Skimmer Recovery Results - 2019
Table 4A – Analytical Results for Surface Water, Third Quarter 2019
Table 4B – Analytical Results for Surface Water, Historical
Table 5A – Analytical Results for Groundwater, Third Quarter 2019
Table 5B – Analytical Results for Groundwater, Historical
Table 6 – Analytical Results for Soil

Figure 1 – Site Overview
Figure 2A – Residuum Groundwater and Surface Water Elevation Map
Figure 2B – Bedrock Groundwater Elevation Map
Figure 3 – Site Features with Measurable Product
Figure 4A – Groundwater Analytical Results in Residuum Aquifer, March 2019, May/June 2019, and August/September 2019
Figure 4B – Groundwater Analytical Results in Bedrock Aquifer, March 2019, June 2019, and September 2019

Attachment A – Product Thickness Trends
Attachment B – Surface Water Analytical Trends
Attachment C – Groundwater Analytical Trends
Attachment D – Analytical Laboratory Reports
Attachment E – Field Summary Report from Redox Tech, LLC

Tables

Table 1. Field Observation Log
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Date	Inspect Cupboard Creek Zone and Wetlands South of Calhoun Road (Any odor, sheen, or distressed vegetation? Describe.)	Inspect Brown's Creek Upstream and Downstream of the Culvert Under Lewis Drive (Any odor, sheen, or distressed vegetation? Describe.)	Inspect Hayfield Area (Any odor, sheen, or distressed vegetation? Describe.)	Inspect Shallow Bedrock Zone Area (Any odor, sheen, or distressed vegetation? Describe.)	Inspect Hillside Adjacent to and South of SW-02 (Any odor, sheen, or distressed vegetation? Describe.)	Inspect Hillside Adjacent to and South of SW-04 (Any odor, sheen, or distressed vegetation? Describe.)
7/17/2019	Cupboard Creek was dry leading to SW-14. No noticeable changes in area. Odor present along pathway from MW-19 to MW-20.	Brown's Creek had a slight odor around SW-12. The remaining locations had clear flow or biosheen. Areas around SW-08 and SW-09 were muddy.	No noticeable changes.	No noticeable changes.	Area near culvert was muddy. No noticeable odors or sheen other than biological. Vehicular trash such as beer bottles, fast food bags, and other debris were noticed.	Animal tracks were observed leading into and out of the SW-04 sampling location.
8/20/2019	Cupboard Creek was dry along Calhoun Road to SW-14. During an inspection of the cattle pond (SW-14), biosheen, live fish, and live frogs were observed.	No odors or distressed vegetation observed in wetlands either upstream or downstream of culvert under Lewis Drive. Some biological sheen near MW-37 and down towards SW-08. Observed frogs jumping in the water near MW-38.	No changes were observed in the Hayfield Zone from the last inspection.	No changes were observed in the Shallow Bedrock Zone from the last inspection.	No observed abnormalities along the hillside. Biological sheen and algae present.	No observed abnormalities along the hillside. Biological sheen and algae present.
9/19/2019	Cupboard Creek leading to SW-14 was dry. Dead grass and trees around injection areas in farmers field were observed.	Daylighting around RW-14. Reduced flow at VAS-24 to 3 scfm. Daylighting issue resolved. Water levels low around SW-13.	Ant hills at most flush mount wells. Overgrown grass in Hayfield Zone, low visibility of ground. Trees along tree line are healthy.	Conditions good. Large oak is dead on one side - possibly struck by lightning.	Kudzu in area. Path still open and clean.	Conditions good.

Note:
ID = identification
MW = monitoring well
RT = recovery trench
scfm = standard cubic feet per minute
SW = surface water

Table 2. Groundwater Elevation and Product Thickness Data

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location ID	Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Top of Casing Elevation[a,b] (ft amsl)	Groundwater Elevation (ft amsl)	Corrected[c] Groundwater Elevation (ft amsl)	Notes
MW-01					853.07			
	9/16/2019	-	12.08	-		840.99	-	
MW-01B*					852.99			
	9/16/2019	-	11.78	-		841.21	-	
MW-02					841.04			
	9/16/2019	-	14.63	-		826.41	-	
MW-02B*					841.19			
	9/16/2019	-	22.23	-		818.96	-	
MW-03					838.36			
	9/16/2019	-	19.89	-		818.47	-	
MW-04					844.42			
	9/16/2019	-	14.48	-		829.94	-	
MW-05					851.11			
	9/16/2019	-	16.50	-		834.61	-	
MW-06					852.92			
	9/16/2019	-	13.73	-		839.19	-	
MW-06B*					852.57			
	9/16/2019	-	13.52	-		839.05	-	
MW-07					853.02			
	9/16/2019	-	12.81	-		840.21	-	
	8/19/2019	-	11.61	-		841.41	-	
MW-08					844.72			
	9/16/2019	-	17.16	-		827.56	-	
MW-09					843.63			
	9/16/2019	-	13.30	-		830.33	-	sparging
MW-09B*					843.92			
	9/16/2019	-	15.49	-		828.43	-	
MW-10					845.41			
	9/16/2019	-	19.95	-		825.46	-	
MW-11*					855.63			
	9/16/2019	29.80	29.82	0.02		825.81	825.82	
MW-12					834.53			
	9/16/2019	-	14.67	-		819.86	-	

Table 2. Groundwater Elevation and Product Thickness Data

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location ID	Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Top of Casing Elevation[a,b] (ft amsl)	Groundwater Elevation (ft amsl)	Corrected[c] Groundwater Elevation (ft amsl)	Notes
MW-12B*					834.98			
	9/16/2019	-	14.59	-		820.39	-	
	8/19/2019	-	12.07	-		822.91	-	no odor
MW-13					848.84			
	9/16/2019	-	22.01	-		826.83	-	
MW-13B*					849.82			
	9/16/2019	-	23.23	-		826.59	-	
MW-14					838.70			
	9/16/2019	-	17.45	-		821.25	-	
MW-14B*					840.20			
	9/16/2019	-	18.26	-		821.94	-	
MW-15					831.03			
	9/16/2019	-	11.56	-		819.47	-	
MW-15B*					831.29			
	9/16/2019	-	15.68	-		815.61	-	
	8/19/2019	-	15.52	-		815.77	-	slight odor
MW-16					847.67			
	9/16/2019	-	14.97	-		832.70	-	well surging
MW-17					855.35			
	9/16/2019	-	10.83	-		844.52	-	
MW-17B*					855.37			
	9/16/2019	-	15.31	-		840.06	-	
	8/19/2019	-	13.97	-		841.40	-	slight odor
MW-18					846.89			
	9/16/2019	-	15.78	-		831.11	-	
MW-19					853.94			
	9/16/2019	-	11.78	-		842.16	-	
MW-20					852.89			
	9/16/2019	11.87	12.07	0.20		840.82	840.96	
	8/19/2019	11.44	11.66	0.22		841.23	841.39	
MW-21					855.77			
	9/16/2019	-	16.11	-		839.66	-	
MW-22					854.60			
	9/16/2019	-	9.98	-		844.62	-	

Table 2. Groundwater Elevation and Product Thickness Data

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location ID	Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Top of Casing Elevation[a,b] (ft amsl)	Groundwater Elevation (ft amsl)	Corrected[c] Groundwater Elevation (ft amsl)	Notes
MW-23					849.57			
	9/16/2019	-	10.27	-		839.30	-	
	8/19/2019	-	9.51	-		840.06	-	
MW-23B*					849.69			
	9/16/2019	-	7.65	-		842.04	-	
MW-24*					817.92			
	9/16/2019	-	5.28	-		812.64	-	
MW-24B*					818.72			
	9/16/2019	-	5.84	-		812.88	-	
MW-25					826.18			
	9/16/2019	-	8.47	-		817.71	-	
MW-25B*					823.81			
	9/16/2019	-	4.46	-		819.35	-	
MW-26*					847.56			
	9/16/2019	-	7.23	-		840.33	-	
	8/19/2019	-	6.46	-		841.10	-	
MW-26B*					847.81			
	9/16/2019	-	8.67	-		839.14	-	
MW-27					854.11			
	9/16/2019	-	26.95	-		827.16	-	
MW-27B*					857.14			
	9/16/2019	-	26.33	-		830.81	-	
MW-28					844.31			
	9/16/2019	-	22.95	-		821.36	-	
MW-29					852.20			
	9/16/2019	-	10.35	-		841.85	-	fire ant hill
MW-30					841.28			
	9/16/2019	-	14.56	-		826.72	-	
MW-31					845.04			
	9/16/2019	-	21.63	-		823.41	-	
MW-32					842.93			
	9/16/2019	-	21.05	-		821.88	-	
MW-33T*					849.11			
	9/16/2019	-	27.90	-		821.21	-	

Table 2. Groundwater Elevation and Product Thickness Data

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location ID	Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Top of Casing Elevation[a,b] (ft amsl)	Groundwater Elevation (ft amsl)	Corrected[c] Groundwater Elevation (ft amsl)	Notes
MW-34*					816.35			
	9/16/2019	-	3.36	-		812.99	-	
	8/19/2019	-	3.28	-		813.07	-	no odor
MW-35*					829.40			
	9/16/2019	-	10.07	-		819.33	-	
MW-36					858.47			
	9/16/2019	-	18.22	-		840.25	-	
	8/19/2019	-	17.20	-		841.27	-	
MW-36B*					858.15			
	9/16/2019	-	17.94	-		840.21	-	
MW-37*					813.92			
	9/16/2019	-	3.79	-		810.13	-	
	8/19/2019	-	3.32	-		810.60	-	no odor
	7/17/2019	-	3.20	-		810.72	-	
MW-38*					813.28			
	9/16/2019	-	1.89	-		811.39	-	
	8/19/2019	-	1.60	-		811.68	-	no odor
	7/17/2019	-	1.44	-		811.84	-	
MW-39*					819.90			
	9/16/2019	-	5.21	-		814.69	-	
	8/19/2019	-	4.13	-		815.77	-	no odor
MW-40*					817.79			
	9/16/2019	-	2.72	-		815.07	-	
	8/19/2019	-	2.27	-		815.52	-	no odor
MW-41*					819.68			
	9/16/2019	-	4.45	-		815.23	-	
	8/19/2019	-	4.20	-		815.48	-	
MW-42*					820.33			
	9/16/2019	-	4.44	-		815.89	-	
MW-43					818.12			
	9/16/2019	-	5.29	-		812.83	-	
MW-43B*					818.80			
	9/16/2019	-	2.64	-		816.16	-	

Table 2. Groundwater Elevation and Product Thickness Data

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location ID	Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Top of Casing Elevation[a,b] (ft amsl)	Groundwater Elevation (ft amsl)	Corrected[c] Groundwater Elevation (ft amsl)	Notes
MW-44					853.67			
	9/16/2019	-	9.43	-		844.24	-	
MW-44B*					853.38			
	9/16/2019	-	13.60	-		839.78	-	
MW-45					852.47			
	9/16/2019	-	13.50	-		838.97	-	
MW-45B*					852.85			
	9/16/2019	-	14.01	-		838.84	-	
MW-46*					845.47			
	9/16/2019	-	9.32	-		836.15	-	
	8/19/2019	-	8.54	-		836.93	-	no odor
	7/17/2019	-	7.50	-		837.97	-	
MW-47					842.98			
	9/16/2019	-	19.29	-		823.69	-	
MW-48B*					832.34			
	9/16/2019	-	18.02	-		814.32	-	
MW-49					846.78			
	9/16/2019	-	19.45	-		827.33	-	
MW-50B*					850.34			
	9/16/2019	-	23.59	-		826.75	-	
MW-51					831.92			
	8/19/2019	-	18.76	-		813.16	-	
MW-52					830.09			
	8/19/2019	-	16.92	-		813.17	-	
MW-53					837.37			
	8/19/2019	-	11.80	-		825.57	-	
MW-54					840.79			
	8/19/2019	-	15.87	-		824.92	-	
MW-55					859.71			
	8/19/2019	-	18.89	-		840.82	-	
MW-56					843.94			
	9/16/2019	-	8.18	-		835.76	-	
	8/19/2019	-	7.46	-		836.48	-	no odor
	7/17/2019	-	6.46	-		837.48	-	

Table 2. Groundwater Elevation and Product Thickness Data

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location ID	Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Top of Casing Elevation[a,b] (ft amsl)	Groundwater Elevation (ft amsl)	Corrected[c] Groundwater Elevation (ft amsl)	Notes
MW-57					845.63			
	9/16/2019	-	9.76	-		835.87	-	
	8/19/2019	-	8.99	-		836.64	-	slight odor
	7/17/2019	-	8.08	-		837.55	-	
RS-01					849.13			
	9/16/2019	12.85	12.87	0.02		836.26	836.27	
RS-02					849.52			
	9/16/2019	-	12.19	-		837.33	-	
RS-04					851.47			
	9/16/2019	-	9.77	-		841.70	-	
RS-05					848.31			
	9/16/2019	12.10	12.30	0.20		836.01	836.16	
RS-06					849.47			
	9/16/2019	-	12.23	-		837.24	-	
RS-07					855.08			
	9/16/2019	-	13.46	-		841.62	-	
RS-08					854.24			
	9/16/2019	-	13.46	-		840.78	-	
RS-09					847.60			
	9/16/2019	-	11.89	-		835.71	-	
RS-10					847.42			
	9/16/2019	-	10.65	-		836.77	-	
RS-11					847.44			
	9/16/2019	-	9.28	-		838.16	-	
RS-12					847.74			
	9/16/2019	-	9.59	-		838.15	-	
RS-13					845.98			
	9/16/2019	-	12.48	-		833.50	-	
RS-14					845.97			
	9/16/2019	-	9.40	-		836.57	-	
RS-15					846.41			
	9/16/2019	-	9.29	-		837.12	-	
RS-16					845.44			
	9/16/2019	-	10.39	-		835.05	-	

Table 2. Groundwater Elevation and Product Thickness Data

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location ID	Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Top of Casing Elevation[a,b] (ft amsl)	Groundwater Elevation (ft amsl)	Corrected[c] Groundwater Elevation (ft amsl)	Notes
RS-17					844.22			
	9/16/2019	-	10.68	-		833.54	-	
RS-18					847.89			
	9/16/2019	-	12.48	-		835.41	-	
RS-20					842.69			
	9/16/2019	-	-	-		842.69	-	Dry
RT-1A					854.06			
	9/16/2019	-	13.29	-		840.77	-	
RT-1B					854.15			
	9/16/2019	-	13.28	-		840.87	-	
RT-1C					854.55			
	9/16/2019	-	13.88	-		840.67	-	
RW-01					851.92			
	9/16/2019	-	17.32	-		834.60	-	
RW-02					852.69			
	9/16/2019	24.21	24.40	0.19		828.29	828.43	
RW-03					852.34			
	9/16/2019	24.03	24.05	0.02		828.29	828.30	
RW-04					853.93			
	9/16/2019	29.49	29.72	0.23		824.21	824.38	
RW-05					853.53			
	9/16/2019	32.88	32.93	0.05		820.60	820.64	
RW-06					846.21			
	9/16/2019	-	26.44	-		819.77	-	
RW-07					843.19			
	9/16/2019	-	23.45	-		819.74	-	
RW-08					835.48			
	9/16/2019	-	16.64	-		818.84	-	
RW-09*					835.12			
	9/16/2019	-	14.10	-		821.02	-	
RW-10					848.53			
	9/16/2019	-	13.74	-		834.79	-	
RW-11					852.97			
	9/16/2019	-	12.37	-		840.60	-	

Table 2. Groundwater Elevation and Product Thickness Data

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location ID	Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Top of Casing Elevation[a,b] (ft amsl)	Groundwater Elevation (ft amsl)	Corrected[c] Groundwater Elevation (ft amsl)	Notes
RW-12*					854.49			
	9/16/2019	-	-	-		854.49	-	Dry
RW-14*					827.54			
	9/16/2019	-	4.50	-		823.04	-	sparging
RW-15					851.64			
	9/16/2019	-	13.78	-		837.86	-	
SW-01					812.82			
	9/16/2019	-	(0.50)	-		813.32	-	
	8/19/2019	-	(0.08)	-		812.90	-	minnows present
	7/17/2019	-	(0.60)	-		813.42	-	No odor / no sheen
SW-02					808.65			
	9/16/2019	-	(1.42)	-		810.07	-	
	8/19/2019	-	(1.72)	-		810.37	-	biosheen
	7/17/2019	-	(1.90)	-		810.55	-	No odor / biosheen
SW-03					815.09			
	9/16/2019	-	-	-		815.09	-	Dry
	8/19/2019	-	-	-		815.09	-	Dry
	7/17/2019	-	-	-		815.09	-	Dry
SW-05					838.75			
	9/16/2019	-	-	-		838.75	-	Dry
	8/19/2019	-	-	-		838.75	-	Dry
	7/17/2019	-	-	-		838.75	-	Dry
SW-08					802.04			
	9/16/2019	-	(0.90)	-		802.94	-	
	8/19/2019	-	(0.50)	-		802.54	-	heavy biosheen
	7/17/2019	-	(0.84)	-		802.88	-	No odor / biosheen
SW-10					778.09			
	9/16/2019	-	(4.00)	-		782.09	-	
	8/19/2019	-	(0.38)	-		778.47	-	No odor / orange floc
	7/17/2019	-	(0.39)	-		778.48	-	No odor / orange floc

Table 2. Groundwater Elevation and Product Thickness Data

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location ID	Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (ft)	Top of Casing Elevation[a,b] (ft amsl)	Groundwater Elevation (ft amsl)	Corrected[c] Groundwater Elevation (ft amsl)	Notes

Notes:

[a] Elevation of zero mark (ft amsl) for surface water staff gauges.

[b] "RS-" and "RT-" features were trimmed to less than 12 inches above ground surface on March 14, 2017. Only the resurveyed top of casing elevation after trimming is displayed. Groundwater elevation calculations are based on the true top of casing elevation at the

[c] Calculated based on an oil: water density ratio of 0.73.

Bold indicates the gauged product thickness was greater than 0.5 foot.

- = not applicable

amsl = above mean sea level

BTOC = below top of casing

DRY = well contained no measurable water or product

"B" designation in the location ID indicates bedrock well.

* = well is not bracketing the water table

amsl = above mean sea level
BTOC = below top of casing
ft = feet
ID = identification
MW = monitoring well
NM = not measured
RS = recovery sump
RT = recovery trench
RW = recovery well
SW = surface water
TW = temporary piezometer well

The following features are no longer reliable for calculating groundwater elevation:

- RS-03 was abandoned on October 19, 2015.
- RS-19 was damaged on or about January 20, 2017.
- RT-2H was covered over on or about January 17, 2017, due to construction efforts in the vicinity.
- TW-46 was damaged on or about December 8, 2016.
- RW-13 is no longer accessible due to health and safety issues.

Table 3. Product Skimmer Recovery Results - 2019
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Well Identifier	Month 10 Volume Recovered (gal)	Month 11 Volume Recovered (gal)	Month 12 Volume Recovered (gal)	Month 13 Volume Recovered (gal)	Month 14 Volume Recovered (gal)	Month 15 Volume Recovered (gal)	Month 16 Volume Recovered (gal)	Total Recovered to Date (gal)
Date	**1/22/2019**	**2/19/2019**	**3/7/2019**	**4/8/2019**	**5/16/2019**	**6/3/2019**	**9/17/2019**	
Product Skimmers								
MW-08	-	-	-	-	-	-	-	**-**
MW-15	-	-	-	-	-	-	-	**-**
MW-20	-	-	-	-	-	-	-	**-**
RS-01	-	0.000	-	-	-	-	-	**0.000**
RS-02	-	0.000	-	0.002	0.006	-	-	**0.008**
RS-05	-	0.000	0.000	0.002	0.002	0.002	0.004	**0.010**
RS-10	-	-	0.000	-	-	-	-	**0.000**
RS-14	-	0.000	0.000	-	0.001	-	-	**0.001**
RS-17	-	-	0.000	-	-	-	-	**0.000**
RW-02	-	0.002	-	-	-	0.002	-	**0.003**
RW-03	0.055	-	0.141	0.102	0.002	0.070	0.008	**0.377**
RW-04	-	-	0.000	-	-	0.004	-	**0.004**
RW-05	-	0.000	-	-	-	0.039	0.063	**0.102**
RW-07	-	-	-	-	-	-	-	**-**
RW-08	-	-	-	-	-	-	-	**-**
RW-15	-	-	0.000	-	-	-	-	**0.000**
RW-10	-	-	0.000	-	-	-	-	**0.000**
Petroleum-Absorbent Socks								
MW-11	-	-	-	-	-	-	-	**-**
RS-08	0.265	0.226	0.025	0.012	0.220	-	-	**0.748**
RT-2K	-	0.143	0.095	-	0.093	-	-	**0.332**
RT-1A	0.224	0.208	0.049	0.114	0.235	-	-	**0.830**
RT-1B	0.247	0.210	0.063	-	0.240	-	-	**0.760**
RT-1C	0.224	0.195	0.055	0.121	0.120	0.035	-	**0.751**
Total:	**1.014**	**0.985**	**0.429**	**0.353**	**0.918**	**0.152**	**0.074**	**3.924**

Notes:
- = no product recovered
gal = gallons
ID = identification
MW = monitoring well
NA = not applicable
RS = recovery sump
RT = recovery trench
RW = recovery well

Table 4A. Analytical Results for Surface Water, Third Quarter 2019

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b
SW-01	SW01-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**2.30**	
	SW01-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.31**	
	SW01-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
SW-02	SW02-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.11**	
	SW02-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.35**	
	SW02-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.96**	
SW-03	SW03-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW03-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	--	9/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
SW-04	SW04-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.12**	
	SW04-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW04-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
SW-05	--	7/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	8/20/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
SW-07	--	7/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	8/20/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
SW-08	SW08-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW08-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW08-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
SW-09	SW09-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
SW-10	SW10-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW10-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW10-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
SW-11	SW11-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
SW-12	SW12-071819	7/18/2019	µg/L	**1.09**		1	U	1	U	2	U	1	U	5	U	1	U
	SW12-082219	8/22/2019	µg/L	**3.33**		1	U	1	U	2	U	1	U	5	U	1	U
	SW12-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
SW-13	SW13-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW13-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW13-091819	9/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	

Table 4A. Analytical Results for Surface Water, Third Quarter 2019

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	[a]	530	[a]	1,000	[a]	NA	[b]	NA	[b]	NA	[b]	NA	[b]
SW-14	SW14-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW14-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW14-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U

Notes:

[a] South Carolina Department of Health and Environmental Control (DHEC) R.61-68, Water Classifications and Standards, Human Health for consumption of water and organism, June 27, 2014.

[b] Screening levels for these analytes are not specified in DHEC R. 61-68.

Samples analyzed by EPA Method SW 8260B.

Bold indicates the analyte was detected above the method detection limit.

Gray shading indicates the analyte exceeded its screening value.

µg/L = microgram(s) per liter

ID = identification

J = estimated

MTBE = methyl tertiary butyl ether

NA = not applicable

NS-DW = sample not collected due to location being in a different watershed

NS-HS = sample not collected due to health and safety concerns

NS-IW = sample not collected due to insufficient volume at surface water location

SW = surface water

U = analyte was not detected above the reported sample quantitation limit

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	[a]	530	[a]	1,000	[a]	NA	[b]	NA	[b]	NA	[b]	NA	[b]		
SW-RELEASE	SW-RELEASE	1/20/2015	µg/L	**330**		**490**		**2,400**		**2,100**		**940**		**140**		**5.7**	**J**		
SW-01	SW01-121114	12/11/2014	µg/L	0.5	U	1	U	1	U	2	U	1	U	1	U	1	U		
	SW01-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW01-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW01-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW01-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW01-033115	3/31/2015	µg/L	5	U[c]	5	U	**17.6**		10	U	5	U	5	U	NA			
	SW01-042215	4/22/2015	µg/L	5	U[c]	5	U	**14.9**		10	U	5	U	5	U	NA			
	SW01-050715	5/7/2015	µg/L	5	U[c]	5	U	**7.00**		10	U	5	U	5	U	NA			
	SW01-051915	5/19/2015	µg/L	5	U[c]	5	U	**8.80**		**10.6**		**6.40**		5	U	NA			
	SW01-060315	6/3/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW01-061815	6/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW01-071515	7/15/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW01-081315	8/13/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW01-092415	9/24/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW01-102215	10/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW01-112415	11/24/2015	µg/L	**7.80**		**1.50**		**13.0**		**9.30**		**4.60**		1	U	NA			
	SW01-122215	12/22/2015	µg/L	**4.60**		1	U	**8.80**		**5.50**		**3.10**		1	U	NA			
	SW01-012516	1/25/2016	µg/L	**17.6**		**2.30**		**36.0**		**11.3**		**6.30**		1	U	NA			
	SW01-021816	2/18/2016	µg/L	**23.4**		**3.00**		**55.6**		**15.0**		**9.10**		1	U	NA			
	SW01-031616	3/16/2016	µg/L	**20.1**		**2.40**		**42.3**		**13.3**		**7.60**		1	U	NA			
	SW01-042716	4/27/2016	µg/L	**20.8**		1	U	**30.6**		**2.90**		**2.00**		1	U	NA			
	SW01-050916	5/9/2016	µg/L	**16.5**		**1.40**		**16.3**		**7.00**		**4.80**		1	U	NA			
	SW01-062716	6/27/2016	µg/L	**9.00**		1	U	**3.30**		2	U	1	U	1	U	NA			
	SW01-072816	7/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW01-081916	8/19/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW01-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW01-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW01-112816	11/28/2016	µg/L	**5.00**		1	U	**10.4**		**4.90**		**8.30**		1	U	NA			
	SW01-122916	12/29/2016	µg/L	**12.6**		1	U	**22.1**		**11.2**		**13.5**		1	U	NA			
	SW01-012017	1/20/2017	µg/L	**1.00**		1	U	**2.30**		2	U	**3.50**		1	U	NA			
	SW01-022817	2/28/2017	µg/L	**18.5**		**1.93**		**37.0**		**13.8**		**10.2**		5	U	NA			
	SW01-031517	3/15/2017	µg/L	**3.02**		1	U	**5.13**		**2.16**		**1.74**		5	U	NA			
	SW01-032117	3/21/2017	µg/L	1	U	1	U	**1.57**		2	U	1	U	5	U	NA			
	SW01-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW01-040517	4/5/2017	µg/L	1	U	1	U	**2.25**		2	U	1	U	5	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	[a]	530	[a]	1,000	[a]	NA	[b]	NA	[b]	NA	[b]	NA	[b]		
SW-01	SW01-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW01-061317	6/13/2017	µg/L	1	U	1	U	**1.90**		2	U	1	U	5	U	NA			
	SW01-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW01-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW01-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW01-120517	12/5/2017	µg/L	**1.50**		1	U	**1.15**		2	U	**2.14**		5	U	NA			
	SW01-121417	12/14/2017	µg/L	**4.52**		1	U	**4.52**		**3.48**		**3.20**		5	U	NA			
	SW01-010918	1/9/2018	µg/L	1	U	1	U	1	U	2	U	**1.15**		5	U	NA			
	SW01-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW01-030918	3/9/2018	µg/L	**1.15**		1	U	1	U	2	U	1	U	5	U	1	U		
	SW01-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.10**			
	SW01-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW01-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.43**			
	SW01-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.09**			
	SW01-091418	9/14/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.51**			
	SW01-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW01-021919	2/19/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	--	3/7/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	SW01-051519	5/15/2019	µg/L	**2.39**		1	U	1	U	2	U	1	U	5	U	**1.56**			
	SW01-060619	6/6/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.93**			
	SW01-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**2.30**			
	SW01-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.31**			
	SW01-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
SW-02	SW02-121114	12/11/2014	µg/L	0.5	U	1	U	1	U	2	U	1	U	1	U	1	U		
	SW02-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW02-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW02-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW02-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW02-033115	3/31/2015	µg/L	5	U[c]	5	U	**6.00**		10	U	5	U	5	U	NA			
	SW02-042215	4/22/2015	µg/L	5	U[c]	5	U	**13.0**		10	U	5	U	5	U	NA			
	SW02-050715	5/7/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW02-051915	5/19/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW02-060315	6/3/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW02-061815	6/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW02-071515	7/15/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW02-081315	8/13/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b
SW-02	SW02-092415	9/24/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW02-102215	10/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW02-112415	11/24/2015	µg/L	**6.00**		**1.30**		**10.0**		**7.80**		**4.00**		1	U	NA	
	SW02-122215	12/22/2015	µg/L	**4.10**		1	U	**7.60**		**5.10**		**3.10**		1	U	NA	
	SW02-012516	1/25/2016	µg/L	**12.0**		**1.50**		**25.0**		**8.40**		**4.60**		1	U	NA	
	SW02-021816	2/18/2016	µg/L	**15.5**		**1.80**		**35.3**		**10.1**		**5.90**		1	U	NA	
	SW02-031616	3/16/2016	µg/L	**8.00**		**1.00**		**17.5**		**5.80**		**3.90**		1	U	NA	
	SW02-042716	4/27/2016	µg/L	**5.60**		1	U	**7.10**		2	U	1	U	1	U	NA	
	SW02-050916	5/9/2016	µg/L	**7.10**		1	U	**4.50**		**2.20**		**1.60**		1	U	NA	
	SW02-062716	6/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW02-072816	7/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW02-081916	8/19/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW02-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW02-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW02-112816	11/28/2016	µg/L	**5.40**		1	U	**1.60**		**2.60**		**4.80**		1	U	NA	
	SW02-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	**1.40**		1	U	NA	
	SW02-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW02-022817	2/28/2017	µg/L	**10.7**		1	U	**11.0**		**4.14**		**4.23**		5	U	NA	
	SW02-031517	3/15/2017	µg/L	**11.4**		1	U	**8.60**		**4.45**		**3.60**		5	U	NA	
	SW02-032117	3/21/2017	µg/L	**8.42**		1	U	**2.45**		**2.48**		**2.68**		5	U	NA	
	SW02-033017	3/30/2017	µg/L	**2.18**		1	U	1	U	2	U	1	U	5	U	NA	
	SW02-040517	4/5/2017	µg/L	**2.87**		1	U	**1.12**		2	U	**1.14**		5	U	NA	
	SW02-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW02-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW02-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW02-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW02-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW02-120517	12/5/2017	µg/L	**26.6**		**1.80**		**8.39**		**10.2**		**7.17**		5	U	NA	
	SW02-121417	12/14/2017	µg/L	**21.1**		**1.53**		**9.40**		**9.74**		**7.32**		5	U	NA	
	SW02-010918	1/9/2018	µg/L	**25.0**		**1.56**		**12.4**		**11.0**		**8.24**		5	U	NA	
	SW02-020618	2/6/2018	µg/L	**6.69**		**1**	U	**2.65**		**2.75**		**1.87**		5	U	1	U
	SW02-030918	3/9/2018	µg/L	**3.19**		1	U	**1.39**		2	U	**1.11**		5	U	1	U
	SW02-040618	4/6/2018	µg/L	**2.23**		1	U	1	U	2	U	1	U	5	U	**2.13**	
	SW02-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**2.25**	
	SW02-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.92**	
	SW02-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.15**	

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b		
SW-02	SW02-091418	9/14/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**2.94**	
	SW02-120418	12/4/2018	µg/L	**11.9**		1	U	**1.32**		**4.40**		**3.75**		5	U	**2.23**	
	SW02-021919	2/19/2019	µg/L	**19.7**		1	U	**2.67**		**4.60**		**4.44**		5	U	**2.12**	
	SW02-030719	3/7/2019	µg/L	**22.3**		1	U	**3.58**		**4.71**		**4.32**		5	U	**2.46**	
	SW02-040919	4/9/2019	µg/L	**2.80**		1	U	1	U	2	U	1	U	5	U	1	U
	SW02-051519	5/15/2019	µg/L	**3.47**		1	U	1	U	2	U	1	U	5	U	**2.36**	
	SW02-060419	6/4/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**2.02**	
	SW02-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.11**	
	SW02-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.35**	
	SW02-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.96**	
SW-03	SW-UPGRADIENT	1/20/2015	µg/L	0.5	U	1	U	**0.23 J**		2	U	1	U	1	U	1	U
	SW03-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-033115	3/31/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-042215	4/22/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-050715	5/7/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-051915	5/19/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-060315	6/3/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-061815	6/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-071515	7/15/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW03-081315	8/13/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	--	9/24/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW03-102215	10/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW03-112415	11/24/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW03-122215	12/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW03-012516	1/25/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW03-021816	2/18/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW03-031616	3/16/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW03-042716	4/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW03-050916	5/9/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW03-062716	6/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW03-072816	7/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	--	8/19/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW03-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b		
SW-03	SW03-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW03-112816	11/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW03-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW03-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW03-022817	2/28/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-031517	3/15/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-032117	3/21/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-040517	4/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW03-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	--	1/9/2018	--	NS-HS		NS-HS		NS-HS		NS-HS		NS-HS		NS-HS		NS-HS			
	SW03-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW03-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW03-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW03-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW03-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW03-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW03-091418	9/14/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW03-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	--	3/7/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	SW03-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	--	6/4/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	SW03-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW03-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	--	9/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
SW-04	SW-DOWNGRADIENT	1/20/2015	µg/L	**95.0**		**27.0**		**310**		**110**		**63.0**		**94.0**		**2.70**			
	SW04-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b		
SW-04	SW04-033115	3/31/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-042215	4/22/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-050715	5/7/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-051915	5/19/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-060315	6/3/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-061815	6/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-071515	7/15/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-081315	8/13/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-092415	9/24/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW04-102215	10/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW04-112415	11/24/2015	µg/L	**1.70**		1	U	**2.70**		**2.90**		**1.60**		1	U	NA			
	SW04-122215	12/22/2015	µg/L	**3.30**		1	U	**7.30**		**5.20**		**2.70**		1	U	NA			
	SW04-012516	1/25/2016	µg/L	**6.90**		1	U	**14.0**		**4.90**		**2.80**		1	U	NA			
	SW04-021816	2/18/2016	µg/L	**10.9**		**1.10**		**25.4**		**7.00**		**4.30**		1	U	NA			
	SW04-031616	3/16/2016	µg/L	1	U	1	U	**2.0**		2	U	**1.80**		1	U	NA			
	SW04-042716	4/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW04-050916	5/9/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW04-062716	6/27/2016	µg/L	1	U	1	U	**1.10**		2	U	1	U	1	U	NA			
	SW04-072816	7/28/2016	µg/L	1	U	1	U	**23.5**		2	U	1	U	1	U	NA			
	SW04-081916	8/19/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW04-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW04-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW04-112816	11/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW04-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW04-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW04-022817	2/28/2017	µg/L	1	U	1	U	**1.13**		2	U	1	U	5	U	NA			
	SW04-031517	3/15/2017	µg/L	1	U	1	U	**2.90**		2	U	1	U	5	U	NA			
	SW04-032117	3/21/2017	µg/L	1	U	1	U	**3.28**		2	U	1	U	5	U	NA			
	SW04-033017	3/30/2017	µg/L	1	U	1	U	**6.15**		2	U	1	U	5	U	NA			
	SW04-040517	4/5/2017	µg/L	1	U	1	U	**9.47**		2	U	1	U	5	U	NA			
	SW04-050417	5/4/2017	µg/L	1	U	1	U	**13.8**		2	U	1	U	5	U	NA			
	SW04-061317	6/13/2017	µg/L	1	U	1	U	**1.37**		2	U	1	U	5	U	NA			
	SW04-071817	7/18/2017	µg/L	1	U	1	U	**1.92**		2	U	1	U	5	U	NA			
	SW04-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW04-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW04-120517	12/5/2017	µg/L	1	U	1	U	**5.53**		2	U	1	U	5	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b		
SW-04	SW04-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW04-010918	1/9/2018	µg/L	1	U	1	U	**4.09**		2	U	1	U	5	U	NA			
	SW04-020618	2/6/2018	µg/L	**3.04**		1	U	**1.73**		2	U	**1.12**		5	U	1	U		
	SW04-030918	3/9/2018	µg/L	1	U	1	U	**1.37**		2	U	1	U	5	U	1	U		
	SW04-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW04-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.20**			
	SW04-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.31**			
	SW04-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW04-091418	9/14/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.13**			
	SW04-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW04-021919	2/19/2019	µg/L	**1.47**		1	U	1	U	2	U	1	U	5	U	1	U		
	SW04-030719	3/7/2019	µg/L	**3.11**		1	U	1	U	2	U	1	U	5	U	1	U		
	SW04-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.27**			
	SW04-060419	6/4/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.36**			
	SW04-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.12**			
	SW04-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW04-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
SW-05	SW05-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW05-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW05-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW05-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW05-033115	3/31/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW05-042215	4/22/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW05-050715	5/7/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	--	5/19/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	6/3/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	6/18/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	7/15/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	8/13/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	9/24/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	10/22/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	SW05-112415	11/24/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW05-122215	12/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW05-012516	1/25/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW05-021816	2/18/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW05-031616	3/16/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b
SW-05	--	4/27/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	5/9/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	6/27/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	7/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	8/19/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/29/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	10/31/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/29/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	1/20/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	2/28/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/15/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/21/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/30/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	4/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	5/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	6/13/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	7/18/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	8/2/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/14/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	1/9/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW05-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW05-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	--	4/6/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW05-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	--	6/7/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	7/12/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/14/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW05-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW05-021919	2/19/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW05-030719	3/7/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW05-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	--	6/4/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	7/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	[a]	530	[a]	1,000	[a]	NA	[b]	NA	[b]	NA	[b]	NA	[b]
SW-05	--	8/20/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
SW-06	SW06-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW06-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW06-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW06-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	--	3/31/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW06-042215	4/22/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	--	5/7/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	5/19/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	6/3/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	6/18/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	7/15/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	8/13/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/24/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	10/22/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	11/24/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW06-122215	12/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW06-012516	1/25/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW06-021816	2/18/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	--	3/16/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	4/27/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	5/9/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	6/27/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	7/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	8/19/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/29/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	10/31/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/29/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	1/20/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	2/28/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/15/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/21/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/30/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	4/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b		
SW-06	--	5/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	6/13/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	7/18/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	8/2/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	12/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	12/14/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	1/9/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	2/6/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	3/9/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	4/6/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	5/3/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	6/7/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	7/12/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	9/14/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
SW-07	SW07-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW07-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW07-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW07-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW07-033115	3/31/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW07-042215	4/22/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW07-050715	5/7/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW07-051915	5/19/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW07-060315	6/3/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW07-061815	6/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW07-071515	7/15/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	--	8/13/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	--	9/24/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW			
	SW07-102215	10/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW07-112415	11/24/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW07-122215	12/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW07-012516	1/25/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW07-021816	2/18/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW07-031616	3/16/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW07-042716	4/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW07-050916	5/9/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b
SW-07	--	6/27/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	7/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	8/19/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/29/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	10/31/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/29/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	1/20/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	2/28/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW07-031517	3/15/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW07-032117	3/21/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW07-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW07-040517	4/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW07-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW07-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW07-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	--	8/2/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW07-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW07-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW07-010918	1/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW07-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW07-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW07-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW07-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW07-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW07-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	--	9/14/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW07-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW07-030719	3/7/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW07-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW07-060619	6/6/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	--	7/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	8/20/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b		
SW-08	SW08-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-033115	3/31/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-042215	4/22/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-050715	5/7/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-051915	5/19/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-060315	6/3/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-061815	6/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-071515	7/15/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-081315	8/13/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-092415	9/24/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW08-102215	10/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-112415	11/24/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-122215	12/22/2015	µg/L	**1.60**		1	U	**3.80**		**2.50**		**1.60**		1	U	NA			
	SW08-012516	1/25/2016	µg/L	**2.40**		1	U	**5.60**		**2.00**		**1.30**		1	U	NA			
	SW08-021816	2/18/2016	µg/L	**2.90**		1	U	**7.60**		**2.30**		**1.50**		1	U	NA			
	SW08-031616	3/16/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-042716	4/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-050916	5/9/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-062716	6/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-072816	7/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-081916	8/19/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-112816	11/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW08-022817	2/28/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-031517	3/15/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-032117	3/21/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-040517	4/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b		
SW-08	SW08-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW08-010918	1/9/2018	µg/L	**1.16**		1	U	1	U	2	U	**1.87**		5	U	NA			
	SW08-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-091418	9/14/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-030719	3/7/2019	µg/L	**2.45**		1	U	1	U	2	U	1	U	5	U	**1.17**			
	SW08-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-060419	6/4/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW08-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
SW-09	SW09-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-033115	3/31/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-042215	4/22/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-050715	5/7/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-051915	5/19/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-060315	6/3/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-061815	6/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-071515	7/15/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-081315	8/13/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-092415	9/24/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW09-102215	10/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW09-112415	11/24/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	SW09-122215	12/22/2015	µg/L	**2.10**		1	U	**4.80**		**3.30**		**2.10**		1	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b
SW-09	SW09-012516	1/25/2016	µg/L	**3.30**		1	U	**7.10**		**2.40**		**1.50**		1	U	NA	
	SW09-021816	2/18/2016	µg/L	**2.20**		1	U	**5.90**		2	U	**1.20**		1	U	NA	
	SW09-031616	3/16/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-042716	4/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-050916	5/9/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-062716	6/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-072816	7/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-081916	8/19/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-112816	11/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW09-022817	2/28/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-031517	3/15/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-032117	3/21/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-040517	4/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-010918	1/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW09-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-091418	9/14/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-030719	3/7/2019	µg/L	**1.88**		1	U	1	U	2	U	1	U	5	U	**1.07**	
	SW09-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b
SW-09	SW09-060419	6/4/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW09-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
SW-10	SW10-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-033115	3/31/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-042215	4/22/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-050715	5/7/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-051915	5/19/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-060315	6/3/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-061815	6/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-071515	7/15/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-081315	8/13/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-092415	9/24/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW10-102215	10/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-112415	11/24/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-122215	12/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-012516	1/25/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-021816	2/18/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-031616	3/16/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-042716	4/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-050916	5/9/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-062716	6/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-072816	7/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-081916	8/19/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-112816	11/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW10-022817	2/28/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW10-031517	3/15/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW-10-032117	3/21/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	[a]	530	[a]	1,000	[a]	NA	[b]	NA	[b]	NA	[b]	NA	[b]		
SW-10	SW-10-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW-10-040517	4/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW10-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW10-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW10-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW10-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW10-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW10-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW10-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW10-010918	1/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	SW10-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-091418	9/14/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-030719	3/7/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-060419	6/4/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	SW10-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
SW-11	SW11-022515	2/25/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-030215	3/2/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-031115	3/11/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-031815	3/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-033115	3/31/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-042215	4/22/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-050715	5/7/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-051915	5/19/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-060315	6/3/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-061815	6/18/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-071515	7/15/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			
	SW11-081315	8/13/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	[a]	530	[a]	1,000	[a]	NA	[b]	NA	[b]	NA	[b]	NA	[b]
SW-11	SW11-092415	9/24/2015	µg/L	5	U[c]	5	U	5	U	10	U	5	U	5	U	NA	
	SW11-102215	10/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-112415	11/24/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-122215	12/22/2015	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-012516	1/25/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-021816	2/18/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-031616	3/16/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-042716	4/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-050916	5/9/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-062716	6/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-072816	7/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-081916	8/19/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-112816	11/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW11-022817	2/28/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW11-031517	3/15/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW-11-032117	3/21/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW-11-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW-11-040517	4/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW11-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW11-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW11-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW11-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW11-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW11-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW11-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW11-010918	1/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW11-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b
SW-11	SW11-091418	9/14/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-030719	3/7/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-060419	6/4/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW11-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
SW-12	SW12-081916	8/19/2016	µg/L	**6,430**		**764**		**15,400**		**3,360**		**1,730**		**128**		NA	
	SW12-092916	9/29/2016	µg/L	**7,850**		**1,030**		**19,000**		**3,910**		**1,940**		**143**		NA	
	SW12-103116	10/31/2016	µg/L	**165**		**17.7**		**302**		**103**		**58.2**		**4.70**		NA	
	SW12-112816	11/28/2016	µg/L	**486**		**59.6**		**976**		**351**		**181**		**14.2**		NA	
	SW12-122916	12/29/2016	µg/L	**707**		**97.3**		**1,790**		**408**		**213**		**16.8**		NA	
	SW12-012017	1/20/2017	µg/L	**212**		**19.8**		**396**		**104**		**58.0**		**3.80**		NA	
	SW12-022817	2/28/2017	µg/L	**26.1**		**4.04**		**62.3**		**18.0**		**9.73**		5	U	NA	
	SW12-031517	3/15/2017	µg/L	**125**		**15.3**		**185**		**67.9**		**35.5**		5	U	NA	
	SW12-032117	3/21/2017	µg/L	**134**		**12.1**		**45.0**		**60.8**		**33.6**		5	U	NA	
	SW12-033017	3/30/2017	µg/L	**48.5**		**5.69**		**86.3**		**27.7**		**15.8**		5	U	NA	
	SW12-040517	4/5/2017	µg/L	**67.1**		**9.24**		**127.0**		**43.6**		**23.7**		5	U	NA	
	SW12-050417	5/4/2017	µg/L	**52.8**		**7.96**		**91.7**		**42.0**		**23.2**		5	U	NA	
	SW12-061317	6/13/2017	µg/L	**102**		**16.6**		**166**		**85.1**		**46.2**		5	U	NA	
	SW12-071817	7/18/2017	µg/L	**65.1**		**5.78**		**116**		**43.3**		**24.8**		5	U	NA	
	SW12-080217	8/2/2017	µg/L	**125**		**14.7**		**204**		**102**		**67.0**		5	U	NA	
	SW12-090517	9/5/2017	µg/L	**46.7**		**4.72**		**72.0**		**39.0**		**26.2**		5	U	NA	
	SW12-120517	12/5/2017	µg/L	**16.6**		**2.91**		**12.6**		**20.1**		**13.3**		5	U	NA	
	SW12-121417	12/14/2017	µg/L	**9.19**		**2.66**		**8.26**		**18.0**		**12.1**		5	U	NA	
	SW12-010918	1/9/2018	µg/L	**12.3**		**2.16**		**5.65**		**14.6**		**11.1**		5	U	NA	
	SW12-020618	2/6/2018	µg/L	**2.53**		1	U	**1.20**		**4.04**		**2.44**		5	U	1	U
	SW12-030918	3/9/2018	µg/L	**3.24**		**1.79**		**12.2**		**9.75**		**4.28**		5	U	1	U
	SW12-040618	4/6/2018	µg/L	**1.88**		1	U	1	U	**5.05**		**2.82**		5	U	1	U
	SW12-050318	5/3/2018	µg/L	1	U	1	U	1	U	**4.18**		**2.72**		5	U	1	U
	SW12-060718	6/7/2018	µg/L	**1.85**		1	U	1	U	**3.24**		**1.64**		5	U	1	U
	SW12-071218	7/12/2018	µg/L	**1.79**		1	U	1	U	**3.81**		**2.15**		5	U	1	U
	SW12-091418	9/14/2018	µg/L	**1.34**		1	U	1	U	**3.20**		**2.00**		5	U	1	U
	SW12-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW12-021919	2/19/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b
SW-12	--	3/7/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	SW12-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW12-060419	6/4/2019	µg/L	**1.19**		1	U	1	U	2	U	1	U	5	U	1	U
	SW12-071819	7/18/2019	µg/L	**1.09**		1	U	1	U	2	U	1	U	5	U	1	U
	SW12-082219	8/22/2019	µg/L	**3.33**		1	U	1	U	2	U	1	U	5	U	1	U
	SW12-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
SW-13	SW13-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW13-103116	10/31/2016	µg/L	1	U	1	U	**2.0**		2	U	1	U	1	U	NA	
	SW13-112816	11/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW13-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW13-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	SW13-022817	2/28/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-031517	3/15/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-032117	3/21/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-040517	4/5/2017	µg/L	1	U	1	U	**1.21**		2	U	1	U	5	U	NA	
	SW13-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-010918	1/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW13-020618	2/6/2018	µg/L	**1.78**		1	U	1	U	2	U	1	U	5	U	**4.26**	
	SW13-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**2.07**	
	SW13-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.40**	
	SW13-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**3.67**	
	SW13-060718	6/7/2018	µg/L	**2.99**		1	U	**2.48**		2	U	1	U	5	U	**8.08**	
	SW13-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW13-081318	8/13/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW13-091418	9/14/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW13-120418	12/4/2018	µg/L	1	U	1	U	**1.84**		2	U	1	U	5	U	**3.49**	
	SW13-021919	2/19/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW13-030719	3/7/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**11.0**	
	SW13-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.30**	

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b		
SW-13	SW13-060419	6/4/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.11**	
	SW13-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW13-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW13-091819	9/18/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
SW-14	SW14-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW14-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW14-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW14-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	--	12/14/2017	--	NS-DW		NS-DW		NS-DW		NS-DW		NS-DW		NS-DW		NS-DW	
	SW14-010918	1/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	SW14-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW14-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW14-040618	4/6/2018	µg/L	1	U	1	U	**1.43**		2	U	1	U	5	U	1	U
	SW14-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW14-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.18**	
	SW14-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.33**	
	SW14-091418	9/14/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW14-120418	12/4/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.62**	
	SW14-021919	2/19/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.19**	
	SW14-030719	3/7/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.68**	
	SW14-051519	5/15/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	**1.50**	
	SW14-060419	6/4/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW14-071819	7/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW14-082019	8/20/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	SW14-091819	9/18/2019	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
FP-01	FP01-031616	3/16/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	FP01-042716	4/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	FP01-050916	5/9/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	FP01-062716	6/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	FP01-072816	7/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	FP01-081916	8/19/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	FP01-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	FP01-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	FP01-112816	11/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	FP01-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	
	FP01-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA	

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b		
FP-01	FP01-022817	2/28/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP01-031517	3/15/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-01-032117	3/21/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-01-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-01-040517	4/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-01-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-01-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-01-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-01-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-01-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-01-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-01-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP01-010918	1/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP01-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	FP01-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	FP01-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	FP01-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	FP01-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	FP01-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
FP-02	FP02-031616	3/16/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-042716	4/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-050916	5/9/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-062716	6/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-072816	7/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-081916	8/19/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-112816	11/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP02-022817	2/28/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP02-031517	3/15/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-02-032117	3/21/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-02-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-02-040517	4/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-02-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte															
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE			
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b		
FP-02	FP-02-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-02-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-02-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-02-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-02-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-02-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP02-010918	1/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP02-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	FP02-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	FP02-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	FP02-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	FP02-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
	FP02-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U		
FP-03	FP03-031616	3/16/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP03-042716	4/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP03-050916	5/9/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP03-062716	6/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP03-072816	7/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	--	8/19/2016	--	NS-HS		NS-HS		NS-HS		NS-HS		NS-HS		NS-HS		NS-HS			
	FP03-092916	9/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP03-103116	10/31/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP03-112816	11/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP03-122916	12/29/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP03-012017	1/20/2017	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	NA			
	FP03-022817	2/28/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP03-031517	3/15/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-03-032117	3/21/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-03-033017	3/30/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	--	4/5/2017	--	NS-HS		NS-HS		NS-HS		NS-HS		NS-HS		NS-HS		NS-HS			
	FP-03-050417	5/4/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-03-061317	6/13/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-03-071817	7/18/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-03-080217	8/2/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-03-090517	9/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-03-120517	12/5/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			
	FP-03-121417	12/14/2017	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA			

Table 4B. Analytical Results for Surface Water, Historical

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Date Collected	Units	Analyte													
				Benzene		Ethylbenzene		Toluene		m&p-Xylene		o-Xylene		Naphthalene		MTBE	
		Screening Value (µg/L):		2.2	a	530	a	1,000	a	NA	b	NA	b	NA	b	NA	b
FP-03	FP03-010918	1/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	NA	
	FP03-020618	2/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	FP03-030918	3/9/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	FP03-040618	4/6/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	FP03-050318	5/3/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	FP03-060718	6/7/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U
	FP03-071218	7/12/2018	µg/L	1	U	1	U	1	U	2	U	1	U	5	U	1	U

Notes:

[a] South Carolina Department of Health and Environmental Control (DHEC) R.61-68, Water Classifications and Standards, Human Health for consumption of water and organism, June 27, 2014.

[b] Screening levels for these analytes are not specified in DHEC R. 61-68.

[c] The analyte was analyzed for, but was not detected above the laboratory reporting/quantitation limit. However, the laboratory reporting/quantitation limit is above the screening criteria. The actual absence or presence of this analyte between the screening criteria and the laboratory reporting/quantitation limit cannot be determined.

Samples analyzed by EPA Method SW 8260B.

Bold indicates the analyte was detected above the method detection limit.

Gray shading indicates the analyte exceeded its screening value.

µg/L = microgram(s) per liter

FP = fishing pond

ID = identification

J = estimated

MTBE = methyl tertiary butyl ether

NA = not applicable

NS-DW = sample not collected due to location being in a different watershed

NS-HS = sample not collected due to health and safety concerns

NS-IW = sample not collected due to insufficient volume at surface water location

SW = surface water

U = analyte was not detected above the reported sample quantitation limit

Table 5A. Analytical Results for Groundwater, Third Quarter 2019
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-01	MW-01-091919	9/19/2019	µg/L	1	U	1	U	1	U	1	U	5	U	--		5	U	--	
MW-01B	MW-01B-091919	9/19/2019	µg/L	**1.53**		1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-02	MW-02-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-02B	MW-02B-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-03	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-04	MW-04-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-05	MW-05-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-06	MW-06-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-06B	MW-06B-091819	9/18/2019	µg/L	1	U	1	U	**3.52**		3	U	1	U	1	U	5	U	--	
MW-07	MW-07-082019	8/20/2019	µg/L	**2,120**		**340**		**4,750**		**3,650**		50	U[b]	50	U[b]	250	U[b]	--	
	MW-07-091919	9/19/2019	µg/L	**1,580**		**148**		**2,550**		**2,160**		50	U[b]	50	U[b]	250	U[b]	--	
MW-08	MW-08-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-09	MW-09-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**1.48**		5	U	--	
MW-09B	MW-09B-091819	9/18/2019	µg/L	**3.08**		**3.04**		**11.4**		**22.6**		1	U	1	U	5	U	--	
MW-10	MW-10-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-11	MW-11-091919	9/19/2019	µg/L	**7,950**		**2,570**		**33,700**		**14,300**		500	U[b]	500	U[b]	2,500	U[b]	--	
MW-12	MW-12-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-12B	MW-12B-082219	8/22/2019	µg/L	**27.0**		**3.54**		1	U	3	U	1	U	1	U	**5.94**		--	
	MW-12B-091919	9/19/2019	µg/L	**23.1**		**2.33**		1	U	3	U	1	U	1	U	5	U	--	
MW-13	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-13B	MW-13B-091819	9/18/2019	µg/L	**408**		**71.2**		**325**		**446**		1	U	**142**		**14.0**		--	
MW-14	MW-14-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**2.02**		5	U	--	
MW-14B	MW-14B-091819	9/18/2019	µg/L	**1.74**		1	U	1	U	**4.57**		1	U	**11.1**		5	U	--	
MW-15	MW-15-091919	9/19/2019	µg/L	**1.25**		1	U	1	U	3	U	1	U	**4.73**		5	U	--	
MW-15B	MW-15B-082219	8/22/2019	µg/L	**2,340**		200	U	**3,060**		**1,440**		1	U	**139**		**33.5**		--	
	MW-15B-091919	9/19/2019	µg/L	**3,870**		**260**		**3,920**		**2,720**		100	U[b]	**188**		500	U[b]	--	
MW-16	MW-16-091819	9/18/2019	µg/L	**8.36**		**5.80**		**73.9**		**118**		1	U	1	U	**132**		--	
MW-17	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-17B	MW-17B-082219	8/22/2019	µg/L	**7,700**		**1,570**		**17,600**		**9,110**		5	U	**335**		**201**		--	
	MW-17B-091919	9/19/2019	µg/L	**7,700**		**833**		**12,000**		**8,740**		10	U[b]	**665**		**195**		--	
MW-18	MW-18-091819	9/18/2019	µg/L	1	U	**1.30**		**10.7**		**37.4**		1	U	**15.4**		**48.7**		--	
MW-19	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-20	MW-20-082019	8/20/2019	µg/L	**7,920**		**1,160**		**15,900**		**10,300**		100	U[b]	**238**		500	U[b]	--	
	--	9/16/2019	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
MW-21	MW-21-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-22	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-23	MW-23-082119	8/21/2019	µg/L	**1,860**		**82.8**		**507**		**1,190**		10	U[b]	**88.7**		50	U[b]	--	
	MW-23-091919	9/19/2019	µg/L	**2,950**		**192**		**1,060**		**2,210**		5	U	**99.9**		**38.4**		--	
MW-23B	MW-23B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5A. Analytical Results for Groundwater, Third Quarter 2019
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

				Analyte																	
Location	Sample ID	Sample Date	Units	Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-24	MW-24-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-24B	MW-24B-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-25	MW-25-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-25B	MW-25B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-26	MW-26-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-26B	MW-26B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-27	MW-27-091919	9/19/2019	µg/L	**1.04**		1	U	**1.09**		**5.00**		1	U	1	U	5	U	--	
MW-27B	MW-27B-091919	9/19/2019	µg/L	1	U	**2.05**		**3.87**		**16.2**		1	U	1	U	5	U	--	
MW-28	MW-28-091719	9/17/2019	µg/L	**1.68**		1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-29	MW-29-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-30	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-31	MW-31-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-32	MW-32-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-33T	MW-33T-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-34	MW-34-082219	8/22/2019	µg/L	**102**		5	U	5	U	15	U	1	U	**207**		**5.05**		--	
	MW-34-091919	9/19/2019	µg/L	**12.9**		1	U	1	U	3	U	1	U	**109**		5	U	--	
MW-35	MW-35-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-36	MW-36-081919	8/19/2019	µg/L	**484**		20	U	**27.5**		**197**		20	U[b]	20	U	100	U[b]	--	
	MW-36-091919	9/19/2019	µg/L	**360**		10	U	**46.0**		**188**		10	U[b]	10	U	50	U[b]	--	
MW-36B	MW-36B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-37	MW-37-071819	7/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-37-082019	8/20/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-37-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-38	MW-38-071819	7/18/2019	µg/L	**1,260**		1	U	**3.27**		**308**		1	U	**104**		**16.2**		--	
	MW-38-082019	8/20/2019	µg/L	**1,030**		10	U	10	U	**279**		10	U[b]	**116**		50	U[b]	--	
	MW-38-091719	9/17/2019	µg/L	**40.2**		10	U	10	U	30	U	10	U[b]	**88.2**		50	U[b]	--	
MW-39	MW-39-081919	8/19/2019	µg/L	**10.9**		1	U	1	U	**5.35**		1	U	**162**		5	U	--	
	MW-39-091919	9/19/2019	µg/L	**1.67**		1	U	1	U	3	U	1	U	**121**		5	U	--	
MW-40	MW-40-082119	8/21/2019	µg/L	**2.56**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-40-091919	9/19/2019	µg/L	**4.50**		1	U	**3.17**		3	U	1	U	1	U	5	U	--	
MW-41	MW-41-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-42	MW-42-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-43	MW-43-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-43B	MW-43B-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-44	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-44B	MW-44B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-45	MW-45-091719	9/17/2019	µg/L	**5.24**		1	U	1	U	1	U	1	U	**103**		5	U	--	
MW-45B	MW-45B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5A. Analytical Results for Groundwater, Third Quarter 2019
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-46	MW-46-071719	7/17/2019	µg/L	**976**		1	U	**29.1**		**237**		1	U	**198**		**15.5**		--	
	MW-46-082119	8/21/2019	µg/L	**874**		25	U	25	U	**226**		25	U[b]	**191**		125	U[b]	--	
	MW-46-091719	9/17/2019	µg/L	**705**		25	U	**26.1**		**150**		25	U[b]	**175**		125	U[b]	--	
MW-47	MW-47-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-48B	MW-48B-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**1.14**		5	U	--	
MW-49	MW-49-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-50B	MW-50B-091819	9/18/2019	µg/L	**25.6**		1	U	**1.20**		3	U	1	U	**43.1**		5	U	--	
MW-51	MW-51-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-52	MW-52-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**2.01**		5	U	--	
MW-53	MW-53-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-54	MW-54-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-55	MW-55-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-56	MW-56-071719	7/17/2019	µg/L	**549**		1	U	**8.90**		**205**		1	U	**146**		**8.18**		--	
	MW-56-082119	8/21/2019	µg/L	**391**		10	U	10	U	**91.1**		10	U[b]	**134**		50	U[b]	--	
	MW-56-091719	9/17/2019	µg/L	**30.1**		1	U	1	U	**8.51**		1	U	**137**		5	U	--	
MW-57	MW-57-071719	7/17/2019	µg/L	**1,330**		**3.63**		**22.9**		**341**		1	U	**186**		**19.8**		--	
	MW-57-082119	8/21/2019	µg/L	**584**		10	U	10	U	**76.2**		10	U[b]	**183**		50	U[b]	--	
	MW-57-091719	9/17/2019	µg/L	**71.8**		10	U	10	U	30	U	10	U[b]	**74.6**		50	U[b]	--	

Notes:

[a] RBSL = Risk-based screening level identified in South Carolina Underground Storage Tank Management Division Programmatic Quality Assurance Program Plan, Revision 3.1, Table D1 "RBSLs for Groundwater," February 2016.

[b] The constituent was analyzed for, but was not detected above the laboratory reporting/quantitation limit. However, the laboratory reporting/quantitation limit is above the screening criteria. The actual absence or presence of this analyte between the screening criteria and the laboratory reporting/quantitation limit cannot be determined.

Samples analyzed by EPA Methods SW 8260B and 8011.

Bold indicates the analyte was detected above the method detection limit.

Gray shading indicates the analyte exceeded RBSLs.

µg/L = microgram(s) per liter
1,2-DCA = 1,2-dichloroethane
BCPZ = Brown's Creek Protection Zone
CCPZ = Cupboard Creek Protection Zone
SBZ = Shallow Bedrock Zone
EDB = 1,2-dibromoethane
ID = identification
MTBE = methyl tertiary butyl ether
MW = monitoring well
NS-FP = sample not collected due to the presence of free product in the well
NS-HS = sample not collected due to health and safety concerns
NS-IW = sample not collected due to insufficient volume of water in well
NS-OL = sample not collected because it was overlooked in the field
NS-SL = sample not analyzed due to sample being lost in transit to laboratory
NS-PS = sample not collected due to observation of product sheen in well
U = analyte was not detected above the reported sample quantitation limit

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-01	MW-01-072715	7/27/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.02	U
	MW-01-012716	1/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-01-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01-090717	9/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01-120517	12/5/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01-030818	3/8/2018	µg/L	**1.85**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01-091118	9/11/2018	µg/L	**2.02**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-01B	MW-01B-080415	8/4/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.02	U
	MW-01B-012716	1/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.019	U
	MW-01B-120116	12/1/2016	µg/L	1	U	1	U	**1.4**		**5.6**		1	U	1	U	**1.3**		--	
	MW-01B-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01B-090717	9/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01B-120517	12/5/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01B-030818	3/8/2018	µg/L	**3.51**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01B-060518	6/5/2018	µg/L	**8.96**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01B-091118	9/11/2018	µg/L	**11.1**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01B-120518	12/5/2018	µg/L	**8.30**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-01B-030519	3/5/2019	µg/L	**3.32**		1	U	1	U	3	U	1	U	**1.02**		5	U	--	
	MW-01B-060519	6/5/2019	µg/L	**1.82**		1	U	1	U	3	U	1	U	**1.00**		5	U	--	
	MW-01B-091919	9/19/2019	µg/L	**1.53**		1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-02	MW-02-072715	7/27/2015	µg/L	**4,320**		625	U	**9,670**		**2,460**		5	U[b]	**171**		**74.7**		0.02	U
	MW-02-012616	1/26/2016	µg/L	**9,500**		**1,160**		**25,000**		**6,310**		50	U[b]	**285**		**139**		0.019	U
	--	11/28/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-02-062917	6/29/2017	µg/L	**8,040**		**833**		**27,100**		**9,890**		250	U[b]	250	U[b]	1,250	U[b]	--	
	MW-02-090817	9/8/2017	µg/L	**2,340**		**181**		**7,120**		**8,510**		50	U[b]	50	U[b]	**389**		--	
	MW-02-100417	10/4/2017	µg/L	**3,510**		**306**		**11,900**		**11,200**		50	U[b]	**53.9**		250	U[b]	--	
	MW-02-110817	11/8/2017	µg/L	**850**		100	U	**1,370**		**3,520**		100	U[b]	100	U[b]	500	U[b]	--	
	MW-02-120717	12/7/2017	µg/L	**153**		**15.1**		**313**		**441**		1	U	**70.9**		**12.8**		--	
	MW-02-010918	1/9/2018	µg/L	**307**		10	U	**878**		**1,300**		10	U[b]	**61.8**		**63.7**		--	
	MW-02-020618	2/6/2018	µg/L	**30.5**		**1.09**		**29.6**		**88.3**		1	U	**32.0**		5	U	--	
	MW-02-030718	3/7/2018	µg/L	**131**		**34.1**		**594**		**442**		1	U	**27.6**		**34.5**		--	
	MW-02-040618	4/6/2018	µg/L	**72.5**		**8.96**		**94.7**		**501**		1	U	**18.4**		5	U	--	
	MW-02-050318	5/3/2018	µg/L	**35.4**		**7.50**		**14.9**		**163**		1	U	**7.95**		5	U	--	
	MW-02-060618	6/6/2018	µg/L	1	U	1	U	**3.19**		**3.70**		1	U	**1.25**		5	U	--	
	MW-02-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-02	MW-02-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-02B	MW-02B-080415	8/4/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.02	U
	--	1/19/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-02B-030116	3/1/2016	µg/L	1	U	1	U	**4.8**		**4.6**		1	U	1	U	1	U	0.019	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-02B-033117	3/31/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02B-062917	6/29/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02B-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02B-120717	12/7/2017	µg/L	1	U	1	U	**1.11**		3	U	1	U	1	U	5	U	--	
	MW-02B-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02B-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02B-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02B-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02B-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02B-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-02B-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-03	MW-03-072715	7/27/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.02	U
	MW-03-012516	1/25/2016	µg/L	**108**		**20.1**		**958**		**598**		1	U	1	U	**11.1**		0.02	U
	MW-03-120616	12/6/2016	µg/L	**61.1**		**25.1**		**229**		**330**		2	U	2	U	**3.60**		--	
	MW-03-062917	6/29/2017	µg/L	**10.9**		1	U	**24.6**		**6.98**		1	U	**2.34**		5	U	--	
	--	9/5/2017	--	NS-HS		NS-HS		NS-HS		NS-HS		NS-HS		NS-HS		NS-HS		NS-HS	
	--	10/3/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-03-110817	11/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-03-120517	12/5/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	--	1/8/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-03-020618	2/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-03-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-03-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-03-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-03-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-03-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-03-091318	9/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-03-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-03-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-03-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-04	MW-04-072815	7/28/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.019	U
	MW-04-012516	1/25/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	MW-04-120616	12/6/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-04-062917	6/29/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-04-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-04-120717	12/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-04-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-04-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-04-091318	9/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-04-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-04-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-04-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-04-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-05	MW-05-072815	7/28/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.019	U
	MW-05-012516	1/25/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-05-050317	5/3/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-062917	6/29/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-071717	7/17/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-080117	8/1/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-100417	10/4/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-110817	11/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-120717	12/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-010918	1/9/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-020618	2/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-060718	6/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-071318	7/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-091318	9/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-05-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-06	MW-06-072815	7/28/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.02	U
	MW-06-012116	1/21/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	MW-06-120216	12/2/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-06-062917	6/29/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-06-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-06-120717	12/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-06	MW-06-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-06-060718	6/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-06-091318	9/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-06-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-06-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-06-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-06-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-06B	MW-06B-120717	12/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-06B-030718	3/7/2018	µg/L	1	U	1	U	**3.63**		3	U	1	U	1	U	5	U	--	
	MW-06B-060718	6/7/2018	µg/L	1	U	1	U	**4.69**		3	U	1	U	1	U	5	U	--	
	MW-06B-091318	9/13/2018	µg/L	1	U	1	U	**1.17**		3	U	1	U	1	U	5	U	--	
	MW-06B-120618	12/6/2018	µg/L	1	U	1	U	**1.89**		3	U	1	U	1	U	5	U	--	
	MW-06B-030719	3/7/2019	µg/L	1	U	1	U	**1.42**		3	U	1	U	1	U	5	U	--	
	MW-06B-060419	6/4/2019	µg/L	1	U	1	U	**4.53**		3	U	1	U	1	U	5	U	--	
	MW-06B-091819	9/18/2019	µg/L	1	U	1	U	**3.52**		3	U	1	U	1	U	5	U	--	
MW-07	--	7/27/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-07-012116	1/21/2016	µg/L	**1,060**		**389**		**5,210**		**2,620**		40	U[b]	40	U[b]	40	U[b]	0.02	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-07-062917	6/29/2017	µg/L	**4,290**		**629**		**17,700**		**4,990**		250	U[b]	250	U[b]	1,250	U[b]	--	
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	10/3/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	11/7/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	1/8/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	2/6/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-07-030818	3/8/2018	µg/L	**4,550**		**802**		**14,100**		**7,520**		50	U[b]	50	U[b]	250	U[b]	--	
	--	4/6/2018	µg/L	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-07-050318	5/3/2018	µg/L	**6,330**		**662**		**16,500**		**9,060**		250	U[b]	250	U[b]	1,250	U[b]	--	
	--	6/4/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-07-091218	9/12/2018	µg/L	**4,620**		**639**		**13,600**		**6,180**		1	U	1	U	**82.5**		--	
	MW-07-120618	12/6/2018	µg/L	**4,850**		**574**		**13,400**		**9,890**		100	U[b]	100	U[b]	500	U[b]	--	
	MW-07-021919	2/19/2019	µg/L	**5,360**		**516**		**12,400**		**7,280**		1	U	1	U	**6.32**		--	
	MW-07-030719	3/7/2019	µg/L	**3,110**		**147**		**5,780**		**4,110**		1	U	1	U	5	U	--	
	MW-07-051519	5/15/2019	µg/L	**2,030**		**169**		**3,440**		**3,110**		1	U	1	U	**9.44**		--	
	MW-07-060419	6/4/2019	µg/L	**1,940**		**168**		**3,390**		**2,740**		1	U	1	U	**6.90**		--	
	MW-07-082019	8/20/2019	µg/L	**2,120**		**340**		**4,750**		**3,650**		50	U[b]	50	U[b]	250	U[b]	--	
	MW-07-091919	9/19/2019	µg/L	**1,580**		**148**		**2,550**		**2,160**		50	U[b]	50	U[b]	250	U[b]	--	
MW-08		7/28/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.02	U
	MW-08-012616	1/26/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	MW-08-120616	12/6/2016	µg/L	1	U	1	U	**14.4**		**7.10**		1	U	1	U	1	U	--	
	MW-08-062917	6/29/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-08-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-08	MW-08-120717	12/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-08-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-08-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-08-091318	9/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	--	12/3/2018	--	NS-PS		NS-PS		NS-PS		NS-PS		NS-PS		NS-PS		NS-PS		NS-PS	
	MW-08-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-08-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-08-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-09	--	7/27/2015	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	1/19/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	11/28/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-09-062917	6/29/2017	µg/L	**3,860**		**517**		**13,000**		**8,680**		200	U[b]	200	U[b]	1,000	U[b]	--	
	--	9/5/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-09-120717	12/7/2017	µg/L	**54.3**		**3.44**		**19.6**		**64.8**		1	U	**27.5**		5	U	--	
	MW-09-030718	3/7/2018	µg/L	**3.30**		1	U	**11.0**		**3.92**		1	U	**8.74**		5	U	--	
	MW-09-060618	6/6/2018	µg/L	**2.25**		1	U	**6.06**		**4.75**		1	U	**3.65**		5	U	--	
	MW-09-091318	9/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**2.14**		5	U	--	
	MW-09-120618	12/6/2018	µg/L	**6.39**		**2.61**		**48.3**		**39.8**		1	U	**5.68**		**6.79**		--	
	MW-09-030719	3/7/2019	µg/L	**6.24**		**3.80**		**64.3**		**52.7**		1	U	**5.90**		5	U	--	
	MW-09-060419	6/4/2019	µg/L	1	U	1	U	**1.66**		3	U	1	U	**3.95**		5	U	--	
	MW-09-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**1.48**		5	U	--	
MW-09B	MW-09B-120717	12/7/2017	µg/L	**21.8**		**24.7**		**82.1**		**179**		1	U	**4.72**		**11.9**		--	
	MW-09B-030718	3/7/2018	µg/L	**4.36**		**4.50**		**18.1**		**33.3**		1	U	**1.37**		5	U	--	
	MW-09B-060618	6/6/2018	µg/L	**17.1**		**16.5**		**66.5**		**139**		1	U	**3.61**		**8.09**		--	
	MW-09B-091318	9/13/2018	µg/L	1	U	1	U	**5.90**		**4.44**		1	U	1	U	5	U	--	
	MW-09B-120618	12/6/2018	µg/L	**2.19**		**2.14**		**8.22**		**16.8**		1	U	1	U	5	U	--	
	MW-09B-030719	3/7/2019	µg/L	**13.2**		**13.7**		**51.1**		**110**		1	U	**2.46**		**6.54**		--	
	MW-09B-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-09B-091819	9/18/2019	µg/L	**3.08**		**3.04**		**11.4**		**22.6**		1	U	1	U	5	U	--	
MW-10	MW-10-072815	7/28/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.019	U
	MW-10-012616	1/26/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.019	U
	MW-10-120616	12/6/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-10-050317	5/3/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-062917	6/29/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-071717	7/17/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-080117	8/1/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-100417	10/4/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-110817	11/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-120717	12/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-010918	1/9/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-020618	2/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-10	MW-10-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-071318	7/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-10-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-11	--	7/27/2015	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-11-012616	1/26/2016	µg/L	**10,600**		**948**		**24,400**		**4,700**		10	U[b]	**432**		**123**		0.019	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-11-062817	6/28/2017	µg/L	**10,900**		**2,140**		**29,600**		**11,700**		100	U[b]	**147**		500	U[b]	--	
	--	9/5/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	12/4/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	3/5/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	6/4/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	9/10/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	12/3/2018	--	NS-PS		NS-PS		NS-PS		NS-PS		NS-PS		NS-PS		NS-PS		NS-PS	
	MW-11-030619	3/6/2019	µg/L	**8,260**		**1,990**		**30,300**		**11,900**		200	U[b]	200	U[b]	1,000	U[b]	--	
	MW-11-060519	6/5/2019	µg/L	**6,940**		**1,660**		**22,500**		**9,020**		200	U[b]	200	U[b]	1,000	U[b]	--	
	MW-11-091919	9/19/2019	µg/L	**7,950**		**2,570**		**33,700**		**14,300**		500	U[b]	500	U[b]	2,500	U[b]	--	
MW-12	MW-12-072815	7/28/2015	µg/L	**51.3**		5	U	**22.9**		**39.2**		5	U[b]	5	U	5	U	0.02	U
	--	1/19/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	11/28/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	3/13/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	3/20/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	3/31/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	4/6/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-12-062817	6/28/2017	µg/L	**1,190**		**467**		**7,910**		**5,100**		50	U[b]	50	U[b]	250	U[b]	--	
	MW-12-090817	9/8/2017	µg/L	**648**		**436**		**3,470**		**4,440**		100	U[b]	100	U[b]	500	U[b]	--	
	MW-12-120617	12/6/2017	µg/L	**367**		**137**		**1,540**		**4,660**		10	U[b]	10	U	**54.4**		--	
	MW-12-030818	3/8/2018	µg/L	**486**		**25.2**		**1,880**		**1,980**		10	U[b]	10	U	50	U[b]	--	
	MW-12-060518	6/5/2018	µg/L	**16.3**		**2.51**		**181**		**249**		1	U	1	U	5	U	--	
	MW-12-091118	9/11/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-12-120518	12/5/2018	µg/L	**5.81**		**2.75**		**9.08**		**72.0**		1	U	1	U	5	U	--	
	MW-12-030619	3/6/2019	µg/L	1	U	1	U	**3.94**		**4.86**		1	U	1	U	5	U	--	
	MW-12-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-12-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-12B	MW-12B-012616	1/26/2016	µg/L	**228**		**31.4**		**193**		**532**		1	U	**5.40**		**14.6**		0.019	U
	MW-12B-113016	11/30/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-12B-031417	3/14/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-12B-032017	3/20/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-12B-033117	3/31/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-12B-040617	4/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-12B-062817	6/28/2017	µg/L	**30.1**		1	U	**7.28**		**14.3**		1	U	**11.8**		5	U	--	
	MW-12B-090817	9/8/2017	µg/L	**126**		**3.81**		**16.8**		**256**		1	U	1	U	**12.0**		--	
	MW-12B-120617	12/6/2017	µg/L	**1.01**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-12B-030818	3/8/2018	µg/L	**3.06**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-12B-060518	6/5/2018	µg/L	**275**		**58.7**		**20.9**		**171**		1	U	1	U	**22.5**		--	
	MW-12B-091118	9/11/2018	µg/L	**246**		**39.8**		**2.87**		**68.0**		1	U	1	U	**18.7**		--	
	MW-12B-120518	12/5/2018	µg/L	**240**		**57.7**		**29.5**		**160**		1	U	1	U	**17.7**		--	
	MW-12B-030619	3/6/2019	µg/L	**309**		**70.4**		**19.6**		**201**		1	U	1	U	**36.7**		--	
	MW-12B-060519	6/5/2019	µg/L	**88.4**		**38.0**		5	U	**15.2**		5	U	5	U	25	U	--	
	MW-12B-082219	8/22/2019	µg/L	**27.0**		**3.54**		1	U	3	U	1	U	1	U	**5.94**		--	
	MW-12B-091919	9/19/2019	µg/L	**23.1**		**2.33**		1	U	3	U	1	U	1	U	5	U	--	
MW-13	--	7/27/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-13-012816	1/28/2016	µg/L	**2**		1	U	**12.5**		**6.9**		1	U	1	U	1	U	0.02	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-13-062917	6/29/2017	µg/L	**1.18**		1	U	**3.39**		3	U	1	U	1	U	5	U	--	
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-13-030618	3/6/2018	µg/L	**6.98**		**1.14**		**15.3**		**4.55**		1	U	1	U	5	U	--	
	MW-13-060618	6/6/2018	µg/L	**44.2**		**4.25**		**86.2**		**19.9**		1	U	1	U	5	U	--	
	--	9/10/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-13-120718	12/7/2018	µg/L	**83.4**		**9.62**		**158**		**23.6**		1	U	1	U	5	U	--	
	MW-13-030619	3/6/2019	µg/L	**326**		**10.9**		**132**		**120**		1	U	1	U	5	U	--	
	MW-13-060519	6/5/2019	µg/L	**35.2**		5	U	5	U	**19.6**		5	U	5	U	25	U	--	
	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-13B	MW-13B-012816	1/28/2016	µg/L	**367**		1	U	**5.60**		**59.5**		1	U	**119**		1	U	0.02	U
	MW-13B-113016	11/30/2016	µg/L	**550**		**5.10**		**21.2**		**140**		5	U[b]	**158**		**7.90**		--	
	MW-13B-062817	6/28/2017	µg/L	**308**		**3.09**		**10.3**		**103**		1	U	**121**		**5.13**		--	
	MW-13B-090817	9/8/2017	--	NS-SL		NS-SL		NS-SL		NS-SL		NS-SL		NS-SL		NS-SL		NS-SL	
	MW-13B-110817	11/8/2017	µg/L	**325**		**3.42**		**19.0**		**91.6**		1	U	**173**		**5.55**		--	
	MW-13B-120617	12/6/2017	µg/L	**269**		**3.97**		**24.4**		**100**		1	U	**140**		**8.83**		--	
	MW-13B-030718	3/7/2018	µg/L	**252**		**3.13**		**12.1**		**60.2**		1	U	**175**		**6.44**		--	
	MW-13B-060618	6/6/2018	µg/L	**498**		**47.7**		**469**		**282**		1	U	**148**		**8.47**		--	
	MW-13B-091218	9/12/2018	µg/L	**402**		**42.5**		**503**		**271**		1	U	**141**		5	U	--	
	MW-13B-120618	12/6/2018	µg/L	**614**		**93.5**		**823**		**516**		1	U	**139**		**10.8**		--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-13B	MW-13B-030619	3/6/2019	µg/L	**445**		**53.1**		**679**		**383**		1	U	**143**		**8.60**		--	
	MW-13B-060519	6/5/2019	µg/L	**195**		**25.3**		**302**		**194**		5	U	**140**		25	U	--	
	MW-13B-091819	9/18/2019	µg/L	**408**		**71.2**		**325**		**446**		1	U	**142**		**14.0**		--	
MW-14	MW-14-072815	7/28/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.02	U
	MW-14-012816	1/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.019	U
	MW-14-113016	11/30/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-14-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-14-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-14-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-14-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-14-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-14-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-14-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-14-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-14-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-14-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**2.02**		5	U	--	
MW-14B	MW-14B-052516	5/25/2016	µg/L	**5.00**		1	U	1	U	**4.40**		1	U	**17.2**		1	U	0.02	U
	MW-14B-113016	11/30/2016	µg/L	**10.5**		1	U	**1.10**		**5.50**		1	U	**19.7**		1	U	--	
	MW-14B-062817	6/28/2017	µg/L	**38.1**		**1.34**		**2.56**		**19.1**		1	U	**36.2**		5	U	--	
	MW-14B-090817	9/8/2017	µg/L	**6.81**		1	U	1	U	**6.67**		1	U	**18.7**		5	U	--	
	MW-14B-120617	12/6/2017	µg/L	**8.82**		1	U	1	U	**6.91**		1	U	**24.4**		5	U	--	
	MW-14B-030718	3/7/2018	µg/L	**3.57**		1	U	1	U	**5.60**		1	U	**9.28**		5	U	--	
	MW-14B-0604B18	6/6/2018	µg/L	**8.63**		1	U	1	U	**5.77**		1	U	**22.1**		5	U	--	
	MW-14B-091218	9/12/2018	µg/L	**3.32**		1	U	1	U	**3.61**		1	U	**7.86**		5	U	--	
	MW-14B-120618	12/6/2018	µg/L	**3.56**		1	U	**1.40**		**6.34**		1	U	**6.56**		5	U	--	
	MW-14B-030619	3/6/2019	µg/L	**2.70**		1	U	1	U	3	U	1	U	**8.83**		5	U	--	
	MW-14B-060519	6/5/2019	µg/L	**9.13**		1	U	**1.01**		**6.57**		1	U	**17.7**		5	U	--	
	MW-14B-091819	9/18/2019	µg/L	**1.74**		1	U	1	U	**4.57**		1	U	**11.1**		5	U	--	
MW-15	MW-15-080415	8/4/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.019	U
	MW-15-012816	1/28/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	MW-15-120716	12/7/2016	µg/L	**3,680**		**139**		**422**		**2,280**		25	U[b]	**188**		**43.8**		--	
	MW-15-031417	3/14/2017	µg/L	**1,960**		**72.1**		**324**		**1,320**		25	U[b]	**161**		125	U[b]	--	
	MW-15-032017	3/20/2017	µg/L	**3,390**		**103**		**505**		**2,460**		50	U[b]	**194**		250	U[b]	--	
	MW-15-033117	3/31/2017	µg/L	**2,850**		**65.4**		**444**		**1,860**		20	U[b]	**221**		100	U[b]	--	
	MW-15-040617	4/6/2017	µg/L	**1,790**		**60.6**		**465**		**886**		25	U[b]	**181**		125	U[b]	--	
	MW-15-062817	6/28/2017	µg/L	**72.7**		25	U	**28.8**		**110**		25	U[b]	**91.8**		125	U[b]	--	
	MW-15-090817	9/8/2017	µg/L	**454**		**24.0**		**567**		**338**		5	U[b]	**193**		25	U[b]	--	
	MW-15-120617	12/6/2017	µg/L	1	U	1	U	**1.60**		**4.64**		1	U	**140**		5	U	--	
	MW-15-030818	3/8/2018	µg/L	**53.1**		**2.75**		**89.9**		**53.1**		1	U	**85.0**		5	U	--	
	MW-15-060618	6/6/2018	µg/L	**52.2**		**4.11**		**81.4**		**46.5**		1	U	**63.8**		5	U	--	
	MW-15-091218	9/12/2018	µg/L	**14.6**		1	U	**27.9**		**16.0**		1	U	**72.2**		5	U	--	
	MW-15-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**15.9**		5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-15	MW-15-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**2.57**		5	U	--	
	MW-15-060519	6/5/2019	µg/L	**1.03**		1	U	1	U	3	U	1	U	**4.33**		5	U	--	
	MW-15-091919	9/19/2019	µg/L	**1.25**		1	U	1	U	3	U	1	U	**4.73**		5	U	--	
MW-15B	MW-15B-080415	8/4/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.019	U
	MW-15B-012816	1/28/2016	µg/L	**4.80**		1	U	**2.00**		**3.90**		1	U	1	U	1	U	0.02	U
	MW-15B-113016	11/30/2016	µg/L	**337**		**34.0**		**565**		**194**		5	U[b]	**26.7**		**5**		--	
	MW-15B-031417	3/14/2017	µg/L	**2,160**		**248**		**4,580**		**1,500**		100	U[b]	**118**		500	U[b]	--	
	MW-15B-032017	3/20/2017	µg/L	**615**		**88.6**		**1,270**		**555**		25	U[b]	**67.5**		125	U[b]	--	
	MW-15B-033117	3/31/2017	µg/L	**1,630**		**205**		**3,240**		**1,180**		50	U[b]	**115**		250	U[b]	--	
	MW-15B-040617	4/6/2017	µg/L	**1,020**		**132**		**2,020**		**789**		25	U[b]	**84.7**		125	U[b]	--	
	MW-15B-062817	6/28/2017	µg/L	**1,510**		**145**		**3,520**		**1,280**		100	U[b]	100	U[b]	500	U[b]	--	
	MW-15B-090817	9/8/2017	µg/L	**1,820**		**164**		**3,560**		**1,210**		50	U[b]	**133**		250	U[b]	--	
	MW-15B-120617	12/6/2017	µg/L	**1,760**		**239**		**3,630**		**1,380**		1	U	**135**		**37.6**		--	
	MW-15B-030818	3/8/2018	µg/L	**1,290**		**151**		**3,140**		**1,070**		25	U[b]	**93.2**		125	U[b]	--	
	MW-15B-060618	6/6/2018	µg/L	**968**		**82.8**		**1,990**		**791**		1	U	**109**		**12.8**		--	
	MW-15B-091218	9/12/2018	µg/L	**947**		**122**		**2,270**		**820**		1	U	**111**		**15.9**		--	
	MW-15B-120618	12/6/2018	µg/L	**725**		**96.4**		**1,890**		**777**		1	U	**71.8**		**11.7**		--	
	MW-15B-021919	2/19/2019	µg/L	**686**		**71.2**		**1,420**		**621**		1	U	**92.3**		**12.6**		--	
	MW-15B-030619	3/6/2019	µg/L	**729**		**78.3**		**1,580**		**649**		1	U	**91.2**		**15.4**		--	
	MW-15B-051519	5/15/2019	µg/L	**721**		**118**		**1,180**		**526**		1	U	**96.6**		**19.5**		--	
	MW-15B-060519	6/5/2019	µg/L	**590**		**48.4**		**1,090**		**492**		10	U[b]	**98.0**		50	U[b]	--	
	MW-15B-082219	8/22/2019	µg/L	**2,340**		200	U	**3,060**		**1,440**		1	U	**139**		**33.5**		--	
	MW-15B-091919	9/19/2019	µg/L	**3,870**		**260**		**3,920**		**2,720**		100	U[b]	**188**		500	U[b]	--	
MW-16	--	7/27/2015	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	1/19/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	11/28/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-16-062917	6/29/2017	µg/L	**12,900**		**1,770**		**36,400**		**12,500**		500	U[b]	**1,740**		2,500	U[b]	--	
	--	9/5/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	12/7/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-16-030718	3/7/2018	µg/L	**130**		**295**		**1,370**		**2,470**		10	U[b]	**132**		**618**		--	
	--	6/4/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-16-091318	9/13/2018	µg/L	**150**		**200**		**2,100**		**2,730**		1	U	**21.5**		**635**		--	
	MW-16-120618	12/6/2018	µg/L	**10.3**		**38.7**		**132**		**398**		5	U	5	U	**460**		--	
	MW-16-030719	3/7/2019	µg/L	**9.06**		**15.7**		**74.1**		**186**		1	U	**1.02**		**398**		--	
	MW-16-060419	6/4/2019	µg/L	**9.56**		**15.4**		**78.9**		**162**		**1.06**		1	U	**192**		--	
	MW-16-091819	9/18/2019	µg/L	**8.36**		**5.8**		**73.9**		**118**		1	U	1	U	**132**		--	
MW-17	--	7/27/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	1/19/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/13/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/20/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/31/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-17	--	4/6/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	6/26/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/5/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	6/4/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/10/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/3/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-17-030519	3/5/2019	µg/L	**173**		**19.9**		**118**		**474**		1	U	**27.9**		5	U	--	
	MW-17-060519	6/5/2019	µg/L	**44.9**		5	U	**10.7**		**87.1**		5	U	**16.1**		25	U	--	
	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-17B	MW-17B-030116	3/1/2016	µg/L	**6,480**		**488**		**11,900**		**2,870**		**5**		**742**		**104**		0.019	U
	MW-17B-120116	12/1/2016	µg/L	**9,370**		**761**		**16,900**		**4,500**		100	U[b]	**954**		**112**		--	
	MW-17B-031317	3/13/2017	µg/L	**7,350**		**770**		**14,100**		**4,510**		200	U[b]	**944**		1,000	U[b]	--	
	MW-17B-032017	3/20/2017	µg/L	**10,700**		**1,360**		**21,400**		**7,910**		**323**		**1,210**		1,000	U[b]	--	
	MW-17B-033117	3/31/2017	µg/L	**9,190**		**900**		**17,500**		**5,910**		100	U[b]	**1,200**		500	U[b]		
	MW-17B-040617	4/6/2017	µg/L	**7,780**		**833**		**14,900**		**5,330**		200	U[b]	**991**		1,000	U[b]	--	
	MW-17B-062817	6/28/2017	µg/L	**11,200**		**704**		**21,600**		**5,650**		200	U[b]	**1,150**		1,000	U[b]	--	
	MW-17B-090817	9/8/2017	µg/L	**11,400**		**1,240**		**23,900**		**8,460**		20	U[b]	**1,330**		**201**		--	
	MW-17B-120717	12/7/2017	µg/L	**10,600**		**1,060**		**14,900**		**9,210**		10	U[b]	**1,140**		**178**		--	
	MW-17B-030718	3/7/2018	µg/L	**8,830**		**1,110**		**20,200**		**8,220**		50	U[b]	**960**		250	U[b]	--	
	MW-17B-060718	6/7/2018	µg/L	**8,910**		**1,250**		**20,200**		**9,130**		20	U[b]	**1,230**		**206**		--	
	MW-17B-080218	8/2/2018	µg/L	**9,470**		**1,190**		**23,200**		**8,530**		200	U[b]	**863**		1,000	U[b]	--	
	MW-17B-091118	9/11/2018	µg/L	**8,180**		**1,370**		**20,200**		**9,660**		50	U[b]	**832**		250	U[b]	--	
	MW-17B-110218	11/2/2018	µg/L	**7,770**		**1,080**		**12,700**		**7,380**		20	U[b]	**841**		**113**		--	
	MW-17B-120518	12/5/2018	µg/L	**6,860**		**1,010**		**24,400**		**8,550**		50	U[b]	**690**		250	U[b]	--	
	MW-17B-021919	2/19/2019	µg/L	**7,810**		**1,140**		**20,200**		**8,330**		1	U	**410**		**181**		--	
	MW-17B-030519	3/5/2019	µg/L	**8,360**		**1,370**		**22,400**		**9,180**		50	U[b]	**308**		**261**		--	
	MW-17B-051419	5/14/2019	µg/L	**7,320**		**1,040**		**18,500**		**8,370**		25	U[b]	**256**		**201**		--	
	MW-17B-060519	6/5/2019	µg/L	**7,390**		**1,220**		**16,600**		**8,370**		200	U[b]	**312**		1,000	U[b]	--	
	MW-17B-082219	8/22/2019	µg/L	**7,700**		**1,570**		**17,600**		**9,110**		5	U	**335**		**201**		--	
	MW-17B-091919	9/19/2019	µg/L	**7,700**		**833**		**12,000**		**8,740**		10	U[b]	**665**		**195**		--	
MW-18	--	7/27/2015	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	1/19/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	11/28/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	6/26/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	9/5/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	12/4/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	3/5/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	6/4/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	9/11/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	12/3/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-18	MW-18-030719	3/7/2019	µg/L	**2.47**		**8.16**		**60.4**		**141**		1	U	**13.5**		**72.7**		--	
	MW-18-060419	6/4/2019	µg/L	**1.46**		**2.92**		**20.9**		**42.0**		**2.36**		**13.6**		**87.5**		--	
	MW-18-091819	9/18/2019	µg/L	1	U	**1.30**		**10.7**		**37.4**		1	U	**15.4**		**48.7**		--	
MW-19	--	7/27/2015	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	MW-19-012116	1/21/2016	µg/L	**22.8**		**18.5**		**256**		**437**		1	U	1	U	**10.7**		0.02	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/13/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/20/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
		3/31/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-19-040617	4/6/2017	µg/L	**9,810**		**1,030**		**25,000**		**10,300**		250	U[b]	250	U[b]	1,250	U[b]	--	
	MW-19-062917	6/29/2017	µg/L	**9,410**		**683**		**27,200**		**9,580**		200	U[b]	**320**		1,000	U[b]	--	
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/5/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-19-060618	6/6/2018	µg/L	**8.15**		**149**		**385**		**1,260**		**1.53**		1	U	250	U[b]	--	
	MW-19-071318	7/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-19-091318	9/13/2018	µg/L	**3.31**		**3.53**		**16.0**		**96.5**		1	U	1	U	**6.55**		--	
	MW-19-120518	12/5/2018	µg/L	5	U	**8.23**		**13.7**		**217**		5	U	5	U	25	U	--	
	MW-19-030519	3/5/2019	µg/L	5	U	**33.1**		**19.4**		**756**		5	U	5	U	**294**		--	
	MW-19-060519	6/5/2019	µg/L	5	U	5	U	5	U	**30.4**		5	U	5	U	25	U	--	
	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-20	--	7/27/2015	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	1/19/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	11/28/2016	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	3/13/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	3/20/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	3/31/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	4/6/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	5/4/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	6/26/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	7/17/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	8/1/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	9/5/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	10/4/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	11/8/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	12/4/2017	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	1/8/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	2/6/2018	µg/L	NS-OL		NS-OL		NS-OL		NS-OL		NS-OL		NS-OL		NS-OL		NS-OL	
	--	3/6/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	4/6/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	5/3/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	6/4/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-20	MW-20-071218	7/12/2018	µg/L	**5,740**		**1,350**		**18,100**		**14,500**		100	U[b]	**351**		500	U[b]	--	
	--	9/10/2018	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
	--	12/3/2018	--	NS-PS		NS-PS		NS-PS		NS-PS		NS-PS		NS-PS		NS-PS		NS-PS	
	MW-20-021919	2/19/2019	µg/L	**6,650**		**1,080**		**13,900**		**11,700**		5	U	**128**		**341**		--	
	MW-20-030519	3/5/2019	µg/L	**9,480**		**1,320**		**19,200**		**10,800**		100	U[b]	**187**		500	U[b]	--	
	MW-20-051519	5/15/2019	µg/L	**4,180**		**758**		**8,970**		**7,620**		100	U[b]	**105**		**636**		--	
	MW-20-060519	6/5/2019	µg/L	**11,200**		**1,460**		**22,800**		**10,200**		50	U[b]	**174**		**437**		--	
	MW-20-082019	8/20/2019	µg/L	**7,920**		**1,160**		**15,900**		**10,300**		100	U[b]	**238**		500	U[b]	--	
	--	9/16/2019	--	NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP		NS-FP	
MW-21	MW-21-072715	7/27/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.02	U
	MW-21-012116	1/21/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	MW-21-112916	11/29/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-21-031417	3/14/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-032117	3/21/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-033117	3/31/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-040617	4/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-120717	12/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-060718	6/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-091118	9/11/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-21-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-22	--	7/27/2015	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-22-012116	1/21/2016	µg/L	**19.8**		**3.40**		**47.2**		**37.4**		1	U	1	U	1	U	0.02	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	5/3/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-22-062917	6/29/2017	µg/L	**234**		10	U	**125**		30	U	10	U[b]	10	U	50	U[b]	--	
	--	7/17/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	8/1/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	10/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	11/8/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	1/8/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	2/6/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-22-030618	3/6/2018	µg/L	1	U	1	U	**1.03**		3	U	1	U	1	U	5	U	--	
	MW-22-040618	4/6/2018	µg/L	1	U	1	U	**1.76**		**46.6**		1	U	1	U	5	U	--	
	MW-22-050318	5/3/2018	µg/L	**1.43**		**1.79**		**33.1**		**426**		1	U	1	U	1	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-22	MW-22-060518	6/5/2018	µg/L	1	U	1	U	**4.27**		**41.6**		1	U	1	U	5	U	--	
	MW-22-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-22-091318	9/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-22-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-22-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-22-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-23	MW-23-072715	7/27/2015	µg/L	5	U[b]	5	U	**7.5**		10	U	5	U[b]	5	U	5	U	0.02	U
	MW-23-012016	1/20/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.019	U
	MW-23-120216	12/2/2016	µg/L	**450**		5	U	**14.6**		**336**		5	U[b]	**46.4**		**5.90**		--	
	MW-23-031317	3/13/2017	µg/L	**709**		5	U	**23.1**		**548**		5	U[b]	**127**		25	U[b]	--	
	MW-23-032017	3/20/2017	µg/L	**642**		10	U	**12.7**		**579**		10	U[b]	**108**		50	U[b]	--	
	MW-23-033117	3/31/2017	µg/L	**685**		10	U	**16.5**		**624**		10	U[b]	**130**		50	U[b]	--	
	MW-23-040617	4/6/2017	µg/L	**432**		1	U	**6.61**		**254**		1	U	**76.5**		5	U	--	
	MW-23-062817	6/28/2017	µg/L	**131**		10	U	10	U	**117**		10	U[b]	**19.1**		5	U	--	
	MW-23-071717	7/17/2017	µg/L	**1.20**		1	U	1	U	3	U	1	U	**1**	U	5	U	--	
	MW-23-080117	8/1/2017	µg/L	**132**		1	U	**6.18**		**252**		1	U	**48.1**		5	U	--	
	MW-23-090717	9/7/2017	µg/L	**1,110**		**9.25**		**43.1**		**999**		5	U[b]	**141**		25	U[b]	--	
	MW-23-100417	10/4/2017	µg/L	**703**		10	U	**17.5**		**515**		10	U[b]	**90.1**		50	U[b]	--	
	MW-23-110817	11/8/2017	µg/L	**788**		10	U	**21.5**		**580**		10	U[b]	**118**		50	U[b]	--	
	MW-23-120617	12/6/2017	µg/L	**693**		10	U	**17.0**		**408**		10	U[b]	**99.5**		50	U[b]	--	
	MW-23-010918	1/9/2018	µg/L	**127**		10	U	10	U	**137**		10	U[b]	**69.6**		50	U[b]	--	
	MW-23-020618	2/6/2018	µg/L	**1.10**		1	U	1	U	3	U	1	U	**33.8**		5	U	--	
	MW-23-030618	3/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**17.5**		5	U	--	
	MW-23-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**32**		5	U	--	
	MW-23-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**19.1**		5	U	--	
	MW-23-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**5.28**		5	U	--	
	MW-23-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**7.05**		5	U	--	
	MW-23-080218	8/2/2018	µg/L	**17.9**		1	U	1	U	**10.4**		1	U	**5.01**		5	U	--	
	MW-23-091118	9/11/2018	µg/L	**2.30**		1	U	1	U	3	U	1	U	**11.0**		5	U	--	
	MW-23-110218	11/2/2018	µg/L	**11.1**		1	U	**2.48**		**4.85**		1	U	**8.35**		5	U	--	
	MW-23-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**2.08**		5	U	--	
	MW-23-022019	2/20/2019	µg/L	**5.34**		1	U	**2.16**		3	U	1	U	**7.24**		5	U	--	
	MW-23-030519	3/5/2019	µg/L	**87.7**		**1.16**		**1.35**		**46.2**		1	U	**16.5**		5	U	--	
	MW-23-051419	5/14/2019	µg/L	**412**		**5.37**		**20.7**		**190**		1	U	**28.0**		**10.9**		--	
	MW-23-060519	6/5/2019	µg/L	**520**		5	U	**5.77**		**211**		5	U	**27.7**		25	U	--	
	MW-23-082119	8/21/2019	µg/L	**1,860**		**82.8**		**507**		**1,190**		10	U[b]	**88.7**		50	U[b]	--	
	MW-23-091919	9/19/2019	µg/L	**2,950**		**192**		**1,060**		**2,210**		5	U	**99.9**		**38.4**		--	
MW-23B	MW-23B-080515	8/5/2015	µg/L	5	U[b]	5	U	**7.00**		10	U	5	U[b]	5	U	5	U	0.02	U
	MW-23B-012016	1/20/2016	µg/L	1	U	1	U	**3.90**		**7.10**		1	U	1	U	1	U	0.02	U
	MW-23B-120216	12/2/2016	µg/L	1	U	**1.40**		**3.50**		**11.0**		1	U	1	U	**1.30**		--	
	MW-23B-031317	3/13/2017	µg/L	1	U	**1.11**		**2.63**		**8.86**		1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-23B	MW-23B-032017	3/20/2017	µg/L	1	U	**1.55**		**2.98**		**11.7**		1	U	1	U	5	U	--	
	MW-23B-033117	3/31/2017	µg/L	1	U	**1.24**		**2.41**		**8.86**		1	U	1	U	5	U	--	
	MW-23B-040617	4/6/2017	µg/L	1	U	**1.21**		**2.41**		**9.23**		1	U	1	U	5	U	--	
	MW-23B-062817	6/28/2017	µg/L	1	U	1	U	**1.73**		**6.20**		1	U	1	U	5	U	--	
	MW-23B-090717	9/7/2017	µg/L	1	U	1	U	**1.65**		**5.40**		1	U	1	U	5	U	--	
	MW-23B-120617	12/6/2017	µg/L	1	U	**1.20**		**2.48**		**7.93**		1	U	1	U	5	U	--	
	MW-23B-030618	3/6/2018	µg/L	1	U	**1.20**		**4.57**		**9.14**		1	U	1	U	5	U	--	
	MW-23B-060518	6/5/2018	µg/L	1	U	1	U	**1.08**		**4.21**		1	U	1	U	5	U	--	
	MW-23B-091118	9/11/2018	µg/L	1	U	1	U	**1.24**		3	U	1	U	1	U	5	U	--	
	MW-23B-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-23B-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-23B-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-23B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-24	MW-24-080515	8/5/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.02	U
	MW-24-012616	1/26/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.019	U
	MW-24-120716	12/7/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-24-062817	6/28/2017	µg/L	**28.8**		**3.96**		**1.70**		**22.2**		1	U	1	U	5	U	--	
	MW-24-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-24B	MW-24B-080515	8/5/2015	µg/L	5	U[b]	5	U	5	U	10	U	5	U[b]	5	U	5	U	0.02	U
	MW-24B-012616	1/26/2016	µg/L	1	U	1	U	**3.30**		**6.80**		1	U	1	U	1	U	0.019	U
	MW-24B-120716	12/7/2016	µg/L	1	U	1	U	**2.90**		**1.60**		1	U	1	U	1	U	--	
	MW-24B-062817	6/28/2017	µg/L	**28.9**		**3.89**		**1.77**		**20.7**		1	U	1	U	5	U	--	
	MW-24B-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24B-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24B-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24B-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24B-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24B-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24B-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24B-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-24B-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-25	MW-25-012716	1/27/2016	µg/L	**101**		1	U	1	U	**115**		1	U	1	U	**1.80**		0.02	U
	MW-25-012716	12/1/2016	µg/L	**675**		**30.2**		**15.3**		**619**		5	U[b]	**5.90**		**29.7**		--	
	MW-25-031417	3/14/2017	µg/L	**627**		**28.6**		**10.1**		**668**		10	U[b]	10	U	50	U[b]	--	
	MW-25-032017	3/20/2017	µg/L	**604**		**20.4**		20	U	**680**		20	U[b]	20	U	100	U[b]	--	
	MW-25-033117	3/31/2017	µg/L	**673**		**30.1**		**12.0**		**736**		10	U[b]	10	U	50	U[b]	--	
	MW-25-040617	4/6/2017	µg/L	**558**		**24.3**		10	U	**682**		10	U[b]	10	U	50	U[b]	--	
	MW-25-050317	5/3/2017	µg/L	**519**		**49.3**		**10.1**		**614**		1	U	1	U	**43.2**		--	
	MW-25-062817	6/28/2017	µg/L	**431**		**34.8**		10	U	**520**		10	U[b]	10	U	50	U[b]	--	
	MW-25-071717	7/17/2017	µg/L	**230**		**13.4**		10	U	**264**		10	U[b]	10	U	50	U[b]	--	
	MW-25-080117	8/1/2017	µg/L	**234**		**14.4**		10	U	**277**		10	U[b]	10	U	50	U[b]	--	
	MW-25-090817	9/8/2017	µg/L	**200**		**12.2**		**1.27**		**214**		1	U	1	U	**10.6**		--	
	MW-25-100417	10/4/2017	µg/L	**173**		**16.2**		**1.73**		**276**		1	U	**1.10**		**6.77**		--	
	MW-25-110817	11/8/2017	µg/L	**82.9**		**7.21**		1	U	**143**		1	U	1	U	**7.74**		--	
	MW-25-120617	12/6/2017	µg/L	**23.8**		**1.84**		1	U	**60.5**		1	U	1	U	5	U	--	
	MW-25-010918	1/9/2018	µg/L	**72.0**		**2.74**		1	U	**111**		1	U	1	U	5	U	--	
	MW-25-020618	2/6/2018	µg/L	**10.8**		1	U	1	U	**19.3**		1	U	1	U	5	U	--	
	MW-25-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-25B	MW-25B-012716	1/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	MW-25B-120116	12/1/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-25B-031417	3/14/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-032017	3/20/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-033117	3/31/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-040617	4/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-25B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-26	MW-26-012016	1/20/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.019	U
	MW-26-120116	12/1/2016	µg/L	1	U	1	U	**2.30**		1	U	1	U	1	U	1	U	--	
	MW-26-031417	3/14/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-032017	3/20/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-033117	3/31/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-040617	4/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-050317	5/3/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-071717	7/17/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-080117	8/1/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-090717	9/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-100417	10/4/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-110817	11/8/2017	µg/L	1	U	1	U	**1.17**		3	U	1	U	1	U	5	U	--	
	MW-26-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-010918	1/9/2018	µg/L	1	U	**1.79**		**6.20**		**13.8**		1	U	1	U	5	U	--	
	MW-26-020618	2/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-030618	3/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-091118	9/11/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-021919	2/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-051519	5/15/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-26B	MW-26B-012016	1/20/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	MW-26B-120116	12/1/2016	µg/L	1	U	1	U	1	U	**1.30**		1	U	1	U	1	U	--	
	MW-26B-031417	3/14/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-032017	3/20/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-033117	3/31/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-040617	4/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-090717	9/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-030618	3/6/2018	µg/L	1	U	1	U	**1.03**		3	U	1	U	1	U	5	U	--	
	MW-26B-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-091118	9/11/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-26B	MW-26B-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-26B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-27	MW-27-012716	1/27/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.019	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-27-062817	6/28/2017	µg/L	**2.69**		**4.06**		**3.88**		**35.9**		1	U	1	U	5	U	--	
	MW-27-090817	9/8/2017	µg/L	**4.96**		**5.75**		**2.13**		**14.8**		1	U	1	U	5	U	--	
	MW-27-120517	12/5/2017	µg/L	**6.48**		**8.23**		**12.5**		**20.5**		1	U	1	U	5	U	--	
	MW-27-030818	3/8/2018	µg/L	**14.5**		**29.7**		**62.3**		**227**		1	U	1	U	5	U	--	
	MW-27-060518	6/5/2018	µg/L	**5.74**		**7.74**		**22.6**		**70.3**		1	U	1	U	5	U	--	
	MW-27-091118	9/11/2018	µg/L	**2.06**		**2.94**		**7.44**		**25.6**		1	U	1	U	5	U	--	
	MW-27-030519	3/5/2019	µg/L	1	U	1	U	**4.05**		**9.95**		1	U	1	U	5	U	--	
	MW-27-060519	6/5/2019	µg/L	**1.33**		1	U	**5.04**		**11.0**		1	U	1	U	5	U	--	
	MW-27-091919	9/19/2019	µg/L	**1.04**		1	U	**1.09**		**5.00**		1	U	1	U	5	U	--	
MW-27B	MW-27B-051216	5/12/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.02	U
	MW-27B-120216	12/2/2016	µg/L	1	U	**5.30**		**9.10**		**45.7**		1	U	1	U	**8.90**		--	
	MW-27B-062817	6/28/2017	µg/L	1	U	**4.04**		**4.04**		**32.7**		1	U	1	U	**6.09**		--	
	MW-27B-090717	9/7/2017	µg/L	1	U	**3.73**		**6.35**		**30.3**		1	U	1	U	**7.54**		--	
	MW-27B-120517	12/5/2017	µg/L	1	U	**3.10**		**5.91**		**24.8**		1	U	1	U	**5.81**		--	
	MW-27B-030818	3/8/2018	µg/L	1	U	**3.44**		**6.82**		**28.8**		1	U	1	U	5	U	--	
	MW-27B-060518	6/5/2018	µg/L	1	U	**3.38**		**6.18**		**26.8**		1	U	1	U	**5.10**		--	
	MW-27B-091118	9/11/2018	µg/L	1	U	**2.98**		**5.65**		**25.0**		1	U	1	U	5	U	--	
	MW-27B-120518	12/5/2018	µg/L	1	U	**2.47**		**4.97**		**21.1**		1	U	1	U	5	U	--	
	MW-27B-030519	3/5/2019	µg/L	1	U	**2.40**		**4.76**		**20.0**		1	U	1	U	5	U	--	
	MW-27B-060519	6/5/2019	µg/L	1	U	**1.85**		**3.59**		**14.7**		1	U	1	U	5	U	--	
	MW-27B-091919	9/19/2019	µg/L	1	U	**2.05**		**3.87**		**16.2**		1	U	1	U	5	U	--	
MW-28	MW-28-012716	1/27/2016	µg/L	**542**		**430**		**3,850**		**3,370**		1	U	**4.8**		**96.3**		0.02	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-28-031517	3/15/2017	µg/L	**1,120**		**68.9**		**3,350**		**1,370**		50	U[b]	50	U[b]	250	U	--	
	--	3/20/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/31/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	4/6/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-28-050317	5/3/2017	µg/L	**65.9**		**14.5**		**263**		**1,010**		1	U	**2.94**		**9.33**		--	
	MW-28-062817	6/28/2017	µg/L	**199**		**55.0**		**108**		**546**		1	U	1	U	**10.1**		--	
	MW-28-071717	7/17/2017	µg/L	**219**		**64.2**		**85.8**		**422**		1	U	1	U	**14.7**		--	
	MW-28-080217	8/2/2017	µg/L	**219**		**48.7**		**52.7**		**187**		1	U	**3.46**		**11.9**		--	
	MW-28-090817	9/8/2017	µg/L	**130**		**16.2**		**175**		**388**		1	U	**4.77**		**13.6**		--	
	--	10/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	11/7/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/7/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	1/9/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-28-020618	2/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-28	MW-28-030818	3/8/2018	µg/L	**10.1**		**9.92**		**5.27**		**21.2**		1	U	1	U	5	U	--	
	MW-28-040618	4/6/2018	µg/L	**16.1**		**11.6**		**4.00**		**23.4**		1	U	1	U	5	U	--	
	MW-28-050318	5/3/2018	µg/L	**8.25**		**8.82**		**1.55**		**24.5**		1	U	1	U	5	U	--	
	MW-28-060518	6/5/2018	µg/L	**3.81**		**3.77**		**1.01**		**16.0**		1	U	1	U	5	U	--	
	MW-28-071218	7/12/2018	µg/L	**3.91**		**5.19**		**1.05**		**8.82**		1	U	1	U	5	U	--	
	MW-28-091118	9/11/2018	µg/L	**28.0**		**25.2**		**3.66**		**4.89**		1	U	1	U	5	U	--	
	MW-28-120518	12/5/2018	µg/L	**13.7**		**8.04**		**1.47**		3	U	1	U	1	U	5	U	--	
	MW-28-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-28-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-28-091719	9/17/2019	µg/L	**1.68**		1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-29	MW-29-012116	1/21/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	MW-29-112916	11/29/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-29-031317	3/13/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-032017	3/20/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-033117	3/31/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-040617	4/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-050317	5/3/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-071717	7/17/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-080117	8/1/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-090717	9/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-100417	10/4/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-110817	11/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-010918	1/9/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-020618	2/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-091118	9/11/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-29-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-30	MW-30-012516	1/25/2016	µg/L	1	U	1	U	1	U	2	U	1	U	1	U	1	U	0.02	U
	--	11/28/2016	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-30-050417	5/4/2017	µg/L	**104**		**3.98**		**341**		**161**		1	U	1	U	5	U	--	
	MW-30-062917	6/29/2017	µg/L	**646**		25	U	**1,630**		**736**		25	U[b]	25	U	125	U[b]	--	
	MW-30-071717	7/17/2017	µg/L	**922**		25	U	**2,050**		**1,320**		25	U[b]	25	U	125	U[b]	--	
	MW-30-080217	8/2/2017	µg/L	**1,240**		**25.9**		**1,020**		**2,230**		25	U[b]	25	U	125	U[b]	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-30	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	10/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	11/8/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	1/8/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-30-020518	2/5/2018	µg/L	**2.20**		1	U	**1.86**		**4.10**		1	U	1	U	5	U	--	
	MW-30-030718	3/7/2018	µg/L	**22.1**		1	U	**8.94**		**19.1**		1	U	**2.25**		5	U	--	
	MW-30-040618	4/6/2018	µg/L	**1.90**		1	U	**7.38**		**5.95**		1	U	**2.22**		5	U	--	
	MW-30-050318	5/3/2018	µg/L	**1.19**		1	U	**3.70**		3	U	1	U	**2.29**		5	U	--	
	MW-30-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**2.58**		5	U	--	
	MW-30-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**2.79**		5	U	--	
	--	9/11/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-30-120718	12/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**1.94**		**9.22**		--	
	MW-30-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-30-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-31	MW-31-051016	5/10/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.02	U
	MW-31-112916	11/29/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-31-050317	5/3/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-071717	7/17/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-080117	8/1/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-100417	10/4/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-110817	11/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-010918	1/9/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-020618	2/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-071318	7/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-31-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-31B	MW-31B-051116	5/11/2016	µg/L	1	U	1	U	**2.70**		1	U	1	U	1	U	1	U	0.02	U

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-32	MW-32-051016	5/10/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.02	U
	MW-32-120616	12/6/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-32-062917	6/29/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-32-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-32-120717	12/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-32-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-32-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-32-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-32-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-32-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-32-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-32-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-33	MW-33-051016	5/10/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.02	U
MW-33T	MW-33T-051016	5/10/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.02	U
	MW-33T-120617	12/6/2017	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-33T-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-33T-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-33T-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-33T-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-33T-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-33T-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-33T-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-34	MW-34-031517	3/15/2017	--	**978**		**33.0**		**143**		**218**		10	U[b]	**157**		50	U[b]	--	
	MW-34-032017	3/20/2017	µg/L	**801**		10.0	U	**113**		**305**		10	U[b]	**149**		50	U[b]	--	
	MW-34-033117	3/31/2017	µg/L	**728**		10.0	U	**81.4**		**224**		10	U[b]	**152**		50	U[b]	--	
	MW-34-040617	4/6/2017	µg/L	**860**		**1.70**		**58.6**		**181**		1	U	**123**		5	U	--	
	MW-34-050317	5/3/2017	µg/L	**287**		**2.62**		**27.2**		**130**		1	U	**124**		5	U	--	
	MW-34-062817	6/28/2017	µg/L	**167**		**4.59**		**9.3**		**39.2**		1	U	**68.3**		5	U	--	
	MW-34-071717	7/17/2017	µg/L	**137**		**5.83**		**19.8**		**69.5**		1	U	**73.8**		5	U	--	
	MW-34-080117	8/1/2017	µg/L	**517**		10	U	**31.7**		**110**		10	U[b]	**98.3**		50	U[b]	--	
	MW-34-090817	9/8/2017	µg/L	**1,430**		**6.01**		**98.0**		**264**		1	U	**191**		**7.33**		--	
	MW-34-100417	10/4/2017	µg/L	**919**		10	U	**36.8**		**157**		10	U[b]	**151**		50	U[b]	--	
	MW-34-110817	11/8/2017	µg/L	**338**		10	U	**15.3**		**140**		10	U[b]	**266**		50	U[b]	--	
	MW-34-120617	12/6/2017	µg/L	**169**		10	U	**29.7**		**69.9**		10	U[b]	**218**		50	U[b]	--	
	MW-34-010918	1/9/2018	µg/L	**147**		10	U	**13.1**		**79.8**		10	U[b]	**246**		50	U[b]	--	
	MW-34-020618	2/6/2018	µg/L	**249**		10	U	**19.2**		**88.3**		10	U[b]	**191**		50	U[b]	--	
	MW-34-030818	3/8/2018	µg/L	**696**		**7.35**		**51.6**		**180**		1	U	**229**		**5.84**		--	
	MW-34-040618	4/6/2018	µg/L	**619**		**2.22**		**31.9**		**150**		1	U	**281**		**7.77**		--	
	MW-34-050318	5/3/2018	µg/L	**342**		10	U	**18.1**		**99.7**		10	U[b]	**278**		50	U[b]	--	
	MW-34-060518	6/5/2018	µg/L	**63.1**		1	U	**3.28**		**19.2**		1	U	**247**		5	U	--	
	MW-34-071218	7/12/2018	µg/L	**186**		**2.41**		**9.34**		**33.7**		1	U	**153**		5	U	--	
	MW-34-080218	8/2/2018	µg/L	**414**		**5.27**		**32.6**		**53.6**		1	U	**147**		5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-34	MW-34-091218	9/12/2018	µg/L	**21.8**		1	U	1	U	3	U	1	U	**209**		5	U	--	
	MW-34-110218	11/2/2018	µg/L	**75.1**		1	U	**1.53**		**8.16**		1	U	**302**		5	U	--	
	MW-34-120618	12/6/2018	µg/L	1	U	1	U	1	U	**6.63**		1	U	**271**		5	U	--	
	MW-34-022019	2/20/2019	µg/L	**124**		**1.13**		**3.82**		15	U	1	U	**303**		5	U	--	
	MW-34-030619	3/6/2019	µg/L	**42.4**		1	U	1	U	**5.32**		1	U	**242**		5	U	--	
	MW-34-051519	5/15/2019	µg/L	**162**		**2.18**		**2.63**		**14.9**		1	U	**163**		5	U	--	
	MW-34-060519	6/5/2019	µg/L	**36.6**		5	U	5	U	15	U	5	U	**148**		25	U	--	
	MW-34-082219	8/22/2019	µg/L	**102**		5	U	5	U	15	U	1	U	**207**		**5.05**		--	
	MW-34-091919	9/19/2019	µg/L	**12.9**		1	U	1	U	3	U	1	U	**109**		5	U	--	
MW-35	MW-35-051016	5/10/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.02	U
	MW-35-120116	12/1/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-35-031417	3/14/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-032017	3/20/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-033117	3/31/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-040617	4/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-050317	5/3/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-071717	7/17/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-080117	8/1/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-100417	10/4/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-110817	11/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-010918	1/9/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-020618	2/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-091118	9/11/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-35-060519	6/5/2019	µg/L	1	U	1	U	**4.52**		3	U	1	U	1	U	5	U	--	
	MW-35-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-36	MW-36-051116	5/11/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.02	U
	MW-36-112916	11/29/2016	µg/L	**1.30**		1	U	**6.50**		**1.10**		1	U	1	U	1	U	--	
	MW-36-062917	6/29/2017	µg/L	**2.11**		1	U	**2.28**		3	U	1	U	1	U	5	U	--	
	MW-36-090817	9/8/2017	µg/L	**4.75**		1	U	**6.16**		**4.62**		1	U	1	U	5	U	--	
	MW-36-120717	12/7/2017	µg/L	**17.5**		1	U	**30.2**		**14.4**		1	U	1	U	5	U	--	
	MW-36-030718	3/7/2018	µg/L	**44.2**		10	U	**75.2**		**38.4**		10	U[b]	10	U	50	U[b]	--	
	MW-36-060718	6/7/2018	µg/L	**184**		1	U	**208**		**134**		1	U	**2.06**		5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-36	MW-36-091318	9/13/2018	µg/L	**238**		1	U	**326**		**238**		1	U	1	U	5	U	--	
	MW-36-120618	12/6/2018	µg/L	**146**		1	U	**181**		**142**		1	U	1	U	5	U	--	
	MW-36-021919	2/19/2019	µg/L	**708**		1	U	**186**		**152**		1	U	1	U	5	U	--	
	MW-36-030719	3/7/2019	µg/L	**223**		1	U	**210**		**161**		1	U	**2.67**		5	U	--	
	MW-36-051519	5/15/2019	µg/L	**1,160**		5	U	**78.4**		**482**		5	U	**292**		**228**		--	
	MW-36-060419	6/4/2019	µg/L	**1,100**		1	U	**48.1**		**428**		1	U	1	U	5	U	--	
	MW-36-081919	8/19/2019	µg/L	**484**		20	U	**27.5**		**197**		20	U[b]	20	U	100	U[b]	--	
	MW-36-091919	9/19/2019	µg/L	**360**		10	U	**46.0**		**188**		10	U[b]	10	U	50	U[b]	--	
MW-36B	MW-36B-051116	5/11/2016	µg/L	1	U	1	U	**7.20**		1	U	1	U	1	U	1	U	0.02	U
	MW-36B-112916	11/29/2016	µg/L	1	U	1	U	**1.60**		1	U	1	U	1	U	1	U	--	
	MW-36B-062917	6/29/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-36B-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-36B-120717	12/7/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-36B-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	7W-36B-060618	6/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-36B-091318	9/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-36B-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-36B-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-36B-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-36B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-37	MW-37-113016	11/30/2016	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	--	
	MW-37-062817	6/28/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**1.44**		5	U	--	
	MW-37-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**1.50**		5	U	--	
	MW-37-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**2.93**		5	U	--	
	MW-37-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**3.71**		5	U	--	
	MW-37-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**5.06**		5	U	--	
	MW-37-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**4.30**		5	U	--	
	MW-37-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-37-021919	2/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-37-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-37-051519	5/15/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-37-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-37-071819	7/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-37-082019	8/20/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-37-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-38	MW-38-113016	11/30/2016	µg/L	1	U	1	U	1	U	1	U	1	U	**5.50**		1	U	--	
	MW-38-031417	3/14/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**9.14**		5	U	--	
	MW-38-032017	3/20/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**7.55**		5	U	--	
	MW-38-033117	3/31/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**10.2**		5	U	--	
	MW-38-040617	4/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**8.06**		5	U	--	
	MW-38-050317	5/3/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**9.08**		5	U	--	
	MW-38-062817	6/28/2017	µg/L	**9.71**		**1.17**		1	U	**6.63**		1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-38	MW-38-071717	7/17/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**8.59**		5	U	--	
	MW-38-080117	8/1/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**7.25**		5	U	--	
	MW-38-090817	9/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**12.9**		5	U	--	
	MW-38-100417	10/4/2017	µg/L	**1.75**		1	U	1	U	3	U	1	U	**11.2**		5	U	--	
	MW-38-110817	11/8/2017	µg/L	**4.48**		1	U	1	U	**12.4**		1	U	**29.2**		5	U	--	
	MW-38-120617	12/6/2017	µg/L	**102**		1	U	1	U	**86.1**		1	U	**38.0**		5	U	--	
	MW-38-010918	1/9/2018	µg/L	**311**		1	U	**2.31**		**158**		1	U	**49.4**		5	U	--	
	MW-38-020618	2/6/2018	µg/L	**389**		5	U	5	U	**208**		5	U	**48.8**		25	U	--	
	MW-38-030818	3/8/2018	µg/L	**364**		5	U	5	U	**202**		5	U	**54.8**		25	U	--	
	MW-38-040618	4/6/2018	µg/L	**347**		1	U	**2.95**		**221**		1	U	**68.8**		**10.4**		--	
	MW-38-050318	5/3/2018	µg/L	**378**		10	U	10	U	**212**		10	U[b]	**62.1**		50	U[b]	--	
	MW-38-060518	6/5/2018	µg/L	**373**		1	U	**2.49**		**222**		1	U	**75.5**		**9**		--	
	MW-38-071218	7/12/2018	µg/L	**268**		1	U	**1.27**		**138**		1	U	**52.5**		**7.26**		--	
	MW-38-091218	9/12/2018	µg/L	**157**		1	U	**1.19**		**66.5**		1	U	**38.8**		5	U	--	
	MW-38-120618	12/6/2018	µg/L	**412**		1	U	**1.90**		**236**		1	U	**89.7**		**13.7**		--	
	MW-38-021919	2/19/2019	µg/L	**887**		1	U	10	U	**331**		1	U	**87.1**		**14.3**		--	
	MW-38-030619	3/6/2019	µg/L	**849**		1	U	**2.55**		**278**		1	U	**96.7**		**18.0**		--	
	MW-38-051519	5/15/2019	µg/L	**614**		1	U	**1.42**		**178**		1	U	**95.6**		**10.1**		--	
	MW-38-060519	6/5/2019	µg/L	**950**		100	U	100	U	300	U	100	U[b]	**118**		500	U[b]	--	
	MW-38-071819	7/18/2019	µg/L	**1,260**		1	U	**3.27**		**308**		1	U	**104**		**16.2**		--	
	MW-38-082019	8/20/2019	µg/L	**1,030**		10	U	10	U	**279**		10	U[b]	**116**		50	U[b]	--	
	MW-38-091719	9/17/2019	µg/L	**40.2**		10	U	10	U	30	U	10	U[b]	**88.2**		50	U[b]	--	
MW-39	MW-39-120716	12/7/2016	µg/L	**6,320**		**682**		**1,290**		**3,650**		50	U[b]	**311**		**86**		--	
	MW-39-031417	3/14/2017	µg/L	**6,370**		**431**		**2,200**		**3,700**		10	U[b]	**199**		**117**		--	
	MW-39-032017	3/20/2017	µg/L	**7,340**		**704**		**2,990**		**4,050**		100	U[b]	**248**		500	U[b]	--	
	MW-39-033117	3/31/2017	µg/L	**7,540**		**899**		**3,140**		**4,400**		50	U[b]	**272**		250	U[b]	--	
	MW-39-040617	4/6/2017	µg/L	**6,180**		**754**		**3,280**		**3,860**		50	U[b]	**257**		250	U[b]	--	
	MW-39-062817	6/28/2017	µg/L	**5,470**		**58**		**3,360**		**3,900**		20	U[b]	**239**		100	U[b]	--	
	MW-39-071717	7/17/2017	µg/L	**4,690**		100	U	**3,760**		**4,580**		100	U[b]	**344**		500	U[b]	--	
	MW-39-080117	8/1/2017	µg/L	**4,630**		100	U	**2,880**		**4,740**		100	U[b]	**348**		500	U[b]	--	
	MW-39-090817	9/8/2017	µg/L	**3,380**		**10.7**		**1,040**		**2,740**		1	U	**376**		**15.6**		--	
	MW-39-100417	10/4/2017	µg/L	**1,560**		50	U	**365**		**1,350**		50	U[b]	**305**		250	U[b]	--	
	MW-39-110817	11/8/2017	µg/L	**878**		50	U	**123**		**368**		50	U[b]	**442**		250	U[b]	--	
	MW-39-120617	12/6/2017	µg/L	**345**		50	U	**69**		**150**		50	U[b]	**355**		250	U[b]	--	
	MW-39-010918	1/9/2018	µg/L	**23.8**		5	U	5	U	15	U	5	U	**370**		25	U	--	
	MW-39-020618	2/6/2018	µg/L	**46.9**		5	U	5	U	15	U	5	U	**263**		25	U	--	
	MW-39-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**304**		5	U	--	
	MW-39-040618	4/6/2018	µg/L	**1.00**		1	U	1	U	3	U	1	U	**297**		5	U	--	
	MW-39-050318	5/3/2018	µg/L	10	U	10	U	10	U	30	U	10	U[b]	**287**		50	U[b]	--	
	MW-39-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**322**		5	U	--	
	MW-39-071218	7/12/2018	µg/L	**1.00**		1	U	1	U	3	U	1	U	**244**		5	U	--	
	MW-39-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**176**		5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-39	MW-39-120618	12/6/2018	µg/L	**30.6**		1	U	**7.49**		**29.3**		1	U	**156**		5	U	--	
	MW-39-021919	2/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**53.8**		5	U	--	
	MW-39-030619	3/6/2019	µg/L	**1.91**		1	U	**1.01**		3	U	1	U	**61.0**		5	U	--	
	MW-39-051519	5/15/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**89.4**		5	U	--	
	MW-39-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**156**		5	U	--	
	MW-39-081919	8/19/2019	µg/L	**10.9**		1	U	1	U	**5.35**		1	U	**162**		5	U	--	
	MW-39-091919	9/19/2019	µg/L	**1.67**		1	U	1	U	3	U	1	U	**121**		5	U	--	
MW-40	MW-40-120716	12/7/2016	µg/L	**6,730**		**588**		**7,460**		**3,390**		50	U[b]	**373**		**64.8**		--	
	MW-40-031417	3/14/2017	µg/L	**11,600**		**1,280**		**16,100**		**7,260**		50	U[b]	**691**		250	U[b]	--	
	MW-40-032017	3/20/2017	µg/L	**12,300**		**1,330**		**19,600**		**7,500**		200	U[b]	**654**		1,000	U[b]	--	
	MW-40-033117	3/31/2017	µg/L	**13,300**		**1,500**		**19,500**		**8,070**		100	U[b]	**727**		500	U[b]	--	
	MW-40-040617	4/6/2017	µg/L	**10,400**		**1,180**		**16,200**		**6,570**		200	U[b]	**650**		1,000	U[b]	--	
	MW-40-062817	6/28/2017	µg/L	**9,250**		**1,030**		**19,200**		**6,540**		500	U[b]	**590**		2,500	U[b]	--	
	MW-40-071717	7/17/2017	µg/L	**11,400**		**1,210**		**25,300**		**7,430**		500	U[b]	**727**		2,500	U[b]	--	
	MW-40-080117	8/1/2017	µg/L	**12,000**		**1,120**		**23,200**		**8,070**		500	U[b]	**631**		2,500	U[b]	--	
	MW-40-090817	9/8/2017	µg/L	**14,300**		**1,250**		**28,700**		**9,250**		20	U[b]	**716**		**219**		--	
	MW-40-100417	10/4/2017	µg/L	**13,800**		1,000	U[b]	**28,800**		**9,530**		1,000	U[b]	1,000	U[b]	5,000	U[b]	--	
	MW-40-110817	11/8/2017	µg/L	**13,500**		1,000	U[b]	**23,000**		**9,290**		1,000	U[b]	1,000	U[b]	5,000	U[b]	--	
	MW-40-120617	12/6/2017	µg/L	**14,300**		1,000	U[b]	**22,300**		**10,100**		1,000	U[b]	1,000	U[b]	5,000	U[b]	--	
	MW-40-010918	1/9/2018	µg/L	**12,400**		**773**		**22,300**		**10,200**		200	U[b]	**497**		1,000	U[b]	--	
	MW-40-020618	2/6/2018	µg/L	**11,100**		**777**		**20,300**		**9,350**		200	U[b]	**373**		1,000	U[b]	--	
	MW-40-030818	3/8/2018	µg/L	**8,450**		**498**		**14,500**		**7,580**		50	U[b]	**337**		250	U[b]	--	
	MW-40-040618	4/6/2018	µg/L	**6,710**		**212**		**8,350**		**5,460**		100	U[b]	**423**		500	U[b]	--	
	MW-40-050318	5/3/2018	µg/L	**2,890**		100	U	**3,490**		**3,350**		100	U[b]	**288**		500	U[b]	--	
	MW-40-060518	6/5/2018	µg/L	**472**		**16.8**		**514**		**1,490**		1	U	**255**		**20.4**		--	
	MW-40-071218	7/12/2018	µg/L	**148**		**6.85**		**28.7**		**197**		1	U	**152**		**8.62**		--	
	MW-40-080218	8/2/2018	µg/L	**123**		**4.46**		**9.67**		**93.2**		1	U	**183**		5	U	--	
	MW-40-091218	9/12/2018	µg/L	**28.2**		**1.67**		**15.3**		**14.0**		1	U	**112**		5	U	--	
	MW-40-110218	11/2/2018	µg/L	**6.40**		1	U	**2.05**		3	U	1	U	**76.7**		5	U	--	
	MW-40-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**36.2**		5	U	--	
	MW-40-022019	2/20/2019	µg/L	**2.68**		1	U	1	U	3	U	1	U	**7.34**		5	U	--	
	MW-40-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**3.73**		5	U	--	
	MW-40-051419	5/14/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**2.12**		5	U	--	
	MW-40-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**1.81**		5	U	--	
	MW-40-082119	8/21/2019	µg/L	**2.56**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-40-091919	9/19/2019	µg/L	**4.50**		1	U	**3.17**		3	U	1	U	1	U	5	U	--	
MW-41	MW-41-120716	12/7/2016	µg/L	**212**		2	U	2	U	**155**		2	U	**6.70**		**5.6**		--	
	MW-41-031417	3/14/2017	µg/L	**469**		**1.78**		1	U	**275**		1	U	**4.34**		**18.1**		--	
	MW-41-032017	3/20/2017	µg/L	**424**		**2.62**		1	U	**342**		1	U	1	U	**16.9**		--	
	MW-41-033117	3/31/2017	µg/L	**449**		5	U	5	U	**343**		5	U[b]	5	U	25	U[b]	--	
	MW-41-040617	4/6/2017	µg/L	**470**		**2.06**		1	U	**258**		1	U	**3.84**		**10.6**		--	
	MW-41-062817	6/28/2017	µg/L	**292**		**8.83**		**2.09**		**271**		1	U	**3.36**		**13.3**		--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-41	MW-41-071717	7/17/2017	µg/L	**487**		**15.8**		**3.09**		**366**		1	U	**3.62**		**27.9**		--	
	MW-41-080117	8/1/2017	µg/L	**371**		10	U	10	U	**260**		10	U[b]	10	U	50	U[b]	--	
	MW-41-090817	9/8/2017	µg/L	**189**		**1.51**		1	U	**90**		1	U	**3.74**		5	U	--	
	MW-41-100417	10/4/2017	µg/L	**93.5**		1	U	1	U	**59.9**		1	U	**1.84**		5	U	--	
	MW-41-110817	11/8/2017	µg/L	**99.6**		1	U	1	U	**56.6**		1	U	**2.46**		**5.68**		--	
	MW-41-120617	12/6/2017	µg/L	**27.6**		1	U	1	U	**11.1**		1	U	**1.62**		5	U	--	
	MW-41-010918	1/9/2018	µg/L	**2.06**		1	U	1	U	3	U	1	U	**1.43**		5	U	--	
	MW-41-020618	2/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-021919	2/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-051519	5/15/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-41-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-42	MW-42-120716	12/7/2016	µg/L	**3.80**		1	U	1	U	**2.70**		1	U	1	U	1	U	--	
	MW-42-031417	3/14/2017	µg/L	**19.3**		1	U	1	U	3	U	1	U	**1.12**		5	U	--	
	MW-42-032017	3/20/2017	µg/L	**59.6**		1	U	1	U	**16.9**		1	U	**1.24**		5	U	--	
	MW-42-033117	3/31/2017	µg/L	**135**		1	U	1	U	**73.8**		1	U	1	U	**5.19**		--	
	MW-42-040617	4/6/2017	µg/L	**93.5**		1	U	1	U	**53.3**		1	U	**1.18**		5	U	--	
	MW-42-062817	6/28/2017	µg/L	**15.1**		1	U	1	U	**11.7**		1	U	**1.25**		5	U	--	
	MW-42-090817	9/8/2017	µg/L	**143**		1	U	1	U	**100**		1	U	**1.51**		**5.52**		--	
	MW-42-120617	12/6/2017	µg/L	**9.82**		1	U	1	U	**45.0**		1	U	**1.24**		5	U	--	
	MW-42-030818	3/8/2018	µg/L	**1.02**		1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-42-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-42-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-42-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-42-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-42-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-42-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-43	MW-43-110817	11/8/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-010918	1/9/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-020618	2/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-040618	4/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-43	MW-43-050318	5/3/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-071218	7/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**4.42**		5	U	--	
	MW-43-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-43B	MW-43B-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43B-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43B-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43B-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43B-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43B-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43B-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-43B-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-44	--	3/13/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-44-062917	6/29/2017	µg/L	**1.06**		1	U	**7.12**		**3.11**		1	U	1	U	5	U	--	
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-44-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44-091318	9/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	--	9/16/2019	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
MW-44B	MW-44B-031317	3/13/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44B-062817	6/28/2017	µg/L	1	U	1	U	**2.39**		3	U	1	U	1	U	5	U	--	
	MW-44B-090717	9/7/2017	µg/L	1	U	1	U	**3.07**		3	U	1	U	1	U	5	U	--	
	MW-44B-120517	12/5/2017	µg/L	1	U	1	U	**2.27**		3	U	1	U	1	U	5	U	--	
	MW-44B-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44B-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44B-091118	9/11/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44B-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44B-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44B-060419	6/4/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-44B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-45	--	3/13/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/20/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	3/31/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	4/6/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-45	--	5/3/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-45-062917	6/29/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45-071717	7/17/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45-080217	8/2/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	10/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	11/8/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	12/4/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	1/8/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	--	2/6/2018	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-45-030618	3/6/2018	µg/L	**24.3**		**6.11**		**28.9**		**41.2**		1	U	1	U	5	U	--	
	MW-45-040618	4/6/2018	µg/L	**21.9**		**3.08**		**19.6**		**36.6**		1	U	1	U	5	U	--	
	MW-45-050318	5/3/2018	µg/L	**2.65**		1	U	1	U	1	U	1	U	**3.35**		5	U	--	
	MW-45-060718	6/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45-071318	7/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45-091318	9/13/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**46.3**		5	U	--	
	MW-45-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**3.67**		5	U	--	
	MW-45-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**47.7**		5	U	--	
	MW-45-091719	9/17/2019	µg/L	**5.24**		1	U	1	U	1	U	1	U	**103**		5	U	--	
MW-45B	MW-45B-031317	3/13/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45B-032017	3/20/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45B-033117	3/31/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45B-040617	4/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45B-062817	6/28/2017	µg/L	1	U	1	U	**1.73**		3	U	1	U	1	U	5	U	--	
	--	9/5/2017	--	NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW		NS-IW	
	MW-45B-120717	12/7/2017	µg/L	1	U	1	U	**3.26**		3	U	1	U	1	U	5	U	--	
	MW-45B-030618	3/6/2018	µg/L	1	U	1	U	**2.75**		3	U	1	U	1	U	5	U	--	
	MW-45B-060718	6/7/2018	µg/L	1	U	1	U	**1.94**		3	U	1	U	1	U	5	U	--	
	MW-45B-091118	9/11/2018	µg/L	1	U	1	U	**1.16**		3	U	1	U	1	U	5	U	--	
	MW-45B-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45B-030519	3/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45B-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-45B-091919	9/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-46	MW-46-120617	12/6/2017	µg/L	**4.97**		1	U	1	U	**7.74**		1	U	**85.5**		5	U	--	
	MW-46-030618	3/6/2018	µg/L	**173**		**1.76**		**16.5**		**29.5**		1	U	**129**		**7.21**		--	
	MW-46-060518	6/5/2018	µg/L	**294**		1	U	**11.8**		**147**		1	U	**184**		5	U	--	
	MW-46-080218	8/2/2018	µg/L	**1,520**		**4.24**		**92.1**		**763**		1	U	**200**		**20.7**		--	
	MW-46-091118	9/11/2018	µg/L	**1,510**		**6.81**		**64**		**597**		1	U	**311**		**23.4**		--	
	MW-46-110218	11/2/2018	µg/L	**1,790**		**7.10**		**120**		**740**		1	U	**299**		**16.6**		--	
	MW-46-120518	12/5/2018	µg/L	**1,250**		**3.07**		**46.7**		**521**		**1.90**		**290**		**7.38**		--	
	MW-46-022019	2/20/2019	µg/L	**2,380**		**2.97**		**82.4**		**799**		1	U	**346**		**22.4**		--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-46	MW-46-030519	3/5/2019	µg/L	**2,350**		**4.01**		**73.7**		**701**		1	U	**406**		**32.8**		--	
	MW-46-051419	5/14/2019	µg/L	**1,300**		**2.27**		**54.8**		**412**		1	U	**174**		**28.9**		--	
	MW-46-060519	6/5/2019	µg/L	**1,300**		10	U	**19.5**		**400**		10	U[b]	**278**		50	U[b]	--	
	MW-46-071719	7/17/2019	µg/L	**976**		1	U	**29.1**		**237**		1	U	**198**		**15.5**		--	
	MW-46-082119	8/21/2019	µg/L	**874**		25	U	25	U	**226**		25	U[b]	**191**		125	U[b]	--	
	MW-46-091719	9/17/2019	µg/L	**705**		25	U	**26.1**		**150**		25	U[b]	**175**		125	U[b]	--	
MW-47	MW-47-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-47-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-47-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-47-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-47-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-47-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-47-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-47-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-48B	MW-48B-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	**2.92**		5	U	--	
	MW-48B-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**2.97**		5	U	--	
	MW-48B-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**2.12**		5	U	--	
	MW-48B-091218	9/12/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**1.80**		5	U	--	
	MW-48B-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**1.56**		5	U	--	
	MW-48B-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**1.64**		5	U	--	
	MW-48B-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**1.45**		5	U	--	
	MW-48B-091819	9/18/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**1.14**		5	U	--	
MW-49	MW-49-120617	12/6/2017	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-49-030818	3/8/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-49-060518	6/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-49-091118	9/11/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-49-120518	12/5/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-49-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-49-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-49-091719	9/17/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-50B	MW-50B-120617	12/6/2017	µg/L	**1.37**		1	U	1	U	3	U	1	U	**35.5**		5	U	--	
	MW-50B-030718	3/7/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**26.7**		5	U	--	
	MW-50B-060618	6/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	**21.8**		5	U	--	
	MW-50B-091218	9/12/2018	µg/L	**150**		**1.20**		**57.9**		**47.8**		1	U	**87.9**		5	U	--	
	MW-50B-120618	12/6/2018	µg/L	**27.4**		1	U	**3.21**		3	U	1	U	**40.6**		5	U	--	
	MW-50B-030619	3/6/2019	µg/L	**1.18**		1	U	1	U	3	U	1	U	**43.9**		5	U	--	
	MW-50B-060519	6/5/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**44.1**		5	U	--	
	MW-50B-091819	9/18/2019	µg/L	**25.6**		1	U	**1.20**		3	U	1	U	**43.1**		5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-51	MW-51-100518	10/5/2018	µg/L	1	U	1	U	**1.88**		3	U	1	U	1	U	5	U	--	
	MW-51-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-51-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-51-051519	5/15/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-51-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-52	MW-52-100518	10/5/2018	µg/L	1	U	1	U	**1.25**		3	U	1	U	**3.12**		5	U	--	
	MW-52-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-52-030619	3/6/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**1.32**		5	U	--	
	MW-52-051519	5/15/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-52-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	**2.01**		5	U	--	
MW-53	MW-53-100518	10/5/2018	µg/L	1	U	1	U	**5.43**		3	U	1	U	1	U	5	U	--	
	MW-53-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-53-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-53-051519	5/15/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-53-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-54	MW-54-100518	10/5/2018	µg/L	1	U	1	U	**1.72**		3	U	1	U	**1.35**		5	U	--	
	MW-54-120618	12/6/2018	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-54-030719	3/7/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-54-051519	5/15/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-54-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-55	MW-55-040919	4/9/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-55-051519	5/15/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
	MW-55-081919	8/19/2019	µg/L	1	U	1	U	1	U	3	U	1	U	1	U	5	U	--	
MW-56	MW-56-040919	4/9/2019	µg/L	**209**		1	U	**2.57**		**93.9**		1	U	**79.9**		5	U	--	
	MW-56-051519	5/15/2019	µg/L	**299**		1	U	**4.11**		**119**		1	U	**86.2**		**5.33**		--	
	MW-56-071719	7/17/2019	µg/L	**549**		1	U	**8.90**		**205**		1	U	**146**		**8.18**		--	
	MW-56-082119	8/21/2019	µg/L	**391**		10	U	10	U	**91.1**		10	U[b]	**134**		50	U[b]	--	
	MW-56-091719	9/17/2019	µg/L	**30.1**		1	U	1	U	**8.51**		1	U	**137**		5	U	--	

Table 5B. Analytical Results for Groundwater, Historical
Plantation Pipe Line Company
Lewis Drive Remediation Site, Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location	Sample ID	Sample Date	Units	Analyte																	
				Benzene		Ethylbenzene		Toluene		Total Xylenes		1,2-DCA		MTBE		Naphthalene		EDB	
RBSL[a]:			**µg/L**	**5.0**		**700**		**1,000**		**10,000**		**5.0**		**40**		**25**		**0.05**	
MW-57	MW-57-040919	4/9/2019	µg/L	**1,340**		**2.81**		**42.0**		**406**		1	U	**198**		**20.5**		--	
	MW-57-051519	5/15/2019	µg/L	**535**		**1.36**		**11.1**		**178**		1	U	**169**		**8.65**		--	
	MW-57-071719	7/17/2019	µg/L	**1,330**		**3.63**		**22.9**		**341**		1	U	**186**		**19.8**		--	
	MW-57-082119	8/21/2019	µg/L	**584**		10	U	10	U	**76.2**		10	U[b]	**183**		50	U[b]	--	
	MW-57-091719	9/17/2019	µg/L	**71.8**		10	U	10	U	30	U	10	U[b]	**74.6**		50	U[b]	--	

Notes:
[a] RBSL = Risk-based screening level identified in South Carolina Underground Storage Tank Management Division Programmatic Quality Assurance Program Plan, Revision 3.1, Table D1 "RBSLs for Groundwater," February 2016.
[b] The constituent was analyzed for, but was not detected above the laboratory reporting/quantitation limit. However, the laboratory reporting/quantitation limit is above the screening criteria. The actual absence or presence of this analyte between the screening criteria and the laboratory reporting/quantitation limit cannot be determined.
Samples analyzed by EPA Methods SW 8260B and 8011.
Bold indicates the analyte was detected above the method detection limit.
Gray shading indicates the analyte exceeded RBSLs.

µg/L = microgram(s) per liter
1,2-DCA = 1,2-dichloroethane
BCPZ = Brown's Creek Protection Zone
CCPZ = Cupboard Creek Protection Zone
SBZ = Shallow Bedrock Zone
EDB = 1,2-dibromoethane
ID = identification
MTBE = methyl tertiary butyl ether
MW = monitoring well
NS-FP = sample not collected due to the presence of free product in the well
NS-HS = sample not collected due to health and safety concerns
NS-IW = sample not collected due to insufficient volume of water in well
NS-OL = sample not collected because it was overlooked in the field
NS-SL = sample not analyzed due to sample being lost in transit to laboratory
NS-PS = sample not collected due to observation of product sheen in well
U = analyte was not detected above the reported sample quantitation limit

Table 6. Analytical Results for Soil

Lewis Drive Release, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Sample ID	Sample Depth (ft)	Estimated Separation Distance[a] (ft)	Zone	Date Collected	Units	Analyte				
						Benzene	Ethylbenzene	Toluene	Total Xylenes[b]	Naphthalene
Soil samples collected less than 10 ft above groundwater elevation:										
MW-06B-15'-16'	15-16	0.4	Smear	9/5/2017	mg/kg	0.00358 U[f]	0.00358 U	0.00715 U	0.0107 U	0.0179 U
MW-09B-4'-5'	4-5	0.1	Smear	9/8/2017	mg/kg	**2.05**	**8.27**	**26.3**	**89.1**	**4.09**
MW-46-04'-05'	4-5	3.0	Smear	9/13/2017	mg/kg	0.00314 U[f]	0.00314 U	0.00628 U	0.00941 U	0.0157 U
MW-47-09'-11'	9-11	3.5	Smear	9/14/2017	mg/kg	0.00367 U[f]	0.00367 U	0.00734 U	0.011 U	0.0183 U
MW-50B-14'-16'	14-16	4.2	Smear	10/6/2017	mg/kg	0.00334 U[f]	0.00334 U	0.00667 U	0.01 U	0.0167 U
MW-48B-09'-11'	9-11	5.0	Smear	10/12/2017	mg/kg	0.00327 U[f]	0.00327 U	0.00654 U	0.0098 U	0.0163 U
MW-43B-01'-02'	1-2	<10	Vadose	10/18/2017	mg/kg	0.00306 U	0.00306 U	0.00613 U	0.0092 U	0.0153 U
MW-53-08'-09'	8-9	7.0	Smear	8/29/2018	mg/kg	0.00151 U	0.00377 U	0.00754 U	0.0098 U	0.0189 U
MW-54-08'-09'	8-9	8.5	Smear	8/30/2018	mg/kg	0.00131 U	0.00329 U	0.00657 U	0.00854 U	0.0164 U
MW-51-08'-10'	8-10	8.9	Smear	9/5/2018	mg/kg	0.00119 U	0.00296 U	0.00593 U	0.00771 U	0.0148 U
MW-57-0.3'-0.8'-031219	0.3-0.8	<10	Smear	3/12/2019	mg/kg	0.0011 U	0.00275 U	0.00551 U	0.00716 U	0.0138 U
SS-01-071819	0-2	<10	Smear	7/18/2019	mg/kg	0.00128U	0.00321 U	0.00642 U	0.00834 U	0.016 U
SS-02-071819	0-2	<10	Smear	7/18/2019	mg/kg	**0.529**	**0.637**	**0.0555**	**10.7**	**1.48**
SS-03-071819	0-2	<10	Smear	7/18/2019	mg/kg	**0.385**	**0.349**	**0.0255**	**2.66**	**0.0846**
SS-04-071819	0-2	<10	Smear	7/18/2019	mg/kg	**0.00454**	**0.00625**	0.00685 U	**0.0278**	0.0171 U
Ingestion/Dermal Contact RBSL[c]:					mg/kg	13	63	6,300	16,000	1,600
Leaching RBSL for < 10 ft separation distance[d]:					mg/kg	0.003	1.551	0.627	13.01	0.047
Soil samples collected between 10 and 15 ft above groundwater elevation:										
MW-49-04'-06'	4-6	13	Vadose	9/14/2017	mg/kg	0.00374 U	0.00374 U	0.00747 U	0.0112 U	0.0186 U
MW-49-04'-06'-FD	4-6	13	Vadose	9/14/2017	mg/kg	0.003 U	0.003 U	0.006 U	0.009 U	0.015 U
MW-52-03'-05'	3-5	12	Smear	9/4/2018	mg/kg	0.00116 U	0.0029 U	0.00579 U	0.00753 U	0.0145 U
Ingestion/Dermal Contact RBSL[c]:					mg/kg	13	63	6,300	16,000	1,600
Leaching RBSL for 10-15 ft separation distance[e]:					mg/kg	0.008	6.168	1.167	22.495	0.069

Notes:

[a] Estimated separation distance is the difference of the depth to water below ground surface measured on 9/10/17 and the bottom depth of the sample interval.

[b] Total xylenes is the sum of m&p-xylenes and o-xylene.

[c] RBSL = risk-based screening levels identified in DHEC Underground Storage Tank (UST) Management Division Programmatic Quality Assurance Program Plan (QAPP), Revision 2, Table D6 "RBSLs for Ingestion or Dermal Contact with Surficial Soil," February 2016. Note RBSL applied to potential exposure of workers.

[d] RBSLs identified in DHEC UST QAPP, Rev. 2, Table D4 "RBSLs for Clay-rich Soil," <10 ft separation distance, February 2016

[e] RBSLs identified in DHEC UST QAPP, Rev. 2, Table D4 "RBSLs for Clay-rich Soil," 10-15 ft separation distance, February 2016

[f] The analyte was analyzed for, but was not detected above the laboratory reporting/quantitation limit. However, the laboratory reporting/quantitation limit is above the screening criteria. The actual absence or presence of this analyte between the screening criteria and the laboratory reporting/quantitation limit cannot be determined.

Samples analyzed by U.S. Environmental Protection Agency (EPA) Method SW8260B

Bold indicates the analyte was detected.

Gray shading indicates the analyte exceeded Leaching RBSLs.

BTEX = benzene, toluene, ethylbenzene, and xylenes

ft = foot/feet

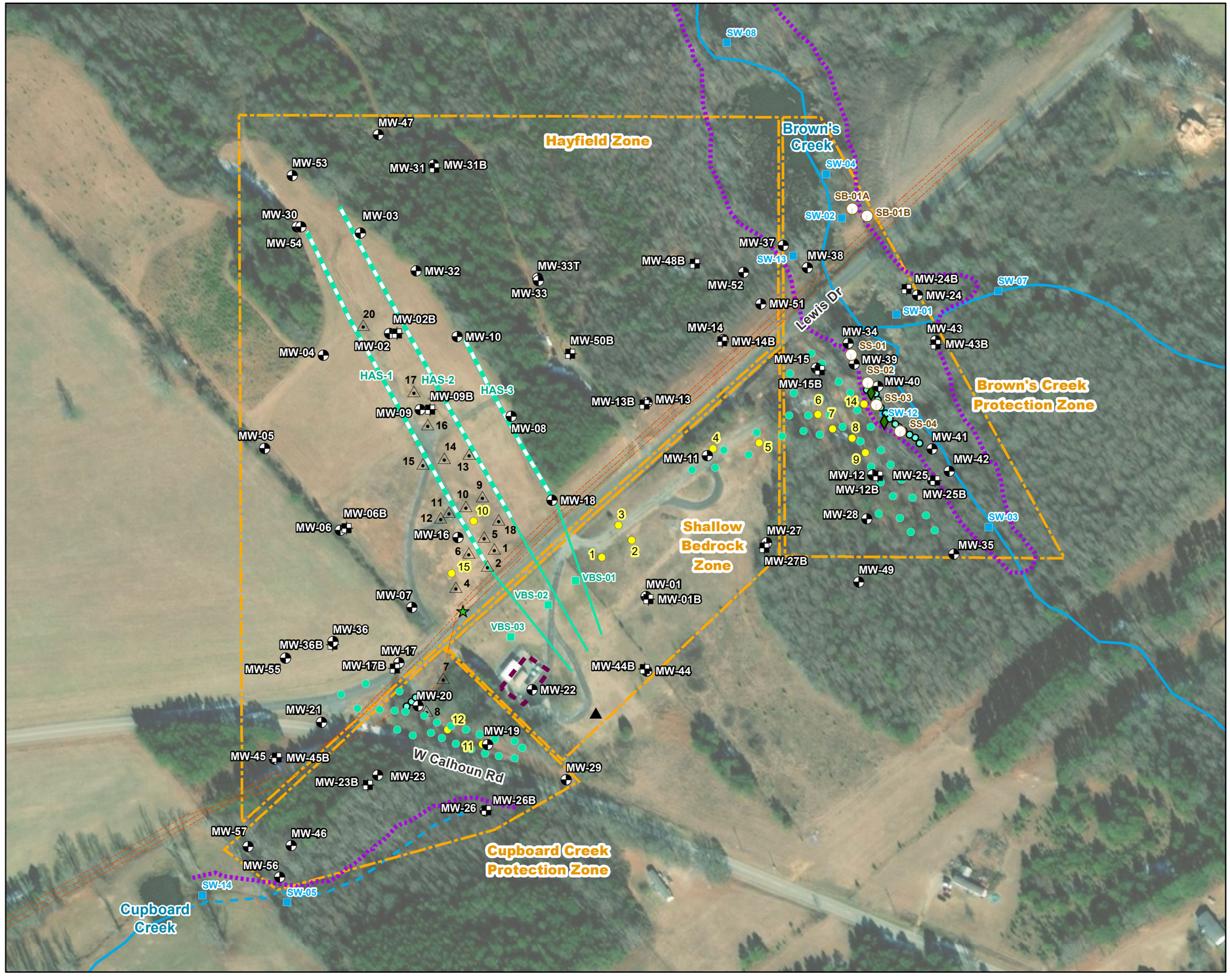
mg/kg = milligram(s) per kilogram

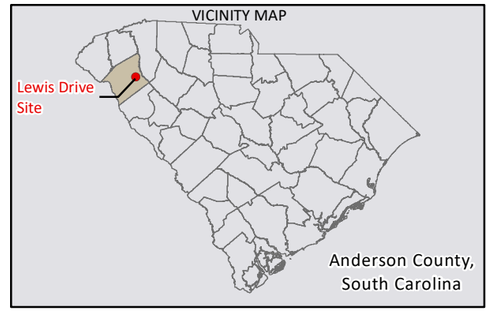
MW = monitoring well

SS = surface soil

U = analyte was not detected above the reported sample quantitation limit

Figures





LEGEND

- Release Point
- Residuum Monitoring Well
- Bedrock Monitoring Well
- Recovery Sump
- Soil Boring Location
- Recovery Trench Point
- Recovery Well (4-inch diameter)
- Surface Water Sampling Location
- Septic Tank
- Seep Location
- Vertical Bedrock Sparging Well
- Vertical Saprolite Sparging Well
- Pipeline
- Horizontal Sparging Well Riser
- Horizontal Sparging Well Screen
- Waterbody
- Intermittent Stream
- Inspection Route for Sheen or Distressed Vegetation
- AS System Compound
- Remediation Zone

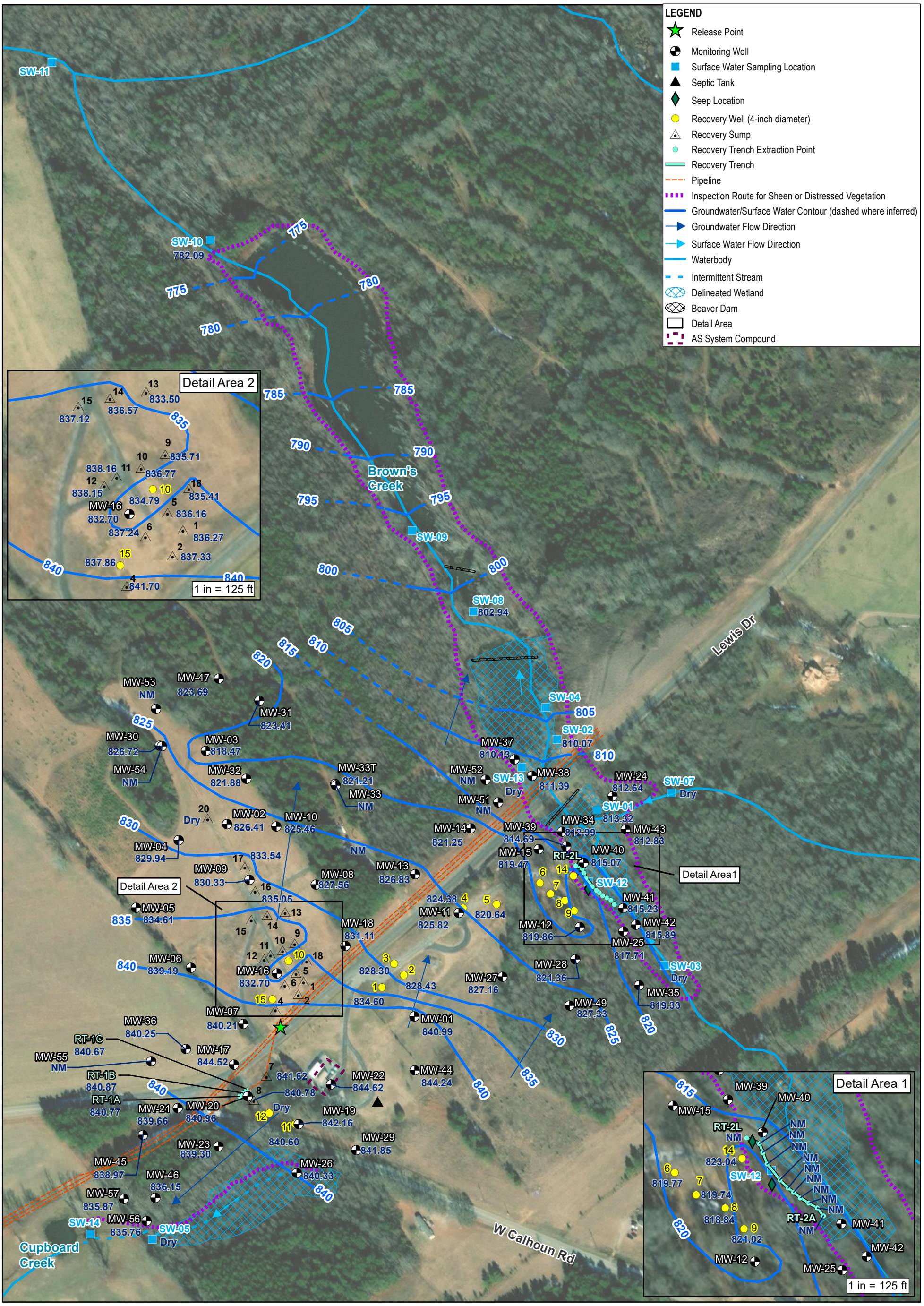
Base Map Sources:
*Environmental Systems Research Institute (Esri) ArcMap World Imagery, 2018. Basemap features are approximate.
*United States Geological Survey (USGS) National Hydrography Dataset (NHD)

N

0 200 400
Scale in feet

Figure 1. Site Overview
Lewis Drive Remediation Site
Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

JACOBS



826.41 Corrected Groundwater Elevation as of 9/16/2019 in feet above mean sea level

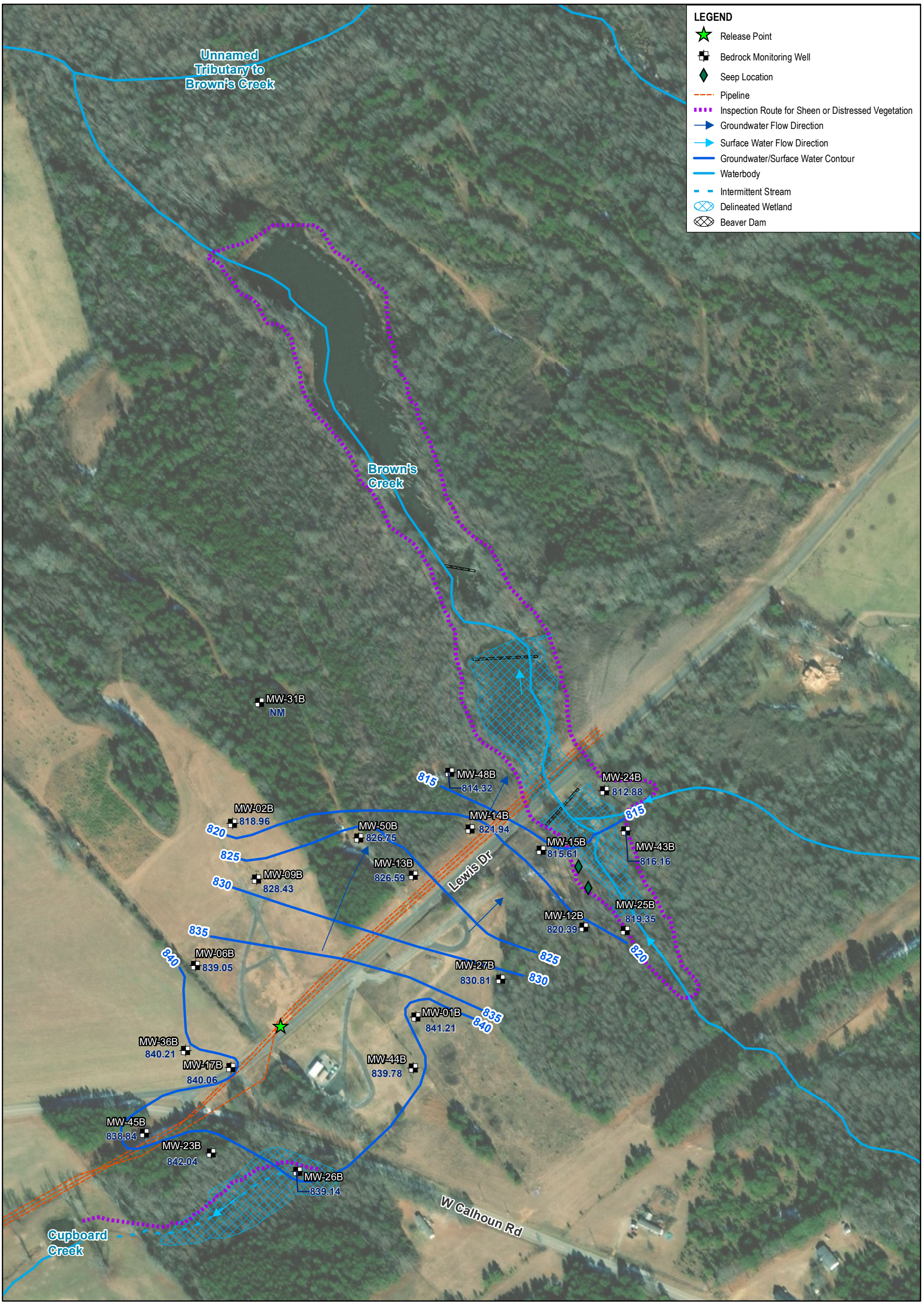
NM Not measured during this sampling event

Dry Well was dry at time of gauging

Base Map Sources:
*Environmental Systems Research Institute (Esri) ArcMap World Imagery, 2018. Basemap features are approximate.
*United States Geological Survey (USGS) National Hydrography Dataset (NHD)

Figure 2A. Residuum Groundwater and Surface Water Elevation Map
Lewis Drive Remediation Site
Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

JACOBS



818.96 Corrected Groundwater Elevation as of 9/16/2019 in feet above mean sea level

NM Not measured during this sampling event

Base Map Sources:
*Environmental Systems Research Institute (Esri) ArcMap World Imagery, 2018. Basemap features are approximate.
*United States Geological Survey (USGS) National Hydrography Dataset (NHD)

Figure 2B. Bedrock Groundwater Elevation Map
Lewis Drive Remediation Site
Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

JACOBS

\\brooksidefiles\GIS_SHARE\ENBG\00_Proj\K\KinderMorgan\654558LewisDr_ER\GIS\Maps\Quarterly_Reports\QR3_Oct2019\Figure2B_Bedrock_GW_Elevation.mxd ag017958 12/17/2019

LEGEND

- Release Point
- Monitoring Well
- Bedrock Monitoring Well
- Seep Location
- Recovery Sump
- Recovery Well (4-inch diameter)
- Well Contains Product as of 9/16/19
- Vertical Bedrock Sparging Well
- Vertical Saprolite Sparging Well
- Surface Water Sampling Location
- Septic Tank
- Recovery Trench Extraction Point
- Recovery Trench
- Surface Water Flow Direction
- Horizontal Sparging Well Riser
- Horizontal Sparging Well Screen
- Pipeline
- Waterbody
- Intermittent Stream
- Delineated Wetland
- Beaver Dam
- Detail Area

0.02 Product thickness in feet as of 9/16/2019
NP No product detected
NM Not measured

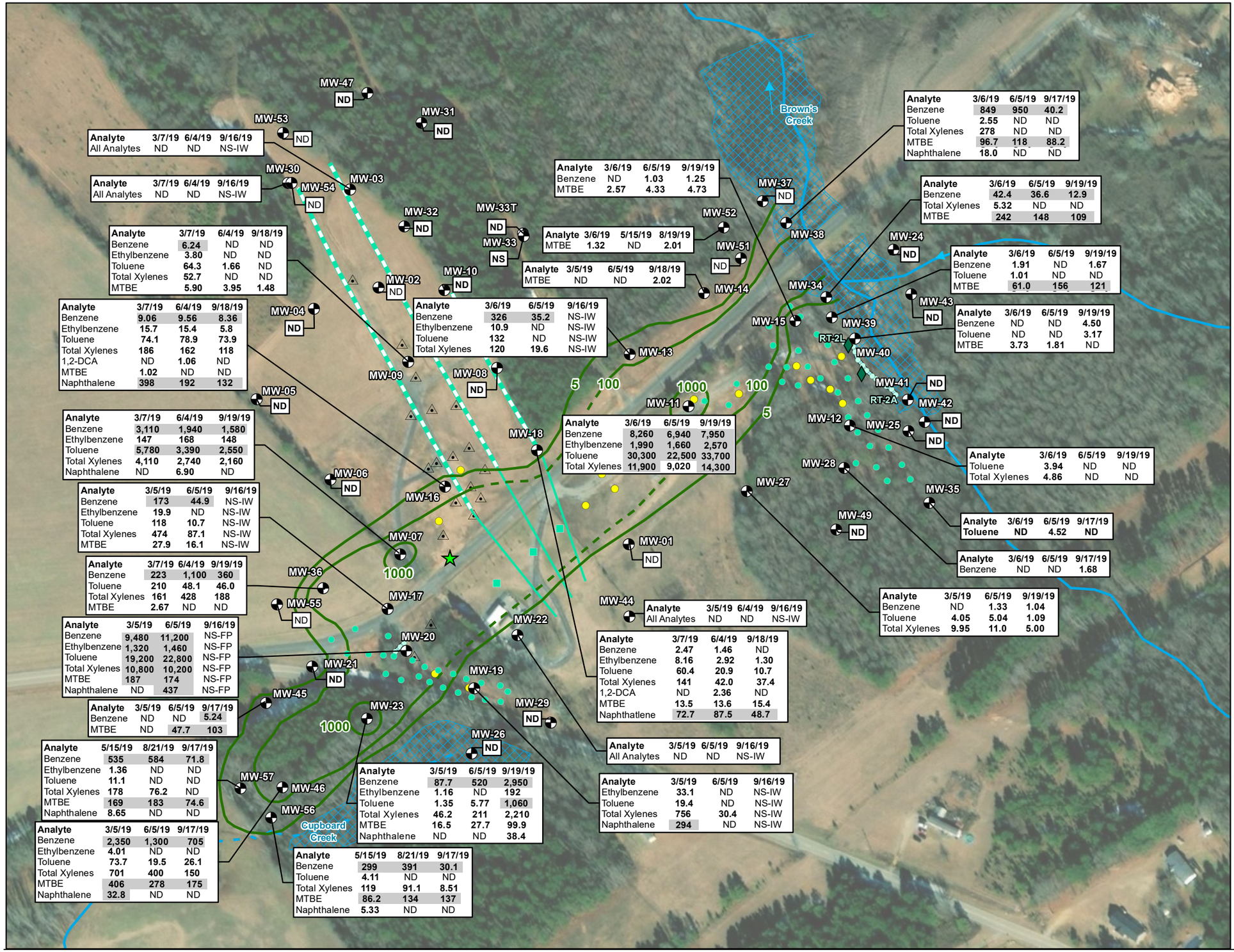
Base Map Sources:
*Environmental Systems Research Institute (Esri) ArcMap World Imagery, 2018. Basemap features are approximate.
*United States Geological Survey (USGS) National Hydrography Dataset (NHD)

N

0 175 350
Scale in Feet

Figure 3. Site Features with Measurable Product
Lewis Drive Remediation Site
Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

JACOBS



LEGEND

- Release Point
- Residuum Monitoring Well
- Vertical Bedrock Sparging Well
- Vertical Saprolite Sparging Well
- Seep Location
- Recovery Well (4-inch diameter)
- Recovery Sump
- Recovery Trench Point
- Recovery Trench
- Surface Water Flow Direction
- Dissolved Benzene Plume Extent as of September 2019 (µg/L) (Dashed where inferred)
- Waterbody
- Intermittent Stream
- Delineated Wetland

NOTES:

1. Total Xylenes is the sum of m&p xylenes and o-xylene.
2. MTBE = Methyl Tertiary Butyl Ether
3. 1,2-DCA = 1,2-dichloroethane
4. Analyte concentration in microgram(s) per liter (µg/L)
5. Only detected analytes are shown on map.
6. ND = Groundwater was collected and analyzed, but no analytes were detected above the reported sample quantitation limit.
7. NS = Not scheduled to be sampled for this event
8. NS-FP = Sample not collected due to the presence of free product in the well
9. NS-PS = Sample not collected due to product sheen observed in well
10. NS-IW = Sample not collected due to insufficient volume of water in well

Gray shading indicates the analyte exceeded risk-based screening levels (RBSLs) identified in South Carolina Underground Storage Tank Management Division Programmatic Quality Assurance Program Plan Revision 3.1, Table D1 "RBSLs for Groundwater", February 2016.

Base Map Sources:
*Environmental Systems Research Institute (Esri) ArcMap World Imagery, 2018. Basemap features are approximate.
*United States Geological Survey (USGS) National Hydrography Dataset (NHD)

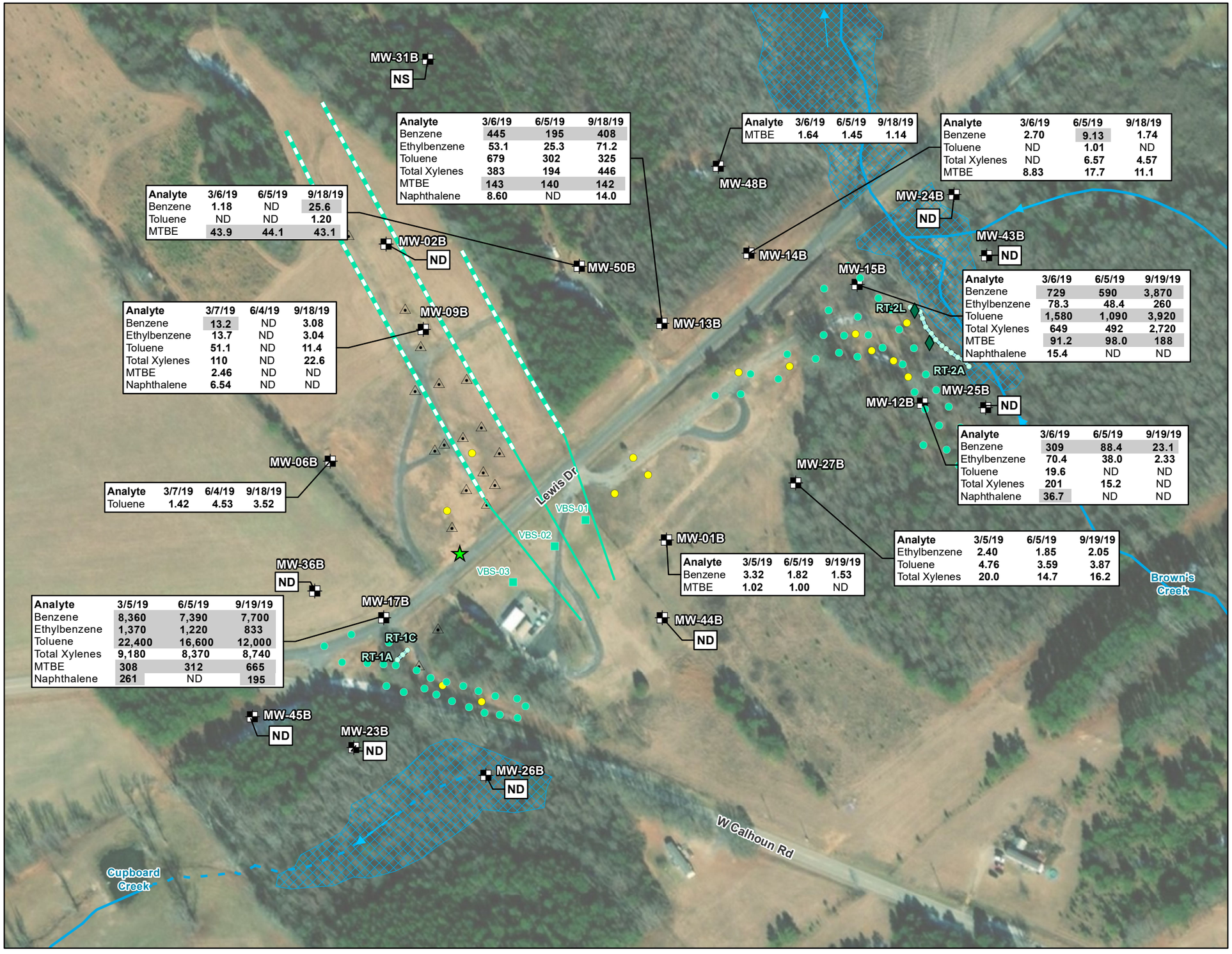
N

0 200 400

Approximate scale in feet

Figure 4A. Groundwater Analytical Results in Residuum Aquifer, March 2019, May/June 2019, and August/September 2019
Lewis Drive Remediation Site
Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

JACOBS



LEGEND

- Release Point
- Bedrock Monitoring Well
- Vertical Bedrock Sparing Well
- Vertical Saprolite Sparing Well
- Seep Location
- Recovery Well (4-inch diameter)
- Recovery Sump
- Recovery Trench Point
- Recovery Trench
- Surface Water Flow Direction
- Horizontal Sparging Well Riser
- Horizontal Sparging Well Screen
- Waterbody
- Intermittent Stream
- Delineated Wetland

NOTES:
All analyte concentrations in microgram(s) per liter (µg/L).
Total Xylenes is the sum of m&p xylenes and o-xylene.
MTBE = Methyl Tertiary Butyl Ether
Only detected analytes are shown on map.
ND = Groundwater was collected and analyzed, but no analytes were detected above the reported sample quantitation limit.
NS = Not sampled during this event.

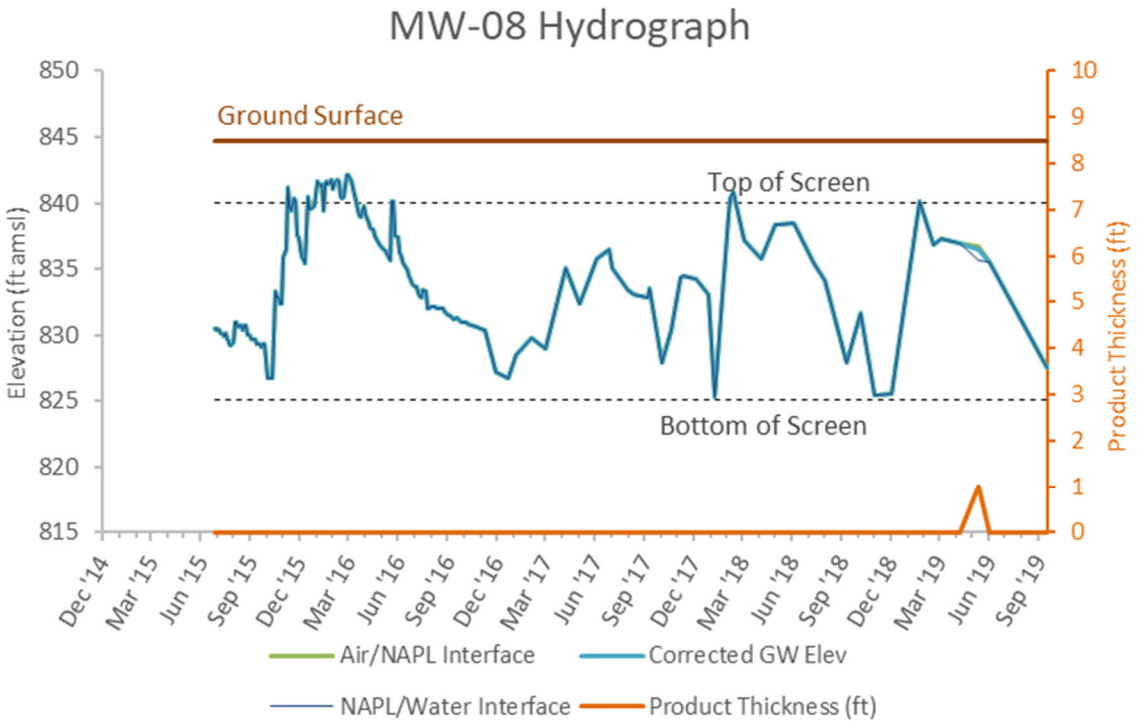
Gray shading indicates the analyte exceeded risk-based screening levels (RBSLs) identified in South Carolina Underground Storage Tank Management Division Programmatic Quality Assurance Program Plan Revision 3.1, Table D1 "RBSLs for Groundwater", February 2016.

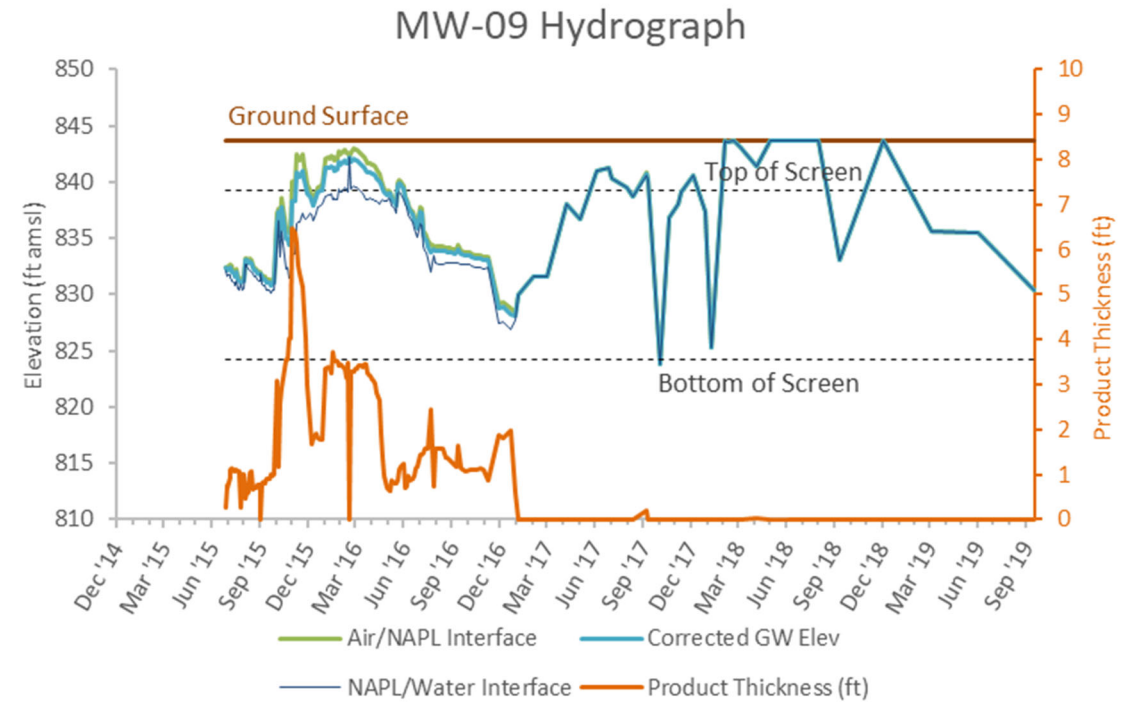
Base Map Sources:
*Environmental Systems Research Institute (Esri) ArcMap World Imagery, 2018. Basemap features are approximate.
*United States Geological Survey (USGS) National Hydrography Dataset (NHD)

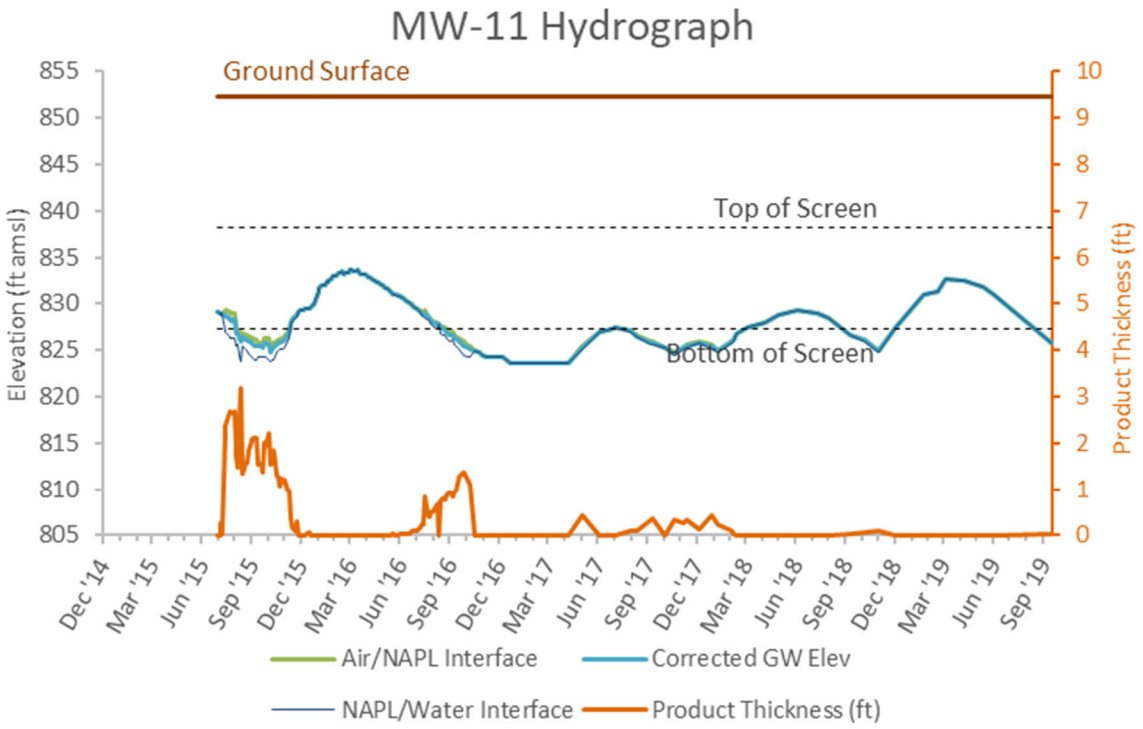
0 175 350
Approximate scale in feet

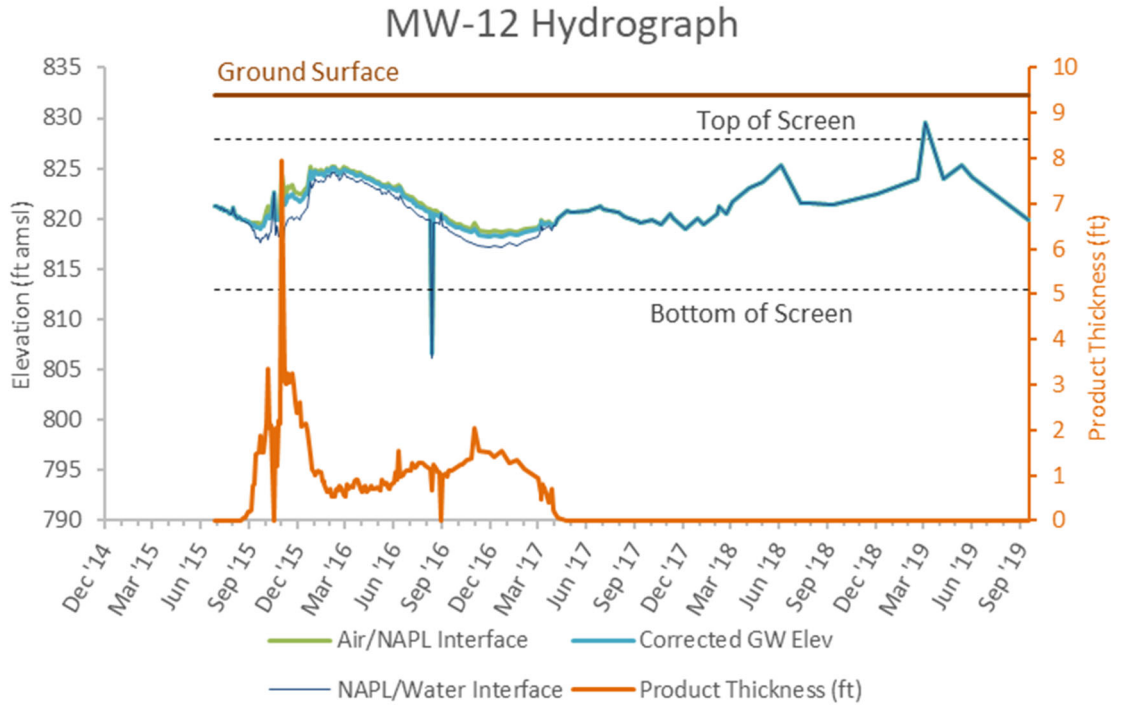
Figure 4B. Groundwater Analytical Results in Bedrock Aquifer, March 2019, June 2019, and September 2019
Lewis Drive Remediation Site
Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

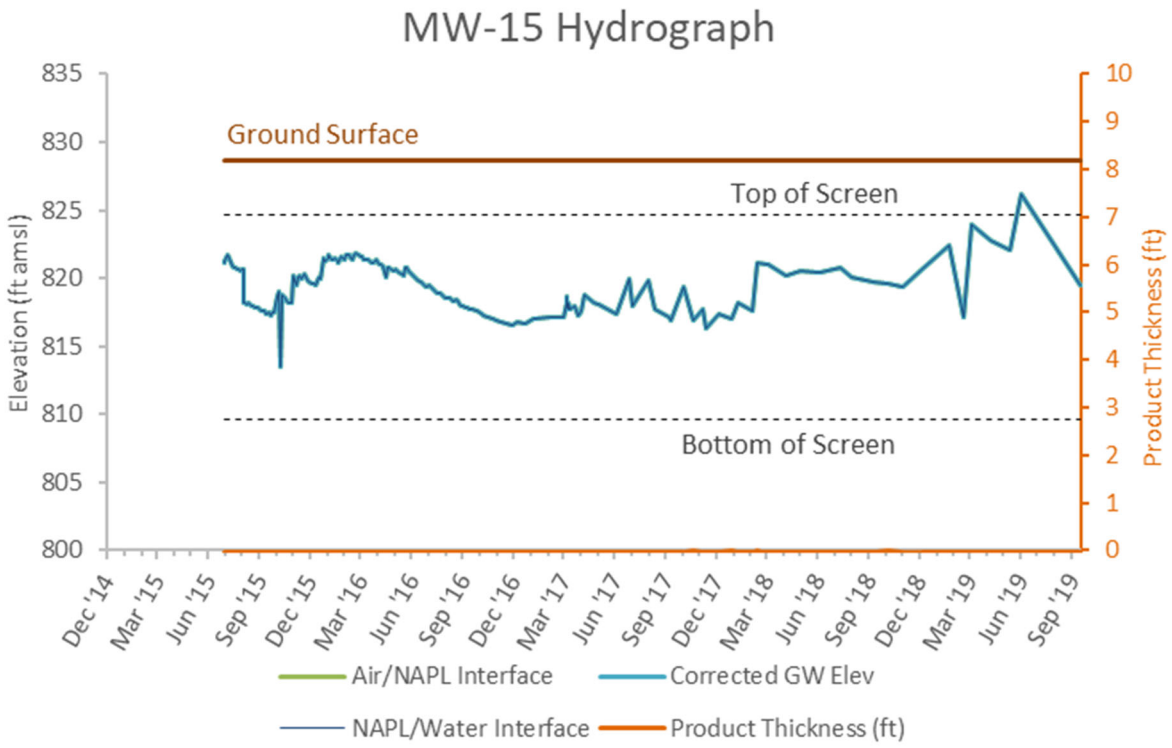
Attachment A
Product Thickness Trends

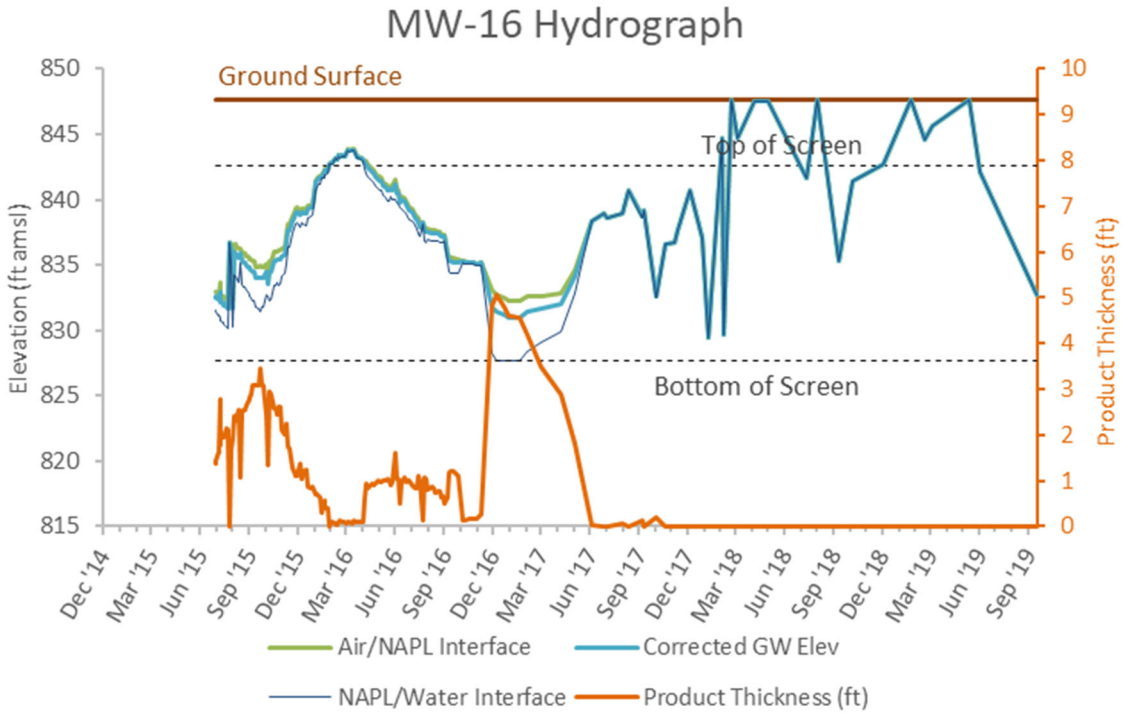

MW-08 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

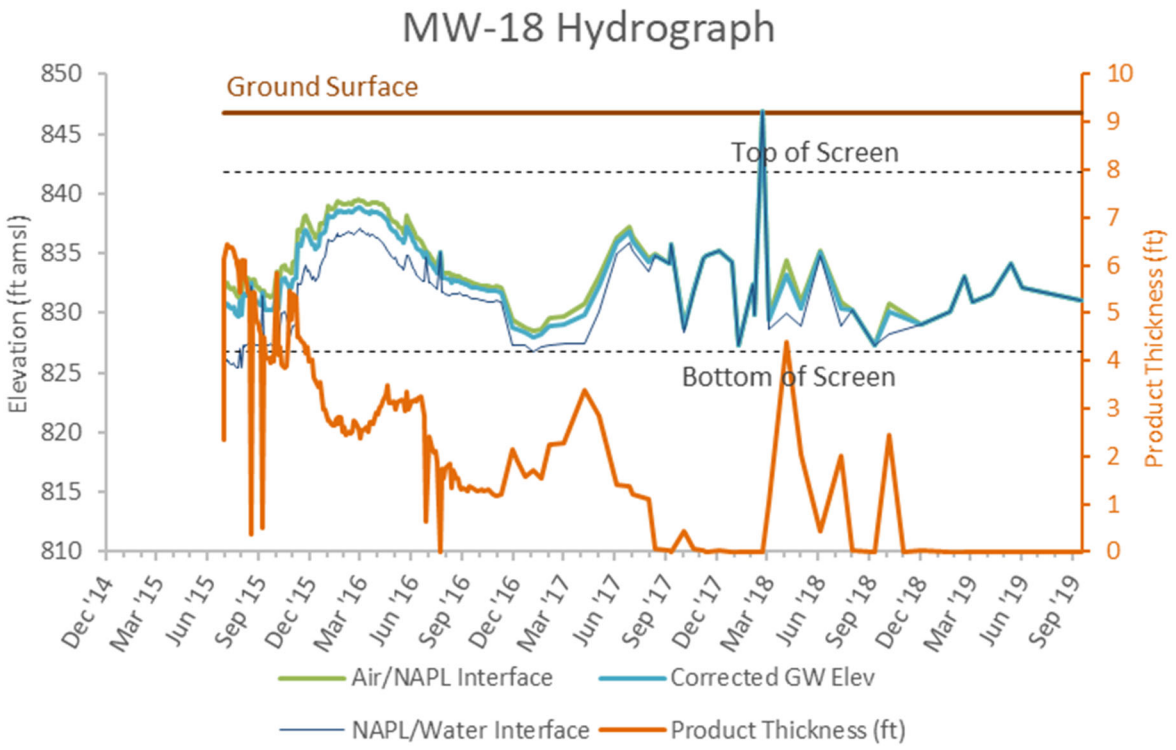

MW-09 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
810
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

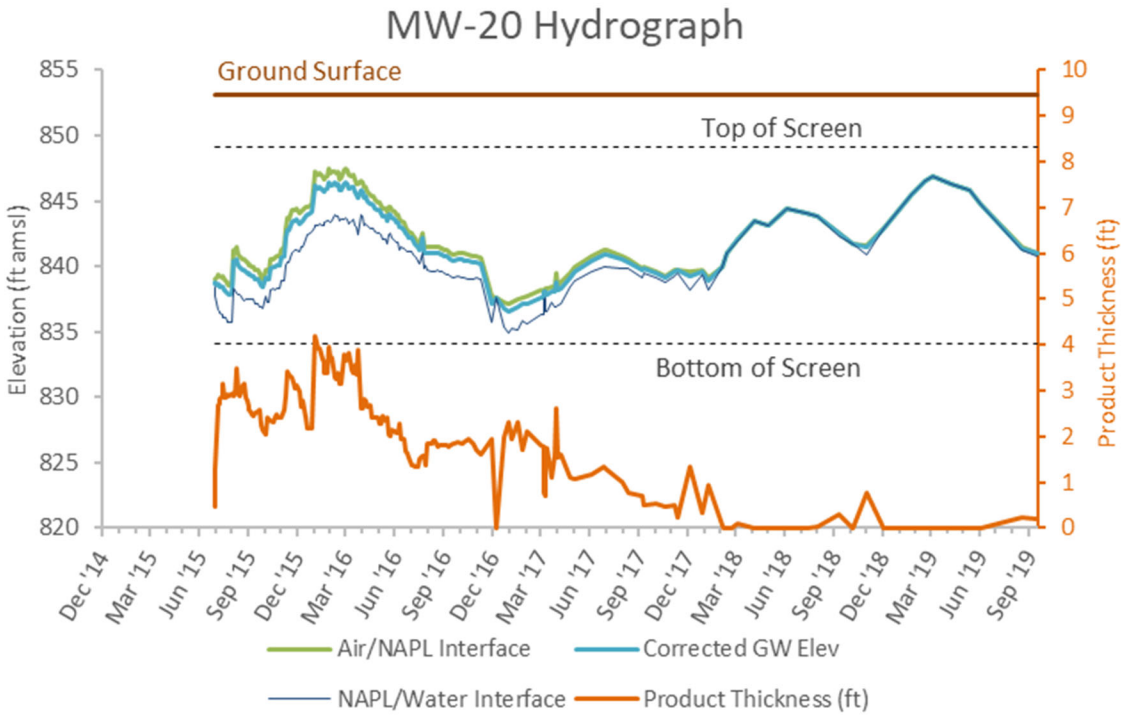

MW-11 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
855
850
845
840
835
830
825
820
815
810
805
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

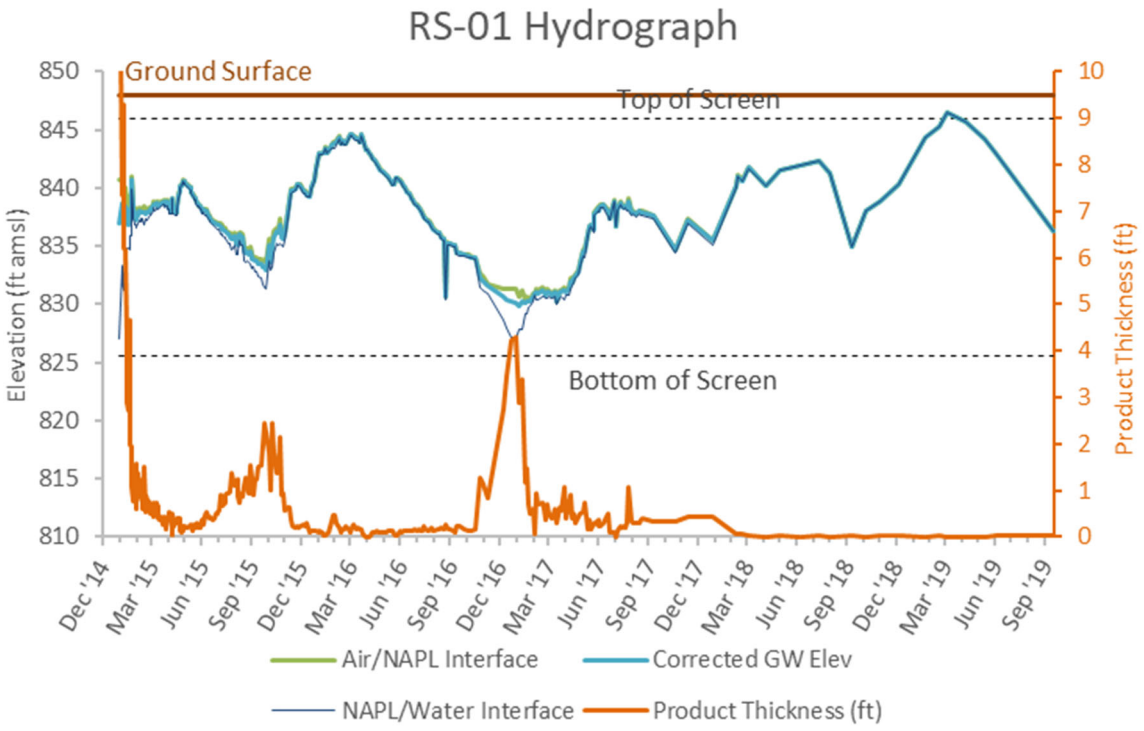

MW-12 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
835
830
825
820
815
810
805
800
795
790
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

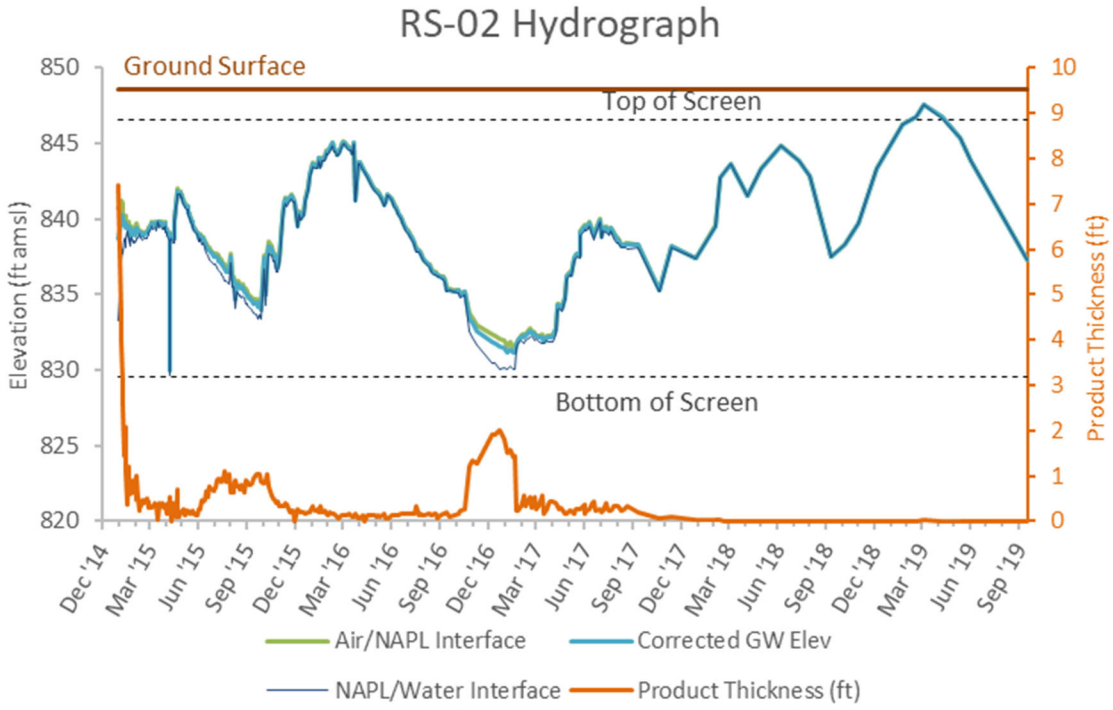

MW-15 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
835
830
825
820
815
810
805
800
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

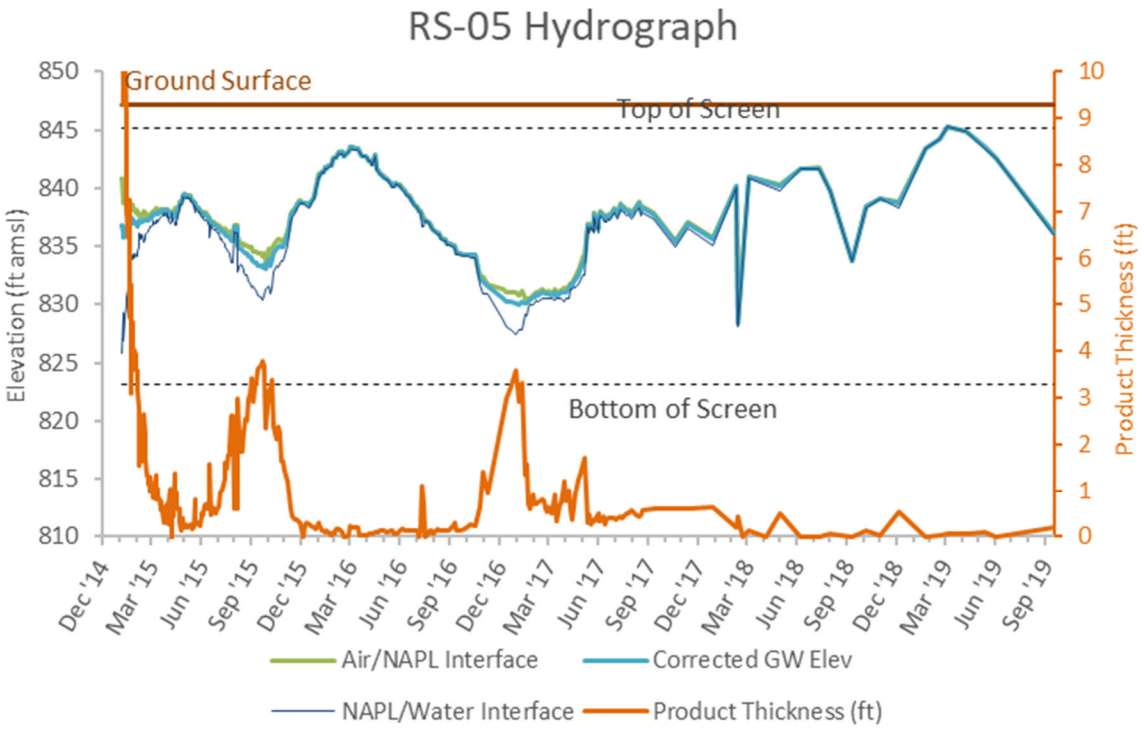

MW-16 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

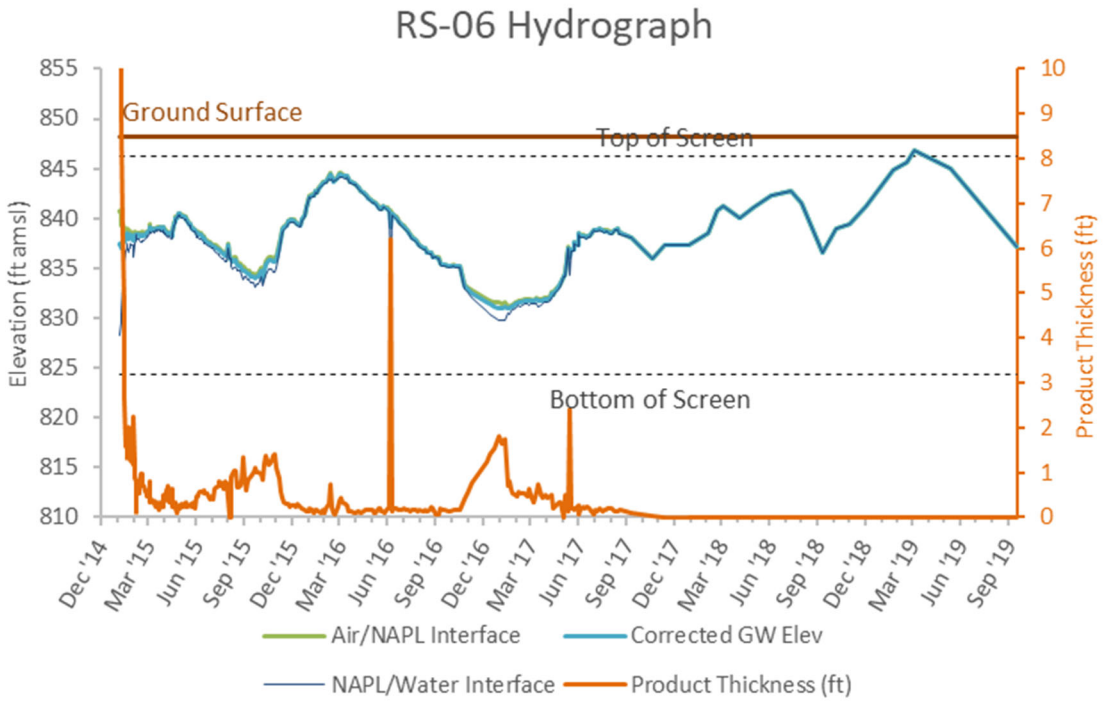

MW-18 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
810
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

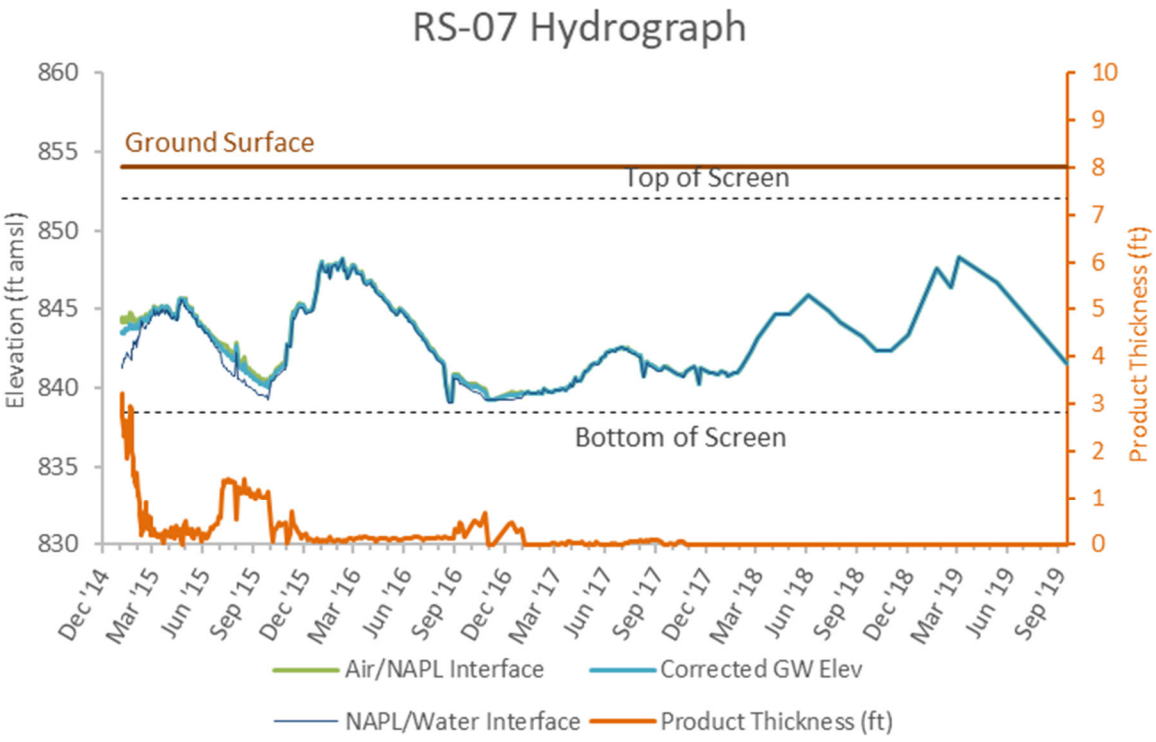

MW-20 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
855
850
845
840
835
830
825
820
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

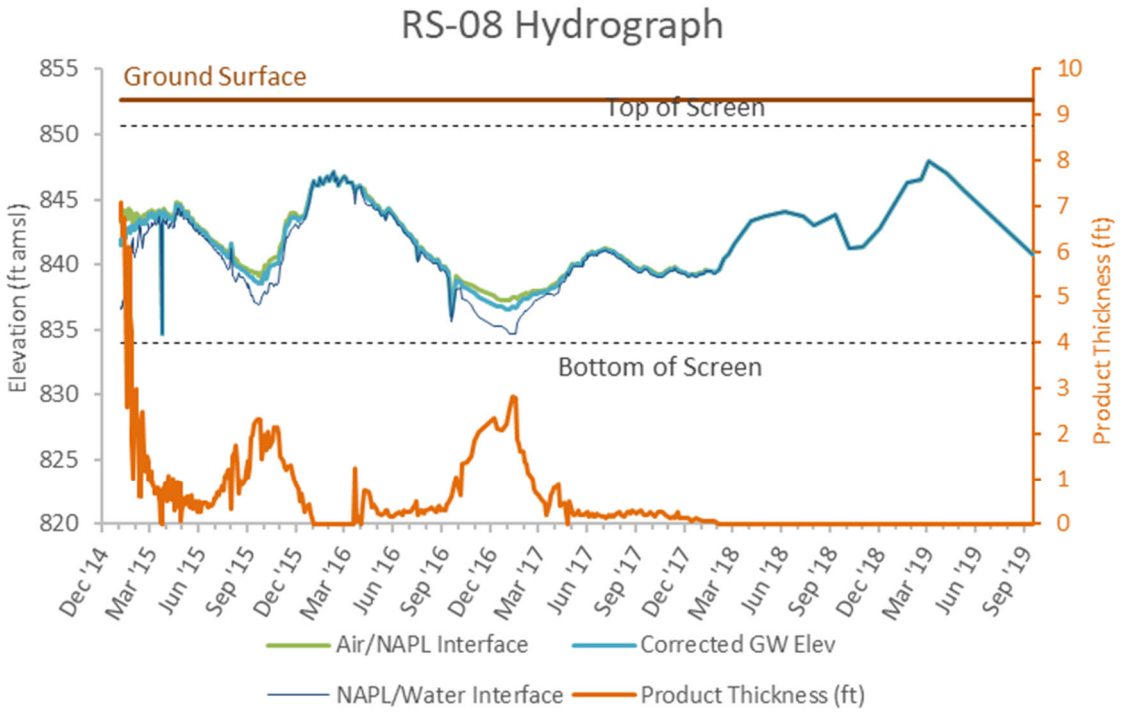

RS-01 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
810
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

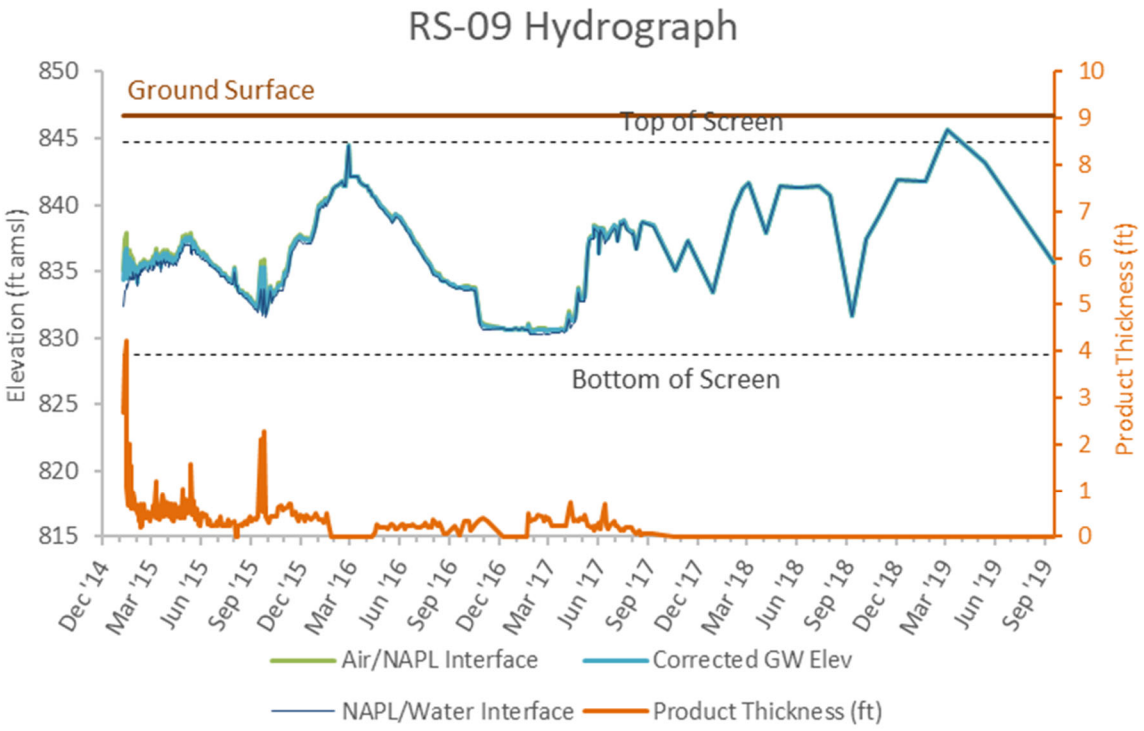

RS-02 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

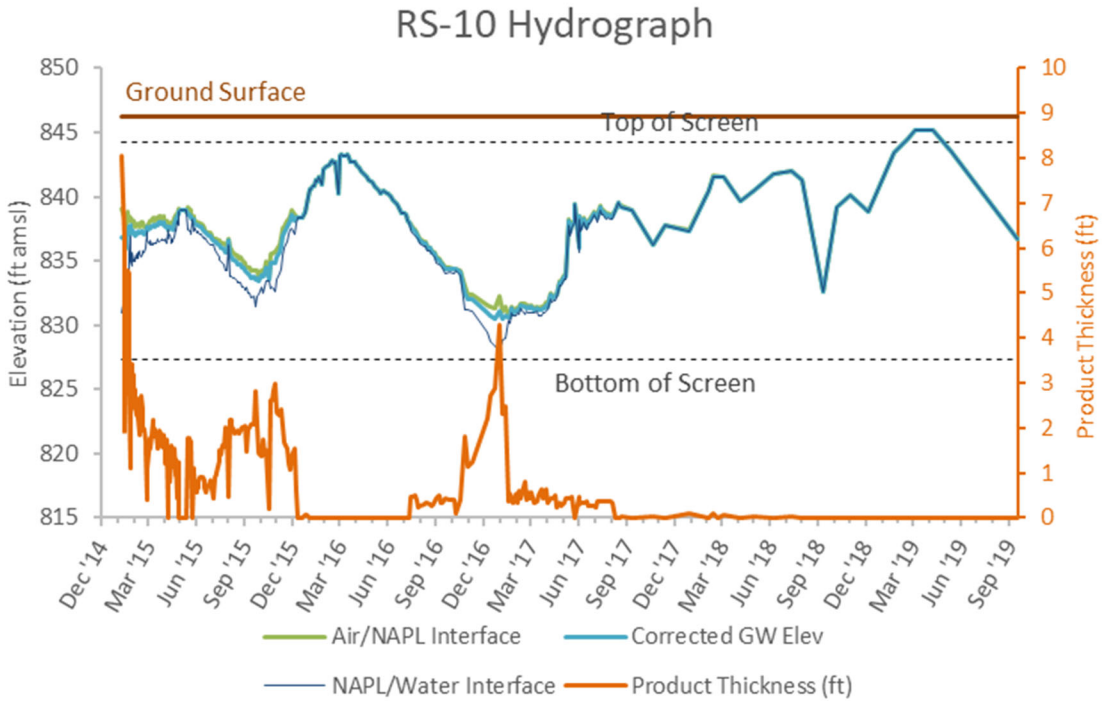

RS-05 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
810
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

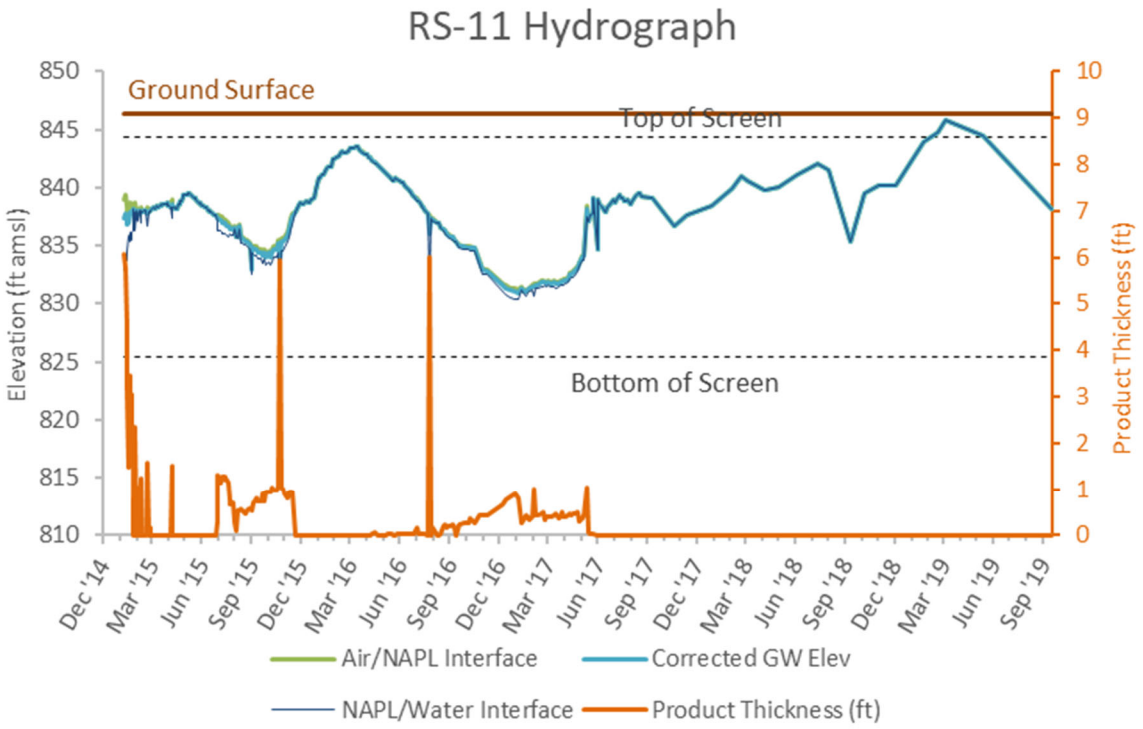

RS-06 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
855
850
845
840
835
830
825
820
815
810
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

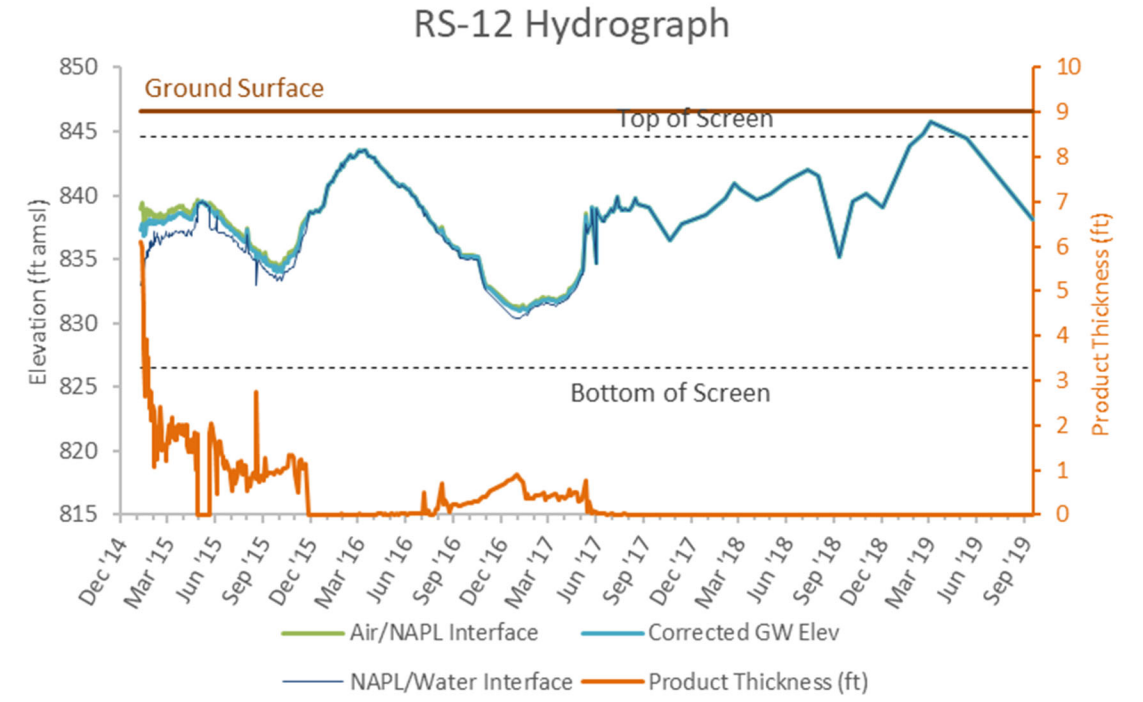

RS-07 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
860
855
850
845
840
835
830
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

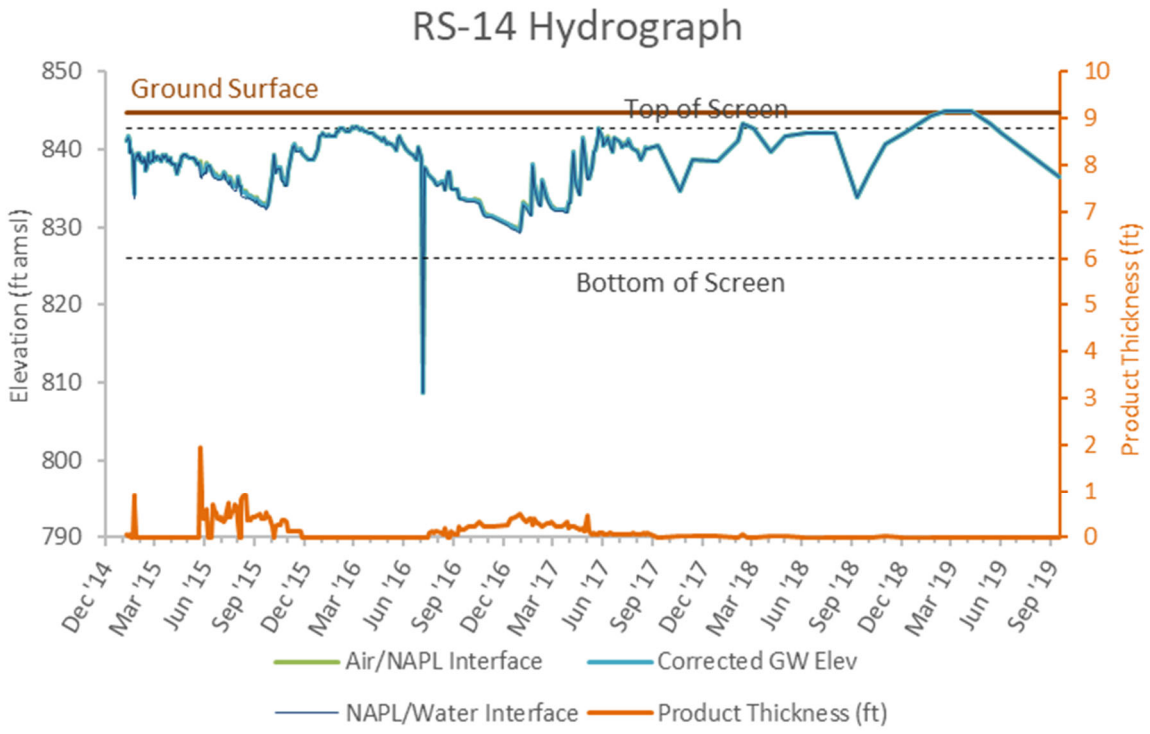

RS-08 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
855
850
845
840
835
830
825
820
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

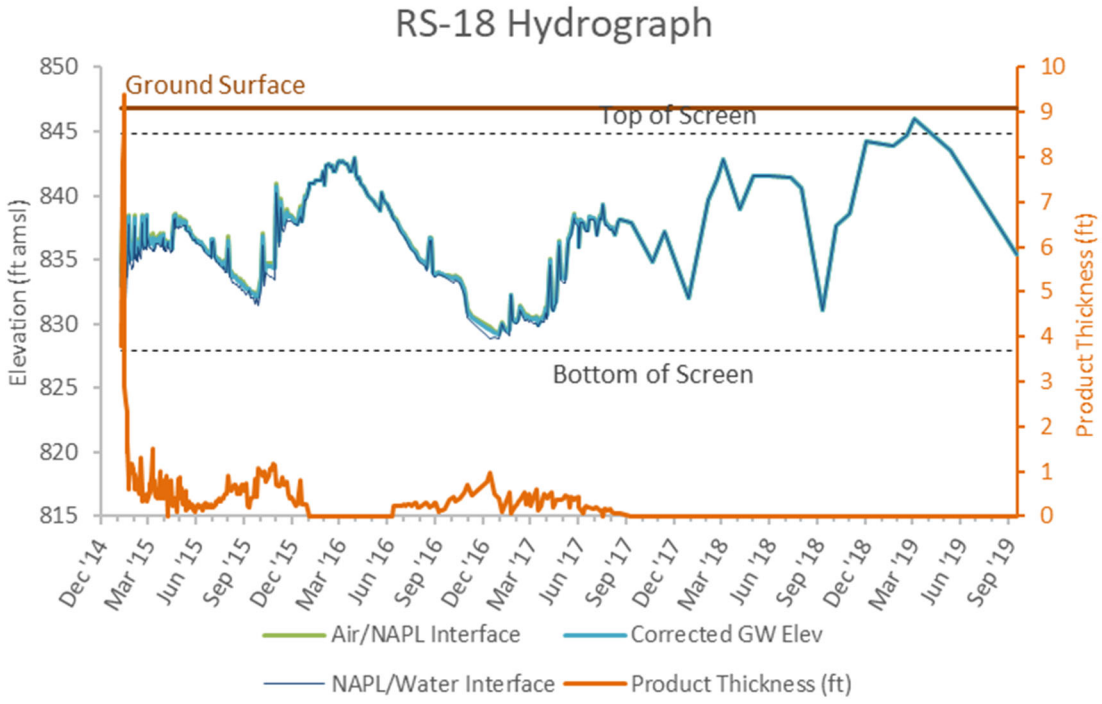

RS-09 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

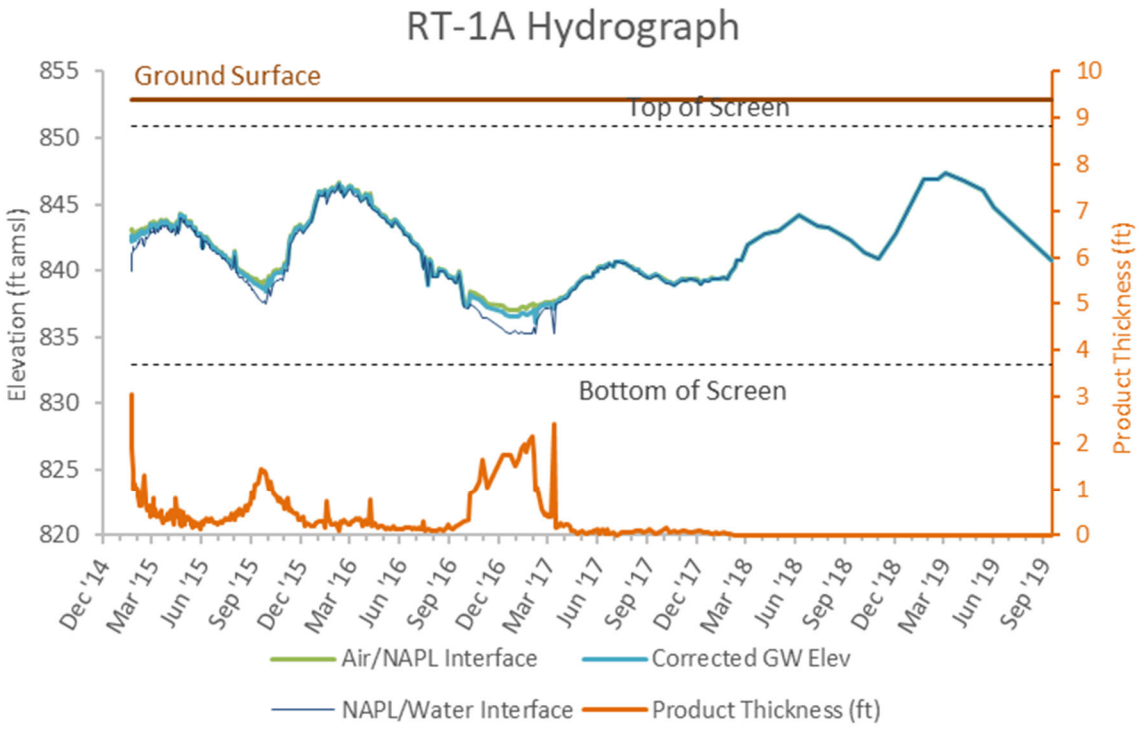

RS-10 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

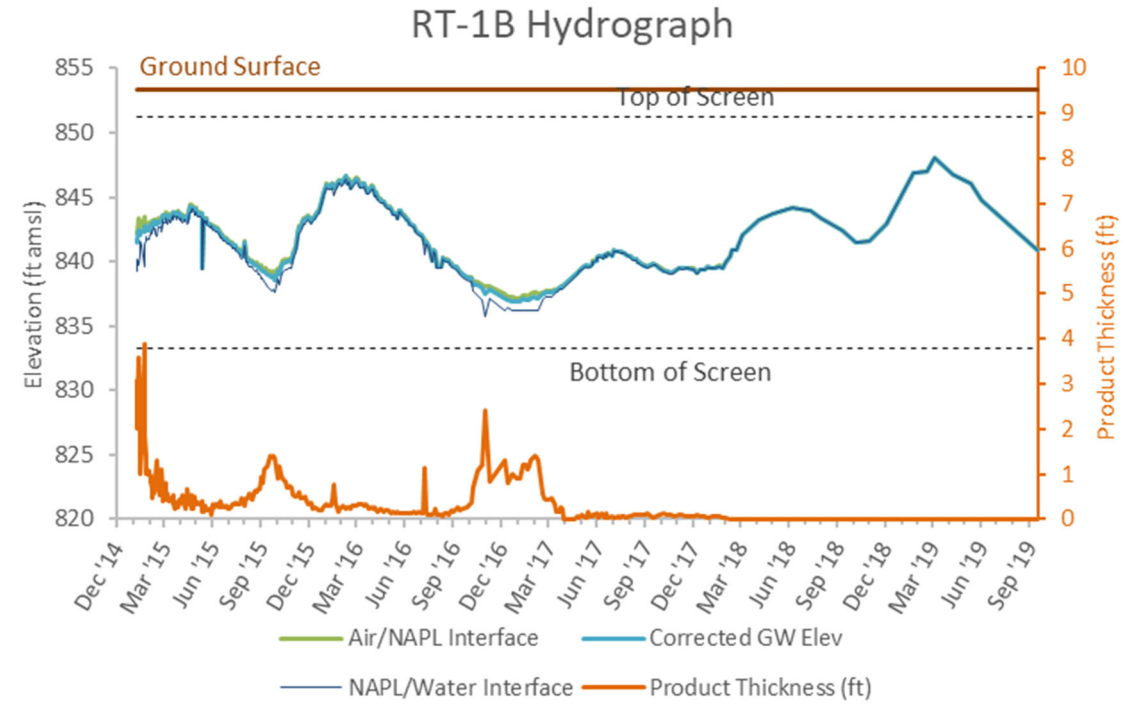

RS-11 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
810
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

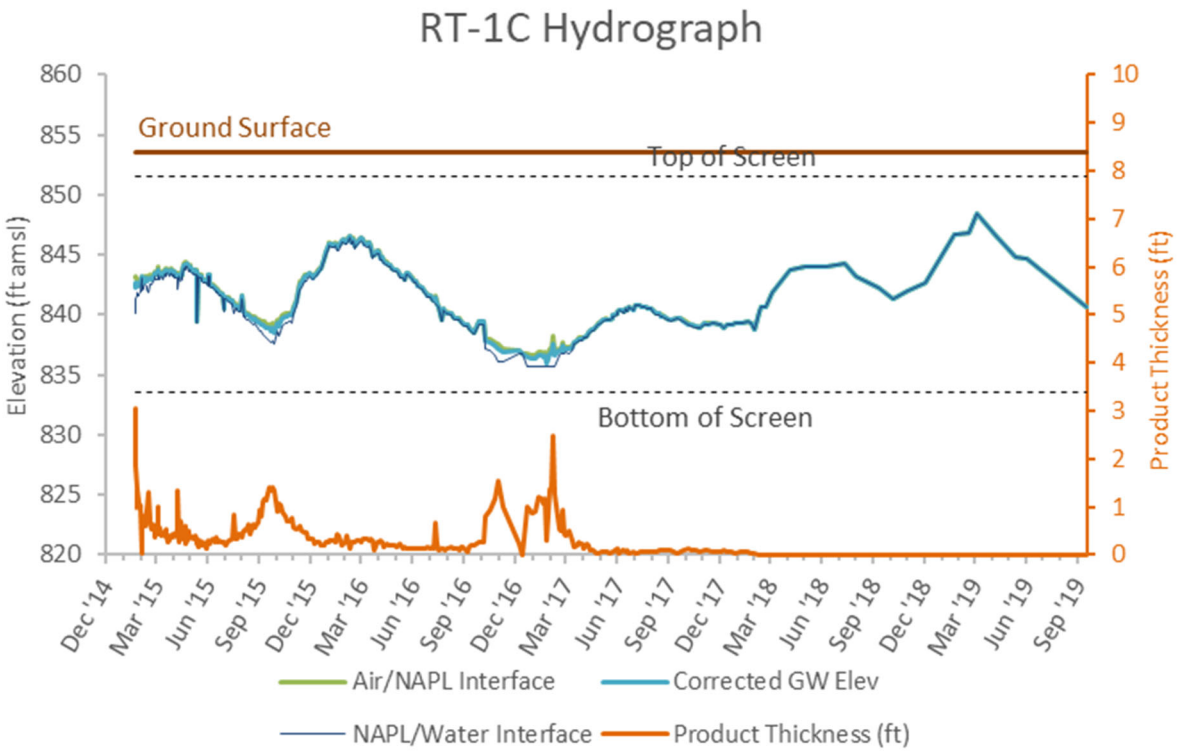

RS-12 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

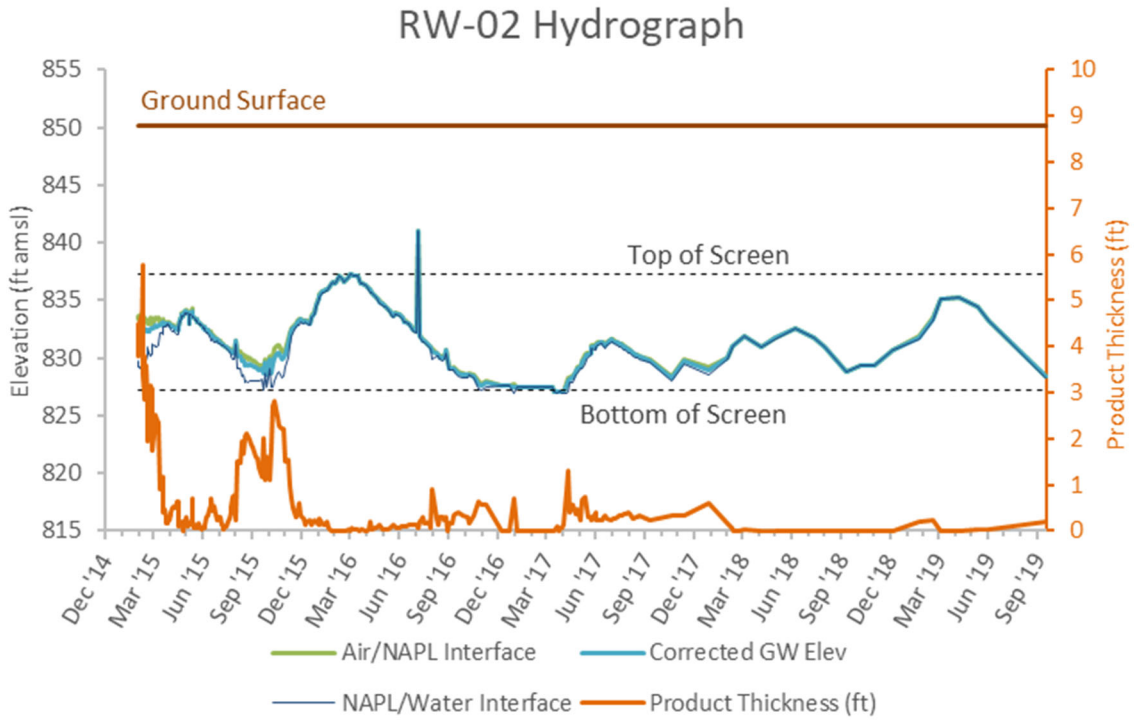

RS-14 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
840
830
820
810
800
790
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

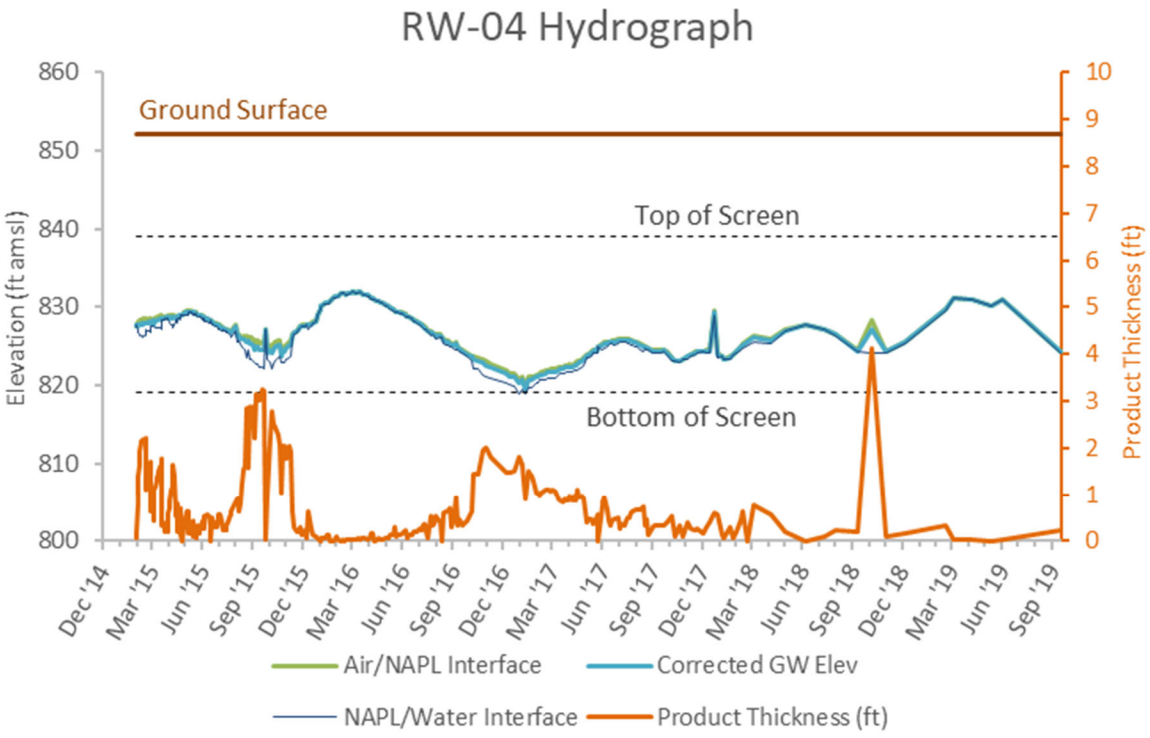

RS-18 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
845
840
835
830
825
820
815
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

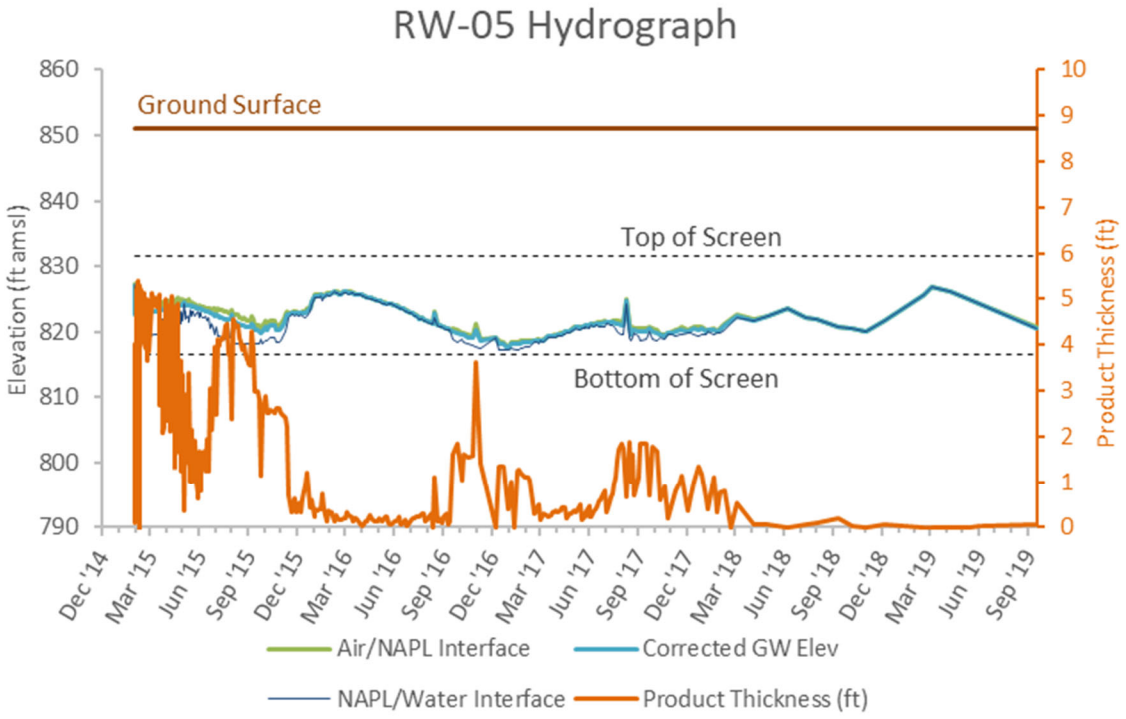

RT-1A Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
855
850
845
840
835
830
825
820
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

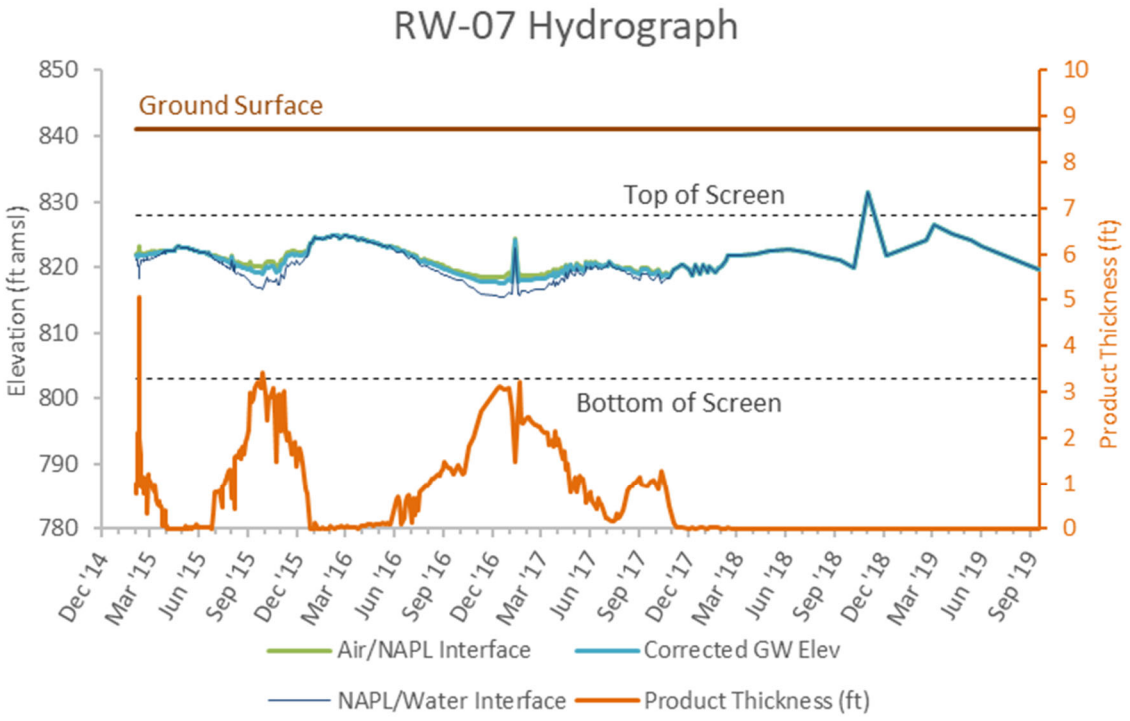

RT-1B Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
855
850
845
840
835
830
825
820
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

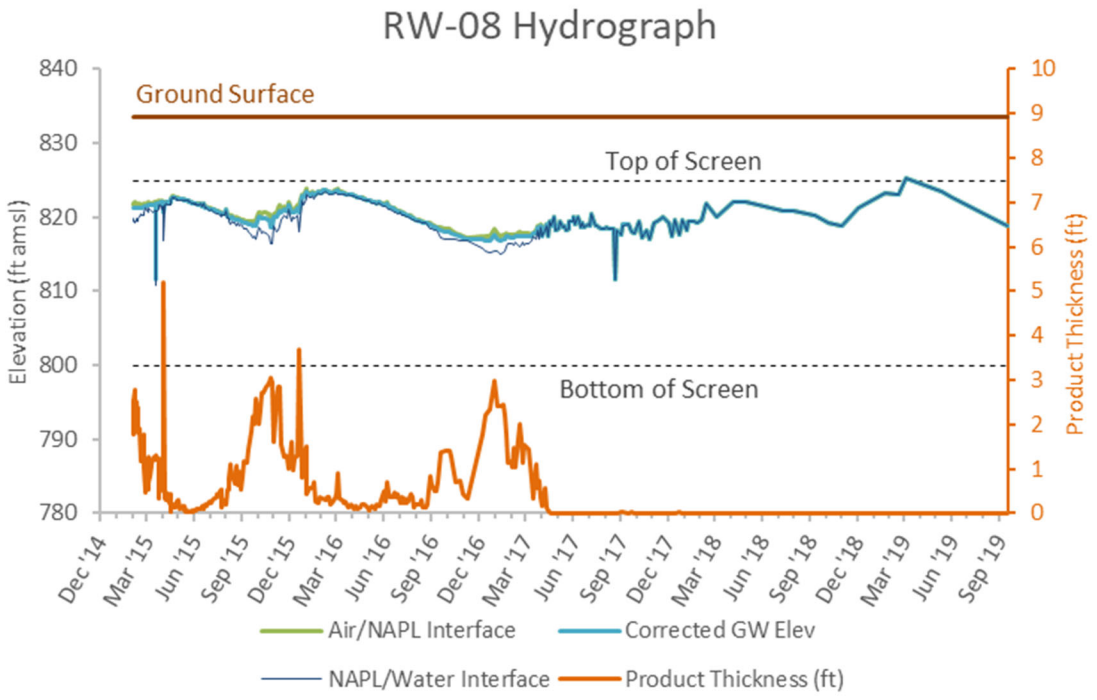

RT-1C Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
860
855
850
845
840
835
830
825
820
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

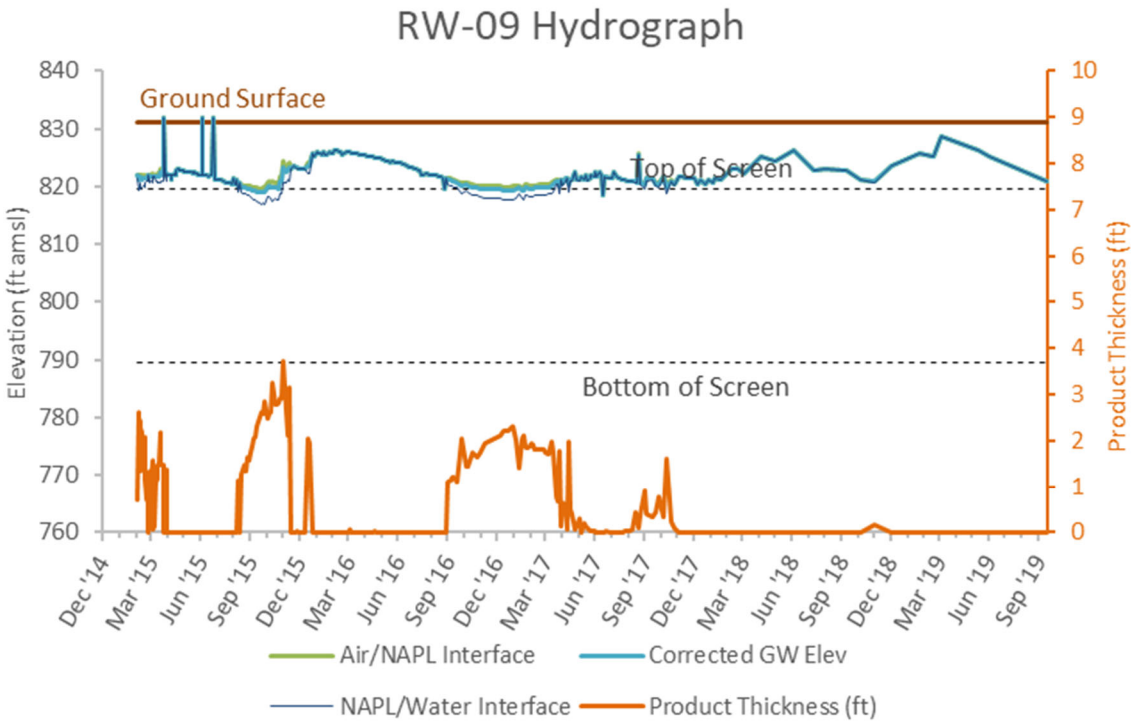

RW-02 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
855
850
845
840
835
830
825
820
815
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

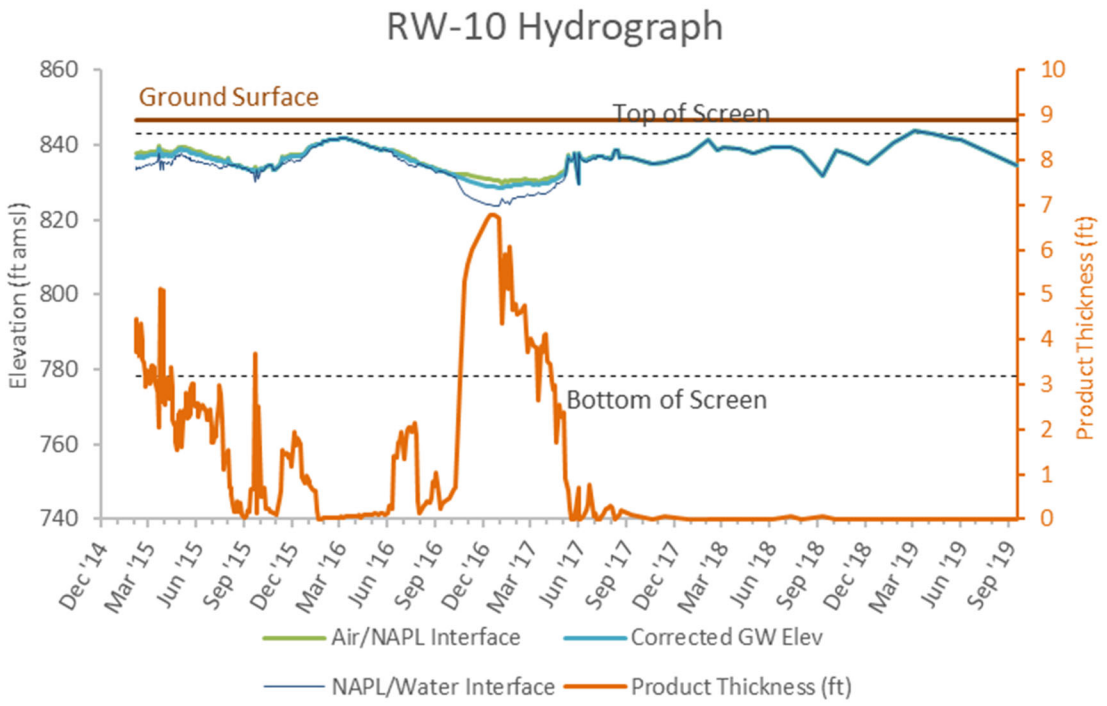

RW-04 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
860
850
840
830
820
810
800
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

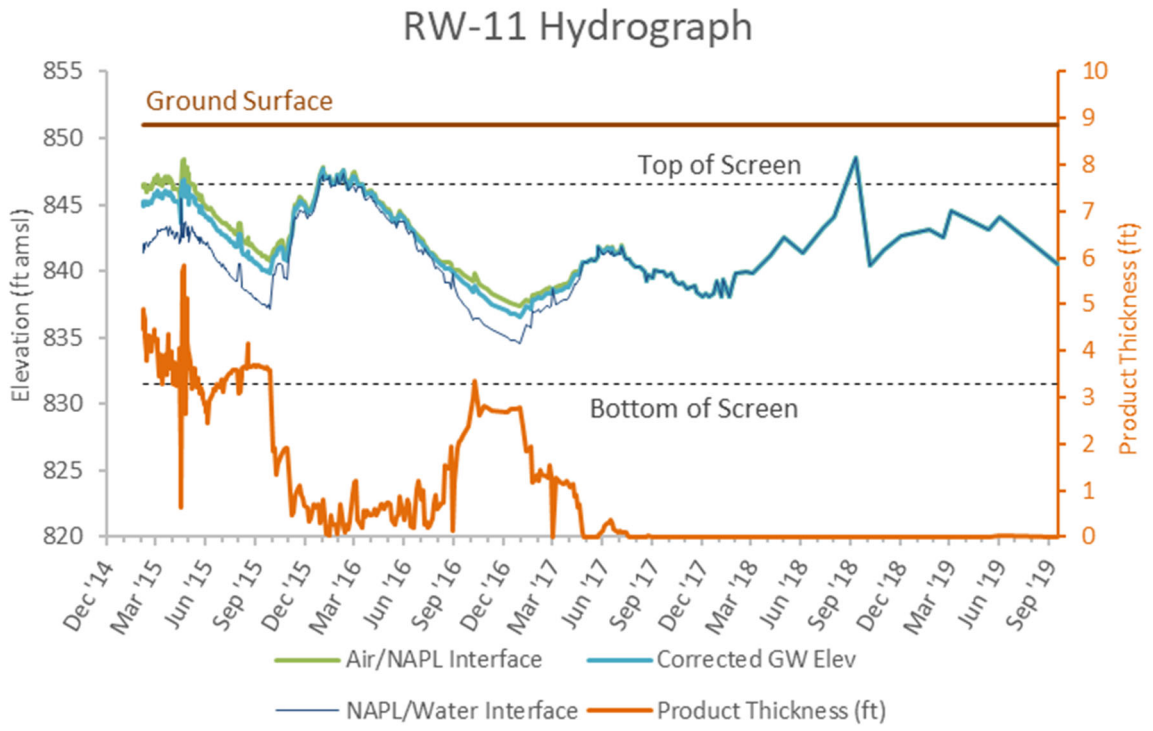

RW-05 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
860
850
840
830
820
810
800
790
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

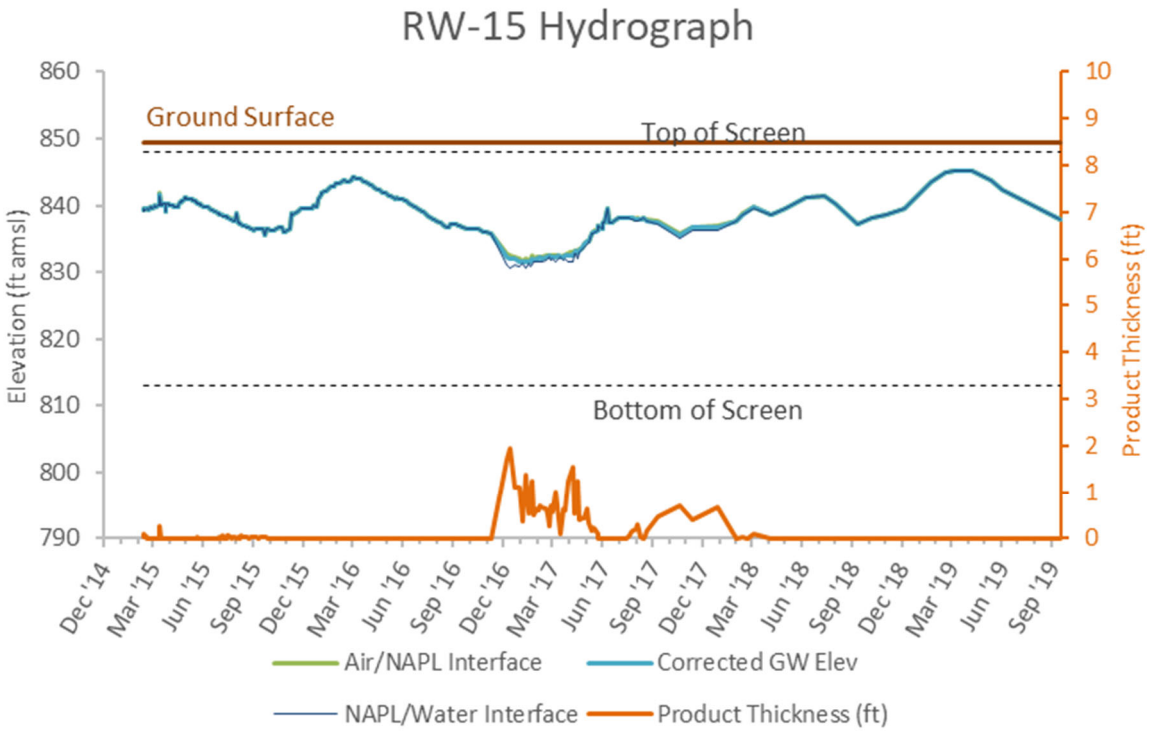

RW-07 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
850
840
830
820
810
800
790
780
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)


RW-08 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
840
830
820
810
800
790
780
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

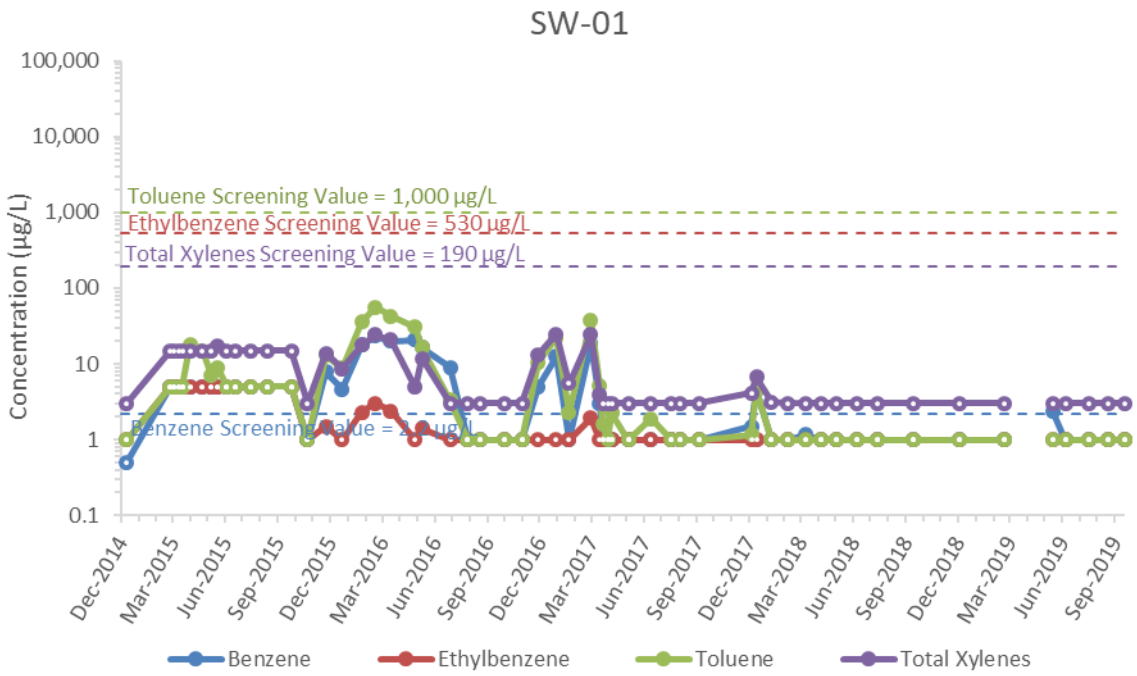

RW-09 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
840
830
820
810
800
790
780
770
760
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)


RW-10 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
860
840
820
800
780
760
740
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

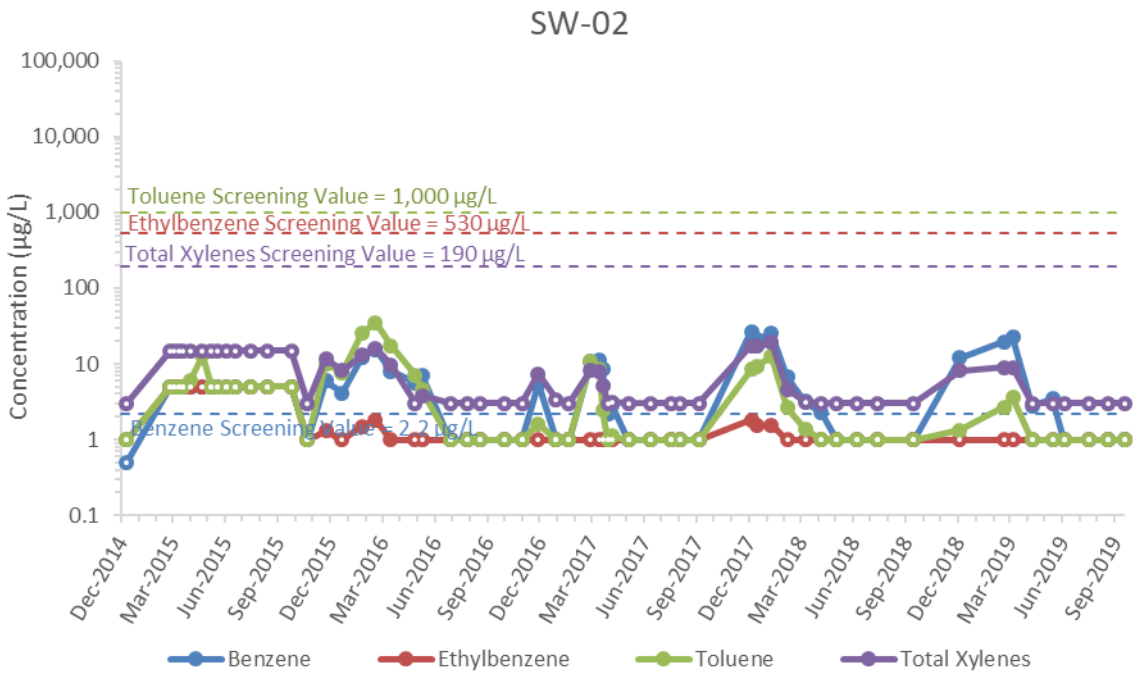

RW-11 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
855
850
845
840
835
830
825
820
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)


RW-15 Hydrograph
Ground Surface
Top of Screen
Bottom of Screen
Elevation (ft amsl)
Product Thickness (ft)
860
850
840
830
820
810
800
790
10
9
8
7
6
5
4
3
2
1
0
Dec '14
Mar '15
Jun '15
Sep '15
Dec '15
Mar '16
Jun '16
Sep '16
Dec '16
Mar '17
Jun '17
Sep '17
Dec '17
Mar '18
Jun '18
Sep '18
Dec '18
Mar '19
Jun '19
Sep '19
Air/NAPL Interface
Corrected GW Elev
NAPL/Water Interface
Product Thickness (ft)

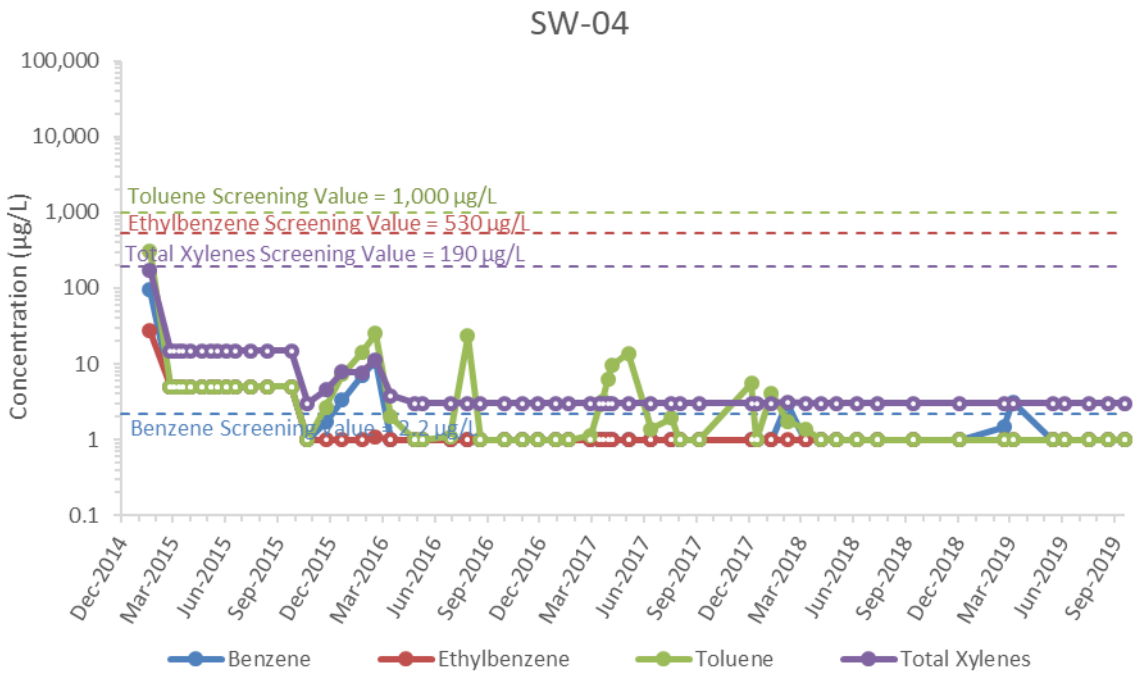
Attachment B
Surface Water Analytical Trends



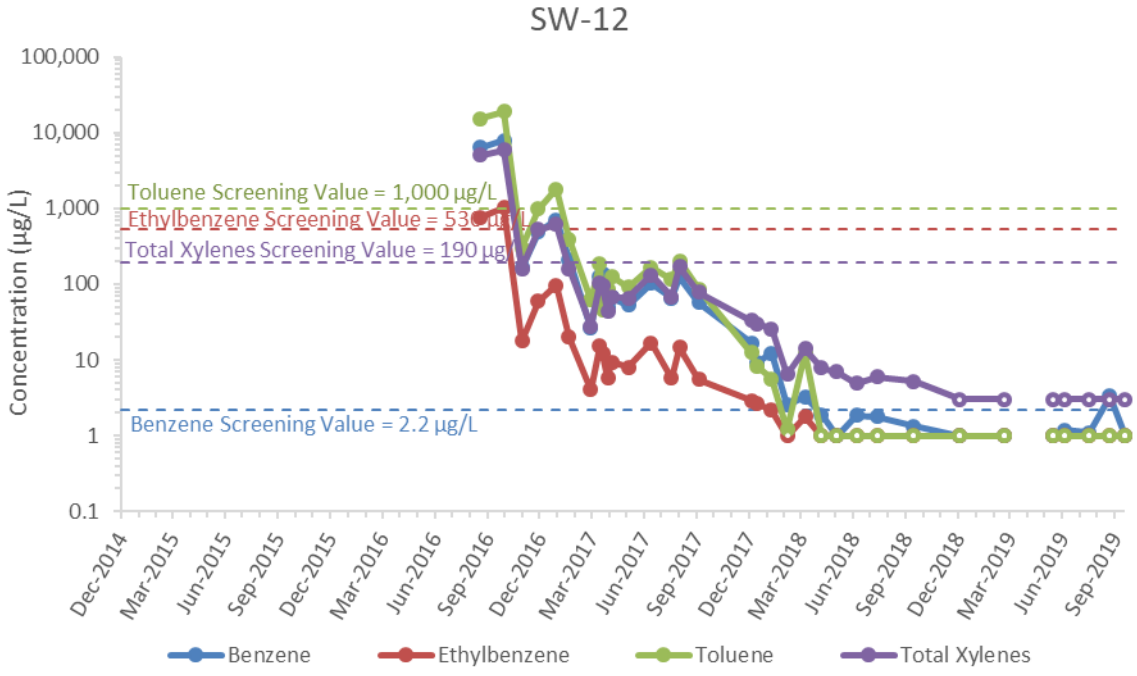
Open circles are drawn at the reporting limit when a compound was not detected in the sample.



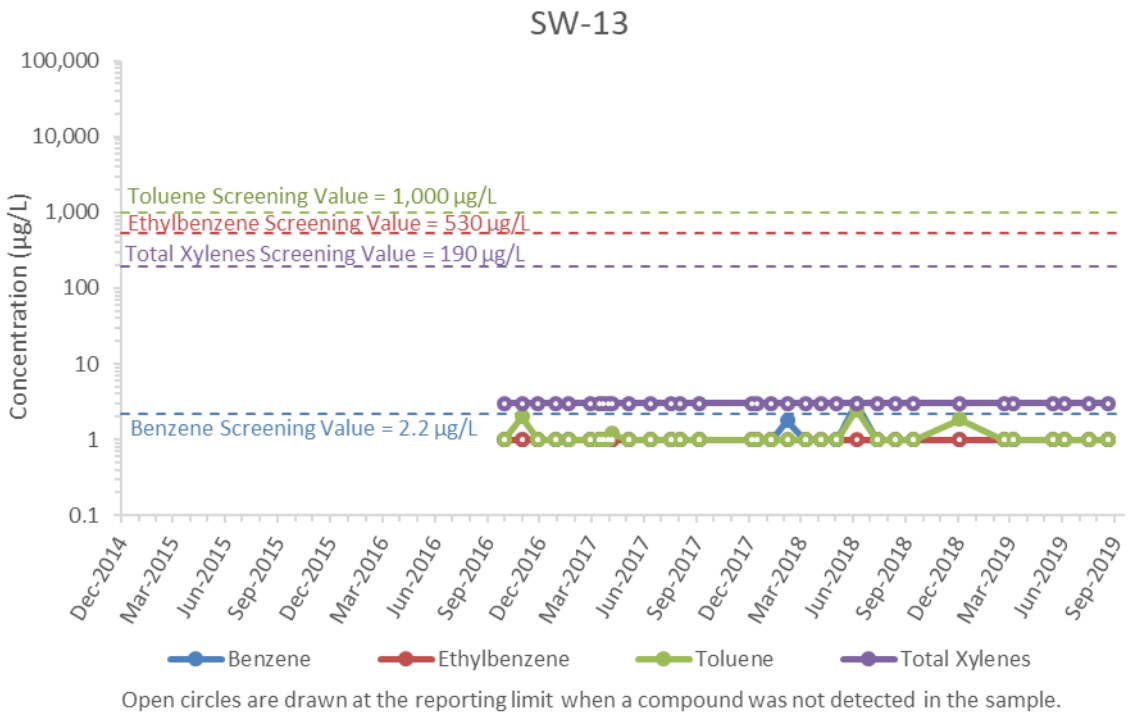
Open circles are drawn at the reporting limit when a compound was not detected in the sample.



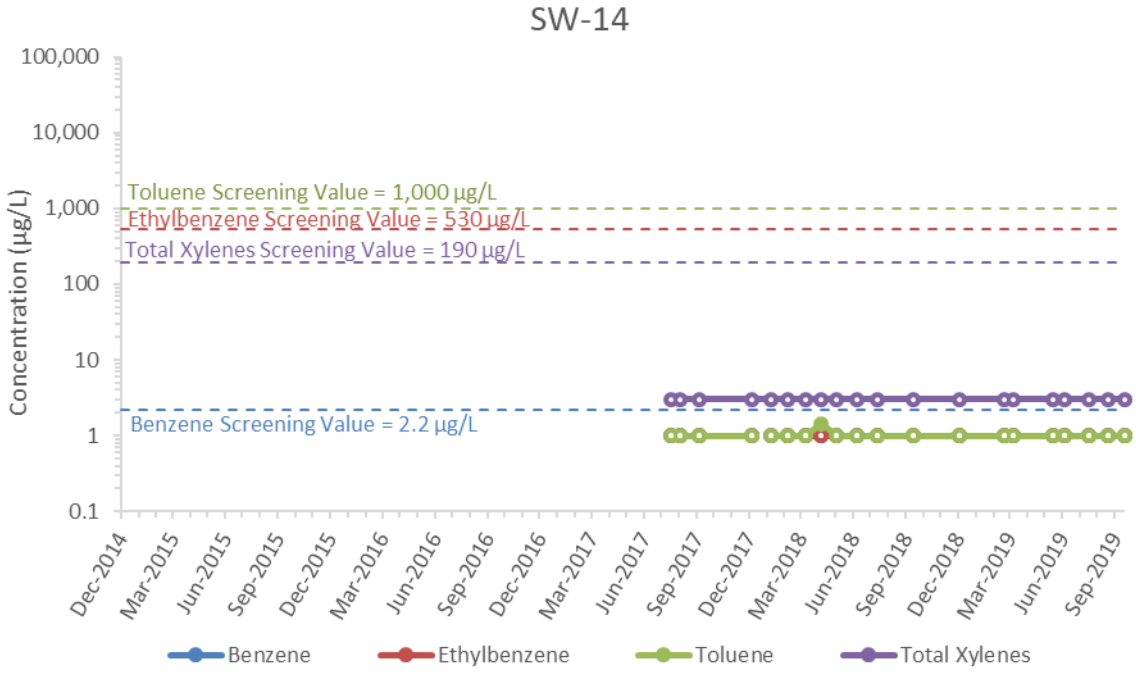
Open circles are drawn at the reporting limit when a compound was not detected in the sample.



Open circles are drawn at the reporting limit when a compound was not detected in the sample.



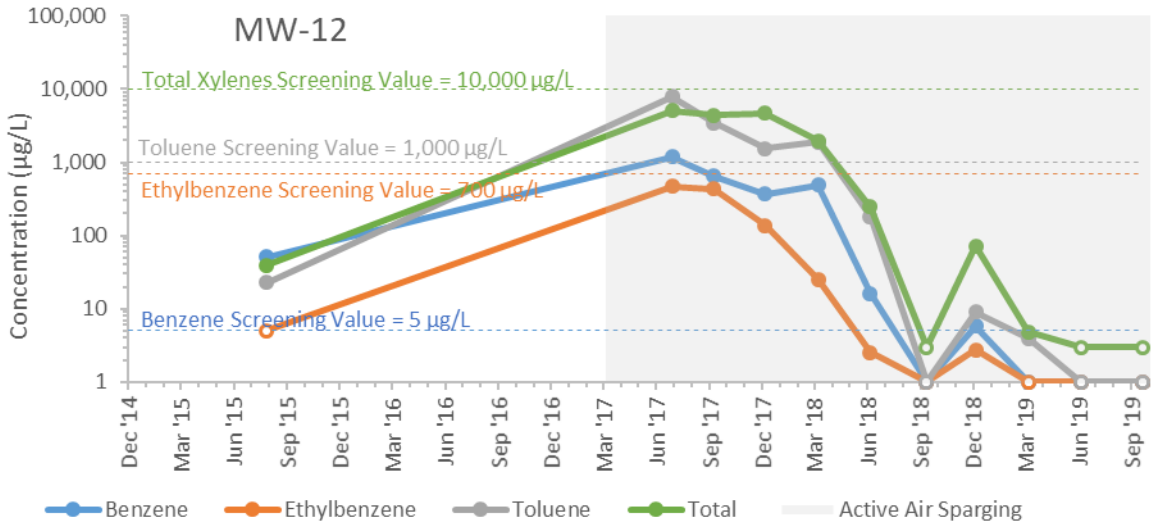
Open circles are drawn at the reporting limit when a compound was not detected in the sample.



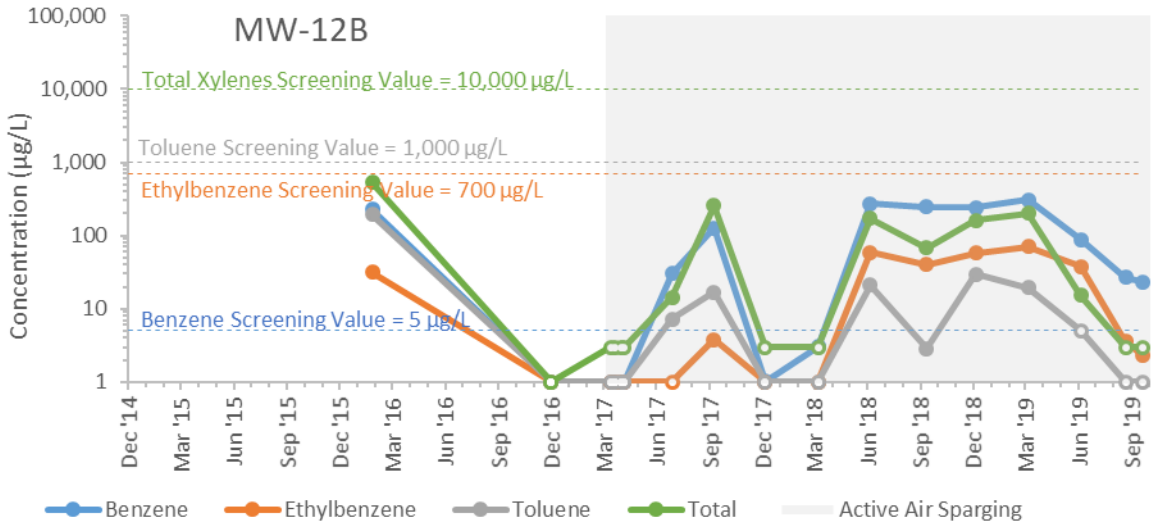
Open circles are drawn at the reporting limit when a compound was not detected in the sample.

Attachment C
Groundwater Analytical Trends

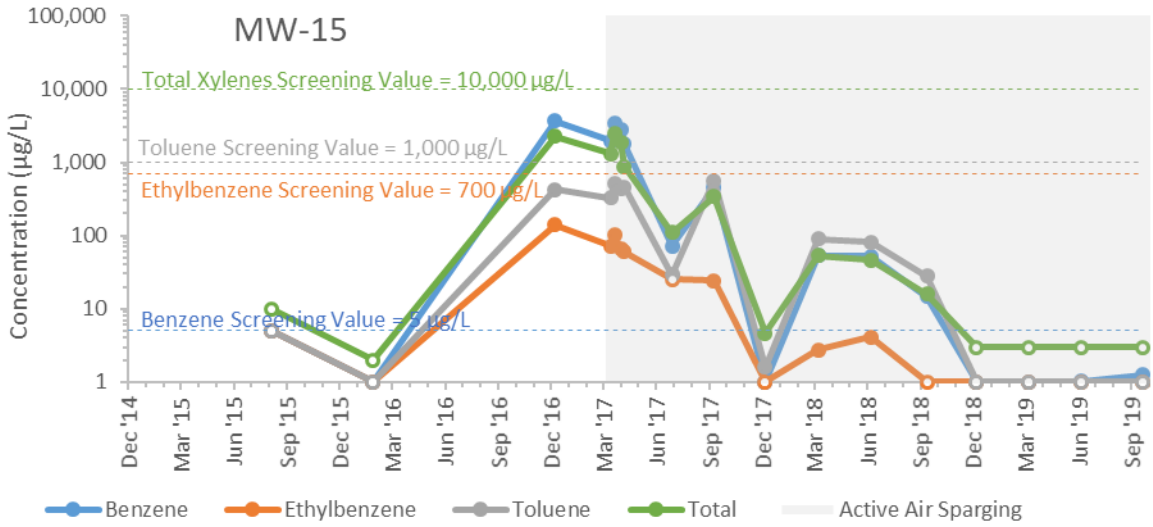
Brown's Creek Monitoring Well Trends



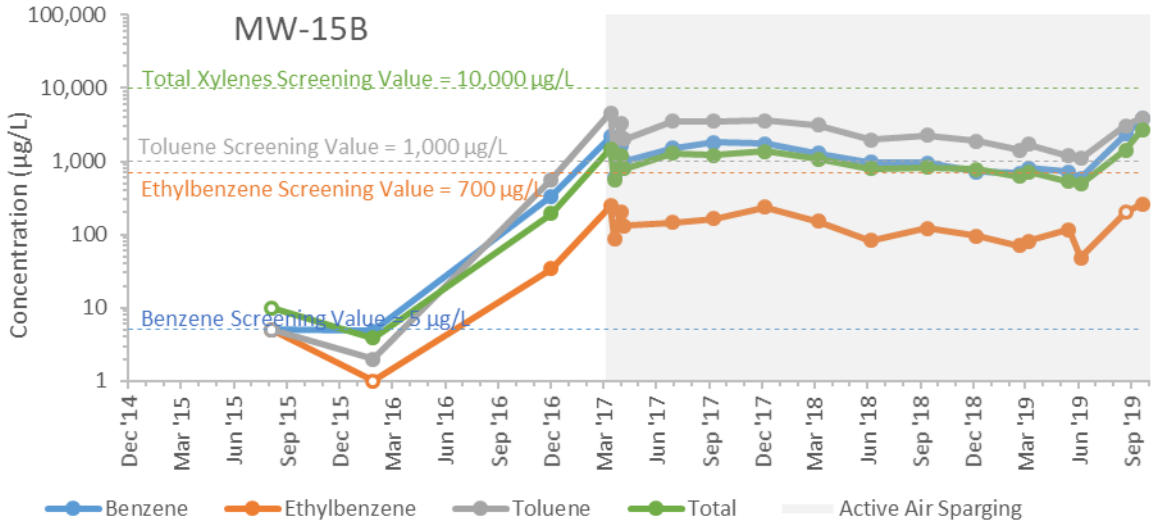
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



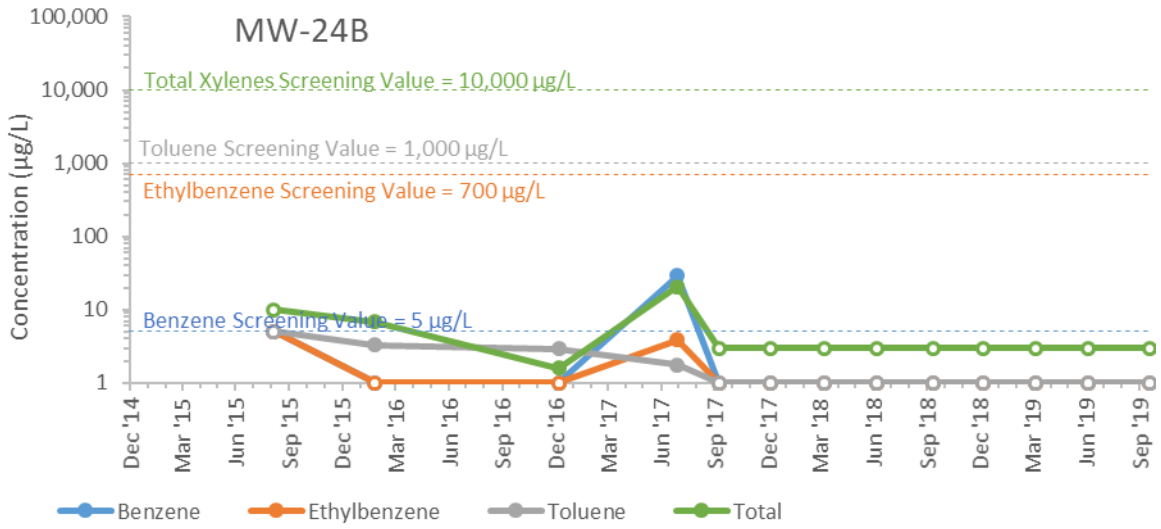
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



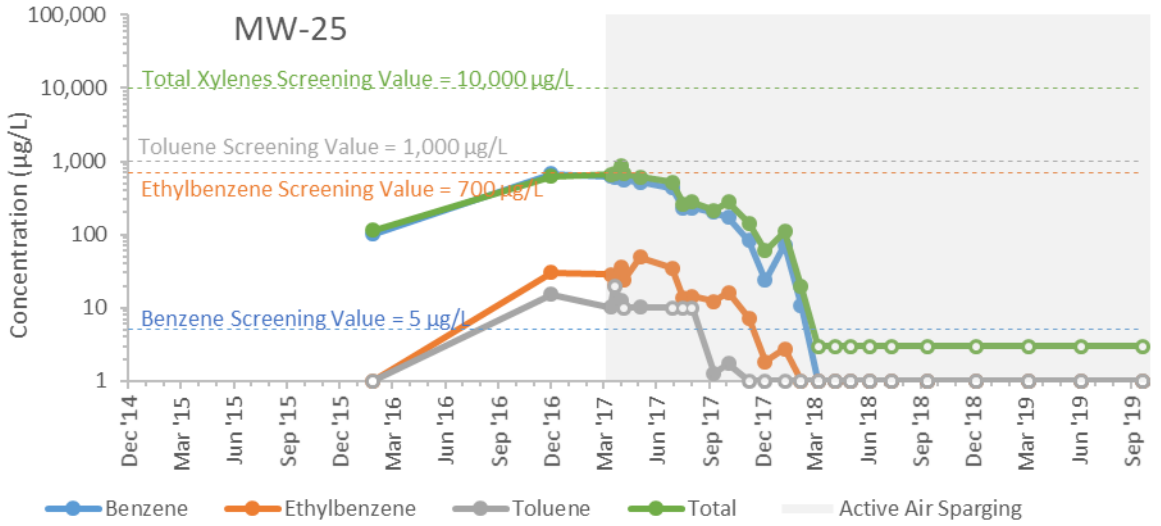
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



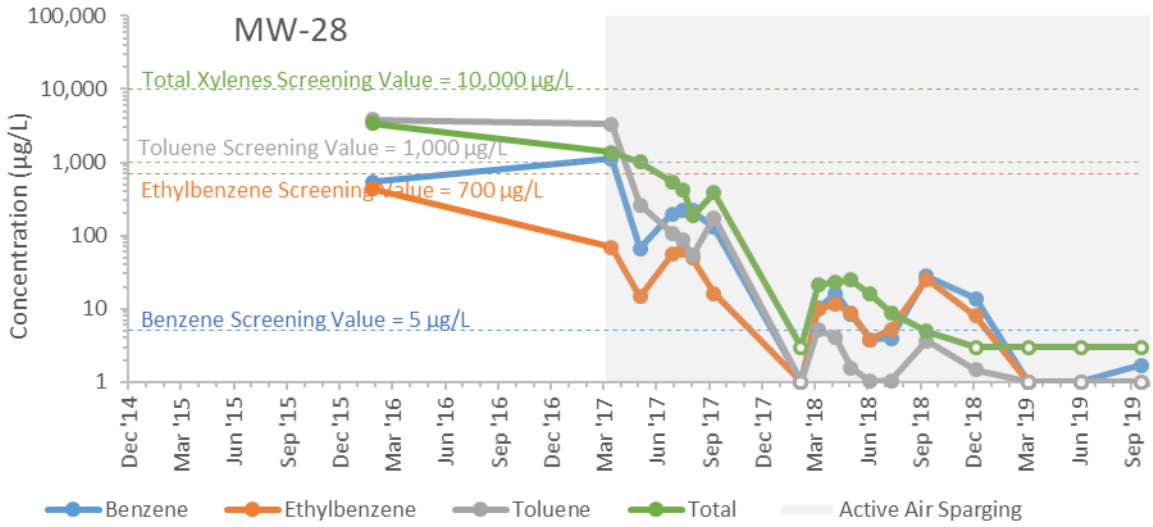
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



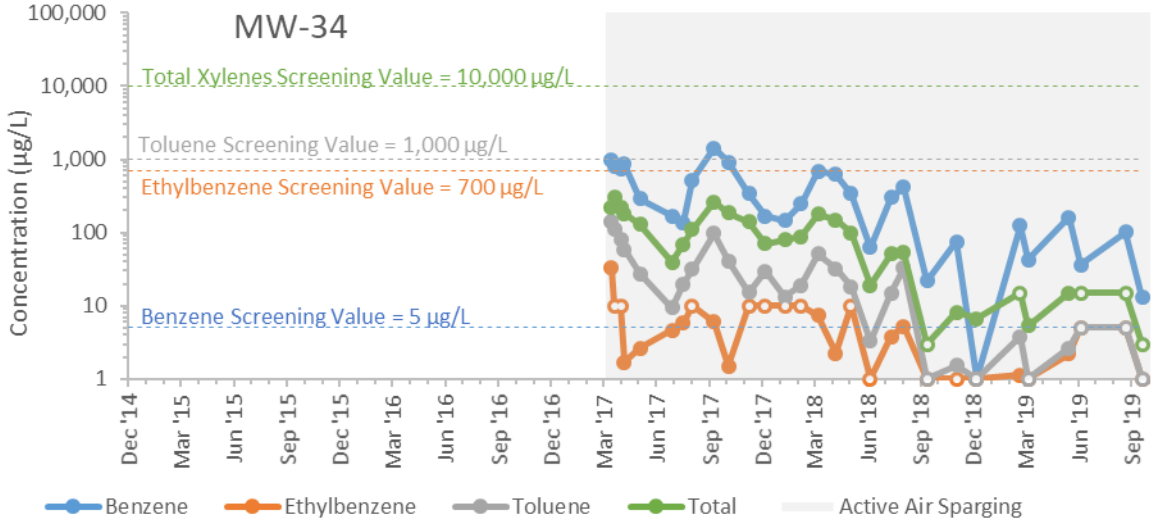
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



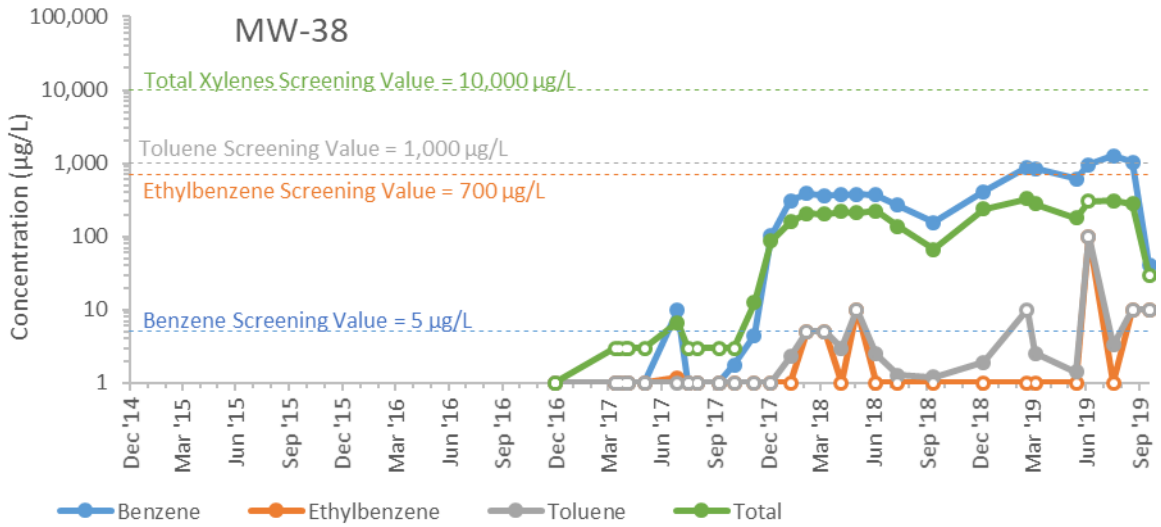
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



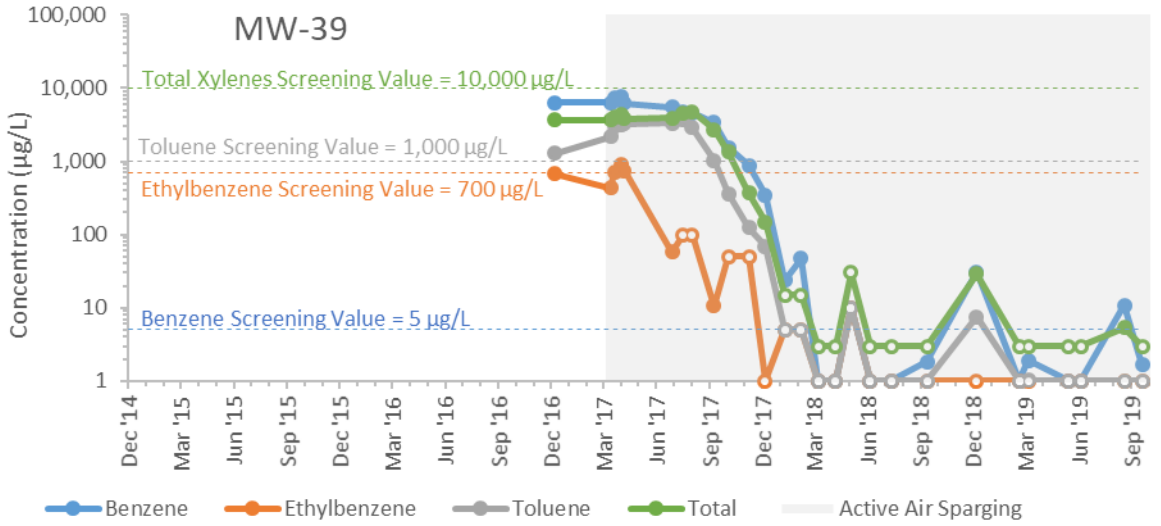
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



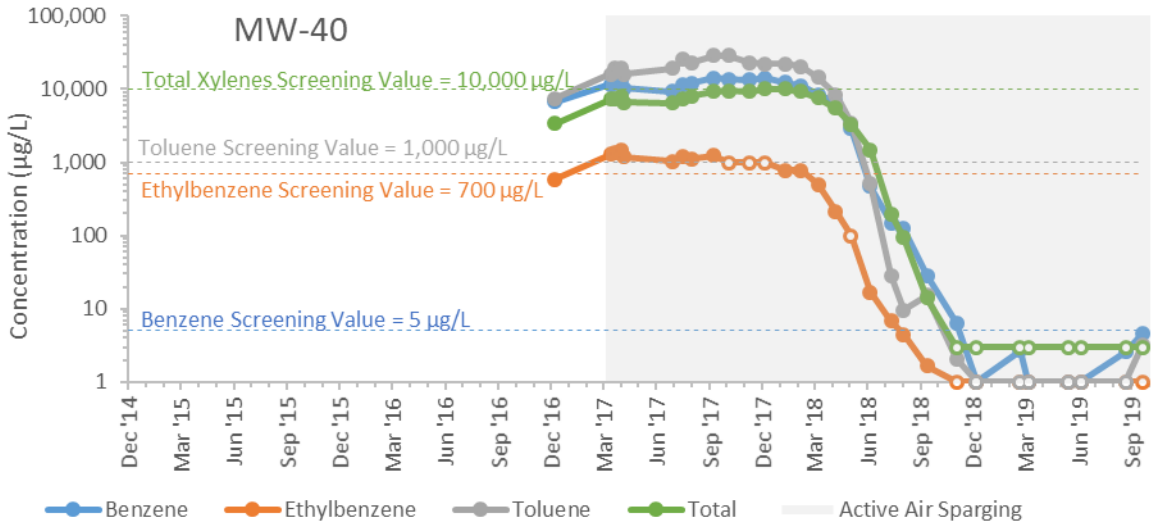
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



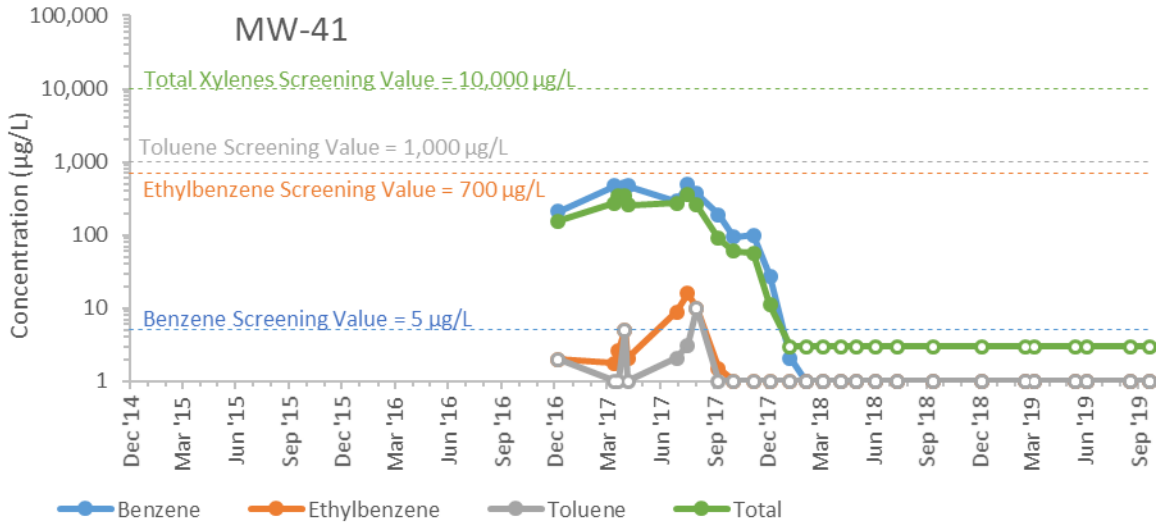
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



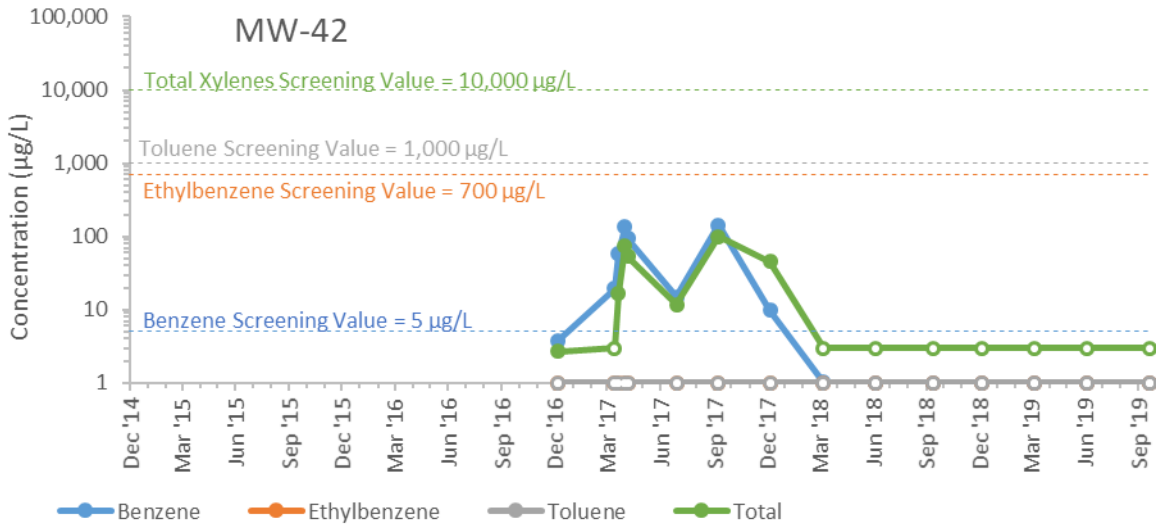
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

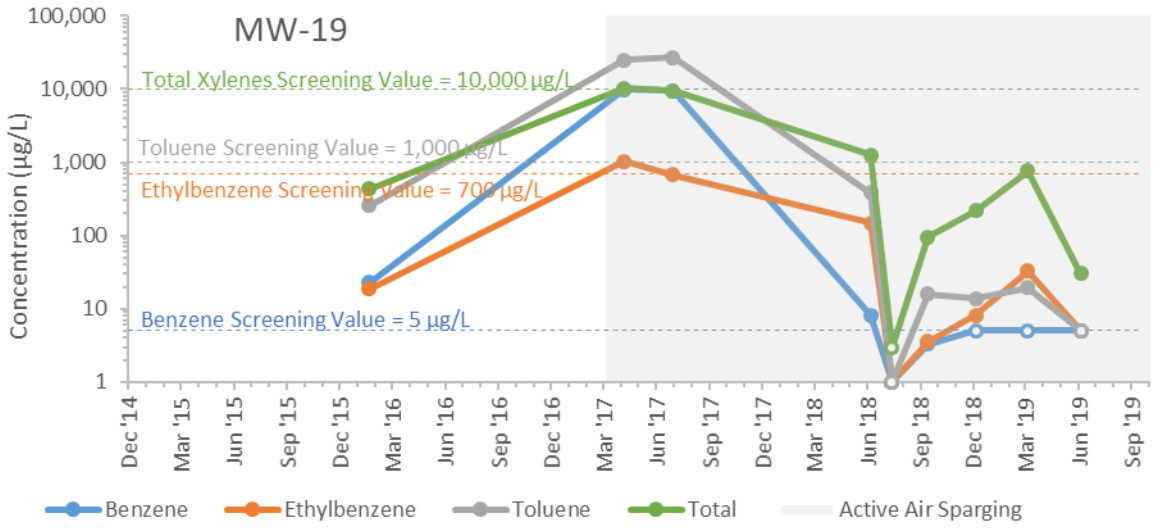


Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

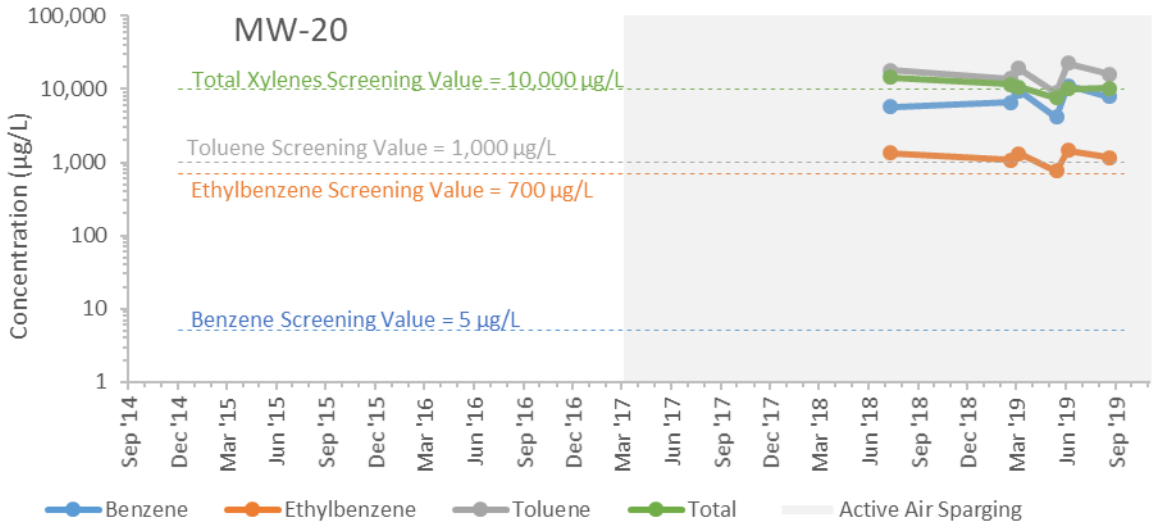


Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

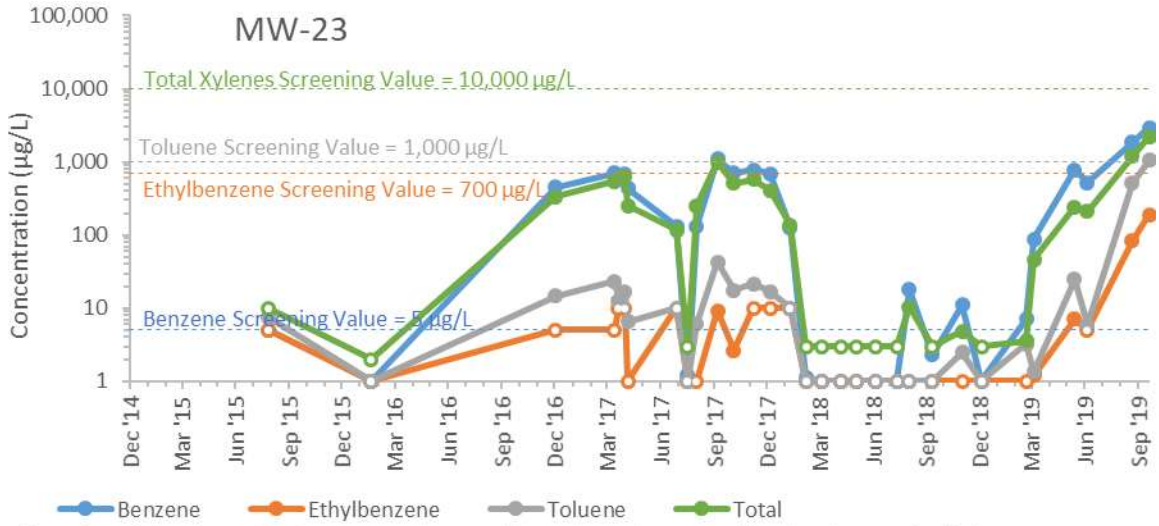
Cupboard Creek Monitoring Well Trends



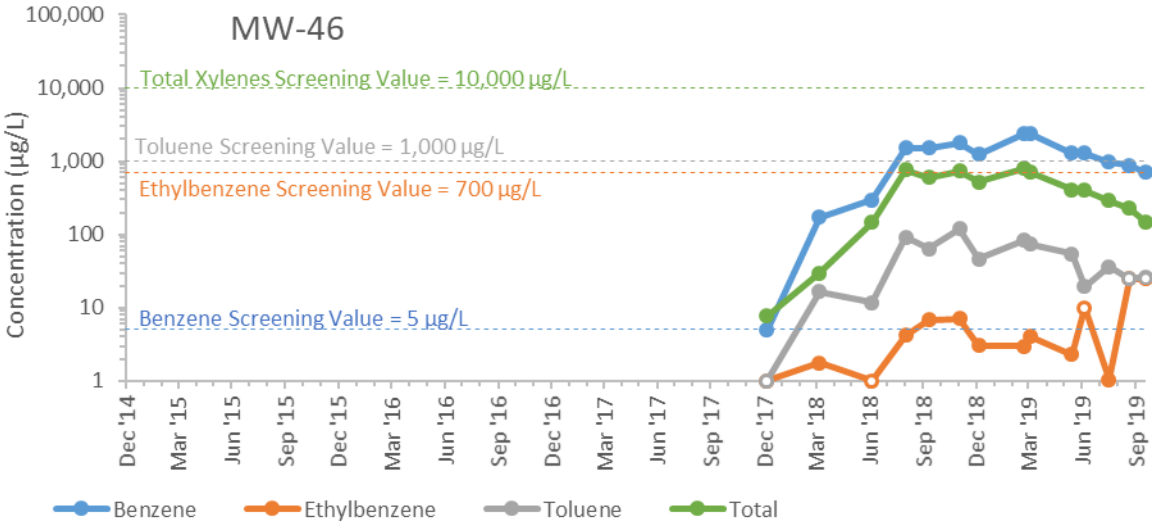
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



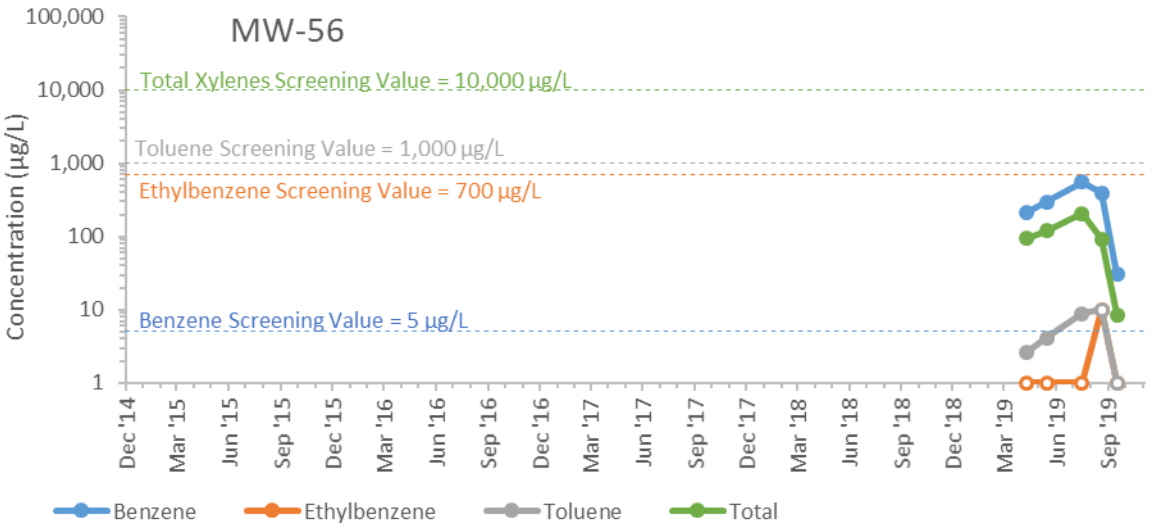
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



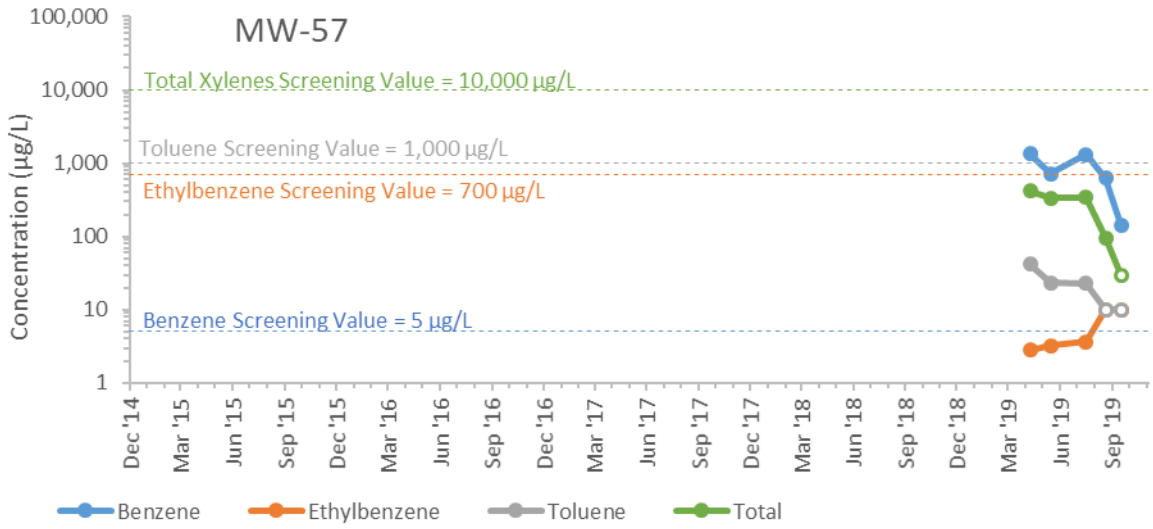
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

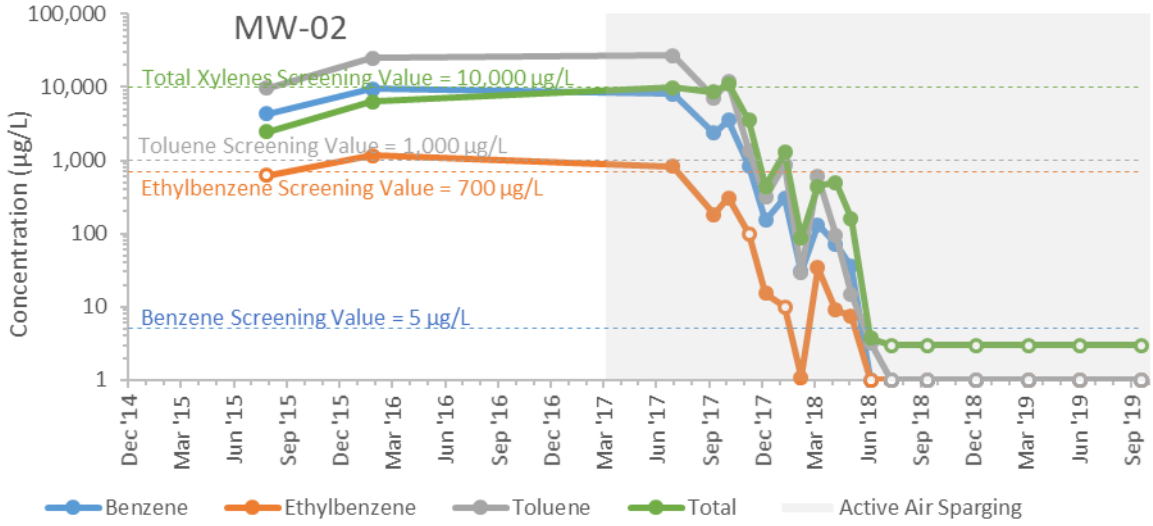


Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

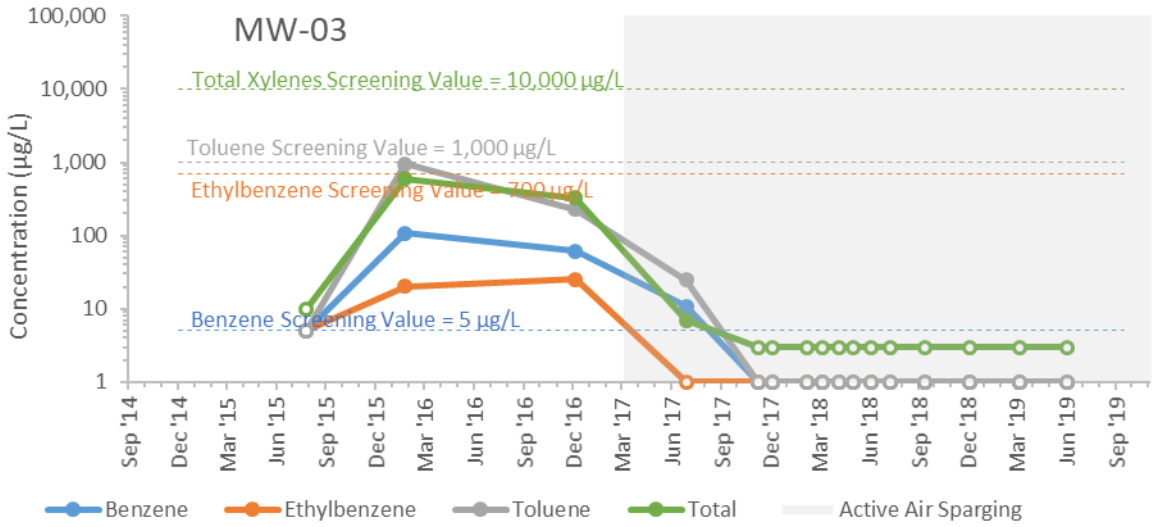


Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

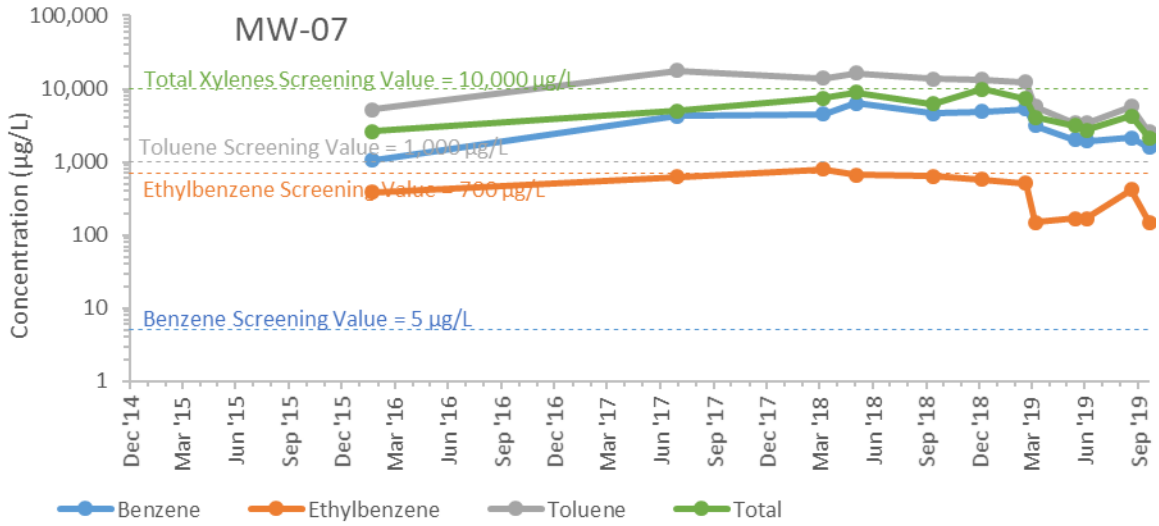
Hayfield Monitoring Well Trends



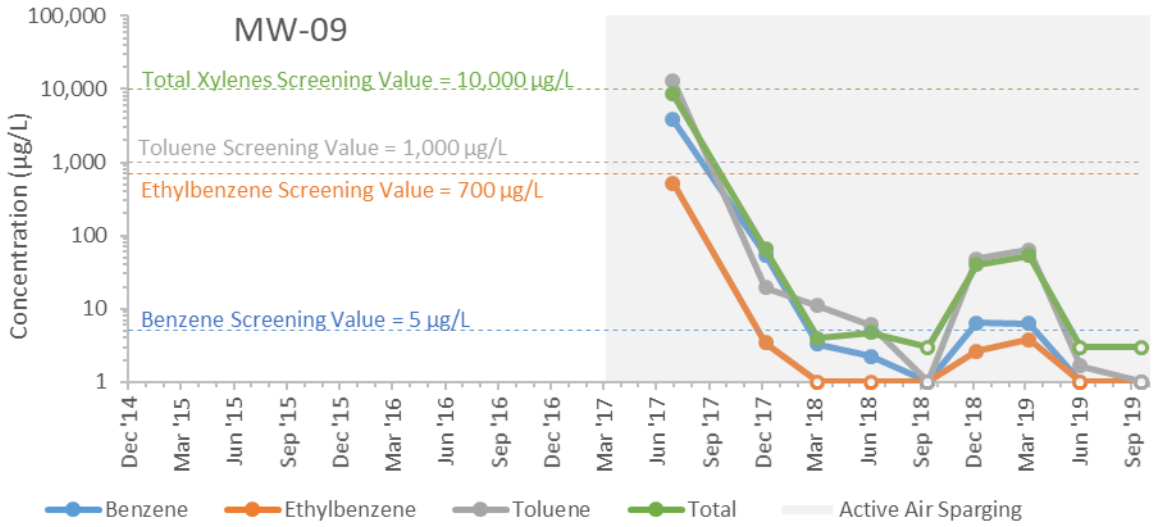
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



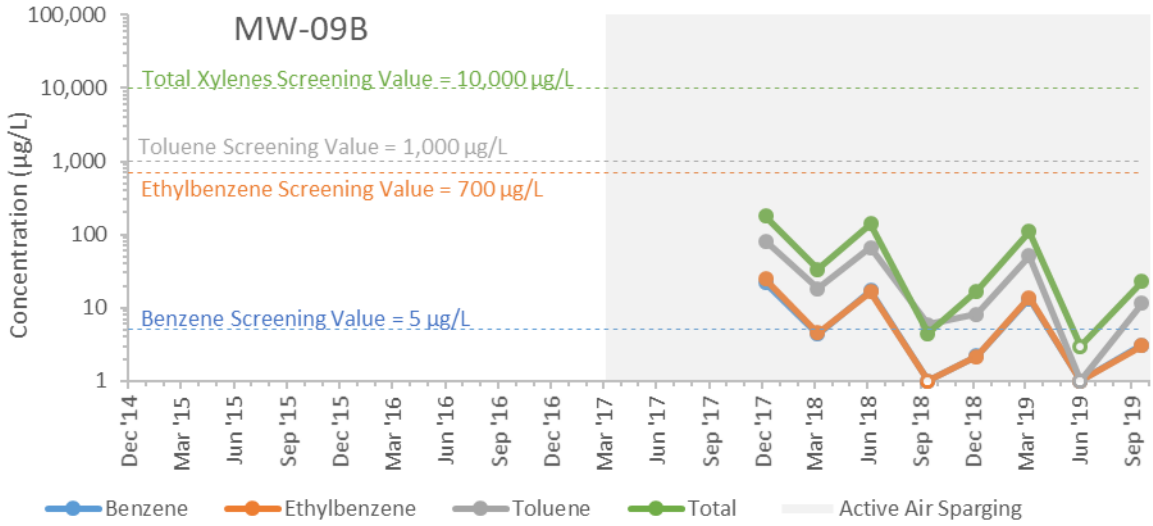
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



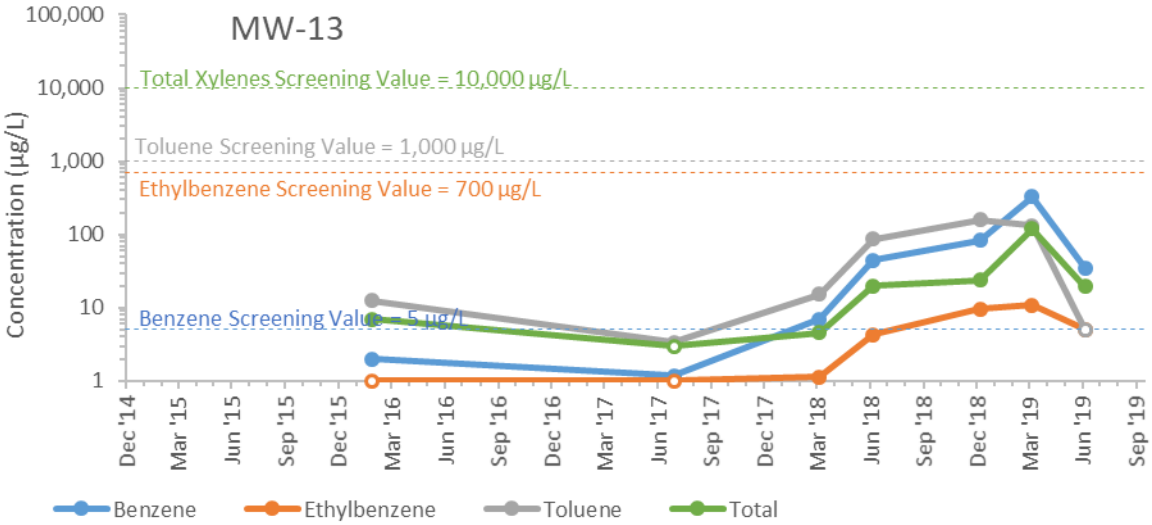
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



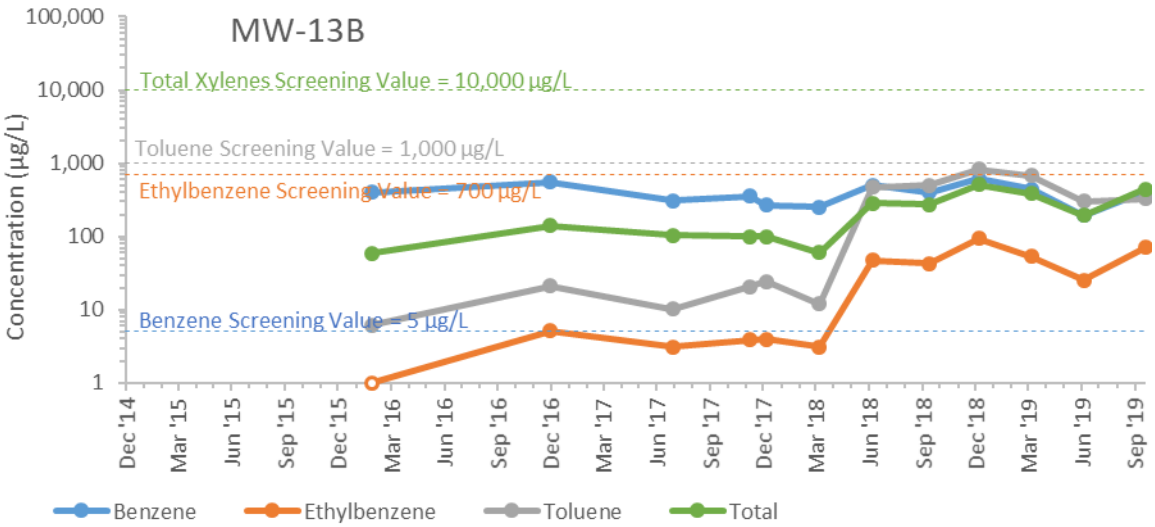
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



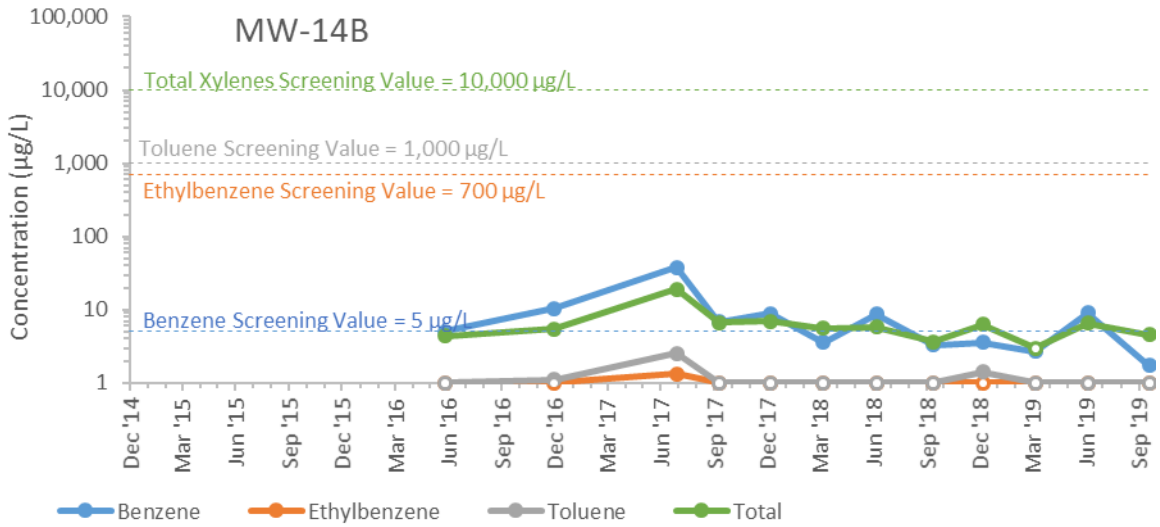
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



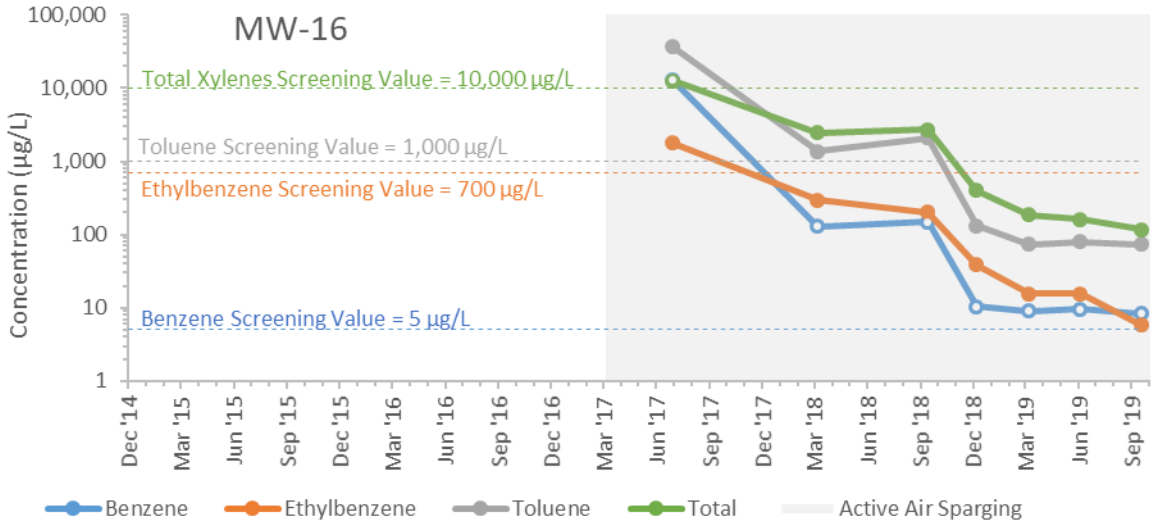
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



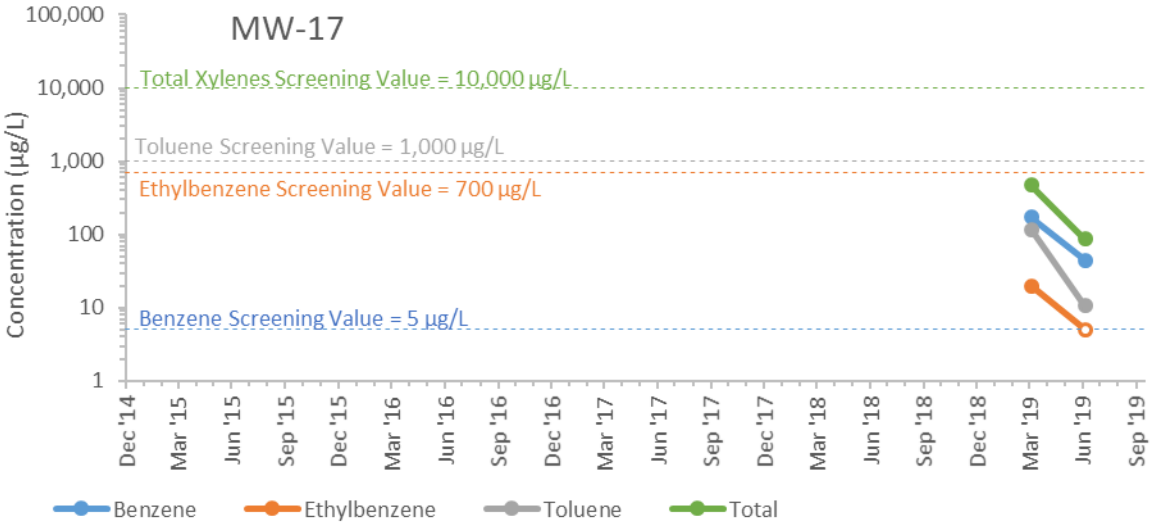
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



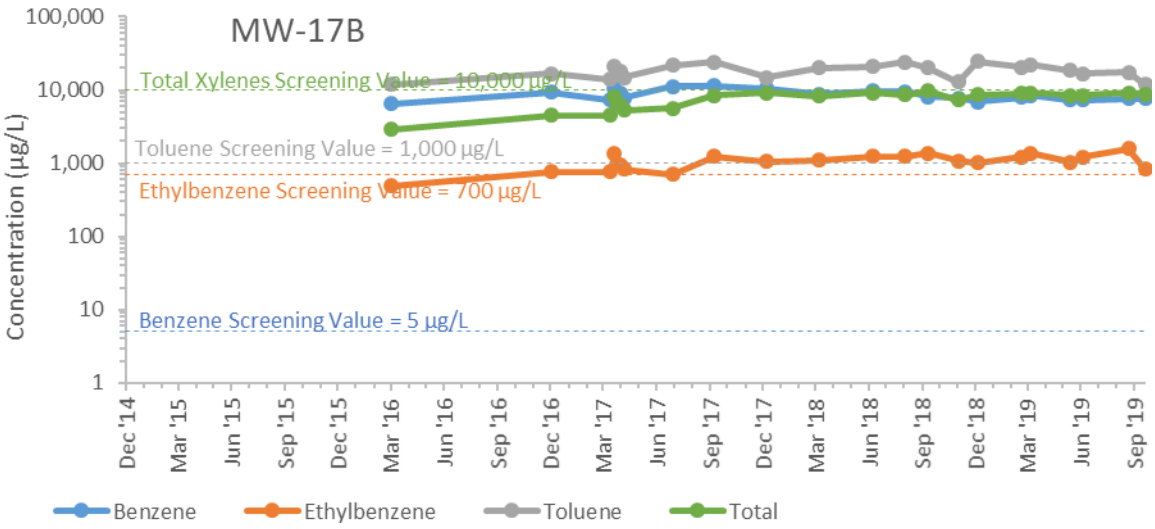
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



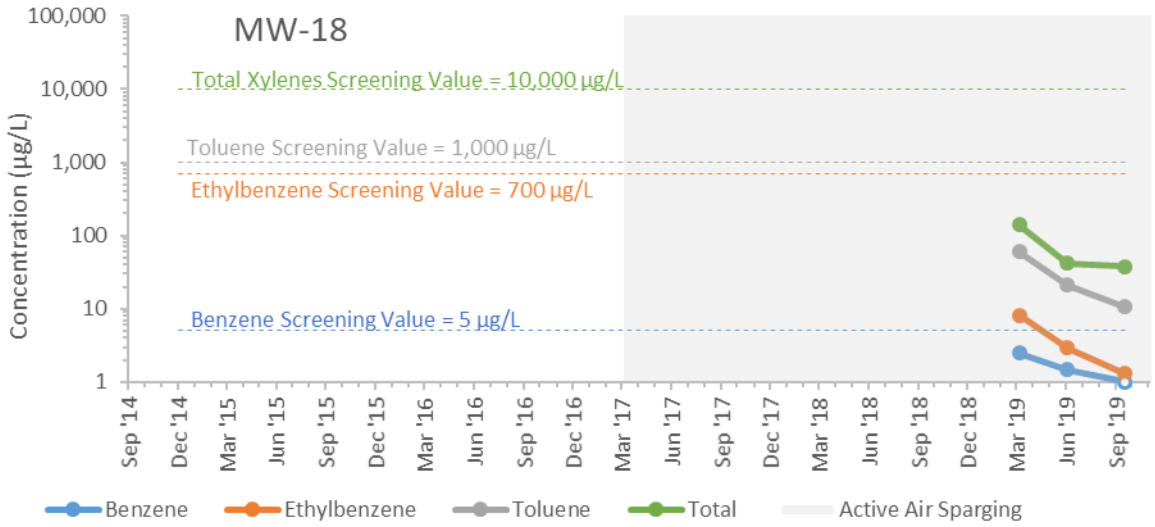
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



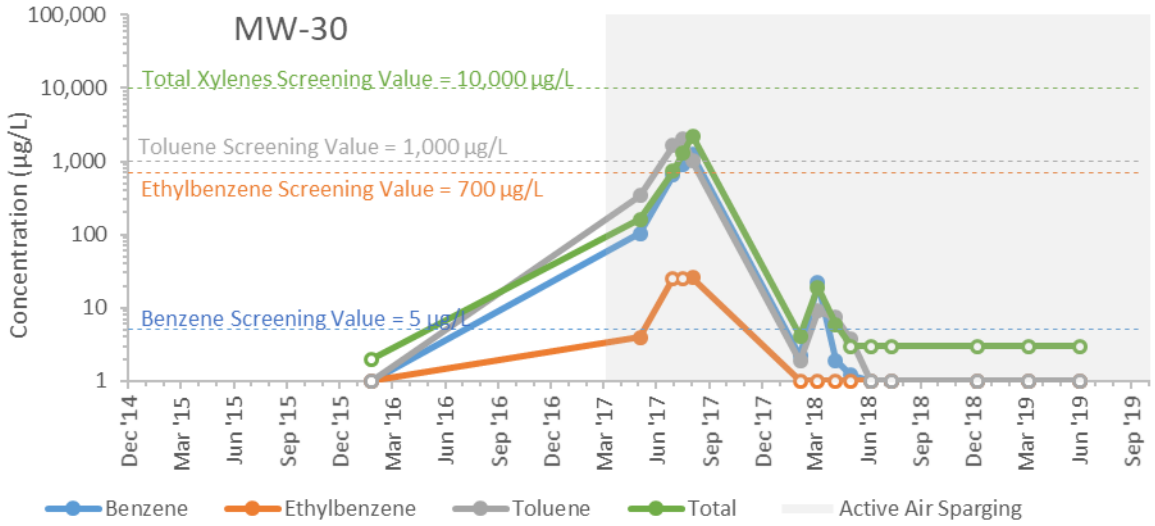
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



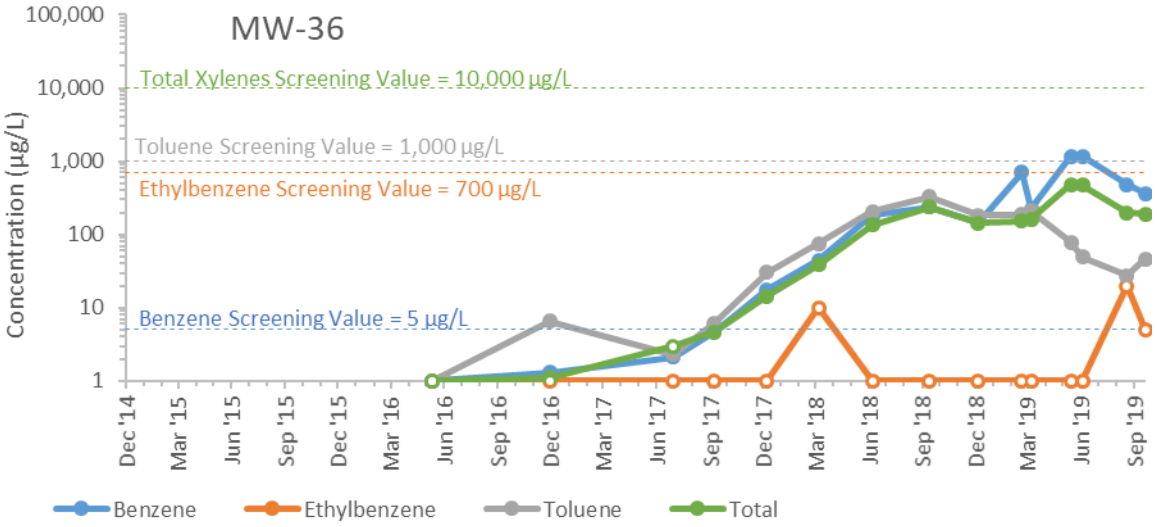
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



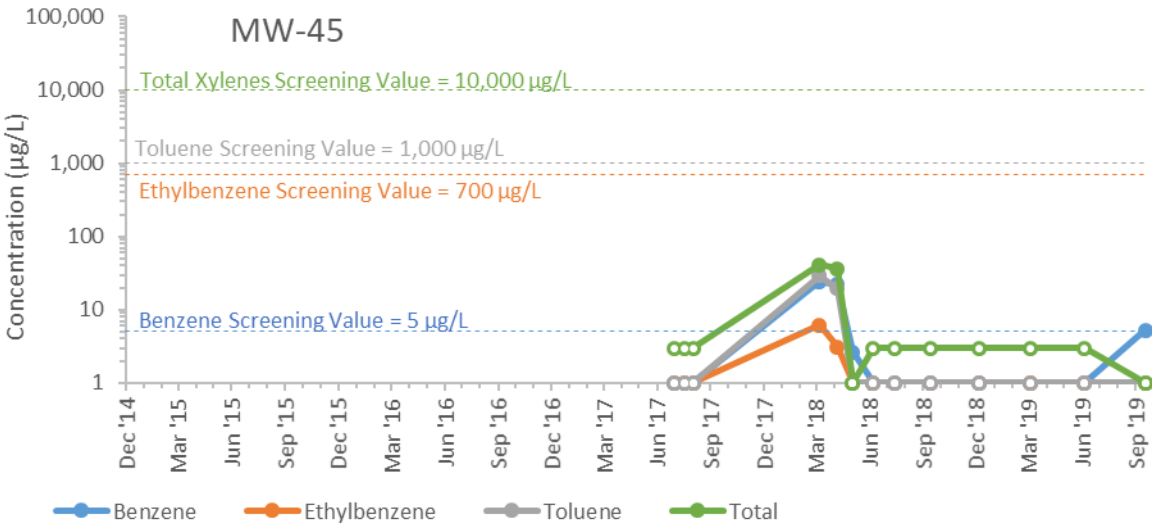
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



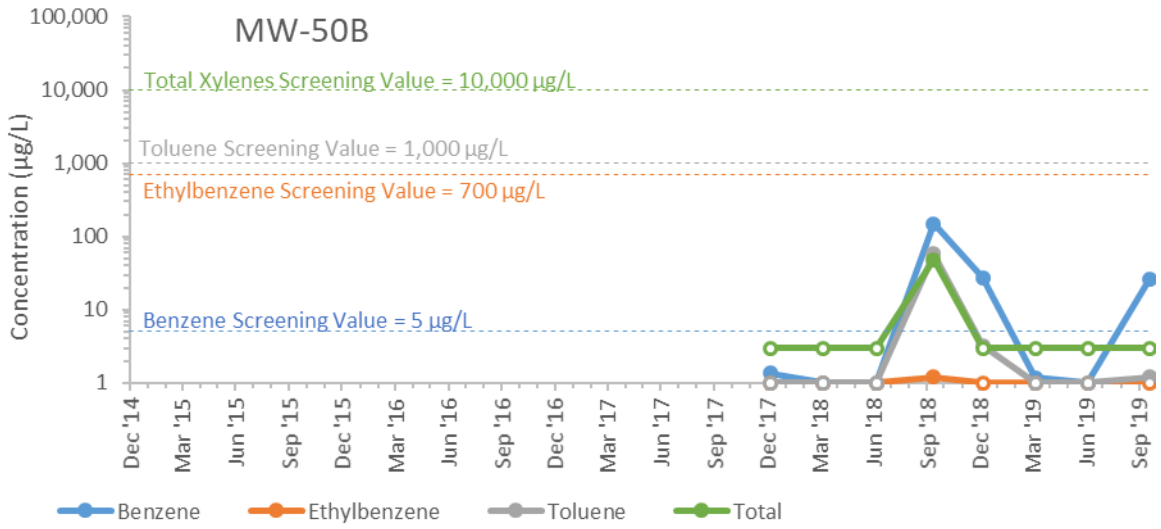
Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

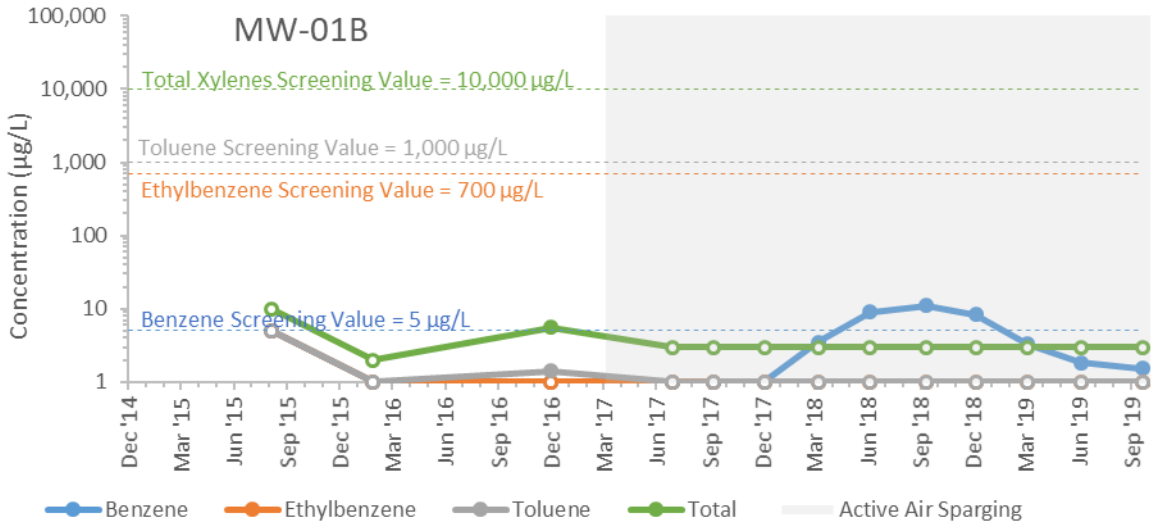


Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

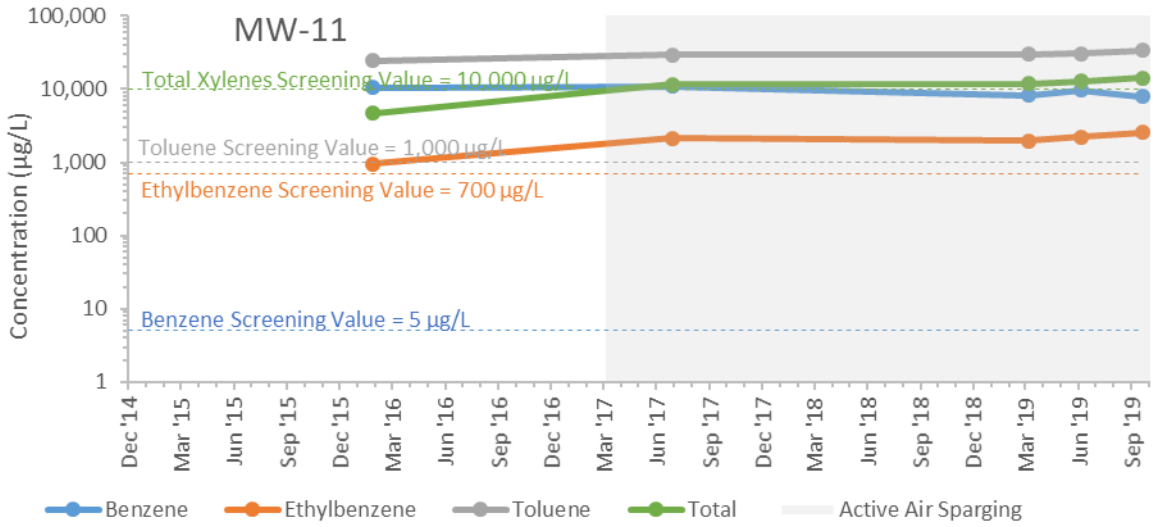


Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

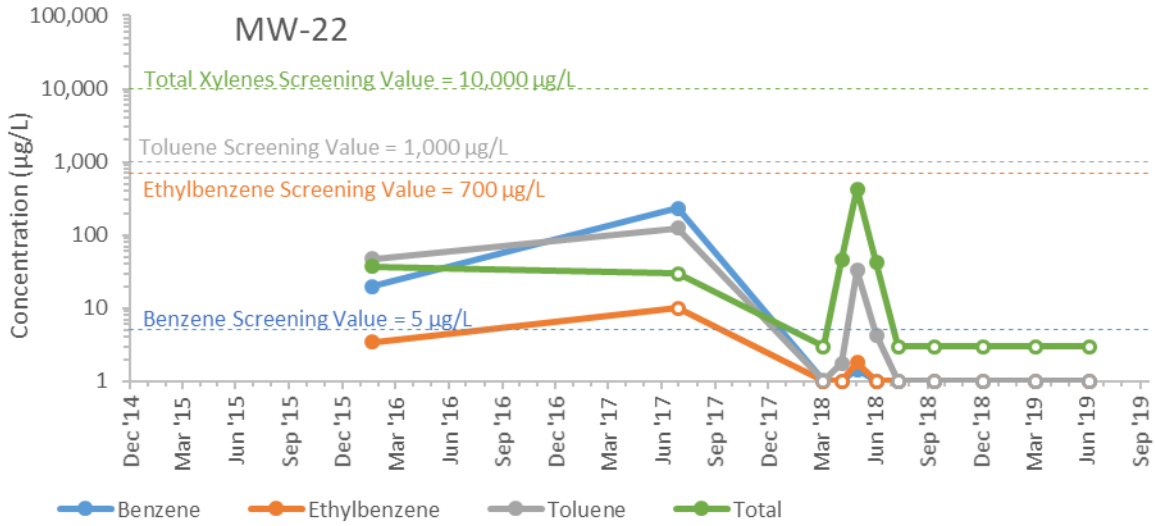
Shallow Bedrock Monitoring Well Trends



Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

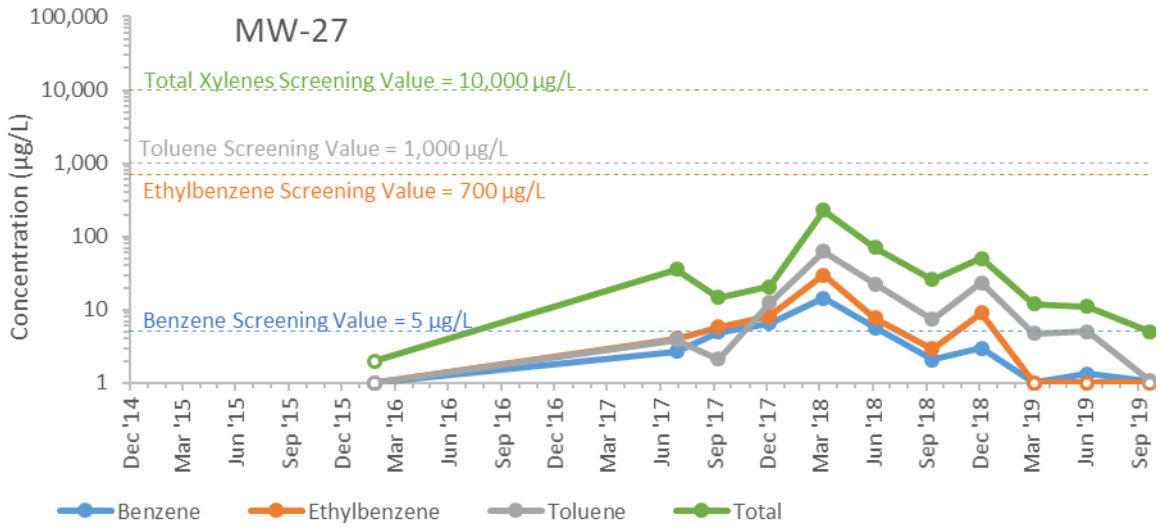


Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.



Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

Attachment C – Groundwater Analytical Trends



Note: Open circles denote that the compound was not detected; non-detects are plotted at the reporting limit.

Attachment D
Analytical Laboratory Reports

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 25, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1119894
Samples Received:	07/18/2019
Project Number:	D3161400.B.PN.GEN.LD
Description:	Lewis Drive Groundwater
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 600 Atlanta, GA 30328

Entire Report Reviewed By:

Jason Romer
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

TABLE OF CONTENTS

MW-46-071719 L1119894-01 GW

Collected by: Melissa Warren | Collected date/time: 07/17/19 15:05 | Received date/time: 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1314866	1	07/23/19 03:40	07/23/19 03:40	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314634	1	07/19/19 21:10	07/19/19 21:10	ZJM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1316034	5	07/24/19 02:14	07/24/19 02:14	ADM	Mt. Juliet, TN

MW-46-D-071719 L1119894-02 GW

Collected by: Melissa Warren | Collected date/time: 07/17/19 15:05 | Received date/time: 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314634	1	07/19/19 21:30	07/19/19 21:30	ZJM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1316034	10	07/24/19 02:34	07/24/19 02:34	ADM	Mt. Juliet, TN

MW-56-071719 L1119894-03 GW

Collected by: Melissa Warren | Collected date/time: 07/17/19 16:40 | Received date/time: 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1314866	1	07/23/19 03:55	07/23/19 03:55	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314634	1	07/19/19 21:50	07/19/19 21:50	ZJM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1316034	5	07/24/19 02:54	07/24/19 02:54	ADM	Mt. Juliet, TN

MW-57-071719 L1119894-04 GW

Collected by: Melissa Warren | Collected date/time: 07/17/19 17:50 | Received date/time: 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1314866	1	07/23/19 04:10	07/23/19 04:10	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314634	1	07/19/19 22:10	07/19/19 22:10	ZJM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1316034	5	07/24/19 03:14	07/24/19 03:14	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1317149	20	07/25/19 12:05	07/25/19 12:05	JAH	Mt. Juliet, TN

FB01-071719 L1119894-05 GW

Collected by: Melissa Warren | Collected date/time: 07/17/19 17:00 | Received date/time: 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314634	1	07/19/19 22:30	07/19/19 22:30	ZJM	Mt. Juliet, TN

TB01-071719 L1119894-06 GW

Collected by: Melissa Warren | Collected date/time: 07/17/19 10:00 | Received date/time: 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314714	1	07/20/19 09:30	07/20/19 09:30	ZJM	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jason Romer
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/23/2019 03:40	WG1314866

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	976		5.00	5	07/24/2019 02:14	WG1316034
Toluene	29.1		1.00	1	07/19/2019 21:10	WG1314634
Ethylbenzene	ND		1.00	1	07/19/2019 21:10	WG1314634
Total Xylenes	237		3.00	1	07/19/2019 21:10	WG1314634
Methyl tert-butyl ether	198		1.00	1	07/19/2019 21:10	WG1314634
Naphthalene	15.5		5.00	1	07/19/2019 21:10	WG1314634
1,2-Dichloroethane	ND		1.00	1	07/19/2019 21:10	WG1314634
(S) Toluene-d8	*93.9*		*80.0-120*		*07/19/2019 21:10*	WG1314634
(S) Toluene-d8	*111*		*80.0-120*		*07/24/2019 02:14*	WG1316034
(S) 4-Bromofluorobenzene	*91.9*		*77.0-126*		*07/19/2019 21:10*	WG1314634
(S) 4-Bromofluorobenzene	*99.9*		*77.0-126*		*07/24/2019 02:14*	WG1316034
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*07/19/2019 21:10*	WG1314634
(S) 1,2-Dichloroethane-d4	*82.7*		*70.0-130*		*07/24/2019 02:14*	WG1316034

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	945		10.0	10	07/24/2019 02:34	WG1316034
Toluene	36.7		1.00	1	07/19/2019 21:30	WG1314634
Ethylbenzene	1.05		1.00	1	07/19/2019 21:30	WG1314634
Total Xylenes	290		3.00	1	07/19/2019 21:30	WG1314634
Methyl tert-butyl ether	175		10.0	10	07/24/2019 02:34	WG1316034
Naphthalene	20.6		5.00	1	07/19/2019 21:30	WG1314634
1,2-Dichloroethane	ND		1.00	1	07/19/2019 21:30	WG1314634
(S) Toluene-d8	*95.8*		*80.0-120*		*07/19/2019 21:30*	WG1314634
(S) Toluene-d8	*108*		*80.0-120*		*07/24/2019 02:34*	WG1316034
(S) 4-Bromofluorobenzene	*95.3*		*77.0-126*		*07/19/2019 21:30*	WG1314634
(S) 4-Bromofluorobenzene	*101*		*77.0-126*		*07/24/2019 02:34*	WG1316034
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*07/19/2019 21:30*	WG1314634
(S) 1,2-Dichloroethane-d4	*85.1*		*70.0-130*		*07/24/2019 02:34*	WG1316034

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/23/2019 03:55	WG1314866

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	549		5.00	5	07/24/2019 02:54	WG1316034
Toluene	8.90		1.00	1	07/19/2019 21:50	WG1314634
Ethylbenzene	ND		1.00	1	07/19/2019 21:50	WG1314634
Total Xylenes	205		3.00	1	07/19/2019 21:50	WG1314634
Methyl tert-butyl ether	146		1.00	1	07/19/2019 21:50	WG1314634
Naphthalene	8.18		5.00	1	07/19/2019 21:50	WG1314634
1,2-Dichloroethane	ND		1.00	1	07/19/2019 21:50	WG1314634
(S) Toluene-d8	*95.6*		*80.0-120*		*07/19/2019 21:50*	WG1314634
(S) Toluene-d8	*109*		*80.0-120*		*07/24/2019 02:54*	WG1316034
(S) 4-Bromofluorobenzene	*95.2*		*77.0-126*		*07/19/2019 21:50*	WG1314634
(S) 4-Bromofluorobenzene	*101*		*77.0-126*		*07/24/2019 02:54*	WG1316034
(S) 1,2-Dichloroethane-d4	*109*		*70.0-130*		*07/19/2019 21:50*	WG1314634
(S) 1,2-Dichloroethane-d4	*85.7*		*70.0-130*		*07/24/2019 02:54*	WG1316034

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/23/2019 04:10	WG1314866

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1330		20.0	20	07/25/2019 12:05	WG1317149
Toluene	22.9		1.00	1	07/19/2019 22:10	WG1314634
Ethylbenzene	3.63		1.00	1	07/19/2019 22:10	WG1314634
Total Xylenes	341		3.00	1	07/19/2019 22:10	WG1314634
Methyl tert-butyl ether	186		5.00	5	07/24/2019 03:14	WG1316034
Naphthalene	19.8		5.00	1	07/19/2019 22:10	WG1314634
1,2-Dichloroethane	ND		1.00	1	07/19/2019 22:10	WG1314634
(S) Toluene-d8	*95.3*		*80.0-120*		*07/19/2019 22:10*	WG1314634
(S) Toluene-d8	*111*		*80.0-120*		*07/24/2019 03:14*	WG1316034
(S) Toluene-d8	*108*		*80.0-120*		*07/25/2019 12:05*	WG1317149
(S) 4-Bromofluorobenzene	*96.0*		*77.0-126*		*07/19/2019 22:10*	WG1314634
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*07/24/2019 03:14*	WG1316034
(S) 4-Bromofluorobenzene	*96.5*		*77.0-126*		*07/25/2019 12:05*	WG1317149
(S) 1,2-Dichloroethane-d4	*110*		*70.0-130*		*07/19/2019 22:10*	WG1314634
(S) 1,2-Dichloroethane-d4	*83.7*		*70.0-130*		*07/24/2019 03:14*	WG1316034
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*07/25/2019 12:05*	WG1317149

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/19/2019 22:30	WG1314634
Toluene	ND		1.00	1	07/19/2019 22:30	WG1314634
Ethylbenzene	ND		1.00	1	07/19/2019 22:30	WG1314634
Total Xylenes	ND		3.00	1	07/19/2019 22:30	WG1314634
Methyl tert-butyl ether	ND		1.00	1	07/19/2019 22:30	WG1314634
Naphthalene	ND		5.00	1	07/19/2019 22:30	WG1314634
1,2-Dichloroethane	ND		1.00	1	07/19/2019 22:30	WG1314634
(S) Toluene-d8	*100*		*80.0-120*		*07/19/2019 22:30*	WG1314634
(S) 4-Bromofluorobenzene	*87.2*		*77.0-126*		*07/19/2019 22:30*	WG1314634
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*07/19/2019 22:30*	WG1314634

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND	J4	50.0	1	07/20/2019 09:30	WG1314714
Benzene	ND		1.00	1	07/20/2019 09:30	WG1314714
Bromochloromethane	ND		1.00	1	07/20/2019 09:30	WG1314714
Bromodichloromethane	ND		1.00	1	07/20/2019 09:30	WG1314714
Bromoform	ND		1.00	1	07/20/2019 09:30	WG1314714
Bromomethane	ND		5.00	1	07/20/2019 09:30	WG1314714
Carbon disulfide	ND		1.00	1	07/20/2019 09:30	WG1314714
Carbon tetrachloride	ND		1.00	1	07/20/2019 09:30	WG1314714
Chlorobenzene	ND		1.00	1	07/20/2019 09:30	WG1314714
Chlorodibromomethane	ND		1.00	1	07/20/2019 09:30	WG1314714
Chloroethane	ND		5.00	1	07/20/2019 09:30	WG1314714
Chloroform	ND		5.00	1	07/20/2019 09:30	WG1314714
Chloromethane	ND	J4	2.50	1	07/20/2019 09:30	WG1314714
Cyclohexane	ND		1.00	1	07/20/2019 09:30	WG1314714
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/20/2019 09:30	WG1314714
1,2-Dibromoethane	ND		1.00	1	07/20/2019 09:30	WG1314714
1,2-Dichlorobenzene	ND		1.00	1	07/20/2019 09:30	WG1314714
1,3-Dichlorobenzene	ND		1.00	1	07/20/2019 09:30	WG1314714
1,4-Dichlorobenzene	ND		1.00	1	07/20/2019 09:30	WG1314714
Dichlorodifluoromethane	ND	J4	5.00	1	07/20/2019 09:30	WG1314714
1,1-Dichloroethane	ND		1.00	1	07/20/2019 09:30	WG1314714
1,2-Dichloroethane	ND		1.00	1	07/20/2019 09:30	WG1314714
1,1-Dichloroethene	ND		1.00	1	07/20/2019 09:30	WG1314714
cis-1,2-Dichloroethene	ND		1.00	1	07/20/2019 09:30	WG1314714
trans-1,2-Dichloroethene	ND		1.00	1	07/20/2019 09:30	WG1314714
1,2-Dichloropropane	ND		1.00	1	07/20/2019 09:30	WG1314714
cis-1,3-Dichloropropene	ND		1.00	1	07/20/2019 09:30	WG1314714
trans-1,3-Dichloropropene	ND		1.00	1	07/20/2019 09:30	WG1314714
Ethylbenzene	ND		1.00	1	07/20/2019 09:30	WG1314714
2-Hexanone	ND		10.0	1	07/20/2019 09:30	WG1314714
Isopropylbenzene	ND		1.00	1	07/20/2019 09:30	WG1314714
2-Butanone (MEK)	ND		10.0	1	07/20/2019 09:30	WG1314714
Methyl Acetate	ND		20.0	1	07/20/2019 09:30	WG1314714
Methyl Cyclohexane	ND		1.00	1	07/20/2019 09:30	WG1314714
Methylene Chloride	ND		5.00	1	07/20/2019 09:30	WG1314714
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/20/2019 09:30	WG1314714
Methyl tert-butyl ether	ND		1.00	1	07/20/2019 09:30	WG1314714
Styrene	ND		1.00	1	07/20/2019 09:30	WG1314714
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/20/2019 09:30	WG1314714
Tetrachloroethene	ND		1.00	1	07/20/2019 09:30	WG1314714
Toluene	ND		1.00	1	07/20/2019 09:30	WG1314714
1,2,3-Trichlorobenzene	ND		1.00	1	07/20/2019 09:30	WG1314714
1,2,4-Trichlorobenzene	ND		1.00	1	07/20/2019 09:30	WG1314714
1,1,1-Trichloroethane	ND		1.00	1	07/20/2019 09:30	WG1314714
1,1,2-Trichloroethane	ND		1.00	1	07/20/2019 09:30	WG1314714
Trichloroethene	ND		1.00	1	07/20/2019 09:30	WG1314714
Trichlorofluoromethane	ND		5.00	1	07/20/2019 09:30	WG1314714
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/20/2019 09:30	WG1314714
Vinyl chloride	ND		1.00	1	07/20/2019 09:30	WG1314714
Xylenes, Total	ND		3.00	1	07/20/2019 09:30	WG1314714
(S) Toluene-d8	*107*		*80.0-120*		*07/20/2019 09:30*	WG1314714
(S) 4-Bromofluorobenzene	*98.1*		*77.0-126*		*07/20/2019 09:30*	WG1314714
(S) 1,2-Dichloroethane-d4	*92.0*		*70.0-130*		*07/20/2019 09:30*	WG1314714

Method Blank (MB)

(MB) R3433129-1 07/22/19 19:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	U		77.4	5000

L1119586-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1119586-02 07/22/19 20:57 • (DUP) R3433129-3 07/22/19 21:12

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	75900	75800	1	0.120		15

L1119894-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1119894-04 07/23/19 04:10 • (DUP) R3433129-8 07/23/19 04:25

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	ND	0.000	1	0.000		15

Laboratory Control Sample (LCS)

(LCS) R3433129-2 07/22/19 20:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	41000	102	80.0-120	

L1119586-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1119586-05 07/22/19 21:57 • (MS) R3433129-4 07/22/19 22:12 • (MSD) R3433129-5 07/22/19 22:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	43000	91600	91900	97.1	97.7	1	80.0-120			0.359	15

L1119586-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1119586-07 07/22/19 23:26 • (MS) R3433129-6 07/22/19 23:41 • (MSD) R3433129-7 07/22/19 23:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	56600	104000	104000	94.0	95.4	1	80.0-120	E	E	0.660	15

Method Blank (MB)

(MB) R3433299-4 07/19/19 20:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	0.424	J	0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*97.7*			*80.0-120*
(S) 4-Bromofluorobenzene	*87.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433299-2 07/19/19 19:09 • (LCSD) R3433299-3 07/19/19 19:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	25.4	25.6	102	102	70.0-130			0.531	20
1,2-Dichloroethane	25.0	27.6	27.8	110	111	70.0-130			0.784	20
Ethylbenzene	25.0	24.1	22.4	96.5	89.5	70.0-130			7.50	20
Methyl tert-butyl ether	25.0	25.0	24.8	100	99.3	70.0-130			0.765	20
Naphthalene	25.0	21.9	22.6	87.8	90.4	70.0-130			2.95	20
Toluene	25.0	22.9	21.0	91.6	84.0	70.0-130			8.71	20
Xylenes, Total	75.0	72.5	67.2	96.7	89.6	70.0-130			7.59	20
(S) Toluene-d8				*94.2*	*86.6*	*80.0-120*				
(S) 4-Bromofluorobenzene				*98.4*	*87.8*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*120*	*125*	*70.0-130*				

Method Blank (MB)

(MB) R3433458-3 07/20/19 03:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Benzene	U		0.331	1.00
Bromochloromethane	U		0.520	1.00
Bromodichloromethane	U		0.380	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Cyclohexane	U		0.390	1.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Isopropylbenzene	U		0.326	1.00
Methyl Acetate	U		4.30	20.0
Methyl Cyclohexane	U		0.380	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Styrene	U		0.307	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00

Method Blank (MB)

(MB) R3433458-3 07/20/19 03:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,2,3-Trichlorobenzene	0.434	J	0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*91.0*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433458-1 07/20/19 02:35 • (LCSD) R3433458-2 07/20/19 02:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	25.0	27.8	29.1	111	116	70.0-130			4.50	20
Carbon disulfide	25.0	25.1	26.0	100	104	70.0-130			3.72	20
Acetone	125	157	171	126	137	70.0-130		J4	8.24	27
Benzene	25.0	23.2	24.0	92.7	95.8	70.0-130			3.30	20
Bromodichloromethane	25.0	21.9	22.5	87.6	90.1	70.0-130			2.79	20
Bromoform	25.0	27.6	28.2	110	113	70.0-130			1.96	20
Bromomethane	25.0	23.4	24.7	93.5	98.9	70.0-130			5.67	25
Carbon tetrachloride	25.0	23.8	24.6	95.4	98.2	70.0-130			2.91	20
Chlorobenzene	25.0	26.2	27.3	105	109	70.0-130			4.11	20
Chlorodibromomethane	25.0	27.2	27.9	109	112	70.0-130			2.42	20
Chloroethane	25.0	24.9	26.0	99.6	104	70.0-130			4.14	20
Chloroform	25.0	22.7	23.4	90.9	93.5	70.0-130			2.81	20
Chloromethane	25.0	32.0	32.9	128	131	70.0-130		J4	2.73	20
1,2-Dibromo-3-Chloropropane	25.0	23.3	25.1	93.3	101	70.0-130			7.49	20
1,2-Dibromoethane	25.0	26.0	26.7	104	107	70.0-130			2.96	20
cis-1,3-Dichloropropene	25.0	23.7	24.3	94.6	97.2	70.0-130			2.69	20
1,2-Dichlorobenzene	25.0	23.1	24.2	92.6	96.7	70.0-130			4.41	20
trans-1,3-Dichloropropene	25.0	22.7	23.8	90.9	95.2	70.0-130			4.59	20
1,3-Dichlorobenzene	25.0	24.7	25.8	98.7	103	70.0-130			4.38	20
1,4-Dichlorobenzene	25.0	24.1	25.1	96.5	101	70.0-130			4.06	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433458-1 07/20/19 02:35 • (LCSD) R3433458-2 07/20/19 02:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dichlorodifluoromethane	25.0	33.6	33.1	134	133	70.0-130	J4	J4	1.43	20
1,1-Dichloroethane	25.0	24.4	24.9	97.4	99.8	70.0-130			2.40	20
1,2-Dichloroethane	25.0	21.0	21.4	83.9	85.7	70.0-130			2.10	20
1,1-Dichloroethene	25.0	23.8	24.7	95.3	98.7	70.0-130			3.56	20
2-Hexanone	125	115	118	92.1	94.0	70.0-130			2.03	20
cis-1,2-Dichloroethene	25.0	24.2	25.0	96.9	100	70.0-130			3.32	20
trans-1,2-Dichloroethene	25.0	23.5	24.3	94.0	97.3	70.0-130			3.43	20
1,2-Dichloropropane	25.0	25.7	26.5	103	106	70.0-130			2.91	20
Ethylbenzene	25.0	25.0	25.9	99.8	103	70.0-130			3.54	20
Isopropylbenzene	25.0	25.1	26.0	100	104	70.0-130			3.75	20
1,1,2-Trichlorotrifluoroethane	25.0	23.7	24.5	94.8	97.9	70.0-130			3.25	20
2-Butanone (MEK)	125	125	129	99.6	103	70.0-130			3.59	20
Methylene Chloride	25.0	24.1	25.0	96.3	99.9	70.0-130			3.69	20
4-Methyl-2-pentanone (MIBK)	125	114	115	91.0	92.3	70.0-130			1.40	20
Methyl tert-butyl ether	25.0	23.5	23.8	94.2	95.1	70.0-130			1.02	20
Styrene	25.0	25.5	26.4	102	105	70.0-130			3.21	20
1,1,2,2-Tetrachloroethane	25.0	26.0	26.7	104	107	70.0-130			2.69	20
Tetrachloroethene	25.0	28.4	29.6	114	119	70.0-130			4.33	20
Toluene	25.0	25.4	26.3	102	105	70.0-130			3.40	20
1,2,3-Trichlorobenzene	25.0	24.5	26.8	97.8	107	70.0-130			9.00	20
1,2,4-Trichlorobenzene	25.0	25.2	26.9	101	108	70.0-130			6.45	20
1,1,1-Trichloroethane	25.0	22.8	23.3	91.2	93.0	70.0-130			2.03	20
1,1,2-Trichloroethane	25.0	25.9	26.4	104	106	70.0-130			1.88	20
Trichloroethene	25.0	25.8	27.0	103	108	70.0-130			4.44	20
Trichlorofluoromethane	25.0	24.6	25.0	98.6	100	70.0-130			1.61	20
Vinyl chloride	25.0	24.9	25.6	99.5	103	70.0-130			3.04	20
Xylenes, Total	75.0	75.7	78.4	101	105	70.0-130			3.50	20
(S) Toluene-d8				*108*	*108*	*80.0-120*				
(S) 4-Bromofluorobenzene				*99.5*	*99.4*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*96.1*	*95.9*	*70.0-130*				

Method Blank (MB)

(MB) R3433741-3 07/23/19 18:57

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Benzene	U		0.331	1.00
Methyl tert-butyl ether	U		0.367	1.00
(S) Toluene-d8	*109*			*80.0-120*
(S) 4-Bromofluorobenzene	*99.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*87.4*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433741-1 07/23/19 17:57 • (LCSD) R3433741-2 07/23/19 18:17

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Benzene	25.0	22.8	23.6	91.2	94.3	70.0-130			3.32	20
Methyl tert-butyl ether	25.0	24.4	22.9	97.8	91.8	70.0-130			6.33	20
(S) Toluene-d8				*108*	*108*	*80.0-120*				
(S) 4-Bromofluorobenzene				*100*	*98.9*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*92.7*	*93.1*	*70.0-130*				

Method Blank (MB)

(MB) R3434222-4 07/25/19 11:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
(S) Toluene-d8	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.0*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434222-1 07/25/19 10:06 • (LCSD) R3434222-2 07/25/19 10:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	23.1	23.0	92.3	92.0	70.0-130			0.284	20
(S) Toluene-d8				*108*	*106*	*80.0-120*				
(S) 4-Bromofluorobenzene				*99.5*	*99.3*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*108*	*107*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

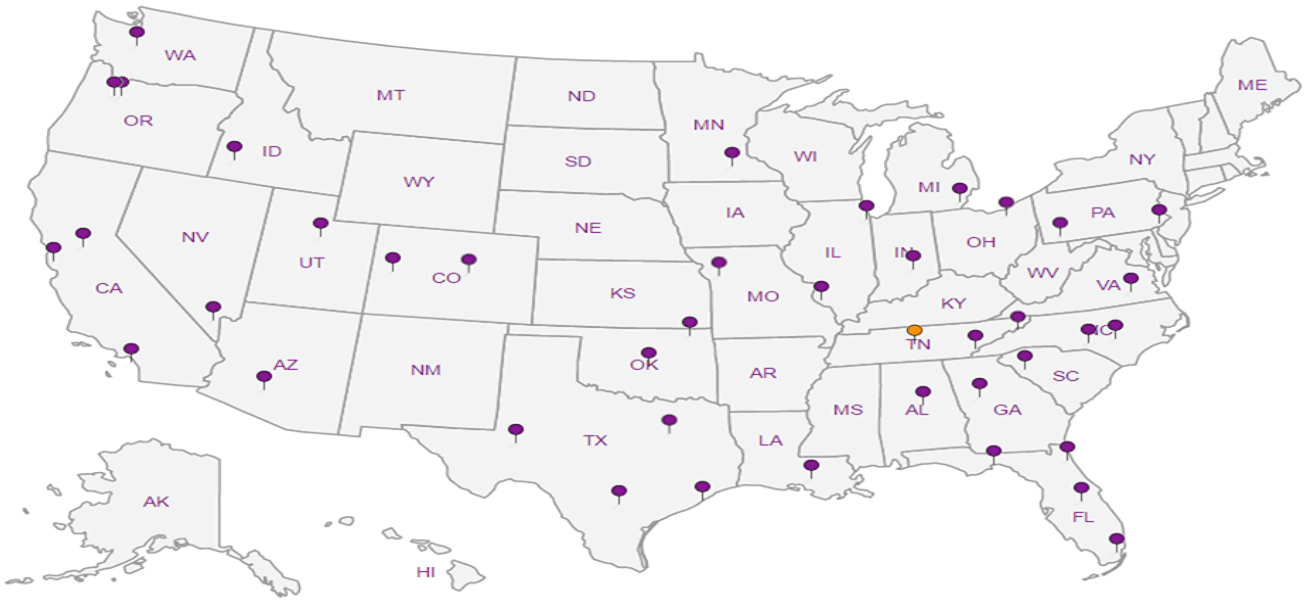
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Chain of Custody

Page 1 of 1

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # L1191894

B034

Template: T130277
Prelogin: P695785
TSR: 526 - Chris McCord
PB:
Shipped Via: FedEx Ground

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 600
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Report to: Bethany Garvey

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Phone: 770-604-9182
Fax:

Client Project # D3161400.B.PN.GEN.LDOMR.GW

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARREN

Site/Facility ID # LEWIS DRIVE

P.O #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	*NITRATE,SULFATE* 125mlHDPE-NoPres	ALK,CO2 125mlHDPE-NoPres	RSK175 40mlAmb HCl	V8260BTEXMNSC 40mlAmb-HCl	V8260TCLSC-TB 40mlAmb-NoPres-Blk	SULFATE BY USEPA METHOD 300.0 OR 9056	Remarks	Sample # (lab only)
						Pres Chk				HCl	HCl	HCl		
MW-46-071719	GRAB	GW	NA	07/17/19	1505	3/4				X		X		-01
MW-46-D-071719		GW			1505	3				X				-02
MW-56-071719		GW			1640	3/4				X		X		-03
MW-57-071719		GW			1750	3/4				X		X		-04
FB01-071719		GW			1700	3				X			DISTILLED	-05
TB01-071719		TB			1000	1					X		TRIP BLANK	-06

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *NITRATE/SULFATE* has a 48hr hold time.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 4686 6469 1315

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 1.2 °C Bottles Received: 14

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

RAD SCREEN: <0.5 mR/hr

	Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	Melissa Warren	07/17/19 1900	1900	
	Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Date: 7-18-19 Time: 8:45

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 30, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1121169
Samples Received:	07/19/2019
Project Number:	D3161400.B.PN.GEN.LD
Description:	Lewis Drive Groundwater
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 600 Atlanta, GA 30328

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

TABLE OF CONTENTS

MW-38-071819 L1121169-01 GW

Collected by: Melissa Warren
Collected date/time: 07/18/19 11:10
Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/26/19 00:51	07/26/19 00:51	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315953	1	07/23/19 20:06	07/23/19 20:06	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318260	10	07/26/19 15:35	07/26/19 15:35	JHH	Mt. Juliet, TN

MW-37-071819 L1121169-02 GW

Collected by: Melissa Warren
Collected date/time: 07/18/19 09:45
Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/26/19 01:07	07/26/19 01:07	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1316358	1	07/25/19 14:00	07/25/19 14:00	JHH	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/26/2019 00:51	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1260		10.0	10	07/26/2019 15:35	WG1318260
Toluene	3.27		1.00	1	07/23/2019 20:06	WG1315953
Ethylbenzene	ND		1.00	1	07/23/2019 20:06	WG1315953
Total Xylenes	308		30.0	10	07/26/2019 15:35	WG1318260
Methyl tert-butyl ether	104		1.00	1	07/23/2019 20:06	WG1315953
Naphthalene	16.2		5.00	1	07/23/2019 20:06	WG1315953
1,2-Dichloroethane	ND		1.00	1	07/23/2019 20:06	WG1315953
(S) Toluene-d8	*93.3*		*80.0-120*		*07/23/2019 20:06*	WG1315953
(S) Toluene-d8	*108*		*80.0-120*		*07/26/2019 15:35*	WG1318260
(S) 4-Bromofluorobenzene	*95.0*		*77.0-126*		*07/23/2019 20:06*	WG1315953
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*07/26/2019 15:35*	WG1318260
(S) 1,2-Dichloroethane-d4	*99.4*		*70.0-130*		*07/23/2019 20:06*	WG1315953
(S) 1,2-Dichloroethane-d4	*88.4*		*70.0-130*		*07/26/2019 15:35*	WG1318260

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/26/2019 01:07	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/25/2019 14:00	WG1316358
Toluene	ND		1.00	1	07/25/2019 14:00	WG1316358
Ethylbenzene	ND		1.00	1	07/25/2019 14:00	WG1316358
Total Xylenes	ND		3.00	1	07/25/2019 14:00	WG1316358
Methyl tert-butyl ether	ND		1.00	1	07/25/2019 14:00	WG1316358
Naphthalene	ND		5.00	1	07/25/2019 14:00	WG1316358
1,2-Dichloroethane	ND		1.00	1	07/25/2019 14:00	WG1316358
(S) Toluene-d8	*102*		*80.0-120*		*07/25/2019 14:00*	WG1316358
(S) 4-Bromofluorobenzene	*98.5*		*77.0-126*		*07/25/2019 14:00*	WG1316358
(S) 1,2-Dichloroethane-d4	*109*		*70.0-130*		*07/25/2019 14:00*	WG1316358

Method Blank (MB)

(MB) R3434476-1 07/25/19 14:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	250	J	77.4	5000

L1120363-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120363-01 07/25/19 15:33 • (DUP) R3434476-3 07/25/19 15:49

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	ND	357	1	0.000		15

L1121169-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1121169-02 07/26/19 01:07 • (DUP) R3434476-6 07/26/19 01:23

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	ND	465	1	0.000		15

Laboratory Control Sample (LCS)

(LCS) R3434476-2 07/25/19 14:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	39000	97.5	80.0-120	

L1120363-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120363-01 07/25/19 15:33 • (MS) R3434476-4 07/25/19 16:05 • (MSD) R3434476-5 07/25/19 16:22

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	ND	50300	50000	100	99.5	1	80.0-120			0.486	15

L1121169-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1121169-02 07/26/19 01:07 • (MS) R3434476-7 07/26/19 01:40

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	ND	50100	99.5	1	80.0-120	

Method Blank (MB)

(MB) R3433512-3 07/23/19 10:27

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
(S) Toluene-d8	*92.9*			*80.0-120*
(S) 4-Bromofluorobenzene	*93.5*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3433512-1 07/23/19 09:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,2-Dichloroethane	25.0	27.7	111	70.0-130	
Ethylbenzene	25.0	22.3	89.2	70.0-130	
Methyl tert-butyl ether	25.0	25.6	102	70.0-130	
Naphthalene	25.0	24.6	98.5	70.0-130	
Toluene	25.0	21.4	85.6	70.0-130	
(S) Toluene-d8			*88.2*	*80.0-120*	
(S) 4-Bromofluorobenzene			*94.7*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*119*	*70.0-130*	

Method Blank (MB)

(MB) R3434714-3 07/25/19 12:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*97.1*			*80.0-120*
(S) 4-Bromofluorobenzene	*99.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3434714-2 07/25/19 10:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	28.3	113	70.0-130	
1,2-Dichloroethane	25.0	30.0	120	70.0-130	
Ethylbenzene	25.0	23.3	93.2	70.0-130	
Methyl tert-butyl ether	25.0	27.2	109	70.0-130	
Naphthalene	25.0	21.9	87.6	70.0-130	
Toluene	25.0	23.1	92.5	70.0-130	
Xylenes, Total	75.0	71.2	94.9	70.0-130	
(S) Toluene-d8			*86.4*	*80.0-120*	
(S) 4-Bromofluorobenzene			*92.2*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*120*	*70.0-130*	

Method Blank (MB)

(MB) R3434792-2 07/26/19 11:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*107*			*80.0-120*
(S) 4-Bromofluorobenzene	*101*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3434792-1 07/26/19 10:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	24.4	97.5	70.0-130	
Xylenes, Total	75.0	76.5	102	70.0-130	
(S) Toluene-d8			*105*	*80.0-120*	
(S) 4-Bromofluorobenzene			*103*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*102*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

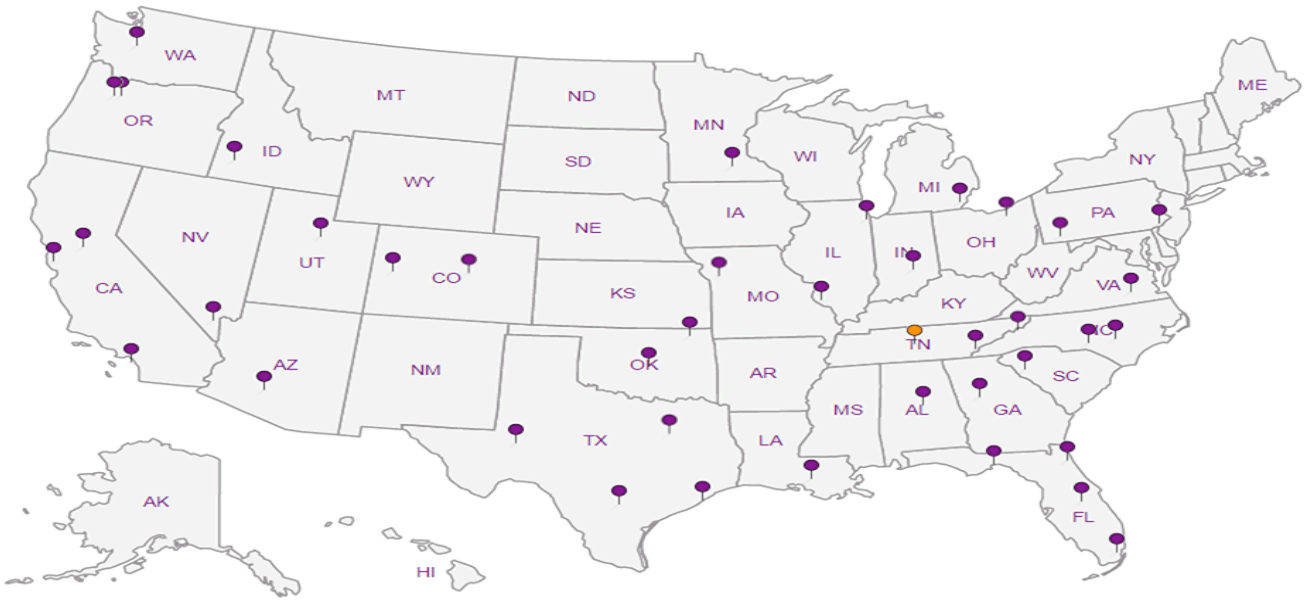
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 600
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Report to: Bethany Garvey

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Phone: 770-604-9182
Fax:

Client Project # D3161400.B.PN.GEN LDOMR.GW

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARREN

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	Sulfate by USEPA Method 300.0 or 9056								Remarks	Sample # (lab only)
MW-38-071819	GRAB	GW	NA	07/18/19	1110	3	X											-01
MW-37-071819	GRAB	GW	NA	07/18/19	0945	3	X											-02
		GW				3	X											
		GW				3	X											
		GW				3	X											
		GW				3	X											
		GW				3	X											
		GW				3	X											
		GW				3	X											
		GW				3	X											

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L1121169

Table #

Acctnum: KINCH2MGA
Template: T131319
Prelogin: P708636
TSR: 526 - Chris McCord
PB:

Shipped Via: FedEX Standard

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXMNSC = BTEX,MTBE,Naphthalene,1,2-DCA.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N

	Date:	Time:		
Relinquished by: (Signature)	07/18/19	1900	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by: (Signature)			Received by: (Signature)	Temp: 4.1 °C 2.6±0=2.6 Bottles Received: 6
Relinquished by: (Signature)			Received for lab by: (Signature)	Date: 7/19/19 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Kelsey Stephenson

Pace Analytical®
National Center for Testing & Innovation

Login #: 1121169	Client: KINCH2MGA	Date:07/19	Evaluated by:Kelsey S

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courier
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:Lexxi R
	Broken container:		Chain of Custody is missing		Date/Time:07/19/19 0845
	Sufficient sample remains				Temp./Cont. Rec./pH:2.2/ 13
					Carrier:Fedex
					Tracking#4686 6469 1326

Login Comments:Project: Lewis Drive Groundwater Project #: KINCH2MGA-LEWIS12 AND Project: Lewis Drive Surface Water
Received 1 250ml-nopres per id
Please see attached list written by unpacker for IDs and times.

Client informed by:		Call		Email	X	Voice Mail		Date: 7/24/19	Time: 1235
TSR Initials: JCR	Client Contact: Bethany Garvey								

Login Instructions:
These should have arrived yesterday, 07/23. Please add containers and SULFATE analysis to L1120363-01 thru -11 and L1121169-01/-02

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

August 27, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1130819
Samples Received:	08/20/2019
Project Number:	D3161400
Description:	Lewis Drive Groundwater
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 500 Atlanta, GA 30328

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

TABLE OF CONTENTS

MW-39-081919 L1130819-01 GW

Collected by: Bethany Garvey | Collected date/time: 08/19/19 14:35 | Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334277	1	08/24/19 11:46	08/24/19 11:46	JCP	Mt. Juliet, TN

MW-52-081919 L1130819-02 GW

Collected by: Bethany Garvey | Collected date/time: 08/19/19 15:35 | Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334277	1	08/24/19 12:07	08/24/19 12:07	JCP	Mt. Juliet, TN

MW-51-081919 L1130819-03 GW

Collected by: Bethany Garvey | Collected date/time: 08/19/19 15:40 | Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334277	1	08/24/19 12:30	08/24/19 12:30	JCP	Mt. Juliet, TN

MW-36-081919 L1130819-04 GW

Collected by: Bethany Garvey | Collected date/time: 08/19/19 15:55 | Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334277	20	08/24/19 12:51	08/24/19 12:51	JCP	Mt. Juliet, TN

MW-55-081919 L1130819-05 GW

Collected by: Bethany Garvey | Collected date/time: 08/19/19 16:00 | Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334277	1	08/24/19 13:13	08/24/19 13:13	JCP	Mt. Juliet, TN

MW-53-081919 L1130819-06 GW

Collected by: Bethany Garvey | Collected date/time: 08/19/19 15:10 | Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334277	1	08/24/19 13:35	08/24/19 13:35	JCP	Mt. Juliet, TN

MW-54-081919 L1130819-07 GW

Collected by: Bethany Garvey | Collected date/time: 08/19/19 15:20 | Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334277	1	08/24/19 13:57	08/24/19 13:57	JCP	Mt. Juliet, TN

MW-26-081919 L1130819-08 GW

Collected by: Bethany Garvey | Collected date/time: 08/19/19 13:50 | Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334277	1	08/24/19 14:19	08/24/19 14:19	JCP	Mt. Juliet, TN

MW-41-081919 L1130819-10 GW

Collected by: Bethany Garvey
Collected date/time: 08/19/19 14:30
Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334277	1	08/24/19 14:41	08/24/19 14:41	JCP	Mt. Juliet, TN

FB01-081919 L1130819-12 GW

Collected by: Bethany Garvey
Collected date/time: 08/19/19 16:05
Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 09:12	08/25/19 09:12	JHH	Mt. Juliet, TN

TB01-081919 L1130819-13 GW

Collected by: Bethany Garvey
Collected date/time: 08/19/19 00:00
Received date/time: 08/20/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 09:32	08/25/19 09:32	JHH	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Project Manager

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	10.9		1.00	1	08/24/2019 11:46	WG1334277
Toluene	ND		1.00	1	08/24/2019 11:46	WG1334277
Ethylbenzene	ND		1.00	1	08/24/2019 11:46	WG1334277
Total Xylenes	5.35		3.00	1	08/24/2019 11:46	WG1334277
Methyl tert-butyl ether	162		1.00	1	08/24/2019 11:46	WG1334277
Naphthalene	ND		5.00	1	08/24/2019 11:46	WG1334277
1,2-Dichloroethane	ND		1.00	1	08/24/2019 11:46	WG1334277
(S) Toluene-d8	*105*		*80.0-120*		*08/24/2019 11:46*	WG1334277
(S) 4-Bromofluorobenzene	*95.8*		*77.0-126*		*08/24/2019 11:46*	WG1334277
(S) 1,2-Dichloroethane-d4	*87.5*		*70.0-130*		*08/24/2019 11:46*	WG1334277

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/24/2019 12:07	WG1334277
Toluene	ND		1.00	1	08/24/2019 12:07	WG1334277
Ethylbenzene	ND		1.00	1	08/24/2019 12:07	WG1334277
Total Xylenes	ND		3.00	1	08/24/2019 12:07	WG1334277
Methyl tert-butyl ether	2.01		1.00	1	08/24/2019 12:07	WG1334277
Naphthalene	ND		5.00	1	08/24/2019 12:07	WG1334277
1,2-Dichloroethane	ND		1.00	1	08/24/2019 12:07	WG1334277
(S) Toluene-d8	*108*		*80.0-120*		*08/24/2019 12:07*	WG1334277
(S) 4-Bromofluorobenzene	*96.3*		*77.0-126*		*08/24/2019 12:07*	WG1334277
(S) 1,2-Dichloroethane-d4	*91.9*		*70.0-130*		*08/24/2019 12:07*	WG1334277

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/24/2019 12:30	WG1334277
Toluene	ND		1.00	1	08/24/2019 12:30	WG1334277
Ethylbenzene	ND		1.00	1	08/24/2019 12:30	WG1334277
Total Xylenes	ND		3.00	1	08/24/2019 12:30	WG1334277
Methyl tert-butyl ether	ND		1.00	1	08/24/2019 12:30	WG1334277
Naphthalene	ND		5.00	1	08/24/2019 12:30	WG1334277
1,2-Dichloroethane	ND		1.00	1	08/24/2019 12:30	WG1334277
(S) Toluene-d8	*108*		*80.0-120*		*08/24/2019 12:30*	WG1334277
(S) 4-Bromofluorobenzene	*98.5*		*77.0-126*		*08/24/2019 12:30*	WG1334277
(S) 1,2-Dichloroethane-d4	*90.9*		*70.0-130*		*08/24/2019 12:30*	WG1334277

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	484		20.0	20	08/24/2019 12:51	WG1334277
Toluene	27.5		20.0	20	08/24/2019 12:51	WG1334277
Ethylbenzene	ND		20.0	20	08/24/2019 12:51	WG1334277
Total Xylenes	197		60.0	20	08/24/2019 12:51	WG1334277
Methyl tert-butyl ether	ND		20.0	20	08/24/2019 12:51	WG1334277
Naphthalene	ND		100	20	08/24/2019 12:51	WG1334277
1,2-Dichloroethane	ND		20.0	20	08/24/2019 12:51	WG1334277
(S) Toluene-d8	*106*		*80.0-120*		*08/24/2019 12:51*	WG1334277
(S) 4-Bromofluorobenzene	*95.0*		*77.0-126*		*08/24/2019 12:51*	WG1334277
(S) 1,2-Dichloroethane-d4	*88.6*		*70.0-130*		*08/24/2019 12:51*	WG1334277

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/24/2019 13:13	WG1334277
Toluene	ND		1.00	1	08/24/2019 13:13	WG1334277
Ethylbenzene	ND		1.00	1	08/24/2019 13:13	WG1334277
Total Xylenes	ND		3.00	1	08/24/2019 13:13	WG1334277
Methyl tert-butyl ether	ND		1.00	1	08/24/2019 13:13	WG1334277
Naphthalene	ND		5.00	1	08/24/2019 13:13	WG1334277
1,2-Dichloroethane	ND		1.00	1	08/24/2019 13:13	WG1334277
(S) Toluene-d8	*107*		*80.0-120*		*08/24/2019 13:13*	WG1334277
(S) 4-Bromofluorobenzene	*96.5*		*77.0-126*		*08/24/2019 13:13*	WG1334277
(S) 1,2-Dichloroethane-d4	*91.0*		*70.0-130*		*08/24/2019 13:13*	WG1334277

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/24/2019 13:35	WG1334277
Toluene	ND		1.00	1	08/24/2019 13:35	WG1334277
Ethylbenzene	ND		1.00	1	08/24/2019 13:35	WG1334277
Total Xylenes	ND		3.00	1	08/24/2019 13:35	WG1334277
Methyl tert-butyl ether	ND		1.00	1	08/24/2019 13:35	WG1334277
Naphthalene	ND		5.00	1	08/24/2019 13:35	WG1334277
1,2-Dichloroethane	ND		1.00	1	08/24/2019 13:35	WG1334277
(S) Toluene-d8	*106*		*80.0-120*		*08/24/2019 13:35*	WG1334277
(S) 4-Bromofluorobenzene	*94.9*		*77.0-126*		*08/24/2019 13:35*	WG1334277
(S) 1,2-Dichloroethane-d4	*90.6*		*70.0-130*		*08/24/2019 13:35*	WG1334277

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/24/2019 13:57	WG1334277
Toluene	ND		1.00	1	08/24/2019 13:57	WG1334277
Ethylbenzene	ND		1.00	1	08/24/2019 13:57	WG1334277
Total Xylenes	ND		3.00	1	08/24/2019 13:57	WG1334277
Methyl tert-butyl ether	ND		1.00	1	08/24/2019 13:57	WG1334277
Naphthalene	ND		5.00	1	08/24/2019 13:57	WG1334277
1,2-Dichloroethane	ND		1.00	1	08/24/2019 13:57	WG1334277
(S) Toluene-d8	*109*		*80.0-120*		*08/24/2019 13:57*	WG1334277
(S) 4-Bromofluorobenzene	*94.0*		*77.0-126*		*08/24/2019 13:57*	WG1334277
(S) 1,2-Dichloroethane-d4	*89.3*		*70.0-130*		*08/24/2019 13:57*	WG1334277

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/24/2019 14:19	WG1334277
Toluene	ND		1.00	1	08/24/2019 14:19	WG1334277
Ethylbenzene	ND		1.00	1	08/24/2019 14:19	WG1334277
Total Xylenes	ND		3.00	1	08/24/2019 14:19	WG1334277
Methyl tert-butyl ether	ND		1.00	1	08/24/2019 14:19	WG1334277
Naphthalene	ND		5.00	1	08/24/2019 14:19	WG1334277
1,2-Dichloroethane	ND		1.00	1	08/24/2019 14:19	WG1334277
(S) Toluene-d8	*105*		*80.0-120*		*08/24/2019 14:19*	WG1334277
(S) 4-Bromofluorobenzene	*97.5*		*77.0-126*		*08/24/2019 14:19*	WG1334277
(S) 1,2-Dichloroethane-d4	*90.2*		*70.0-130*		*08/24/2019 14:19*	WG1334277

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/24/2019 14:41	WG1334277
Toluene	ND		1.00	1	08/24/2019 14:41	WG1334277
Ethylbenzene	ND		1.00	1	08/24/2019 14:41	WG1334277
Total Xylenes	ND		3.00	1	08/24/2019 14:41	WG1334277
Methyl tert-butyl ether	ND		1.00	1	08/24/2019 14:41	WG1334277
Naphthalene	ND		5.00	1	08/24/2019 14:41	WG1334277
1,2-Dichloroethane	ND		1.00	1	08/24/2019 14:41	WG1334277
(S) Toluene-d8	*111*		*80.0-120*		*08/24/2019 14:41*	WG1334277
(S) 4-Bromofluorobenzene	*99.7*		*77.0-126*		*08/24/2019 14:41*	WG1334277
(S) 1,2-Dichloroethane-d4	*92.5*		*70.0-130*		*08/24/2019 14:41*	WG1334277

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 09:12	WG1334544
Toluene	ND		1.00	1	08/25/2019 09:12	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 09:12	WG1334544
Total Xylenes	ND		3.00	1	08/25/2019 09:12	WG1334544
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 09:12	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 09:12	WG1334544
1,2-Dichloroethane	ND		1.00	1	08/25/2019 09:12	WG1334544
(S) Toluene-d8	*116*		*80.0-120*		*08/25/2019 09:12*	WG1334544
(S) 4-Bromofluorobenzene	*95.5*		*77.0-126*		*08/25/2019 09:12*	WG1334544
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*08/25/2019 09:12*	WG1334544

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 09:32	WG1334544
Toluene	ND		1.00	1	08/25/2019 09:32	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 09:32	WG1334544
Total Xylenes	ND		3.00	1	08/25/2019 09:32	WG1334544
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 09:32	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 09:32	WG1334544
1,2-Dichloroethane	ND		1.00	1	08/25/2019 09:32	WG1334544
(S) Toluene-d8	*112*		*80.0-120*		*08/25/2019 09:32*	WG1334544
(S) 4-Bromofluorobenzene	*97.8*		*77.0-126*		*08/25/2019 09:32*	WG1334544
(S) 1,2-Dichloroethane-d4	*103*		*70.0-130*		*08/25/2019 09:32*	WG1334544

Method Blank (MB)

(MB) R3444357-4 08/24/19 11:23

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*110*			*80.0-120*
(S) 4-Bromofluorobenzene	*96.7*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*91.9*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3444357-1 08/24/19 09:56 • (LCSD) R3444357-2 08/24/19 10:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	26.5	26.3	106	105	70.0-130			0.826	20
1,2-Dichloroethane	25.0	22.9	22.7	91.5	90.8	70.0-130			0.741	20
Ethylbenzene	25.0	22.4	22.4	89.6	89.6	70.0-130			0.0808	20
Methyl tert-butyl ether	25.0	23.7	23.7	94.7	94.8	70.0-130			0.0807	20
Naphthalene	25.0	22.7	25.6	90.8	102	70.0-130			11.9	20
Toluene	25.0	24.0	23.9	96.1	95.5	70.0-130			0.561	20
Xylenes, Total	75.0	65.8	65.5	87.7	87.3	70.0-130			0.457	20
(S) Toluene-d8				*94.8*	*94.3*	*80.0-120*				
(S) 4-Bromofluorobenzene				*88.3*	*85.6*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*95.4*	*97.0*	*70.0-130*				

L1132514-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1132514-01 08/24/19 18:41 • (MS) R3444357-5 08/24/19 19:03 • (MSD) R3444357-6 08/24/19 19:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	ND	22.0	18.0	87.9	72.1	1	17.0-158			19.8	27
1,2-Dichloroethane	25.0	ND	18.9	15.4	75.8	61.7	1	29.0-151			20.4	27
Ethylbenzene	25.0	ND	18.1	14.8	72.5	59.3	1	30.0-155			20.0	27
Methyl tert-butyl ether	25.0	ND	19.4	15.7	77.8	62.8	1	28.0-150			21.2	29
Naphthalene	25.0	ND	16.5	15.7	66.1	62.6	1	12.0-156			5.44	35
Toluene	25.0	ND	19.9	16.3	79.6	65.1	1	26.0-154			20.1	28
Xylenes, Total	75.0	ND	52.9	43.0	70.5	57.3	1	29.0-154			20.6	28

L1132514-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1132514-01 08/24/19 18:41 • (MS) R3444357-5 08/24/19 19:03 • (MSD) R3444357-6 08/24/19 19:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) Toluene-d8					*94.1*	*93.1*		*80.0-120*				
(S) 4-Bromofluorobenzene					*85.9*	*87.6*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*95.2*	*93.0*		*70.0-130*				

Method Blank (MB)

(MB) R3444489-3 08/25/19 05:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*111*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.5*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*99.2*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3444489-1 08/25/19 04:49 • (LCSD) R3444489-2 08/25/19 05:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	23.2	22.8	92.7	91.3	70.0-130			1.54	20
1,2-Dichloroethane	25.0	22.2	21.7	88.6	86.7	70.0-130			2.23	20
Ethylbenzene	25.0	28.2	27.9	113	111	70.0-130			1.19	20
Methyl tert-butyl ether	25.0	21.4	21.3	85.5	85.3	70.0-130			0.242	20
Naphthalene	25.0	21.3	21.8	85.3	87.1	70.0-130			2.11	20
Toluene	25.0	25.6	25.5	102	102	70.0-130			0.419	20
Xylenes, Total	75.0	80.4	81.1	107	108	70.0-130			0.867	20
(S) Toluene-d8				*111*	*113*	*80.0-120*				
(S) 4-Bromofluorobenzene				*98.5*	*97.6*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*105*	*103*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

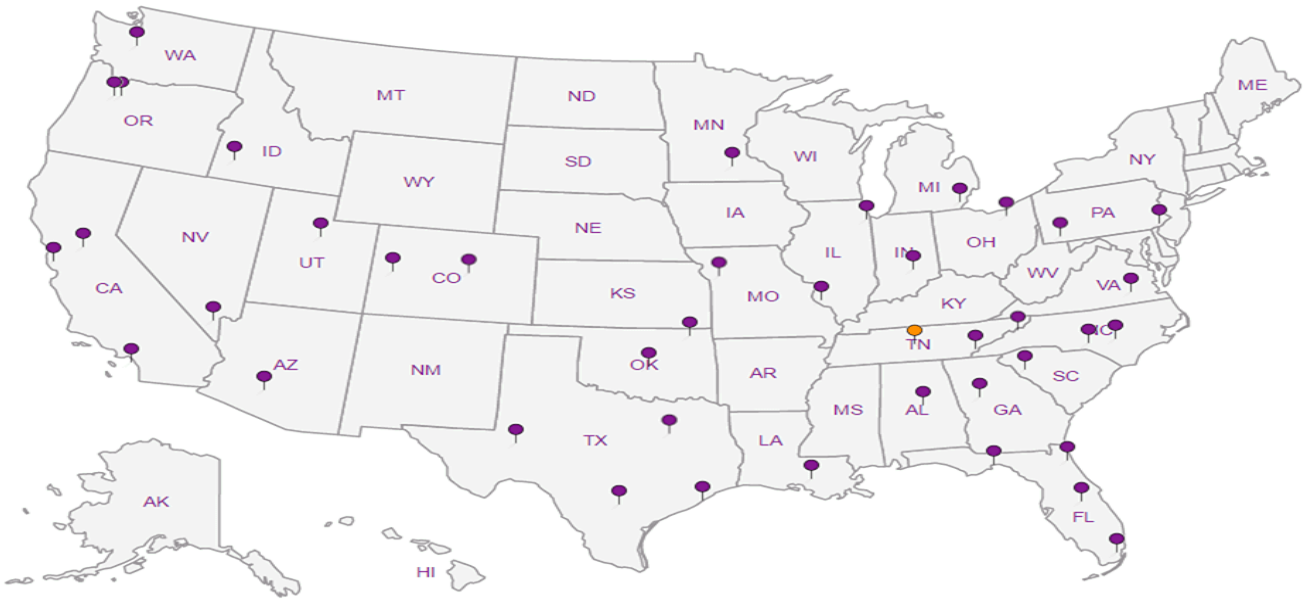
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Pres Chk

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: **Lewis Drive Groundwater**

City/State Collected: Belton, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): Bethany Garvey

Site/Facility ID # Lewis Drive

P.O. #

Collected by (signature): Bethany Garvey

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth Ft.	Date	Time	No. of Cntrs	SULFATE 125mlHDPE-NoPres	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
								HCl			
MW-39-081919	Grab	GW	11	8.19.19	1435	3		X			-1
MW-52-081919		GW	26		1535	3		X			-2
MW-51-081919		GW	23		1540	3		X			-3
MW-36-081919		GW	21		1555	3		X			-4
MW-55-081919		GW	24		1600	3		X			-5
MW-53-081919		GW	18		1510	3		X			-6
MW-54-081919		GW	23		1520	3		X			-7
MW-26-081919		GW	13	8.19.19	1350	3		X			-8
MW-23-081919		GW	18		1410	3		X			-9
MW-41-081919		GW	10		1430	3		X			-10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:V8260BTEXMNSC = BTEX,MTBE,Naphthalene,1,2-DCA.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx X Courier _____

Tracking # 1082 5998 8129

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: ✓Y __N
RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Bethany Garvey	8.19.19	17.15		1	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C .3+0.3=3.3	Bottles Received: 36	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/20	Time: 0851	Hold:	Condition: NCF / OK

Chain of Custody Page 1 of 2

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 130819

Tab A149

Acctnum: KINCH2MGA

Template: T131319

Prelogin: P724307

PM: 526 - Chris McCord

PB: 8-13-19

Shipped Via: FedEX Ground

Chain of Custody Page 2 of 2

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Pres Chk

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: **Lewis Drive Groundwater**

City/State Collected: Belton, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): Bethany Garvey

Site/Facility ID # Lewis Drive

P.O. #

Collected by (signature): Bethany Garvey
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	SULFATE 125mlHDPE-NoPres	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk								Remarks	Sample # (lab only)
								HCl	HCl									
MW-23-D-081919	Grab	GW	18	8.19.19	1410	3		X										-11
FB01-081919	Grab	GW	-	8.19.19	1605	3		X										-12
TB01-081919	Grab	GW	-	8.19.19	-	1			X									-13
~~MW-51-081919~~	~~GRAB~~	~~GW~~	~~23~~	~~8.19.19~~	~~1540~~	~~3~~		~~X~~										
~~MW-52-081919~~	~~GRAB~~	~~GW~~	~~26~~	~~8.19.19~~	~~1535~~	~~3~~		~~X~~										
		GW																
		GW																
		GW																
		GW																
		GW																

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1130819

Table #

Acctnum: KINCH2MGA

Template: T131319

Prelogin: P724307

PM: 526 - Chris McCord

PB: 8-13-19

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXMNSC = BTEX,MTBE,Naphthalene,1,2-DCA.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx X Courier _____

Tracking # 108259988129

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y __N
COC Signed/Accurate: Y __N
Bottles arrive intact: Y __N
Correct bottles used: Y __N
Sufficient volume sent: Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: Y __N
RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Bethany Garvey	8.19.19	1715			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C -3+0=.3	Bottles Received: 30
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/20	Time: 0830

Hold: | Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

August 29, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1131208
Samples Received:	08/21/2019
Project Number:	D3161400
Description:	Lewis Drive Groundwater
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 500 Atlanta, GA 30328

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

TABLE OF CONTENTS

MW-37-082019 L1131208-01 GW

Collected by: Bethany Garvey | Collected date/time: 08/20/19 09:40 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1332945	1	08/22/19 11:20	08/22/19 11:20	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334466	1	08/25/19 12:11	08/25/19 12:11	ZJM	Mt. Juliet, TN

MW-38-082019 L1131208-02 GW

Collected by: Bethany Garvey | Collected date/time: 08/20/19 11:15 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1332945	1	08/22/19 11:53	08/22/19 11:53	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334466	10	08/25/19 12:30	08/25/19 12:30	ZJM	Mt. Juliet, TN

MW-07-082019 L1131208-03 GW

Collected by: Bethany Garvey | Collected date/time: 08/20/19 15:15 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334466	50	08/25/19 12:49	08/25/19 12:49	ZJM	Mt. Juliet, TN

FB02-082019 L1131208-04 GW

Collected by: Bethany Garvey | Collected date/time: 08/20/19 16:45 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334466	1	08/25/19 13:08	08/25/19 13:08	ZJM	Mt. Juliet, TN

TB02-082019 L1131208-05 GW

Collected by: Bethany Garvey | Collected date/time: 08/20/19 00:00 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334466	1	08/25/19 13:28	08/25/19 13:28	ZJM	Mt. Juliet, TN

MW-07-D-082019 L1131208-06 GW

Collected by: Bethany Garvey | Collected date/time: 08/20/19 15:15 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334466	1	08/25/19 13:47	08/25/19 13:47	ZJM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1336147	100	08/28/19 15:26	08/28/19 15:26	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1336147	20	08/28/19 14:04	08/28/19 14:04	JHH	Mt. Juliet, TN

MW-20-082019 L1131208-07 GW

Collected by: Bethany Garvey | Collected date/time: 08/20/19 13:00 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334466	100	08/25/19 14:06	08/25/19 14:06	ZJM	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	08/22/2019 11:20	WG1332945

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 12:11	WG1334466
Toluene	ND		1.00	1	08/25/2019 12:11	WG1334466
Ethylbenzene	ND		1.00	1	08/25/2019 12:11	WG1334466
Total Xylenes	ND		3.00	1	08/25/2019 12:11	WG1334466
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 12:11	WG1334466
Naphthalene	ND		5.00	1	08/25/2019 12:11	WG1334466
1,2-Dichloroethane	ND		1.00	1	08/25/2019 12:11	WG1334466
(S) Toluene-d8	*99.1*		*80.0-120*		*08/25/2019 12:11*	WG1334466
(S) 4-Bromofluorobenzene	*99.4*		*77.0-126*		*08/25/2019 12:11*	WG1334466
(S) 1,2-Dichloroethane-d4	*117*		*70.0-130*		*08/25/2019 12:11*	WG1334466

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	08/22/2019 11:53	WG1332945

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1030		10.0	10	08/25/2019 12:30	WG1334466
Toluene	ND		10.0	10	08/25/2019 12:30	WG1334466
Ethylbenzene	ND		10.0	10	08/25/2019 12:30	WG1334466
Total Xylenes	279		30.0	10	08/25/2019 12:30	WG1334466
Methyl tert-butyl ether	116		10.0	10	08/25/2019 12:30	WG1334466
Naphthalene	ND		50.0	10	08/25/2019 12:30	WG1334466
1,2-Dichloroethane	ND		10.0	10	08/25/2019 12:30	WG1334466
(S) Toluene-d8	*103*		*80.0-120*		*08/25/2019 12:30*	WG1334466
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*08/25/2019 12:30*	WG1334466
(S) 1,2-Dichloroethane-d4	*116*		*70.0-130*		*08/25/2019 12:30*	WG1334466

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	2120		50.0	50	08/25/2019 12:49	WG1334466
Toluene	4750		50.0	50	08/25/2019 12:49	WG1334466
Ethylbenzene	340		50.0	50	08/25/2019 12:49	WG1334466
Total Xylenes	3650		150	50	08/25/2019 12:49	WG1334466
Methyl tert-butyl ether	ND		50.0	50	08/25/2019 12:49	WG1334466
Naphthalene	ND		250	50	08/25/2019 12:49	WG1334466
1,2-Dichloroethane	ND		50.0	50	08/25/2019 12:49	WG1334466
(S) Toluene-d8	*99.3*		*80.0-120*		*08/25/2019 12:49*	WG1334466
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*08/25/2019 12:49*	WG1334466
(S) 1,2-Dichloroethane-d4	*116*		*70.0-130*		*08/25/2019 12:49*	WG1334466

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 13:08	WG1334466
Toluene	ND		1.00	1	08/25/2019 13:08	WG1334466
Ethylbenzene	ND		1.00	1	08/25/2019 13:08	WG1334466
Total Xylenes	ND		3.00	1	08/25/2019 13:08	WG1334466
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 13:08	WG1334466
Naphthalene	ND		5.00	1	08/25/2019 13:08	WG1334466
1,2-Dichloroethane	ND		1.00	1	08/25/2019 13:08	WG1334466
(S) Toluene-d8	*100*		*80.0-120*		*08/25/2019 13:08*	WG1334466
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*08/25/2019 13:08*	WG1334466
(S) 1,2-Dichloroethane-d4	*117*		*70.0-130*		*08/25/2019 13:08*	WG1334466

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 13:28	WG1334466
Toluene	ND		1.00	1	08/25/2019 13:28	WG1334466
Ethylbenzene	ND		1.00	1	08/25/2019 13:28	WG1334466
Total Xylenes	ND		3.00	1	08/25/2019 13:28	WG1334466
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 13:28	WG1334466
Naphthalene	ND		5.00	1	08/25/2019 13:28	WG1334466
1,2-Dichloroethane	ND		1.00	1	08/25/2019 13:28	WG1334466
(S) Toluene-d8	*99.9*		*80.0-120*		*08/25/2019 13:28*	WG1334466
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*08/25/2019 13:28*	WG1334466
(S) 1,2-Dichloroethane-d4	*118*		*70.0-130*		*08/25/2019 13:28*	WG1334466

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	2050		20.0	20	08/28/2019 14:04	WG1336147
Toluene	5720		100	100	08/28/2019 15:26	WG1336147
Ethylbenzene	416		20.0	20	08/28/2019 14:04	WG1336147
Total Xylenes	4280		60.0	20	08/28/2019 14:04	WG1336147
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 13:47	WG1334466
Naphthalene	34.5		5.00	1	08/25/2019 13:47	WG1334466
1,2-Dichloroethane	ND		1.00	1	08/25/2019 13:47	WG1334466
(S) Toluene-d8	*95.0*		*80.0-120*		*08/25/2019 13:47*	WG1334466
(S) Toluene-d8	*117*		*80.0-120*		*08/28/2019 14:04*	WG1336147
(S) Toluene-d8	*115*		*80.0-120*		*08/28/2019 15:26*	WG1336147
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*08/25/2019 13:47*	WG1334466
(S) 4-Bromofluorobenzene	*99.6*		*77.0-126*		*08/28/2019 14:04*	WG1336147
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*08/28/2019 15:26*	WG1336147
(S) 1,2-Dichloroethane-d4	*132*	J1	*70.0-130*		*08/25/2019 13:47*	WG1334466
(S) 1,2-Dichloroethane-d4	*78.4*		*70.0-130*		*08/28/2019 15:26*	WG1336147
(S) 1,2-Dichloroethane-d4	*81.7*		*70.0-130*		*08/28/2019 14:04*	WG1336147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	7920		100	100	08/25/2019 14:06	WG1334466
Toluene	15900		100	100	08/25/2019 14:06	WG1334466
Ethylbenzene	1160		100	100	08/25/2019 14:06	WG1334466
Total Xylenes	10300		300	100	08/25/2019 14:06	WG1334466
Methyl tert-butyl ether	238		100	100	08/25/2019 14:06	WG1334466
Naphthalene	ND		500	100	08/25/2019 14:06	WG1334466
1,2-Dichloroethane	ND		100	100	08/25/2019 14:06	WG1334466
(S) Toluene-d8	*100*		*80.0-120*		*08/25/2019 14:06*	WG1334466
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*08/25/2019 14:06*	WG1334466
(S) 1,2-Dichloroethane-d4	*112*		*70.0-130*		*08/25/2019 14:06*	WG1334466

Method Blank (MB)

(MB) R3443434-1 08/22/19 08:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Sulfate	U		77.4	5000

L1131208-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1131208-01 08/22/19 11:20 • (DUP) R3443434-3 08/22/19 11:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Sulfate	ND	730	1	0.000		15

L1131383-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1131383-04 08/22/19 18:43 • (DUP) R3443434-10 08/22/19 19:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Sulfate	1870000	1870000	1	0.0774	E	15

Laboratory Control Sample (LCS)

(LCS) R3443434-2 08/22/19 08:44

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Sulfate	40000	39200	98.0	80.0-120	

L1131379-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1131379-02 08/22/19 14:21 • (MS) R3443434-4 08/22/19 14:37 • (MSD) R3443434-5 08/22/19 14:54

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Sulfate	50000	20700	71400	70800	101	100	1	80.0-120			0.859	15

L1131379-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1131379-04 08/22/19 15:26 • (MS) R3443434-6 08/22/19 15:43 • (MSD) R3443434-7 08/22/19 15:59

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Sulfate	50000	176000	221000	221000	89.9	90.2	1	80.0-120	E	E	0.0595	15

L1131383-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1131383-03 08/22/19 17:54 • (MS) R3443434-8 08/22/19 18:11 • (MSD) R3443434-9 08/22/19 18:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	1860000	1850000	1850000	0.000	0.000	1	80.0-120	E V	E V	0.0663	15

Method Blank (MB)

(MB) R3444779-3 08/25/19 08:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*98.2*			*80.0-120*
(S) 4-Bromofluorobenzene	*103*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*121*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3444779-1 08/25/19 04:32 • (LCSD) R3444779-2 08/25/19 04:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	26.3	25.0	105	99.9	70.0-130			5.18	20
1,2-Dichloroethane	25.0	31.1	31.8	125	127	70.0-130			2.06	20
Ethylbenzene	25.0	27.2	27.0	109	108	70.0-130			0.511	20
Methyl tert-butyl ether	25.0	29.4	27.1	118	108	70.0-130			8.20	20
Naphthalene	25.0	25.4	28.4	102	114	70.0-130			11.3	20
Toluene	25.0	26.3	26.1	105	104	70.0-130			0.801	20
Xylenes, Total	75.0	81.0	80.3	108	107	70.0-130			0.868	20
(S) Toluene-d8				*104*	*101*	*80.0-120*				
(S) 4-Bromofluorobenzene				*106*	*105*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*130*	*129*	*70.0-130*				

Method Blank (MB)

(MB) R3445111-2 08/28/19 08:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*114*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*79.7*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3445111-1 08/28/19 07:54 • (LCSD) R3445111-3 08/28/19 10:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	23.3	20.2	93.1	81.0	70.0-130			13.9	20
Ethylbenzene	25.0	29.8	25.5	119	102	70.0-130			15.4	20
Toluene	25.0	26.7	23.0	107	92.0	70.0-130			15.0	20
Xylenes, Total	75.0	85.5	73.1	114	97.5	70.0-130			15.6	20
(S) Toluene-d8				*115*	*113*	*80.0-120*				
(S) 4-Bromofluorobenzene				*102*	*98.3*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*84.0*	*83.2*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

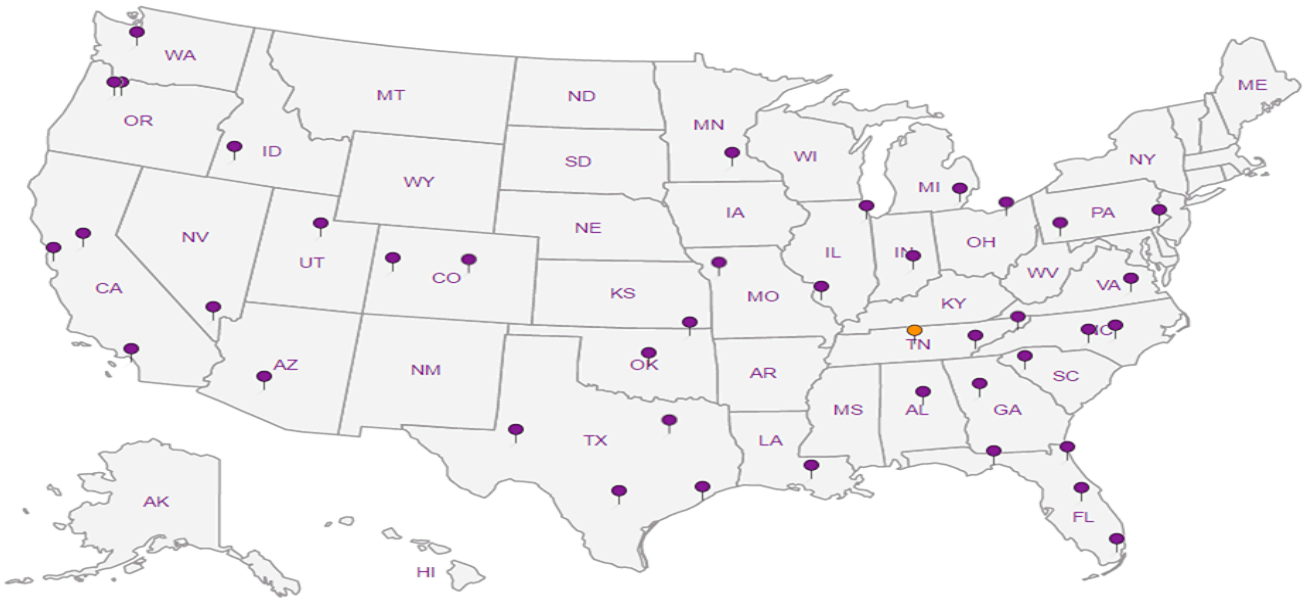
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: Belton, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): Bethany Garvey

Site/Facility ID # Lewis Drive

P.O. #

Collected by (signature): Bethany Garvey
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk: 1 | HCl | HCl

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	SULFATE 125mlHDPE-NoPres	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
MW-37-082019	Grab	GW	12	8/20/19	0940	4	X	X			—
MW-38-082019	Grab	GW	7		1115	4	X	X			—
MW-07-082019	Grab	GW	13		1515	4	X	X			—
FB02-082019	Grab	WQ GW	—		1645	3		X			—
TB02-082019	Grab	WQ GW	—		—	1			X		—
MW-07-082019-FD	Grab	GW	13	8/20/19	1515	3		X			—
MW-20-082019	Grab	GW	15	8/20/19	1300	3		X			—

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 113208

A203

Acctnum: KINCH2MGA

Template: T131319

Prelogin: P724307

PM: 526 - Chris McCord

PB: 8-13-19

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXMNSC = BTEX,MTBE,Naphthalene,1,2-DCA.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx X Courier _____

Tracking # 108259988092

Sample Receipt Checklist

COC Seal Present/Intact:	NP	✓Y N
COC Signed/Accurate:		✓Y N
Bottles arrive intact:		✓Y N
Correct bottles used:		✓Y N
Sufficient volume sent:		✓Y N
If Applicable		
VOA Zero Headspace:		✓Y N
Preservation Correct/Checked:		✓Y N
RAD Screen <0.5 mR/hr:		✓Y N

	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature) Bethany Garvey	8/20/19	1800	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: (Yes) / No
HCL / MeoH
TBR
1

Temp: 1.5+.3=1.8 °C

Bottles Received: 21

Date: 08/21 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

August 30, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1131900
Samples Received:	08/22/2019
Project Number:	D3161400
Description:	Lewis Drive Groundwater
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 600 Atlanta, GA 30328

Entire Report Reviewed By:

Chris McCord
Project Manager

TABLE OF CONTENTS

MW-46-082119 L1131900-01 GW

Collected by: BG/MW | Collected date/time: 08/21/19 09:50 | Received date/time: 08/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1333681	1	08/23/19 14:32	08/23/19 14:32	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1336967	25	08/29/19 16:17	08/29/19 16:17	BMB	Mt. Juliet, TN

MW-57-082119 L1131900-02 GW

Collected by: BG/MW | Collected date/time: 08/21/19 10:20 | Received date/time: 08/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1333681	10	08/25/19 13:07	08/25/19 13:07	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1336967	10	08/29/19 15:55	08/29/19 15:55	BMB	Mt. Juliet, TN

MW-57-D-082119 L1131900-03 GW

Collected by: BG/MW | Collected date/time: 08/21/19 10:20 | Received date/time: 08/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1336967	10	08/29/19 15:33	08/29/19 15:33	BMB	Mt. Juliet, TN

MW-23-082119 L1131900-04 GW

Collected by: BG/MW | Collected date/time: 08/21/19 11:45 | Received date/time: 08/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1336967	10	08/29/19 15:10	08/29/19 15:10	BMB	Mt. Juliet, TN

MW-56-082119 L1131900-05 GW

Collected by: BG/MW | Collected date/time: 08/21/19 12:00 | Received date/time: 08/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1333681	1	08/23/19 16:11	08/23/19 16:11	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1336967	10	08/29/19 14:26	08/29/19 14:26	JHH	Mt. Juliet, TN

FB03-082119 L1131900-06 GW

Collected by: BG/MW | Collected date/time: 08/21/19 11:30 | Received date/time: 08/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1336967	1	08/29/19 14:03	08/29/19 14:03	JHH	Mt. Juliet, TN

MW-40-082119 L1131900-07 GW

Collected by: BG/MW | Collected date/time: 08/21/19 16:10 | Received date/time: 08/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1336967	1	08/29/19 13:41	08/29/19 13:41	JHH	Mt. Juliet, TN

TB03-082119 L1131900-08 GW

Collected by: BG/MW | Collected date/time: 08/21/19 00:00 | Received date/time: 08/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1336967	1	08/29/19 13:18	08/29/19 13:18	JHH	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	08/23/2019 14:32	WG1333681

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	874		25.0	25	08/29/2019 16:17	WG1336967
Toluene	ND		25.0	25	08/29/2019 16:17	WG1336967
Ethylbenzene	ND		25.0	25	08/29/2019 16:17	WG1336967
Total Xylenes	226		75.0	25	08/29/2019 16:17	WG1336967
Methyl tert-butyl ether	191		25.0	25	08/29/2019 16:17	WG1336967
Naphthalene	ND		125	25	08/29/2019 16:17	WG1336967
1,2-Dichloroethane	ND		25.0	25	08/29/2019 16:17	WG1336967
(S) Toluene-d8	*97.6*		*80.0-120*		*08/29/2019 16:17*	WG1336967
(S) 4-Bromofluorobenzene	*97.6*		*77.0-126*		*08/29/2019 16:17*	WG1336967
(S) 1,2-Dichloroethane-d4	*99.6*		*70.0-130*		*08/29/2019 16:17*	WG1336967

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	273000		50000	10	08/25/2019 13:07	WG1333681

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	584		10.0	10	08/29/2019 15:55	WG1336967
Toluene	ND		10.0	10	08/29/2019 15:55	WG1336967
Ethylbenzene	ND		10.0	10	08/29/2019 15:55	WG1336967
Total Xylenes	76.2		30.0	10	08/29/2019 15:55	WG1336967
Methyl tert-butyl ether	183		10.0	10	08/29/2019 15:55	WG1336967
Naphthalene	ND		50.0	10	08/29/2019 15:55	WG1336967
1,2-Dichloroethane	ND		10.0	10	08/29/2019 15:55	WG1336967
(S) Toluene-d8	*95.3*		*80.0-120*		*08/29/2019 15:55*	WG1336967
(S) 4-Bromofluorobenzene	*91.0*		*77.0-126*		*08/29/2019 15:55*	WG1336967
(S) 1,2-Dichloroethane-d4	*97.8*		*70.0-130*		*08/29/2019 15:55*	WG1336967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	631		10.0	10	08/29/2019 15:33	WG1336967
Toluene	ND		10.0	10	08/29/2019 15:33	WG1336967
Ethylbenzene	ND		10.0	10	08/29/2019 15:33	WG1336967
Total Xylenes	95.2		30.0	10	08/29/2019 15:33	WG1336967
Methyl tert-butyl ether	168		10.0	10	08/29/2019 15:33	WG1336967
Naphthalene	ND		50.0	10	08/29/2019 15:33	WG1336967
1,2-Dichloroethane	ND		10.0	10	08/29/2019 15:33	WG1336967
(S) Toluene-d8	*96.7*		*80.0-120*		*08/29/2019 15:33*	WG1336967
(S) 4-Bromofluorobenzene	*95.9*		*77.0-126*		*08/29/2019 15:33*	WG1336967
(S) 1,2-Dichloroethane-d4	*100*		*70.0-130*		*08/29/2019 15:33*	WG1336967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1860		10.0	10	08/29/2019 15:10	WG1336967
Toluene	507		10.0	10	08/29/2019 15:10	WG1336967
Ethylbenzene	82.8		10.0	10	08/29/2019 15:10	WG1336967
Total Xylenes	1190		30.0	10	08/29/2019 15:10	WG1336967
Methyl tert-butyl ether	88.7		10.0	10	08/29/2019 15:10	WG1336967
Naphthalene	ND		50.0	10	08/29/2019 15:10	WG1336967
1,2-Dichloroethane	ND		10.0	10	08/29/2019 15:10	WG1336967
(S) Toluene-d8	*94.2*		*80.0-120*		*08/29/2019 15:10*	WG1336967
(S) 4-Bromofluorobenzene	*99.8*		*77.0-126*		*08/29/2019 15:10*	WG1336967
(S) 1,2-Dichloroethane-d4	*97.7*		*70.0-130*		*08/29/2019 15:10*	WG1336967

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	08/23/2019 16:11	WG1333681

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	391		10.0	10	08/29/2019 14:26	WG1336967
Toluene	ND		10.0	10	08/29/2019 14:26	WG1336967
Ethylbenzene	ND		10.0	10	08/29/2019 14:26	WG1336967
Total Xylenes	91.1		30.0	10	08/29/2019 14:26	WG1336967
Methyl tert-butyl ether	134		10.0	10	08/29/2019 14:26	WG1336967
Naphthalene	ND		50.0	10	08/29/2019 14:26	WG1336967
1,2-Dichloroethane	ND		10.0	10	08/29/2019 14:26	WG1336967
(S) Toluene-d8	*98.2*		*80.0-120*		*08/29/2019 14:26*	WG1336967
(S) 4-Bromofluorobenzene	*96.9*		*77.0-126*		*08/29/2019 14:26*	WG1336967
(S) 1,2-Dichloroethane-d4	*99.5*		*70.0-130*		*08/29/2019 14:26*	WG1336967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/29/2019 14:03	WG1336967
Toluene	ND		1.00	1	08/29/2019 14:03	WG1336967
Ethylbenzene	ND		1.00	1	08/29/2019 14:03	WG1336967
Total Xylenes	ND		3.00	1	08/29/2019 14:03	WG1336967
Methyl tert-butyl ether	ND		1.00	1	08/29/2019 14:03	WG1336967
Naphthalene	ND		5.00	1	08/29/2019 14:03	WG1336967
1,2-Dichloroethane	ND		1.00	1	08/29/2019 14:03	WG1336967
(S) Toluene-d8	*96.2*		*80.0-120*		*08/29/2019 14:03*	WG1336967
(S) 4-Bromofluorobenzene	*90.9*		*77.0-126*		*08/29/2019 14:03*	WG1336967
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*08/29/2019 14:03*	WG1336967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	2.56		1.00	1	08/29/2019 13:41	WG1336967
Toluene	ND		1.00	1	08/29/2019 13:41	WG1336967
Ethylbenzene	ND		1.00	1	08/29/2019 13:41	WG1336967
Total Xylenes	ND		3.00	1	08/29/2019 13:41	WG1336967
Methyl tert-butyl ether	ND		1.00	1	08/29/2019 13:41	WG1336967
Naphthalene	ND		5.00	1	08/29/2019 13:41	WG1336967
1,2-Dichloroethane	ND		1.00	1	08/29/2019 13:41	WG1336967
(S) Toluene-d8	*99.3*		*80.0-120*		*08/29/2019 13:41*	WG1336967
(S) 4-Bromofluorobenzene	*90.8*		*77.0-126*		*08/29/2019 13:41*	WG1336967
(S) 1,2-Dichloroethane-d4	*94.4*		*70.0-130*		*08/29/2019 13:41*	WG1336967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/29/2019 13:18	WG1336967
Toluene	ND		1.00	1	08/29/2019 13:18	WG1336967
Ethylbenzene	ND		1.00	1	08/29/2019 13:18	WG1336967
Total Xylenes	ND		3.00	1	08/29/2019 13:18	WG1336967
Methyl tert-butyl ether	ND		1.00	1	08/29/2019 13:18	WG1336967
Naphthalene	ND		5.00	1	08/29/2019 13:18	WG1336967
1,2-Dichloroethane	ND		1.00	1	08/29/2019 13:18	WG1336967
(S) Toluene-d8	*95.6*		*80.0-120*		*08/29/2019 13:18*	WG1336967
(S) 4-Bromofluorobenzene	*93.5*		*77.0-126*		*08/29/2019 13:18*	WG1336967
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*08/29/2019 13:18*	WG1336967

Method Blank (MB)

(MB) R3443825-1 08/23/19 09:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Sulfate	U		77.4	5000

L1131886-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1131886-10 08/23/19 10:34 • (DUP) R3443825-3 08/23/19 10:44

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Sulfate	655000	649000	10	0.845		15

L1131886-19 Original Sample (OS) • Duplicate (DUP)

(OS) L1131886-19 08/23/19 13:06 • (DUP) R3443825-6 08/23/19 13:16

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Sulfate	1340000	1030000	20	25.7	J3	15

Laboratory Control Sample (LCS)

(LCS) R3443825-2 08/23/19 09:52

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Sulfate	40000	39700	99.4	80.0-120	

L1131886-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1131886-13 08/23/19 11:17 • (MS) R3443825-4 08/23/19 11:28 • (MSD) R3443825-5 08/23/19 11:39

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Sulfate	50000	3690	54600	54300	102	101	1	80.0-120			0.381	15

L1131886-22 Original Sample (OS) • Matrix Spike (MS)

(OS) L1131886-22 08/23/19 13:49 • (MS) R3443825-7 08/23/19 14:00

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Sulfate	50000	7950	18500	21.2	1	80.0-120	J6

Method Blank (MB)

(MB) R3445595-3 08/29/19 12:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*97.4*			*80.0-120*
(S) 4-Bromofluorobenzene	*96.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3445595-1 08/29/19 09:23 • (LCSD) R3445595-2 08/29/19 10:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	25.2	23.3	101	93.2	70.0-130			7.84	20
1,2-Dichloroethane	25.0	23.6	23.1	94.5	92.5	70.0-130			2.04	20
Ethylbenzene	25.0	28.4	26.7	114	107	70.0-130			6.03	20
Methyl tert-butyl ether	25.0	25.1	24.8	100	99.0	70.0-130			1.35	20
Naphthalene	25.0	30.8	29.9	123	120	70.0-130			3.02	20
Toluene	25.0	25.8	24.6	103	98.3	70.0-130			4.92	20
Xylenes, Total	75.0	86.3	82.1	115	109	70.0-130			4.99	20
(S) Toluene-d8				*97.4*	*96.5*	*80.0-120*				
(S) 4-Bromofluorobenzene				*102*	*101*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*102*	*107*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

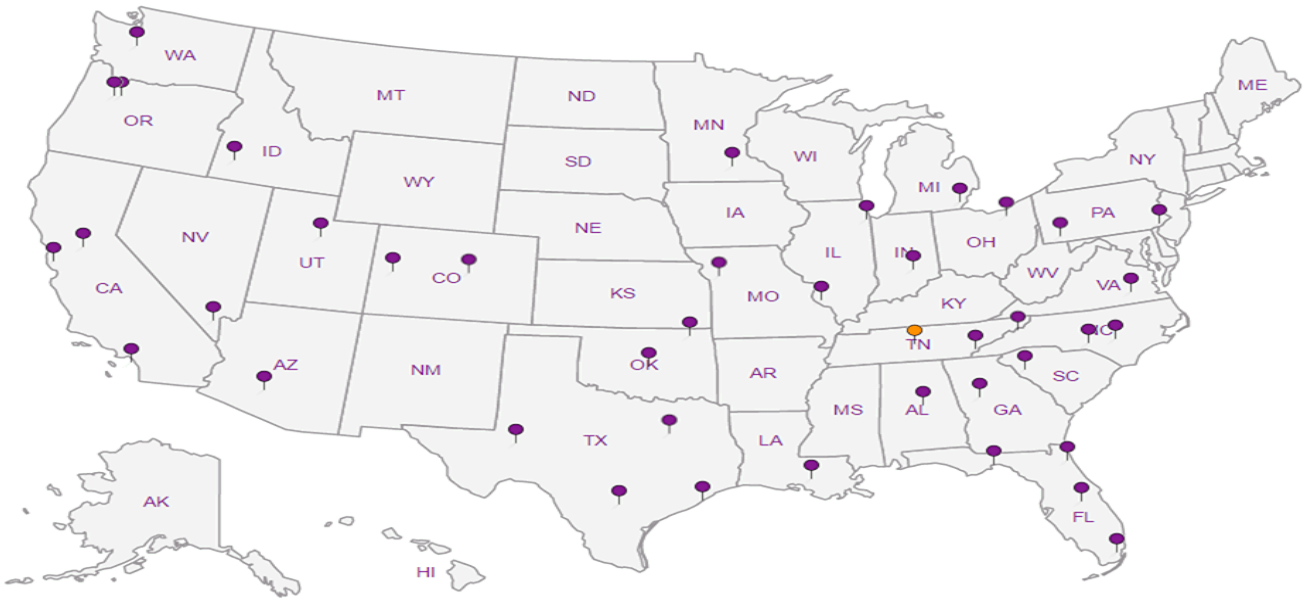
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 600
Atlanta, GA 30328

Billing Information:
Attention: Celithia Ball
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: Belton, SC

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12OBC

Collected by (print): Bethany Garvey / Melissa Wadren

Site/Facility ID # Lewis Drive

P.O. #

Collected by (signature): Bethany Garvey

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	SULFATE 125mlHDPE-NoPres	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
MW-46-082119	Grab	GW	—	8.21.19	0950	4	X	X			-01
MW-57-082119		GW	13		1020	4	X	X			-02
MW-57-D-082119		GW	13		1020	4	X	X			-03
MW-23-082119		GW	—		1145	4	X	X			-04
MW-56-082119		GW	13		1200	4	X	X			-05
FB03-082119		~~GW~~ WQ	—		1130	4	X	X			-06
MW-40-082119	Grab	GW	—	8-21-19	1610	4	X	X			-07
		GW				4	X	X			-08
		GW				4	X	X			-09
TB03-082119	Grab	~~GW~~ WQ	—	8.21.19	—	1			X		-10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: look at historical results to determine dilutions. Potentially high results.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx X Courier __ _____

Tracking #

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L1131900

B089

Acctnum: KINCH2MGA
Template: T153128
Prelogin: P719933
TSR: 526 - Chris McCord
PB: TB 7-16-19
Shipped Via: FedEX Ground

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y __N
COC Signed/Accurate: Y __N
Bottles arrive intact: Y __N
Correct bottles used: Y __N
Sufficient volume sent: Y __N
If Applicable
VOA Zero Headspace: Y __N
Preservation Correct/Checked: __Y __N

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Bethany Garvey	8.21.19	1730			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 3.6+0-3.6=2.4 24	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Hailey Miller	Date: 8/22/19 Time: 8:45	Hold: Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 03, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1132163
Samples Received:	08/23/2019
Project Number:	D3161400
Description:	Lewis Drive Groundwater
Site:	LEWIS DR.
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 500 Atlanta, GA 30328

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

TABLE OF CONTENTS

MW-15B-082219 L1132163-01 GW

Collected by: Melissa Warren | Collected date/time: 08/22/19 13:40 | Received date/time: 08/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1337483	1	08/30/19 03:02	08/30/19 03:02	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1337948	200	08/31/19 01:40	08/31/19 01:40	ADM	Mt. Juliet, TN

MW-34-082219 L1132163-02 GW

Collected by: Melissa Warren | Collected date/time: 08/22/19 10:00 | Received date/time: 08/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1337483	1	08/30/19 03:22	08/30/19 03:22	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1337948	5	08/31/19 02:02	08/31/19 02:02	ADM	Mt. Juliet, TN

MW-12B-082219 L1132163-03 GW

Collected by: Melissa Warren | Collected date/time: 08/22/19 15:10 | Received date/time: 08/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1337483	1	08/30/19 03:42	08/30/19 03:42	ADM	Mt. Juliet, TN

FB04-082219 L1132163-04 GW

Collected by: Melissa Warren | Collected date/time: 08/22/19 10:32 | Received date/time: 08/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1337483	1	08/30/19 04:03	08/30/19 04:03	ADM	Mt. Juliet, TN

TB04-082219 L1132163-05 GW

Collected by: Melissa Warren | Collected date/time: 08/22/19 00:00 | Received date/time: 08/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1337483	1	08/30/19 04:23	08/30/19 04:23	ADM	Mt. Juliet, TN

MW-17B-082219 L1132163-06 GW

Collected by: Melissa Warren | Collected date/time: 08/22/19 16:40 | Received date/time: 08/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1337483	5	08/30/19 04:43	08/30/19 04:43	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1338165	250	08/31/19 10:39	08/31/19 10:39	ADM	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Project Manager

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	2340		200	200	08/31/2019 01:40	WG1337948
Toluene	3060		200	200	08/31/2019 01:40	WG1337948
Ethylbenzene	ND		200	200	08/31/2019 01:40	WG1337948
Total Xylenes	1440		600	200	08/31/2019 01:40	WG1337948
Methyl tert-butyl ether	139		1.00	1	08/30/2019 03:02	WG1337483
Naphthalene	33.5		5.00	1	08/30/2019 03:02	WG1337483
1,2-Dichloroethane	ND		1.00	1	08/30/2019 03:02	WG1337483
(S) Toluene-d8	*101*		*80.0-120*		*08/30/2019 03:02*	WG1337483
(S) Toluene-d8	*102*		*80.0-120*		*08/31/2019 01:40*	WG1337948
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*08/30/2019 03:02*	WG1337483
(S) 4-Bromofluorobenzene	*96.7*		*77.0-126*		*08/31/2019 01:40*	WG1337948
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*08/30/2019 03:02*	WG1337483
(S) 1,2-Dichloroethane-d4	*124*		*70.0-130*		*08/31/2019 01:40*	WG1337948

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	102		1.00	1	08/30/2019 03:22	WG1337483
Toluene	ND		5.00	5	08/31/2019 02:02	WG1337948
Ethylbenzene	ND		5.00	5	08/31/2019 02:02	WG1337948
Total Xylenes	ND		15.0	5	08/31/2019 02:02	WG1337948
Methyl tert-butyl ether	207		5.00	5	08/31/2019 02:02	WG1337948
Naphthalene	5.05		5.00	1	08/30/2019 03:22	WG1337483
1,2-Dichloroethane	ND		1.00	1	08/30/2019 03:22	WG1337483
(S) Toluene-d8	*105*		*80.0-120*		*08/30/2019 03:22*	WG1337483
(S) Toluene-d8	*100*		*80.0-120*		*08/31/2019 02:02*	WG1337948
(S) 4-Bromofluorobenzene	*101*		*77.0-126*		*08/30/2019 03:22*	WG1337483
(S) 4-Bromofluorobenzene	*93.2*		*77.0-126*		*08/31/2019 02:02*	WG1337948
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*08/30/2019 03:22*	WG1337483
(S) 1,2-Dichloroethane-d4	*125*		*70.0-130*		*08/31/2019 02:02*	WG1337948

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	27.0		1.00	1	08/30/2019 03:42	WG1337483
Toluene	ND		1.00	1	08/30/2019 03:42	WG1337483
Ethylbenzene	3.54		1.00	1	08/30/2019 03:42	WG1337483
Total Xylenes	ND		3.00	1	08/30/2019 03:42	WG1337483
Methyl tert-butyl ether	ND		1.00	1	08/30/2019 03:42	WG1337483
Naphthalene	5.94		5.00	1	08/30/2019 03:42	WG1337483
1,2-Dichloroethane	ND		1.00	1	08/30/2019 03:42	WG1337483
(S) Toluene-d8	*99.7*		*80.0-120*		*08/30/2019 03:42*	WG1337483
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*08/30/2019 03:42*	WG1337483
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*08/30/2019 03:42*	WG1337483

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/30/2019 04:03	WG1337483
Toluene	ND		1.00	1	08/30/2019 04:03	WG1337483
Ethylbenzene	ND		1.00	1	08/30/2019 04:03	WG1337483
Total Xylenes	ND		3.00	1	08/30/2019 04:03	WG1337483
Methyl tert-butyl ether	ND		1.00	1	08/30/2019 04:03	WG1337483
Naphthalene	ND		5.00	1	08/30/2019 04:03	WG1337483
1,2-Dichloroethane	ND		1.00	1	08/30/2019 04:03	WG1337483
(S) Toluene-d8	*98.2*		*80.0-120*		*08/30/2019 04:03*	WG1337483
(S) 4-Bromofluorobenzene	*97.0*		*77.0-126*		*08/30/2019 04:03*	WG1337483
(S) 1,2-Dichloroethane-d4	*103*		*70.0-130*		*08/30/2019 04:03*	WG1337483

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/30/2019 04:23	WG1337483
Toluene	ND		1.00	1	08/30/2019 04:23	WG1337483
Ethylbenzene	ND		1.00	1	08/30/2019 04:23	WG1337483
Total Xylenes	ND		3.00	1	08/30/2019 04:23	WG1337483
Methyl tert-butyl ether	ND		1.00	1	08/30/2019 04:23	WG1337483
Naphthalene	ND		5.00	1	08/30/2019 04:23	WG1337483
1,2-Dichloroethane	ND		1.00	1	08/30/2019 04:23	WG1337483
(S) Toluene-d8	*102*		*80.0-120*		*08/30/2019 04:23*	WG1337483
(S) 4-Bromofluorobenzene	*99.1*		*77.0-126*		*08/30/2019 04:23*	WG1337483
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*08/30/2019 04:23*	WG1337483

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	7700		250	250	08/31/2019 10:39	WG1338165
Toluene	17600		250	250	08/31/2019 10:39	WG1338165
Ethylbenzene	1570		250	250	08/31/2019 10:39	WG1338165
Total Xylenes	9110		750	250	08/31/2019 10:39	WG1338165
Methyl tert-butyl ether	335		5.00	5	08/30/2019 04:43	WG1337483
Naphthalene	201		25.0	5	08/30/2019 04:43	WG1337483
1,2-Dichloroethane	ND		5.00	5	08/30/2019 04:43	WG1337483
(S) Toluene-d8	*101*		*80.0-120*		*08/30/2019 04:43*	WG1337483
(S) Toluene-d8	*104*		*80.0-120*		*08/31/2019 10:39*	WG1338165
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*08/30/2019 04:43*	WG1337483
(S) 4-Bromofluorobenzene	*99.2*		*77.0-126*		*08/31/2019 10:39*	WG1338165
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*08/30/2019 04:43*	WG1337483
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*08/31/2019 10:39*	WG1338165

Method Blank (MB)

(MB) R3446071-2 08/29/19 23:23

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*100*			*80.0-120*
(S) 4-Bromofluorobenzene	*101*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3446071-1 08/29/19 22:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	21.3	85.2	70.0-130	
1,2-Dichloroethane	25.0	24.1	96.5	70.0-130	
Ethylbenzene	25.0	21.1	84.4	70.0-130	
Methyl tert-butyl ether	25.0	25.4	102	70.0-130	
Naphthalene	25.0	20.2	80.7	70.0-130	
Toluene	25.0	20.4	81.5	70.0-130	
Xylenes, Total	75.0	65.9	87.9	70.0-130	
(S) Toluene-d8			*101*	*80.0-120*	
(S) 4-Bromofluorobenzene			*99.9*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*113*	*70.0-130*	

Method Blank (MB)

(MB) R3446210-2 08/30/19 20:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*103*			*80.0-120*
(S) 4-Bromofluorobenzene	*93.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*120*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3446210-1 08/30/19 19:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	24.5	98.1	70.0-130	
Ethylbenzene	25.0	24.2	96.7	70.0-130	
Methyl tert-butyl ether	25.0	26.5	106	70.0-130	
Toluene	25.0	24.2	96.8	70.0-130	
Xylenes, Total	75.0	71.7	95.6	70.0-130	
(S) Toluene-d8			*102*	*80.0-120*	
(S) 4-Bromofluorobenzene			*97.1*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*119*	*70.0-130*	

Method Blank (MB)

(MB) R3446337-2 08/31/19 03:12

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.1*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3446337-1 08/31/19 02:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	23.5	94.1	70.0-130	
Ethylbenzene	25.0	23.8	95.0	70.0-130	
Toluene	25.0	23.0	92.2	70.0-130	
Xylenes, Total	75.0	73.1	97.5	70.0-130	
(S) Toluene-d8			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*101*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*109*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

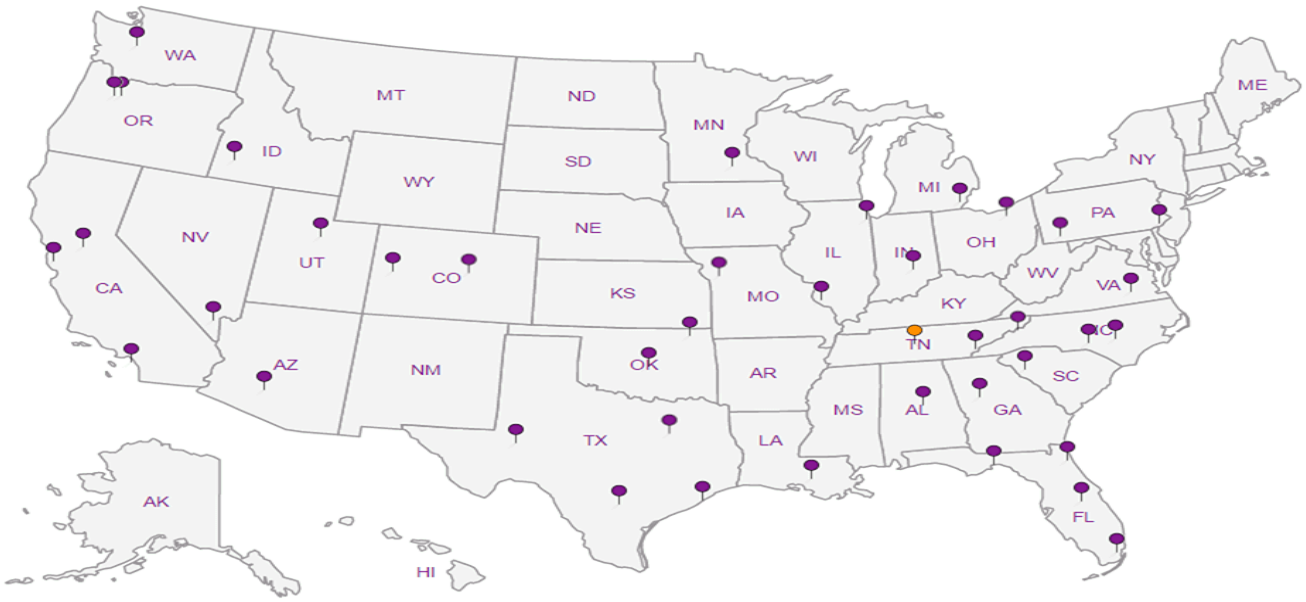
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: Belton, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

SDG # L1132163

A056

Collected by (print): Melissa Warren

Site/Facility ID # Lewis Dr.

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Acctnum: KINCH2MGA
Template: T131319
Prelogin: P724307
PM: 526 - Chris McCord
PB: 8-13-19 Gm
Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	SULFATE 125mlHDPE-NoPres	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
MW-15B-082219	Grab	GW		8.22.19	1340	3		X			-1
mW-34-082219	|	GW	—	|	1000	3		X			-2
MW-12B-082219	|	GW		|	1510	3		X			-3
FB04-082219	|	~~GW~~ WQ	—	|	1032	3		X			-4
TB04-082219	|	~~GW~~ WQ	—	|	—	1		[illegible]	X		-5
mW-17B-082219	|	GW		|	1640	3		X			-6
		GW									
		GW									
		GW									
		GW									

(HCl noted under Pres Chk for V8260BTEXMNSC column)

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks: V8260BTEXMNSC = BTEX,MTBE,Naphthalene,1,2-DCA.

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx X Courier ________

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: (Yes) / No 1 HCL / MeoH TBR	
Bethany Garvey	8.22.19	1730			
Relinquished by : (Signature)	**Date:**	**Time:**	**Received by: (Signature)**	**Temp: A3BF °C** 1.4±0=1.4	**Bottles Received:** 15
					If preservation required by Login: Date/Time
Relinquished by : (Signature)	**Date:**	**Time:**	**Received for lab by: (Signature)** [signature]	**Date:** 08/23	**Time:** 8145

Hold:

Condition: NCF / (OK)

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 26, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1140693
Samples Received:	09/18/2019
Project Number:	D3161400
Description:	Lewis Drive Groundwater
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 500 Atlanta, GA 30328

Entire Report Reviewed By:

Jason Romer
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

FB01-091719 L1140693-01 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 08:00 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350041	1	09/22/19 09:24	09/22/19 09:24	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351454	1	09/24/19 23:36	09/24/19 23:36	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351877	1	09/25/19 14:26	09/25/19 14:26	BMB	Mt. Juliet, TN

MW-45-091719 L1140693-02 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 09:50 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350041	1	09/22/19 09:44	09/22/19 09:44	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351454	1	09/24/19 23:56	09/24/19 23:56	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351877	1	09/25/19 14:46	09/25/19 14:46	BMB	Mt. Juliet, TN

MW-46-091719 L1140693-03 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 10:50 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1348252	1	09/19/19 08:45	09/19/19 08:45	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350041	25	09/22/19 10:05	09/22/19 10:05	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351454	25	09/25/19 00:16	09/25/19 00:16	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351877	25	09/25/19 15:06	09/25/19 15:06	BMB	Mt. Juliet, TN

MW-57-091719 L1140693-04 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 10:50 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1348252	100	09/19/19 10:01	09/19/19 10:01	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350041	10	09/22/19 10:25	09/22/19 10:25	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351454	10	09/25/19 00:37	09/25/19 00:37	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351877	10	09/25/19 15:26	09/25/19 15:26	BMB	Mt. Juliet, TN

MW-57-D-091719 L1140693-05 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 10:55 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350041	10	09/22/19 10:45	09/22/19 10:45	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351454	10	09/25/19 00:57	09/25/19 00:57	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351877	10	09/25/19 15:46	09/25/19 15:46	BMB	Mt. Juliet, TN

MW-56-091719 L1140693-06 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 11:50 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1348948	1	09/20/19 02:22	09/20/19 02:22	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351877	1	09/25/19 16:06	09/25/19 16:06	BMB	Mt. Juliet, TN

MW-43B-091719 L1140693-07 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 14:05 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350041	1	09/22/19 11:26	09/22/19 11:26	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351454	1	09/25/19 01:38	09/25/19 01:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351877	1	09/25/19 16:26	09/25/19 16:26	BMB	Mt. Juliet, TN

MW-43-091719 L1140693-08 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 14:15 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350041	1	09/22/19 11:46	09/22/19 11:46	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351454	1	09/25/19 01:58	09/25/19 01:58	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351877	1	09/25/19 16:46	09/25/19 16:46	BMB	Mt. Juliet, TN

MW-24-091719 L1140693-09 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 14:40 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350041	1	09/22/19 12:06	09/22/19 12:06	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351454	1	09/25/19 02:18	09/25/19 02:18	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351877	1	09/25/19 17:06	09/25/19 17:06	BMB	Mt. Juliet, TN

MW-24B-091719 L1140693-10 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 14:50 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350041	1	09/22/19 12:26	09/22/19 12:26	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351454	1	09/25/19 02:38	09/25/19 02:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351877	1	09/25/19 17:26	09/25/19 17:26	BMB	Mt. Juliet, TN

MW-28-091719 L1140693-11 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 15:30 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350057	1	09/22/19 06:07	09/22/19 06:07	ACG	Mt. Juliet, TN

MW-49-091719 L1140693-12 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 15:45 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350057	1	09/22/19 06:28	09/22/19 06:28	ACG	Mt. Juliet, TN

MW-35-091719 L1140693-13 GW

Collected by: Melissa Warren | Collected date/time: 09/17/19 16:00 | Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350057	1	09/22/19 06:49	09/22/19 06:49	ACG	Mt. Juliet, TN

TB01-091719 L1140693-14 GW

Collected by: Melissa Warren
Collected date/time: 09/17/19 00:00
Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350057	1	09/22/19 05:46	09/22/19 05:46	ACG	Mt. Juliet, TN

MW-37-091719 L1140693-15 GW

Collected by: Melissa Warren
Collected date/time: 09/17/19 15:50
Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1348948	1	09/20/19 02:52	09/20/19 02:52	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350057	1	09/22/19 07:10	09/22/19 07:10	ACG	Mt. Juliet, TN

MW-38-091719 L1140693-16 GW

Collected by: Melissa Warren
Collected date/time: 09/17/19 14:50
Received date/time: 09/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1348948	1	09/20/19 03:37	09/20/19 03:37	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350057	10	09/22/19 07:31	09/22/19 07:31	ACG	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jason Romer
Project Manager

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/22/2019 09:24	WG1350041
Toluene	ND		1.00	1	09/22/2019 09:24	WG1350041
Ethylbenzene	ND		1.00	1	09/22/2019 09:24	WG1350041
Total Xylenes	ND		3.00	1	09/22/2019 09:24	WG1350041
Methyl tert-butyl ether	ND		1.00	1	09/22/2019 09:24	WG1350041
Naphthalene	ND		5.00	1	09/24/2019 23:36	WG1351454
1,2-Dichloroethane	ND		1.00	1	09/25/2019 14:26	WG1351877
(S) Toluene-d8	*97.5*		*80.0-120*		*09/22/2019 09:24*	WG1350041
(S) Toluene-d8	*97.8*		*80.0-120*		*09/24/2019 23:36*	WG1351454
(S) Toluene-d8	*97.9*		*80.0-120*		*09/25/2019 14:26*	WG1351877
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*09/22/2019 09:24*	WG1350041
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/24/2019 23:36*	WG1351454
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/25/2019 14:26*	WG1351877
(S) 1,2-Dichloroethane-d4	*80.2*		*70.0-130*		*09/22/2019 09:24*	WG1350041
(S) 1,2-Dichloroethane-d4	*78.3*		*70.0-130*		*09/24/2019 23:36*	WG1351454
(S) 1,2-Dichloroethane-d4	*78.7*		*70.0-130*		*09/25/2019 14:26*	WG1351877

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	5.24		1.00	1	09/22/2019 09:44	WG1350041
Toluene	ND		1.00	1	09/22/2019 09:44	WG1350041
Ethylbenzene	ND		1.00	1	09/22/2019 09:44	WG1350041
Total Xylenes	ND		3.00	1	09/22/2019 09:44	WG1350041
Methyl tert-butyl ether	103		1.00	1	09/22/2019 09:44	WG1350041
Naphthalene	ND		5.00	1	09/24/2019 23:56	WG1351454
1,2-Dichloroethane	ND		1.00	1	09/25/2019 14:46	WG1351877
(S) Toluene-d8	*99.6*		*80.0-120*		*09/22/2019 09:44*	WG1350041
(S) Toluene-d8	*100*		*80.0-120*		*09/24/2019 23:56*	WG1351454
(S) Toluene-d8	*70.8*	J2	*80.0-120*		*09/25/2019 14:46*	WG1351877
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/22/2019 09:44*	WG1350041
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*09/24/2019 23:56*	WG1351454
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*09/25/2019 14:46*	WG1351877
(S) 1,2-Dichloroethane-d4	*78.4*		*70.0-130*		*09/22/2019 09:44*	WG1350041
(S) 1,2-Dichloroethane-d4	*77.2*		*70.0-130*		*09/24/2019 23:56*	WG1351454
(S) 1,2-Dichloroethane-d4	*80.7*		*70.0-130*		*09/25/2019 14:46*	WG1351877

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	09/19/2019 08:45	WG1348252

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	705		25.0	25	09/22/2019 10:05	WG1350041
Toluene	26.1		25.0	25	09/22/2019 10:05	WG1350041
Ethylbenzene	ND		25.0	25	09/22/2019 10:05	WG1350041
Total Xylenes	150		75.0	25	09/22/2019 10:05	WG1350041
Methyl tert-butyl ether	175		25.0	25	09/22/2019 10:05	WG1350041
Naphthalene	ND		125	25	09/25/2019 00:16	WG1351454
1,2-Dichloroethane	ND		25.0	25	09/25/2019 15:06	WG1351877
(S) Toluene-d8	*98.4*		*80.0-120*		*09/22/2019 10:05*	WG1350041
(S) Toluene-d8	*101*		*80.0-120*		*09/25/2019 00:16*	WG1351454
(S) Toluene-d8	*98.3*		*80.0-120*		*09/25/2019 15:06*	WG1351877
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/22/2019 10:05*	WG1350041
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*09/25/2019 00:16*	WG1351454
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*09/25/2019 15:06*	WG1351877
(S) 1,2-Dichloroethane-d4	*78.2*		*70.0-130*		*09/22/2019 10:05*	WG1350041
(S) 1,2-Dichloroethane-d4	*77.4*		*70.0-130*		*09/25/2019 00:16*	WG1351454
(S) 1,2-Dichloroethane-d4	*77.8*		*70.0-130*		*09/25/2019 15:06*	WG1351877

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	576000		500000	100	09/19/2019 10:01	WG1348252

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	71.8		10.0	10	09/22/2019 10:25	WG1350041
Toluene	ND		10.0	10	09/22/2019 10:25	WG1350041
Ethylbenzene	ND		10.0	10	09/22/2019 10:25	WG1350041
Total Xylenes	ND		30.0	10	09/22/2019 10:25	WG1350041
Methyl tert-butyl ether	74.6		10.0	10	09/22/2019 10:25	WG1350041
Naphthalene	ND		50.0	10	09/25/2019 00:37	WG1351454
1,2-Dichloroethane	ND		10.0	10	09/25/2019 15:26	WG1351877
(S) Toluene-d8	*97.6*		*80.0-120*		*09/22/2019 10:25*	WG1350041
(S) Toluene-d8	*98.9*		*80.0-120*		*09/25/2019 00:37*	WG1351454
(S) Toluene-d8	*98.8*		*80.0-120*		*09/25/2019 15:26*	WG1351877
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/22/2019 10:25*	WG1350041
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/25/2019 00:37*	WG1351454
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/25/2019 15:26*	WG1351877
(S) 1,2-Dichloroethane-d4	*79.7*		*70.0-130*		*09/22/2019 10:25*	WG1350041
(S) 1,2-Dichloroethane-d4	*77.9*		*70.0-130*		*09/25/2019 00:37*	WG1351454
(S) 1,2-Dichloroethane-d4	*79.3*		*70.0-130*		*09/25/2019 15:26*	WG1351877

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	144		10.0	10	09/22/2019 10:45	WG1350041
Toluene	ND		10.0	10	09/22/2019 10:45	WG1350041
Ethylbenzene	ND		10.0	10	09/22/2019 10:45	WG1350041
Total Xylenes	ND		30.0	10	09/22/2019 10:45	WG1350041
Methyl tert-butyl ether	94.1		10.0	10	09/22/2019 10:45	WG1350041
Naphthalene	ND		50.0	10	09/25/2019 00:57	WG1351454
1,2-Dichloroethane	ND		10.0	10	09/25/2019 15:46	WG1351877
(S) Toluene-d8	*96.4*		*80.0-120*		*09/22/2019 10:45*	WG1350041
(S) Toluene-d8	*97.5*		*80.0-120*		*09/25/2019 00:57*	WG1351454
(S) Toluene-d8	*89.0*		*80.0-120*		*09/25/2019 15:46*	WG1351877
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*09/22/2019 10:45*	WG1350041
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*09/25/2019 00:57*	WG1351454
(S) 4-Bromofluorobenzene	*114*		*77.0-126*		*09/25/2019 15:46*	WG1351877
(S) 1,2-Dichloroethane-d4	*79.2*		*70.0-130*		*09/22/2019 10:45*	WG1350041
(S) 1,2-Dichloroethane-d4	*77.4*		*70.0-130*		*09/25/2019 00:57*	WG1351454
(S) 1,2-Dichloroethane-d4	*90.4*		*70.0-130*		*09/25/2019 15:46*	WG1351877

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	09/20/2019 02:22	WG1348948

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	30.1		1.00	1	09/25/2019 16:06	WG1351877
Toluene	ND		1.00	1	09/25/2019 16:06	WG1351877
Ethylbenzene	ND		1.00	1	09/25/2019 16:06	WG1351877
Total Xylenes	8.51		3.00	1	09/25/2019 16:06	WG1351877
Methyl tert-butyl ether	137		1.00	1	09/25/2019 16:06	WG1351877
Naphthalene	ND		5.00	1	09/25/2019 16:06	WG1351877
1,2-Dichloroethane	ND		1.00	1	09/25/2019 16:06	WG1351877
(S) Toluene-d8	*122*	J1	*80.0-120*		*09/25/2019 16:06*	WG1351877
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/25/2019 16:06*	WG1351877
(S) 1,2-Dichloroethane-d4	*83.0*		*70.0-130*		*09/25/2019 16:06*	WG1351877

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/22/2019 11:26	WG1350041
Toluene	ND		1.00	1	09/22/2019 11:26	WG1350041
Ethylbenzene	ND		1.00	1	09/22/2019 11:26	WG1350041
Total Xylenes	ND		3.00	1	09/22/2019 11:26	WG1350041
Methyl tert-butyl ether	ND		1.00	1	09/22/2019 11:26	WG1350041
Naphthalene	ND		5.00	1	09/25/2019 01:38	WG1351454
1,2-Dichloroethane	ND		1.00	1	09/25/2019 16:26	WG1351877
(S) Toluene-d8	*99.9*		*80.0-120*		*09/22/2019 11:26*	WG1350041
(S) Toluene-d8	*96.7*		*80.0-120*		*09/25/2019 01:38*	WG1351454
(S) Toluene-d8	*98.2*		*80.0-120*		*09/25/2019 16:26*	WG1351877
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/22/2019 11:26*	WG1350041
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*09/25/2019 01:38*	WG1351454
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*09/25/2019 16:26*	WG1351877
(S) 1,2-Dichloroethane-d4	*80.2*		*70.0-130*		*09/22/2019 11:26*	WG1350041
(S) 1,2-Dichloroethane-d4	*78.5*		*70.0-130*		*09/25/2019 01:38*	WG1351454
(S) 1,2-Dichloroethane-d4	*78.2*		*70.0-130*		*09/25/2019 16:26*	WG1351877

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/22/2019 11:46	WG1350041
Toluene	ND		1.00	1	09/22/2019 11:46	WG1350041
Ethylbenzene	ND		1.00	1	09/22/2019 11:46	WG1350041
Total Xylenes	ND		3.00	1	09/22/2019 11:46	WG1350041
Methyl tert-butyl ether	ND		1.00	1	09/22/2019 11:46	WG1350041
Naphthalene	ND		5.00	1	09/25/2019 01:58	WG1351454
1,2-Dichloroethane	ND		1.00	1	09/25/2019 16:46	WG1351877
(S) Toluene-d8	*98.5*		*80.0-120*		*09/22/2019 11:46*	WG1350041
(S) Toluene-d8	*98.6*		*80.0-120*		*09/25/2019 01:58*	WG1351454
(S) Toluene-d8	*118*		*80.0-120*		*09/25/2019 16:46*	WG1351877
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*09/22/2019 11:46*	WG1350041
(S) 4-Bromofluorobenzene	*108*		*77.0-126*		*09/25/2019 01:58*	WG1351454
(S) 4-Bromofluorobenzene	*98.1*		*77.0-126*		*09/25/2019 16:46*	WG1351877
(S) 1,2-Dichloroethane-d4	*78.0*		*70.0-130*		*09/22/2019 11:46*	WG1350041
(S) 1,2-Dichloroethane-d4	*78.6*		*70.0-130*		*09/25/2019 01:58*	WG1351454
(S) 1,2-Dichloroethane-d4	*81.8*		*70.0-130*		*09/25/2019 16:46*	WG1351877

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/22/2019 12:06	WG1350041
Toluene	ND		1.00	1	09/22/2019 12:06	WG1350041
Ethylbenzene	ND		1.00	1	09/22/2019 12:06	WG1350041
Total Xylenes	ND		3.00	1	09/22/2019 12:06	WG1350041
Methyl tert-butyl ether	ND		1.00	1	09/22/2019 12:06	WG1350041
Naphthalene	ND		5.00	1	09/25/2019 02:18	WG1351454
1,2-Dichloroethane	ND		1.00	1	09/25/2019 17:06	WG1351877
(S) Toluene-d8	*98.1*		*80.0-120*		*09/22/2019 12:06*	WG1350041
(S) Toluene-d8	*97.0*		*80.0-120*		*09/25/2019 02:18*	WG1351454
(S) Toluene-d8	*99.4*		*80.0-120*		*09/25/2019 17:06*	WG1351877
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/22/2019 12:06*	WG1350041
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*09/25/2019 02:18*	WG1351454
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/25/2019 17:06*	WG1351877
(S) 1,2-Dichloroethane-d4	*79.8*		*70.0-130*		*09/22/2019 12:06*	WG1350041
(S) 1,2-Dichloroethane-d4	*80.0*		*70.0-130*		*09/25/2019 02:18*	WG1351454
(S) 1,2-Dichloroethane-d4	*78.9*		*70.0-130*		*09/25/2019 17:06*	WG1351877

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/22/2019 12:26	WG1350041
Toluene	ND		1.00	1	09/22/2019 12:26	WG1350041
Ethylbenzene	ND		1.00	1	09/22/2019 12:26	WG1350041
Total Xylenes	ND		3.00	1	09/22/2019 12:26	WG1350041
Methyl tert-butyl ether	ND		1.00	1	09/22/2019 12:26	WG1350041
Naphthalene	ND		5.00	1	09/25/2019 02:38	WG1351454
1,2-Dichloroethane	ND		1.00	1	09/25/2019 17:26	WG1351877
(S) Toluene-d8	*99.3*		*80.0-120*		*09/22/2019 12:26*	WG1350041
(S) Toluene-d8	*99.9*		*80.0-120*		*09/25/2019 02:38*	WG1351454
(S) Toluene-d8	*98.5*		*80.0-120*		*09/25/2019 17:26*	WG1351877
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*09/22/2019 12:26*	WG1350041
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*09/25/2019 02:38*	WG1351454
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*09/25/2019 17:26*	WG1351877
(S) 1,2-Dichloroethane-d4	*78.7*		*70.0-130*		*09/22/2019 12:26*	WG1350041
(S) 1,2-Dichloroethane-d4	*78.9*		*70.0-130*		*09/25/2019 02:38*	WG1351454
(S) 1,2-Dichloroethane-d4	*90.1*		*70.0-130*		*09/25/2019 17:26*	WG1351877

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1.68		1.00	1	09/22/2019 06:07	WG1350057
Toluene	ND		1.00	1	09/22/2019 06:07	WG1350057
Ethylbenzene	ND		1.00	1	09/22/2019 06:07	WG1350057
Total Xylenes	ND		3.00	1	09/22/2019 06:07	WG1350057
Methyl tert-butyl ether	ND		1.00	1	09/22/2019 06:07	WG1350057
Naphthalene	ND		5.00	1	09/22/2019 06:07	WG1350057
1,2-Dichloroethane	ND		1.00	1	09/22/2019 06:07	WG1350057
(S) Toluene-d8	*105*		*80.0-120*		*09/22/2019 06:07*	WG1350057
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/22/2019 06:07*	WG1350057
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*09/22/2019 06:07*	WG1350057

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/22/2019 06:28	WG1350057
Toluene	ND		1.00	1	09/22/2019 06:28	WG1350057
Ethylbenzene	ND		1.00	1	09/22/2019 06:28	WG1350057
Total Xylenes	ND		3.00	1	09/22/2019 06:28	WG1350057
Methyl tert-butyl ether	ND		1.00	1	09/22/2019 06:28	WG1350057
Naphthalene	ND		5.00	1	09/22/2019 06:28	WG1350057
1,2-Dichloroethane	ND		1.00	1	09/22/2019 06:28	WG1350057
(S) Toluene-d8	*104*		*80.0-120*		*09/22/2019 06:28*	WG1350057
(S) 4-Bromofluorobenzene	*101*		*77.0-126*		*09/22/2019 06:28*	WG1350057
(S) 1,2-Dichloroethane-d4	*106*		*70.0-130*		*09/22/2019 06:28*	WG1350057

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/22/2019 06:49	WG1350057
Toluene	ND		1.00	1	09/22/2019 06:49	WG1350057
Ethylbenzene	ND		1.00	1	09/22/2019 06:49	WG1350057
Total Xylenes	ND		3.00	1	09/22/2019 06:49	WG1350057
Methyl tert-butyl ether	ND		1.00	1	09/22/2019 06:49	WG1350057
Naphthalene	ND		5.00	1	09/22/2019 06:49	WG1350057
1,2-Dichloroethane	ND		1.00	1	09/22/2019 06:49	WG1350057
(S) Toluene-d8	*105*		*80.0-120*		*09/22/2019 06:49*	WG1350057
(S) 4-Bromofluorobenzene	*101*		*77.0-126*		*09/22/2019 06:49*	WG1350057
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*09/22/2019 06:49*	WG1350057

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/22/2019 05:46	WG1350057
Toluene	ND		1.00	1	09/22/2019 05:46	WG1350057
Ethylbenzene	ND		1.00	1	09/22/2019 05:46	WG1350057
Total Xylenes	ND		3.00	1	09/22/2019 05:46	WG1350057
Methyl tert-butyl ether	ND		1.00	1	09/22/2019 05:46	WG1350057
Naphthalene	ND		5.00	1	09/22/2019 05:46	WG1350057
1,2-Dichloroethane	ND		1.00	1	09/22/2019 05:46	WG1350057
(S) Toluene-d8	*106*		*80.0-120*		*09/22/2019 05:46*	WG1350057
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*09/22/2019 05:46*	WG1350057
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*09/22/2019 05:46*	WG1350057

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	09/20/2019 02:52	WG1348948

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/22/2019 07:10	WG1350057
Toluene	ND		1.00	1	09/22/2019 07:10	WG1350057
Ethylbenzene	ND		1.00	1	09/22/2019 07:10	WG1350057
Total Xylenes	ND		3.00	1	09/22/2019 07:10	WG1350057
Methyl tert-butyl ether	ND		1.00	1	09/22/2019 07:10	WG1350057
Naphthalene	ND		5.00	1	09/22/2019 07:10	WG1350057
1,2-Dichloroethane	ND		1.00	1	09/22/2019 07:10	WG1350057
(S) Toluene-d8	*104*		*80.0-120*		*09/22/2019 07:10*	WG1350057
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*09/22/2019 07:10*	WG1350057
(S) 1,2-Dichloroethane-d4	*108*		*70.0-130*		*09/22/2019 07:10*	WG1350057

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	6050		5000	1	09/20/2019 03:37	WG1348948

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	40.2		10.0	10	09/22/2019 07:31	WG1350057
Toluene	ND		10.0	10	09/22/2019 07:31	WG1350057
Ethylbenzene	ND		10.0	10	09/22/2019 07:31	WG1350057
Total Xylenes	ND		30.0	10	09/22/2019 07:31	WG1350057
Methyl tert-butyl ether	88.2		10.0	10	09/22/2019 07:31	WG1350057
Naphthalene	ND		50.0	10	09/22/2019 07:31	WG1350057
1,2-Dichloroethane	ND		10.0	10	09/22/2019 07:31	WG1350057
(S) Toluene-d8	*104*		*80.0-120*		*09/22/2019 07:31*	WG1350057
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*09/22/2019 07:31*	WG1350057
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*09/22/2019 07:31*	WG1350057

Method Blank (MB)

(MB) R3452465-1 09/19/19 01:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	U		77.4	5000

L1140469-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1140469-01 09/19/19 03:30 • (DUP) R3452465-3 09/19/19 03:40

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	97800	96700	1	1.07		15

L1140693-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1140693-04 09/19/19 08:55 • (DUP) R3452465-6 09/19/19 09:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	3330000	3390000	1	1.76	E	15

L1140693-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1140693-04 09/19/19 10:01 • (DUP) R3452465-8 09/19/19 10:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	576000	576000	100	0.0101		15

Laboratory Control Sample (LCS)

(LCS) R3452465-2 09/19/19 01:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	40900	102	80.0-120	

L1140469-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1140469-01 09/19/19 03:30 • (MS) R3452465-4 09/19/19 03:51 • (MSD) R3452465-5 09/19/19 04:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	97800	148000	148000	100	100	1	80.0-120	E	E	0.139	15

L1140693-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1140693-04 09/19/19 08:55 • (MS) R3452465-7 09/19/19 09:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	3330000	2790000	0.000	1	80.0-120	E V

Method Blank (MB)

(MB) R3452826-1 09/19/19 23:01

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	U		77.4	5000

L1140693-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1140693-06 09/20/19 02:22 • (DUP) R3452826-3 09/20/19 02:37

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	ND	95.5	1	0.000		15

L1140878-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1140878-01 09/20/19 08:05 • (DUP) R3452826-6 09/20/19 08:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	6940	6930	1	0.221		15

Laboratory Control Sample (LCS)

(LCS) R3452826-2 09/19/19 23:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	39100	97.7	80.0-120	

L1140693-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1140693-15 09/20/19 02:52 • (MS) R3452826-4 09/20/19 03:07 • (MSD) R3452826-5 09/20/19 03:22

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	ND	46800	46900	93.1	93.4	1	80.0-120			0.314	15

L1140878-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1140878-01 09/20/19 08:05 • (MS) R3452826-7 09/20/19 08:35

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	6940	57800	102	1	80.0-120	

Method Blank (MB)

(MB) R3454107-3 09/22/19 05:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*98.3*			*80.0-120*
(S) 4-Bromofluorobenzene	*107*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*78.7*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3454107-1 09/22/19 04:41 • (LCSD) R3454107-2 09/22/19 05:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	23.5	23.9	93.9	95.5	70.0-130			1.70	20
Ethylbenzene	25.0	24.1	25.0	96.4	100	70.0-130			3.71	20
Methyl tert-butyl ether	25.0	21.6	21.2	86.3	84.6	70.0-130			1.92	20
Toluene	25.0	23.0	23.8	92.1	95.2	70.0-130			3.35	20
Xylenes, Total	75.0	75.1	76.8	100	102	70.0-130			2.24	20
(S) Toluene-d8				*98.2*	*98.0*	*80.0-120*				
(S) 4-Bromofluorobenzene				*106*	*108*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*77.9*	*78.9*	*70.0-130*				

Method Blank (MB)

(MB) R3454072-3 09/22/19 05:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*101*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3454072-1 09/22/19 04:23 • (LCSD) R3454072-2 09/22/19 04:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	22.9	23.7	91.5	94.8	70.0-130			3.55	20
1,2-Dichloroethane	25.0	27.4	27.7	109	111	70.0-130			1.25	20
Ethylbenzene	25.0	23.5	25.7	94.0	103	70.0-130			9.03	20
Methyl tert-butyl ether	25.0	23.9	24.8	95.5	99.2	70.0-130			3.76	20
Naphthalene	25.0	26.7	27.0	107	108	70.0-130			1.00	20
Toluene	25.0	22.2	24.5	88.9	98.2	70.0-130			9.87	20
Xylenes, Total	75.0	71.6	78.3	95.5	104	70.0-130			8.94	20
(S) Toluene-d8				*97.4*	*102*	*80.0-120*				
(S) 4-Bromofluorobenzene				*96.5*	*100*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*111*	*113*	*70.0-130*				

Method Blank (MB)

(MB) R3454323-2 09/24/19 18:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Naphthalene	U		1.00	5.00
(S) Toluene-d8	*100*			*80.0-120*
(S) 4-Bromofluorobenzene	*106*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*76.3*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3454323-1 09/24/19 18:12

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	25.0	17.8	71.2	70.0-130	
(S) Toluene-d8			*100*	*80.0-120*	
(S) 4-Bromofluorobenzene			*105*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*77.9*	*70.0-130*	

Method Blank (MB)

(MB) R3454550-2 09/25/19 13:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*97.6*			*80.0-120*
(S) 4-Bromofluorobenzene	*105*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*76.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3454550-1 09/25/19 12:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	24.7	98.7	70.0-130	
1,2-Dichloroethane	25.0	20.9	83.8	70.0-130	
Ethylbenzene	25.0	24.4	97.5	70.0-130	
Methyl tert-butyl ether	25.0	29.3	117	70.0-130	
Naphthalene	25.0	18.1	72.5	70.0-130	
Toluene	25.0	23.4	93.6	70.0-130	
Xylenes, Total	75.0	75.8	101	70.0-130	
(S) Toluene-d8			*93.3*	*80.0-120*	
(S) 4-Bromofluorobenzene			*115*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*94.1*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

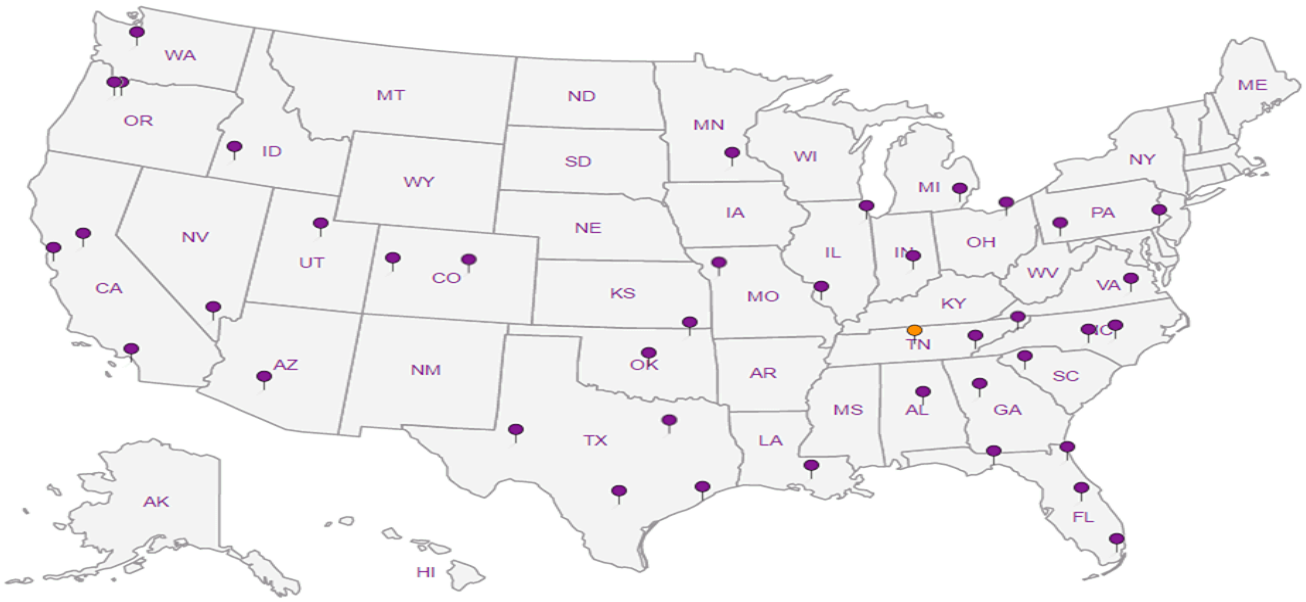
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARREN

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk: X X

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	SULFATE BY IC	Remarks	Sample # (lab only)
FB01-091719	GRAB	GW	NA	09/17/19	0800	3	X				-01
MW-45-091719		GW			0950	3	X				02
MW-46-091719		GW			1050	~~3~~ 4	X		X		03
MW-57-091719		GW			1050	~~3~~ 4	X		X		04
MW-57D-091719		GW			1055	3	X			DUPLICATE	05
MW-56-091719		GW			1150	~~3~~ 4	X		X		06
MW-43B-091719		GW			1405	3	X				07
MW-43-091719		GW			1415	3	X				08
MW-24-091719		GW			1440	3	X				09
MW-24B-091719		GW			1450	3	X				10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXMNSC=BTEX, MTBE, Naphthalene, and 1,2-DCA.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 1203 5780 4396

Trip Blank Received: Yes / No (HCL / MeoH) TBR

Temp: 1.9+.3=2.2 °C Bottles Received: 50

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
[signature]	09/17/19	1800	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature] Date: 9/18/19 Time: 8:45

Sample Receipt Checklist

COC Seal Present/Intact:	__NP	X Y __N
COC Signed/Accurate:		X Y __N
Bottles arrive intact:		X Y __N
Correct bottles used:		X Y __N
Sufficient volume sent:		X Y __N
If Applicable		
VOA Zero Headspace:		X Y __N
Preservation Correct/Checked:		__Y __N
RAD Screen <0.5 mR/hr:		X Y __N

Chain of Custody Page 1 of 2

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1140693

H059

Acctnum: KINCH2MGA
Template: T155769
Prelogin: P729887
PM: 526 - Chris McCord
PB: 9-11-19 GM
Shipped Via: FedEX Ground

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARREN

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Chain of Custody Page 2 of 2

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L140693

Table #

Acctnum: KINCH2MGA
Template: T155769
Prelogin: P729887
PM: 526 - Chris McCord
PB: 9-11-19

Shipped Via: FedEx Ground

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	SULFATE BY IC	Remarks	Sample # (lab only)
MW-28-091719	GRAB	GW	NA	09/17/19	1530	3	X				11
MW-49-091719		GW			1545	3	X				12
MW-35-091719		GW			1600	3	X				13
TB01-091719		GW			—	1	X	X		TRIP BLANK	14
MW-37-091719		GW			1550	4	X		X		15
MW-38-091719		GW			1450	4	X		X		16
		GW				3	X				
		GW				3	X				
		GW				3	X				
		GW				3	X				

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXMNSC=BTEX, MTBE, Naphthalene, and 1,2-DCA.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by : (Signature)	09/17/19	1800			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.9+3=2.2 °C Bottles Received: 50	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9/18/19 Time: 8:45	Hold: / Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 27, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1141238
Samples Received:	09/19/2019
Project Number:	D3161400
Description:	Lewis Drive Groundwater
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 500 Atlanta, GA 30328

Entire Report Reviewed By:

Jason Romer
Project Manager

MW-08-091819 L1141238-01 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 08:35 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351561	1	09/25/19 05:36	09/25/19 05:36	JAH	Mt. Juliet, TN

MW-18-091819 L1141238-02 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 08:50 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351561	1	09/25/19 05:58	09/25/19 05:58	JAH	Mt. Juliet, TN

MW-16-091819 L1141238-03 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 09:00 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351561	1	09/25/19 06:19	09/25/19 06:19	JAH	Mt. Juliet, TN

MW-06B-091819 L1141238-04 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 09:10 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 00:15	09/24/19 00:15	JAH	Mt. Juliet, TN

MW-06-091819 L1141238-05 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 09:20 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 00:35	09/24/19 00:35	JAH	Mt. Juliet, TN

MW-09B-091819 L1141238-06 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 09:35 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 00:54	09/24/19 00:54	JAH	Mt. Juliet, TN

MW-09-091819 L1141238-07 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 09:40 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 01:14	09/24/19 01:14	JAH	Mt. Juliet, TN

MW-02B-091819 L1141238-08 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 10:15 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 01:34	09/24/19 01:34	JAH	Mt. Juliet, TN

MW-02-091819 L1141238-09 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 10:20 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 01:53	09/24/19 01:53	JAH	Mt. Juliet, TN

MW-04-091819 L1141238-10 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 10:50 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 02:13	09/24/19 02:13	JAH	Mt. Juliet, TN

MW-05-091819 L1141238-11 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 11:00 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 02:32	09/24/19 02:32	JAH	Mt. Juliet, TN

MW-32-091819 L1141238-12 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 11:30 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 03:28	09/24/19 03:28	JAH	Mt. Juliet, TN

MW-10-091819 L1141238-13 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 11:45 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 03:48	09/24/19 03:48	JAH	Mt. Juliet, TN

FB02-091819 L1141238-14 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 14:00 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 04:08	09/24/19 04:08	JAH	Mt. Juliet, TN

TB02-091819 L1141238-15 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 00:00 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/23/19 23:56	09/23/19 23:56	JAH	Mt. Juliet, TN

MW-47-091819 L1141238-16 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 14:20 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 04:27	09/24/19 04:27	JAH	Mt. Juliet, TN

MW-31-091819 L1141238-17 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 14:30 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 04:47	09/24/19 04:47	JAH	Mt. Juliet, TN

MW-48B-091819 L1141238-18 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 14:45 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 05:06	09/24/19 05:06	JAH	Mt. Juliet, TN

MW-33T-091819 L1141238-19 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 14:40 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 05:26	09/24/19 05:26	JAH	Mt. Juliet, TN

MW-50B-091819 L1141238-20 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 14:50 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 05:46	09/24/19 05:46	JAH	Mt. Juliet, TN

MW-13B-091819 L1141238-21 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 15:10 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 06:05	09/24/19 06:05	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1352654	10	09/26/19 14:18	09/26/19 14:18	BMB	Mt. Juliet, TN

MW-14B-091819 L1141238-22 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 15:20 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 06:25	09/24/19 06:25	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1352654	1	09/26/19 14:38	09/26/19 14:38	BMB	Mt. Juliet, TN

MW-14-091819 L1141238-23 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 15:30 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350784	1	09/24/19 06:44	09/24/19 06:44	JAH	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jason Romer
Project Manager

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 05:36	WG1351561
Toluene	ND		1.00	1	09/25/2019 05:36	WG1351561
Ethylbenzene	ND		1.00	1	09/25/2019 05:36	WG1351561
Total Xylenes	ND		3.00	1	09/25/2019 05:36	WG1351561
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 05:36	WG1351561
Naphthalene	ND		5.00	1	09/25/2019 05:36	WG1351561
1,2-Dichloroethane	ND		1.00	1	09/25/2019 05:36	WG1351561
(S) Toluene-d8	*104*		*80.0-120*		*09/25/2019 05:36*	WG1351561
(S) 4-Bromofluorobenzene	*90.2*		*77.0-126*		*09/25/2019 05:36*	WG1351561
(S) 1,2-Dichloroethane-d4	*118*		*70.0-130*		*09/25/2019 05:36*	WG1351561

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 05:58	WG1351561
Toluene	10.7		1.00	1	09/25/2019 05:58	WG1351561
Ethylbenzene	1.30		1.00	1	09/25/2019 05:58	WG1351561
Total Xylenes	37.4		3.00	1	09/25/2019 05:58	WG1351561
Methyl tert-butyl ether	15.4		1.00	1	09/25/2019 05:58	WG1351561
Naphthalene	48.7		5.00	1	09/25/2019 05:58	WG1351561
1,2-Dichloroethane	ND		1.00	1	09/25/2019 05:58	WG1351561
(S) Toluene-d8	*101*		*80.0-120*		*09/25/2019 05:58*	WG1351561
(S) 4-Bromofluorobenzene	*95.9*		*77.0-126*		*09/25/2019 05:58*	WG1351561
(S) 1,2-Dichloroethane-d4	*109*		*70.0-130*		*09/25/2019 05:58*	WG1351561

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	8.36		1.00	1	09/25/2019 06:19	WG1351561
Toluene	73.9		1.00	1	09/25/2019 06:19	WG1351561
Ethylbenzene	5.80		1.00	1	09/25/2019 06:19	WG1351561
Total Xylenes	118		3.00	1	09/25/2019 06:19	WG1351561
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 06:19	WG1351561
Naphthalene	132		5.00	1	09/25/2019 06:19	WG1351561
1,2-Dichloroethane	ND		1.00	1	09/25/2019 06:19	WG1351561
(S) Toluene-d8	*98.5*		*80.0-120*		*09/25/2019 06:19*	WG1351561
(S) 4-Bromofluorobenzene	*86.6*		*77.0-126*		*09/25/2019 06:19*	WG1351561
(S) 1,2-Dichloroethane-d4	*123*		*70.0-130*		*09/25/2019 06:19*	WG1351561

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 00:15	WG1350784
Toluene	3.52		1.00	1	09/24/2019 00:15	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 00:15	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 00:15	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 00:15	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 00:15	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 00:15	WG1350784
(S) Toluene-d8	*104*		*80.0-120*		*09/24/2019 00:15*	WG1350784
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/24/2019 00:15*	WG1350784
(S) 1,2-Dichloroethane-d4	*92.6*		*70.0-130*		*09/24/2019 00:15*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 00:35	WG1350784
Toluene	ND		1.00	1	09/24/2019 00:35	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 00:35	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 00:35	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 00:35	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 00:35	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 00:35	WG1350784
(S) Toluene-d8	*103*		*80.0-120*		*09/24/2019 00:35*	WG1350784
(S) 4-Bromofluorobenzene	*101*		*77.0-126*		*09/24/2019 00:35*	WG1350784
(S) 1,2-Dichloroethane-d4	*96.4*		*70.0-130*		*09/24/2019 00:35*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	3.08		1.00	1	09/24/2019 00:54	WG1350784
Toluene	11.4		1.00	1	09/24/2019 00:54	WG1350784
Ethylbenzene	3.04		1.00	1	09/24/2019 00:54	WG1350784
Total Xylenes	22.6		3.00	1	09/24/2019 00:54	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 00:54	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 00:54	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 00:54	WG1350784
(S) Toluene-d8	*102*		*80.0-120*		*09/24/2019 00:54*	WG1350784
(S) 4-Bromofluorobenzene	*98.9*		*77.0-126*		*09/24/2019 00:54*	WG1350784
(S) 1,2-Dichloroethane-d4	*96.5*		*70.0-130*		*09/24/2019 00:54*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 01:14	WG1350784
Toluene	ND		1.00	1	09/24/2019 01:14	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 01:14	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 01:14	WG1350784
Methyl tert-butyl ether	1.48		1.00	1	09/24/2019 01:14	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 01:14	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 01:14	WG1350784
(S) Toluene-d8	*104*		*80.0-120*		*09/24/2019 01:14*	WG1350784
(S) 4-Bromofluorobenzene	*99.1*		*77.0-126*		*09/24/2019 01:14*	WG1350784
(S) 1,2-Dichloroethane-d4	*93.3*		*70.0-130*		*09/24/2019 01:14*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 01:34	WG1350784
Toluene	ND		1.00	1	09/24/2019 01:34	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 01:34	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 01:34	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 01:34	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 01:34	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 01:34	WG1350784
(S) Toluene-d8	*103*		*80.0-120*		*09/24/2019 01:34*	WG1350784
(S) 4-Bromofluorobenzene	*96.1*		*77.0-126*		*09/24/2019 01:34*	WG1350784
(S) 1,2-Dichloroethane-d4	*93.2*		*70.0-130*		*09/24/2019 01:34*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 01:53	WG1350784
Toluene	ND		1.00	1	09/24/2019 01:53	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 01:53	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 01:53	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 01:53	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 01:53	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 01:53	WG1350784
(S) Toluene-d8	*103*		*80.0-120*		*09/24/2019 01:53*	WG1350784
(S) 4-Bromofluorobenzene	*99.8*		*77.0-126*		*09/24/2019 01:53*	WG1350784
(S) 1,2-Dichloroethane-d4	*100*		*70.0-130*		*09/24/2019 01:53*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 02:13	WG1350784
Toluene	ND		1.00	1	09/24/2019 02:13	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 02:13	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 02:13	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 02:13	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 02:13	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 02:13	WG1350784
(S) Toluene-d8	*103*		*80.0-120*		*09/24/2019 02:13*	WG1350784
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*09/24/2019 02:13*	WG1350784
(S) 1,2-Dichloroethane-d4	*94.3*		*70.0-130*		*09/24/2019 02:13*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 02:32	WG1350784
Toluene	ND		1.00	1	09/24/2019 02:32	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 02:32	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 02:32	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 02:32	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 02:32	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 02:32	WG1350784
(S) Toluene-d8	*102*		*80.0-120*		*09/24/2019 02:32*	WG1350784
(S) 4-Bromofluorobenzene	*98.2*		*77.0-126*		*09/24/2019 02:32*	WG1350784
(S) 1,2-Dichloroethane-d4	*95.1*		*70.0-130*		*09/24/2019 02:32*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 03:28	WG1350784
Toluene	ND		1.00	1	09/24/2019 03:28	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 03:28	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 03:28	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 03:28	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 03:28	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 03:28	WG1350784
(S) Toluene-d8	*102*		*80.0-120*		*09/24/2019 03:28*	WG1350784
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*09/24/2019 03:28*	WG1350784
(S) 1,2-Dichloroethane-d4	*94.3*		*70.0-130*		*09/24/2019 03:28*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 03:48	WG1350784
Toluene	ND		1.00	1	09/24/2019 03:48	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 03:48	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 03:48	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 03:48	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 03:48	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 03:48	WG1350784
(S) Toluene-d8	*104*		*80.0-120*		*09/24/2019 03:48*	WG1350784
(S) 4-Bromofluorobenzene	*98.8*		*77.0-126*		*09/24/2019 03:48*	WG1350784
(S) 1,2-Dichloroethane-d4	*95.3*		*70.0-130*		*09/24/2019 03:48*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 04:08	WG1350784
Toluene	ND		1.00	1	09/24/2019 04:08	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 04:08	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 04:08	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 04:08	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 04:08	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 04:08	WG1350784
(S) Toluene-d8	*101*		*80.0-120*		*09/24/2019 04:08*	WG1350784
(S) 4-Bromofluorobenzene	*95.9*		*77.0-126*		*09/24/2019 04:08*	WG1350784
(S) 1,2-Dichloroethane-d4	*93.6*		*70.0-130*		*09/24/2019 04:08*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/23/2019 23:56	WG1350784
Toluene	ND		1.00	1	09/23/2019 23:56	WG1350784
Ethylbenzene	ND		1.00	1	09/23/2019 23:56	WG1350784
Total Xylenes	ND		3.00	1	09/23/2019 23:56	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/23/2019 23:56	WG1350784
Naphthalene	ND		5.00	1	09/23/2019 23:56	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/23/2019 23:56	WG1350784
(S) Toluene-d8	*101*		*80.0-120*		*09/23/2019 23:56*	WG1350784
(S) 4-Bromofluorobenzene	*99.6*		*77.0-126*		*09/23/2019 23:56*	WG1350784
(S) 1,2-Dichloroethane-d4	*95.8*		*70.0-130*		*09/23/2019 23:56*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 04:27	WG1350784
Toluene	ND		1.00	1	09/24/2019 04:27	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 04:27	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 04:27	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 04:27	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 04:27	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 04:27	WG1350784
(S) Toluene-d8	*103*		*80.0-120*		*09/24/2019 04:27*	WG1350784
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*09/24/2019 04:27*	WG1350784
(S) 1,2-Dichloroethane-d4	*97.6*		*70.0-130*		*09/24/2019 04:27*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 04:47	WG1350784
Toluene	ND		1.00	1	09/24/2019 04:47	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 04:47	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 04:47	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 04:47	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 04:47	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 04:47	WG1350784
(S) Toluene-d8	*98.7*		*80.0-120*		*09/24/2019 04:47*	WG1350784
(S) 4-Bromofluorobenzene	*94.9*		*77.0-126*		*09/24/2019 04:47*	WG1350784
(S) 1,2-Dichloroethane-d4	*94.3*		*70.0-130*		*09/24/2019 04:47*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 05:06	WG1350784
Toluene	ND		1.00	1	09/24/2019 05:06	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 05:06	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 05:06	WG1350784
Methyl tert-butyl ether	1.14		1.00	1	09/24/2019 05:06	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 05:06	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 05:06	WG1350784
(S) Toluene-d8	*102*		*80.0-120*		*09/24/2019 05:06*	WG1350784
(S) 4-Bromofluorobenzene	*97.9*		*77.0-126*		*09/24/2019 05:06*	WG1350784
(S) 1,2-Dichloroethane-d4	*97.1*		*70.0-130*		*09/24/2019 05:06*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 05:26	WG1350784
Toluene	ND		1.00	1	09/24/2019 05:26	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 05:26	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 05:26	WG1350784
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 05:26	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 05:26	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 05:26	WG1350784
(S) Toluene-d8	*105*		*80.0-120*		*09/24/2019 05:26*	WG1350784
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/24/2019 05:26*	WG1350784
(S) 1,2-Dichloroethane-d4	*96.2*		*70.0-130*		*09/24/2019 05:26*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	25.6		1.00	1	09/24/2019 05:46	WG1350784
Toluene	1.20		1.00	1	09/24/2019 05:46	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 05:46	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 05:46	WG1350784
Methyl tert-butyl ether	43.1		1.00	1	09/24/2019 05:46	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 05:46	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 05:46	WG1350784
(S) Toluene-d8	*101*		*80.0-120*		*09/24/2019 05:46*	WG1350784
(S) 4-Bromofluorobenzene	*96.8*		*77.0-126*		*09/24/2019 05:46*	WG1350784
(S) 1,2-Dichloroethane-d4	*96.4*		*70.0-130*		*09/24/2019 05:46*	WG1350784

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	408		10.0	10	09/26/2019 14:18	WG1352654
Toluene	325		10.0	10	09/26/2019 14:18	WG1352654
Ethylbenzene	71.2		1.00	1	09/24/2019 06:05	WG1350784
Total Xylenes	446		3.00	1	09/24/2019 06:05	WG1350784
Methyl tert-butyl ether	142		1.00	1	09/24/2019 06:05	WG1350784
Naphthalene	14.0		5.00	1	09/24/2019 06:05	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 06:05	WG1350784
(S) Toluene-d8	*105*		*80.0-120*		*09/24/2019 06:05*	WG1350784
(S) Toluene-d8	*96.4*		*80.0-120*		*09/26/2019 14:18*	WG1352654
(S) 4-Bromofluorobenzene	*99.5*		*77.0-126*		*09/24/2019 06:05*	WG1350784
(S) 4-Bromofluorobenzene	*94.9*		*77.0-126*		*09/26/2019 14:18*	WG1352654
(S) 1,2-Dichloroethane-d4	*96.8*		*70.0-130*		*09/24/2019 06:05*	WG1350784
(S) 1,2-Dichloroethane-d4	*77.4*		*70.0-130*		*09/26/2019 14:18*	WG1352654

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1.74		1.00	1	09/26/2019 14:38	WG1352654
Toluene	ND		1.00	1	09/24/2019 06:25	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 06:25	WG1350784
Total Xylenes	4.57		3.00	1	09/24/2019 06:25	WG1350784
Methyl tert-butyl ether	11.1		1.00	1	09/24/2019 06:25	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 06:25	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 06:25	WG1350784
(S) Toluene-d8	*103*		*80.0-120*		*09/24/2019 06:25*	WG1350784
(S) Toluene-d8	*96.8*		*80.0-120*		*09/26/2019 14:38*	WG1352654
(S) 4-Bromofluorobenzene	*98.4*		*77.0-126*		*09/24/2019 06:25*	WG1350784
(S) 4-Bromofluorobenzene	*96.3*		*77.0-126*		*09/26/2019 14:38*	WG1352654
(S) 1,2-Dichloroethane-d4	*94.3*		*70.0-130*		*09/24/2019 06:25*	WG1350784
(S) 1,2-Dichloroethane-d4	*80.7*		*70.0-130*		*09/26/2019 14:38*	WG1352654

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 06:44	WG1350784
Toluene	ND		1.00	1	09/24/2019 06:44	WG1350784
Ethylbenzene	ND		1.00	1	09/24/2019 06:44	WG1350784
Total Xylenes	ND		3.00	1	09/24/2019 06:44	WG1350784
Methyl tert-butyl ether	2.02		1.00	1	09/24/2019 06:44	WG1350784
Naphthalene	ND		5.00	1	09/24/2019 06:44	WG1350784
1,2-Dichloroethane	ND		1.00	1	09/24/2019 06:44	WG1350784
(S) Toluene-d8	*104*		*80.0-120*		*09/24/2019 06:44*	WG1350784
(S) 4-Bromofluorobenzene	*98.2*		*77.0-126*		*09/24/2019 06:44*	WG1350784
(S) 1,2-Dichloroethane-d4	*95.2*		*70.0-130*		*09/24/2019 06:44*	WG1350784

Method Blank (MB)

(MB) R3454793-2 09/23/19 22:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*106*			*80.0-120*
(S) 4-Bromofluorobenzene	*101*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*95.0*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3454793-1 09/23/19 21:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	27.1	109	70.0-130	
1,2-Dichloroethane	25.0	24.2	96.8	70.0-130	
Ethylbenzene	25.0	27.7	111	70.0-130	
Methyl tert-butyl ether	25.0	25.9	104	70.0-130	
Naphthalene	25.0	28.0	112	70.0-130	
Toluene	25.0	27.5	110	70.0-130	
Xylenes, Total	75.0	82.4	110	70.0-130	
(S) Toluene-d8			*104*	*80.0-120*	
(S) 4-Bromofluorobenzene			*98.4*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*95.5*	*70.0-130*	

Method Blank (MB)

(MB) R3454719-2 09/25/19 04:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*100*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3454719-1 09/25/19 03:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	24.0	96.0	70.0-130	
1,2-Dichloroethane	25.0	30.5	122	70.0-130	
Ethylbenzene	25.0	21.4	85.8	70.0-130	
Methyl tert-butyl ether	25.0	27.5	110	70.0-130	
Naphthalene	25.0	26.7	107	70.0-130	
Toluene	25.0	22.6	90.5	70.0-130	
Xylenes, Total	75.0	62.7	83.6	70.0-130	
(S) Toluene-d8			*91.9*	*80.0-120*	
(S) 4-Bromofluorobenzene			*87.5*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*125*	*70.0-130*	

L1141238-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1141238-02 09/25/19 05:58 • (MS) R3454719-3 09/25/19 10:37 • (MSD) R3454719-4 09/25/19 10:59

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	ND	24.9	24.7	97.0	96.3	1	17.0-158			0.727	27
1,2-Dichloroethane	25.0	ND	30.0	29.7	120	119	1	29.0-151			0.911	27
Ethylbenzene	25.0	1.30	21.6	21.9	81.1	82.3	1	30.0-155			1.42	27
Methyl tert-butyl ether	25.0	15.4	39.3	39.5	95.6	96.4	1	28.0-150			0.512	29
Naphthalene	25.0	48.7	65.2	69.7	66.1	84.2	1	12.0-156			6.71	35
Toluene	25.0	10.7	31.3	30.6	82.6	79.8	1	26.0-154			2.34	28
Xylenes, Total	75.0	37.4	91.6	89.6	72.2	69.6	1	29.0-154			2.21	28

L1141238-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1141238-02 09/25/19 05:58 • (MS) R3454719-3 09/25/19 10:37 • (MSD) R3454719-4 09/25/19 10:59

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) Toluene-d8					*92.6*	*91.4*		*80.0-120*				
(S) 4-Bromofluorobenzene					*91.4*	*93.3*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*108*	*107*		*70.0-130*				

Method Blank (MB)

(MB) R3454999-2 09/26/19 13:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Toluene	U		0.412	1.00
(S) Toluene-d8	*99.3*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*78.2*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3454999-1 09/26/19 12:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	25.8	103	70.0-130	
Toluene	25.0	25.2	101	70.0-130	
(S) Toluene-d8			*95.0*	*80.0-120*	
(S) 4-Bromofluorobenzene			*95.7*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*77.3*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

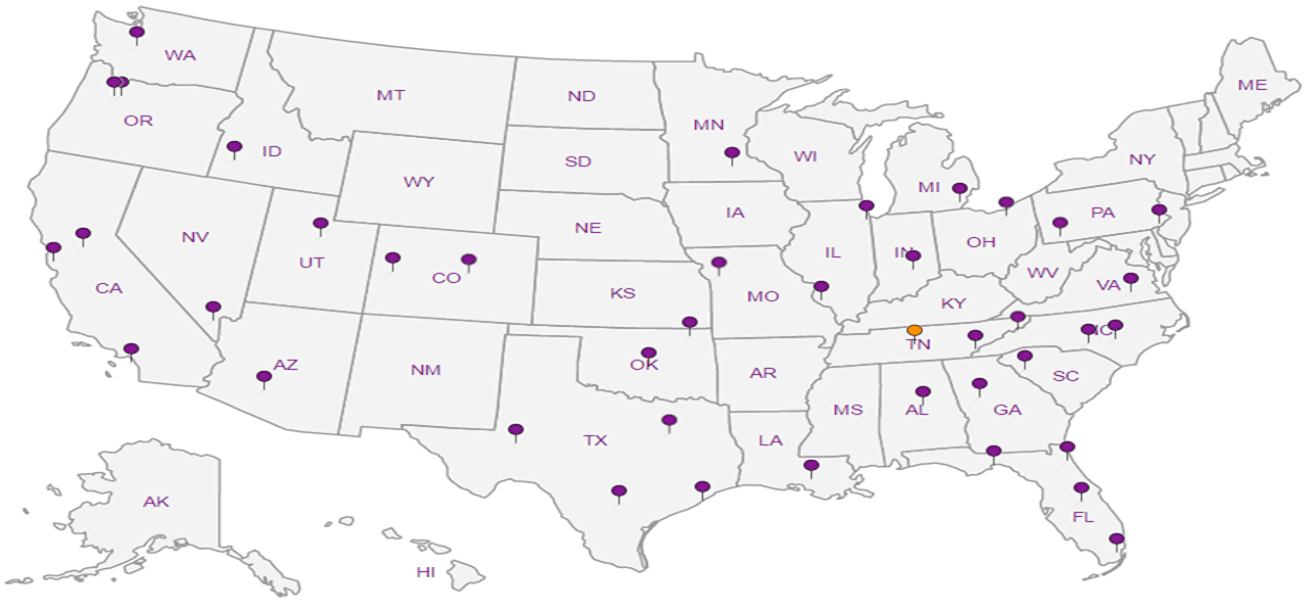
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Chain of Custody Page 1 of 3

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Pres Chk

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project #: D3161400

Lab Project #: KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARREN

Site/Facility ID #: LEWIS DRIVE

P.O. #:

Collected by (signature): [signature]

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #:

Date Results Needed:

Immediately Packed on Ice N ___ Y ✓

SDG # 1141238
H116

Acctnum: KINCH2MGA
Template: T131319
Prelogin: P724307
PM: 526 - Chris McCord
PB: 8-13-19 [initials]
Shipped Via: FedEX Ground

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	SULFATE 125mlHDPE-NoPres	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
MW-08-091819	GRAB	GW	NA	09/18/19	0835	3		X			-01
MW-18-091819	↓	GW	↓	↓	0850	3		X		DILUTE	02
MW-16-091819	↓	GW	↓	↓	0900	3		X			03
MW-06B-091819	↓	GW	↓	↓	0910	3		X			04
MW-06-091819	↓	GW	↓	↓	0920	3		X			05
MW-09B-091819	↓	GW	↓	↓	0935	3		X			06
MW-09-091819	↓	GW	↓	↓	0940	3		X			07
MW-02B-091819	↓	GW	↓	↓	1015	3		X			08
MW-02-091819	↓	GW	↓	↓	1020	3		X			09
MW-04-091819	↓	GW	↓	↓	1050	3		X			10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks: V8260BTEXMNSC = BTEX, MTBE, Naphthalene, 1,2-DCA.

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: __ UPS __ FedEx __ Courier ________

Tracking # 1203 5180 4352

Sample Receipt Checklist
COC Seal Present/Intact: NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	
[signature]	09/18/19	1900		Trip Blank Received: Yes / No — HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.6+0=3.6 °C — Bottles Received: 66
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 9/19/19 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARREN

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	SULFATE 125mlHDPE-NoPres	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
MW-05-091819	GRAB	GW	NA	09/18/19	1100	3		X			11
MW-32-091819		GW			1130	3		X			12
MW-10-091819		GW			1145	3		X			13
FB02-091819		GW			1400	3		X			14
TB02-091819		GW			----	1			X		15
MW-47-091819		GW			1420	3		X			16
MW-31-091819		GW			1430	3		X			17
MW-48B-091819		GW			1445	3		X			18
MW-33T-091819		GW			1440	3		X			19
MW-50B-091819		GW			1450	3		X			20

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXMNSC = BTEX,MTBE,Naphthalene,1,2-DCA.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	09/18/19	1900		X
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				3.6+0+3.6=7.2 6 6
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
			Hailey	9/19/19 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Chain of Custody Page 2 of 3

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1141238

Table #

Acctnum: KINCH2MGA
Template: T131319
Prelogin: P724307
PM: 526 - Chris McCord
PB: 8-13-19

Shipped Via: FedEx Ground

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARREN

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk: X

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
MW-13B-091819	GRAB	GW	NA	09/18/19	1510	3	X			21
MW-14B-091819	↓	GW	↓	↓	1520	3	X			22
MW-14-091819	↓	GW	↓	↓	1530	3	X			23
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			

Chain of Custody Page 3 of 3

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 114236

Table #

Acctnum: KINCH2MGA

Template: T155769

Prelogin: P729887

PM: 526 - Chris McCord

PB: 9-11-19

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXMNSC=BTEX, MTBE, Naphthalene, and 1,2-DCA.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR
	09/18/19	1900		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				3.6+0=3.6 12
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
				9/19/19 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 27, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1141422
Samples Received:	09/20/2019
Project Number:	D3161400
Description:	Lewis Drive Groundwater
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 500 Atlanta, GA 30328

Entire Report Reviewed By:

Jason Romer
Project Manager

MW-07-091919 L1141422-01 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 09:50 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	50	09/25/19 02:18	09/25/19 02:18	JCP	Mt. Juliet, TN

MW-29-091919 L1141422-02 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 08:55 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 02:42	09/25/19 02:42	JCP	Mt. Juliet, TN

MW-26-091919 L1141422-03 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 09:10 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 03:06	09/25/19 03:06	JCP	Mt. Juliet, TN

MW-26B-091919 L1141422-04 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 09:20 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 03:31	09/25/19 03:31	JCP	Mt. Juliet, TN

MW-23-091919 L1141422-05 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 09:35 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	5	09/25/19 03:55	09/25/19 03:55	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1352978	200	09/26/19 18:58	09/26/19 18:58	BMB	Mt. Juliet, TN

MW-23-D-091919 L1141422-06 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 09:30 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	10	09/25/19 04:19	09/25/19 04:19	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1352978	100	09/26/19 19:19	09/26/19 19:19	BMB	Mt. Juliet, TN

MW-23B-091919 L1141422-07 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 09:45 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 04:43	09/25/19 04:43	JCP	Mt. Juliet, TN

MW-45B-091919 L1141422-08 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 09:55 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 05:08	09/25/19 05:08	JCP	Mt. Juliet, TN

MW-21-091919 L1141422-09 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 10:10 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 05:32	09/25/19 05:32	JCP	Mt. Juliet, TN

MW-17B-091919 L1141422-10 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 10:25 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	10	09/25/19 05:56	09/25/19 05:56	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1352978	500	09/26/19 19:39	09/26/19 19:39	BMB	Mt. Juliet, TN

MW-44B-091919 L1141422-11 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 10:50 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 06:21	09/25/19 06:21	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1352978	1	09/26/19 19:59	09/26/19 19:59	BMB	Mt. Juliet, TN

MW-01-091919 L1141422-12 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 11:00 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 06:45	09/25/19 06:45	JCP	Mt. Juliet, TN

MW-01B-091919 L1141422-13 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 11:10 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 07:09	09/25/19 07:09	JCP	Mt. Juliet, TN

MW-27-091919 L1141422-14 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 11:20 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1352978	1	09/26/19 20:19	09/26/19 20:19	BMB	Mt. Juliet, TN

MW-27B-091919 L1141422-15 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 11:25 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1352978	1	09/26/19 20:40	09/26/19 20:40	BMB	Mt. Juliet, TN

MW-12-091919 L1141422-16 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 13:30 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 08:22	09/25/19 08:22	JCP	Mt. Juliet, TN

MW-12B-091919 L1141422-17 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 13:35 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 08:47	09/25/19 08:47	JCP	Mt. Juliet, TN

MW-25-091919 L1141422-18 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 13:45 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 09:11	09/25/19 09:11	JCP	Mt. Juliet, TN

MW-25B-091919 L1141422-19 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 13:50 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 09:35	09/25/19 09:35	JCP	Mt. Juliet, TN

MW-15-091919 L1141422-20 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 14:05 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351496	1	09/25/19 10:00	09/25/19 10:00	JCP	Mt. Juliet, TN

MW-15B-091919 L1141422-21 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 14:20 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	100	09/26/19 02:30	09/26/19 02:30	JAH	Mt. Juliet, TN

TB04-091919 L1141422-22 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 00:00 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1352155	1	09/25/19 16:09	09/25/19 16:09	ACG	Mt. Juliet, TN

FB03-091919 L1141422-23 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 14:25 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	1	09/26/19 02:50	09/26/19 02:50	JAH	Mt. Juliet, TN

MW-11-091919 L1141422-24 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 15:15 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	500	09/26/19 03:10	09/26/19 03:10	JAH	Mt. Juliet, TN

MW-36-091919 L1141422-25 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 15:35 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	10	09/26/19 03:30	09/26/19 03:30	JAH	Mt. Juliet, TN

MW-36-D-091919 L1141422-26 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 15:40 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	5	09/26/19 03:50	09/26/19 03:50	JAH	Mt. Juliet, TN

MW-36B-091919 L1141422-27 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 15:45 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	1	09/26/19 04:10	09/26/19 04:10	JAH	Mt. Juliet, TN

MW-41-D-091919 L1141422-28 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 14:45 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	1	09/26/19 04:30	09/26/19 04:30	JAH	Mt. Juliet, TN

MW-41-091919 L1141422-29 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 14:40 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	1	09/26/19 04:50	09/26/19 04:50	JAH	Mt. Juliet, TN

MW-42-091919 L1141422-30 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 14:55 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	1	09/26/19 05:10	09/26/19 05:10	JAH	Mt. Juliet, TN

MW-40-091919 L1141422-31 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 14:35 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	1	09/26/19 05:30	09/26/19 05:30	JAH	Mt. Juliet, TN

MW-34-091919 L1141422-32 GW

Collected by: Melissa Warren | Collected date/time: 09/19/19 14:25 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	1	09/26/19 05:50	09/26/19 05:50	JAH	Mt. Juliet, TN

MW-39-091919 L1141422-33 GW

Collected by: Melissa Warren
Collected date/time: 09/19/19 14:30
Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1351565	1	09/26/19 06:10	09/26/19 06:10	JAH	Mt. Juliet, TN

TB05-091919 L1141422-34 GW

Collected by: Melissa Warren
Collected date/time: 09/19/19 00:00
Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1352155	1	09/25/19 16:29	09/25/19 16:29	ACG	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jason Romer
Project Manager

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1580		50.0	50	09/25/2019 02:18	WG1351496
Toluene	2550		50.0	50	09/25/2019 02:18	WG1351496
Ethylbenzene	148		50.0	50	09/25/2019 02:18	WG1351496
Total Xylenes	2160		150	50	09/25/2019 02:18	WG1351496
Methyl tert-butyl ether	ND		50.0	50	09/25/2019 02:18	WG1351496
Naphthalene	ND		250	50	09/25/2019 02:18	WG1351496
1,2-Dichloroethane	ND		50.0	50	09/25/2019 02:18	WG1351496
(S) Toluene-d8	*110*		*80.0-120*		*09/25/2019 02:18*	WG1351496
(S) 4-Bromofluorobenzene	*113*		*77.0-126*		*09/25/2019 02:18*	WG1351496
(S) 1,2-Dichloroethane-d4	*119*		*70.0-130*		*09/25/2019 02:18*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 02:42	WG1351496
Toluene	ND		1.00	1	09/25/2019 02:42	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 02:42	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 02:42	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 02:42	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 02:42	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 02:42	WG1351496
(S) Toluene-d8	*112*		*80.0-120*		*09/25/2019 02:42*	WG1351496
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*09/25/2019 02:42*	WG1351496
(S) 1,2-Dichloroethane-d4	*117*		*70.0-130*		*09/25/2019 02:42*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 03:06	WG1351496
Toluene	ND		1.00	1	09/25/2019 03:06	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 03:06	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 03:06	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 03:06	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 03:06	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 03:06	WG1351496
(S) Toluene-d8	*107*		*80.0-120*		*09/25/2019 03:06*	WG1351496
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/25/2019 03:06*	WG1351496
(S) 1,2-Dichloroethane-d4	*119*		*70.0-130*		*09/25/2019 03:06*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 03:31	WG1351496
Toluene	ND		1.00	1	09/25/2019 03:31	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 03:31	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 03:31	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 03:31	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 03:31	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 03:31	WG1351496
(S) Toluene-d8	*109*		*80.0-120*		*09/25/2019 03:31*	WG1351496
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*09/25/2019 03:31*	WG1351496
(S) 1,2-Dichloroethane-d4	*123*		*70.0-130*		*09/25/2019 03:31*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	2950		200	200	09/26/2019 18:58	WG1352978
Toluene	1060		200	200	09/26/2019 18:58	WG1352978
Ethylbenzene	192		5.00	5	09/25/2019 03:55	WG1351496
Total Xylenes	2210		15.0	5	09/25/2019 03:55	WG1351496
Methyl tert-butyl ether	99.9		5.00	5	09/25/2019 03:55	WG1351496
Naphthalene	38.4	B	25.0	5	09/25/2019 03:55	WG1351496
1,2-Dichloroethane	ND		5.00	5	09/25/2019 03:55	WG1351496
(S) Toluene-d8	*107*		*80.0-120*		*09/25/2019 03:55*	WG1351496
(S) Toluene-d8	*101*		*80.0-120*		*09/26/2019 18:58*	WG1352978
(S) 4-Bromofluorobenzene	*110*		*77.0-126*		*09/25/2019 03:55*	WG1351496
(S) 4-Bromofluorobenzene	*98.9*		*77.0-126*		*09/26/2019 18:58*	WG1352978
(S) 1,2-Dichloroethane-d4	*116*		*70.0-130*		*09/25/2019 03:55*	WG1351496
(S) 1,2-Dichloroethane-d4	*93.7*		*70.0-130*		*09/26/2019 18:58*	WG1352978

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	2640		100	100	09/26/2019 19:19	WG1352978
Toluene	999		10.0	10	09/25/2019 04:19	WG1351496
Ethylbenzene	154		10.0	10	09/25/2019 04:19	WG1351496
Total Xylenes	1990		30.0	10	09/25/2019 04:19	WG1351496
Methyl tert-butyl ether	91.5		10.0	10	09/25/2019 04:19	WG1351496
Naphthalene	ND		50.0	10	09/25/2019 04:19	WG1351496
1,2-Dichloroethane	ND		10.0	10	09/25/2019 04:19	WG1351496
(S) Toluene-d8	*106*		*80.0-120*		*09/25/2019 04:19*	WG1351496
(S) Toluene-d8	*104*		*80.0-120*		*09/26/2019 19:19*	WG1352978
(S) 4-Bromofluorobenzene	*109*		*77.0-126*		*09/25/2019 04:19*	WG1351496
(S) 4-Bromofluorobenzene	*101*		*77.0-126*		*09/26/2019 19:19*	WG1352978
(S) 1,2-Dichloroethane-d4	*117*		*70.0-130*		*09/25/2019 04:19*	WG1351496
(S) 1,2-Dichloroethane-d4	*92.8*		*70.0-130*		*09/26/2019 19:19*	WG1352978

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 04:43	WG1351496
Toluene	ND		1.00	1	09/25/2019 04:43	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 04:43	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 04:43	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 04:43	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 04:43	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 04:43	WG1351496
(S) Toluene-d8	*108*		*80.0-120*		*09/25/2019 04:43*	WG1351496
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*09/25/2019 04:43*	WG1351496
(S) 1,2-Dichloroethane-d4	*119*		*70.0-130*		*09/25/2019 04:43*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 05:08	WG1351496
Toluene	ND		1.00	1	09/25/2019 05:08	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 05:08	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 05:08	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 05:08	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 05:08	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 05:08	WG1351496
(S) Toluene-d8	*110*		*80.0-120*		*09/25/2019 05:08*	WG1351496
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*09/25/2019 05:08*	WG1351496
(S) 1,2-Dichloroethane-d4	*119*		*70.0-130*		*09/25/2019 05:08*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 05:32	WG1351496
Toluene	ND		1.00	1	09/25/2019 05:32	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 05:32	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 05:32	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 05:32	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 05:32	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 05:32	WG1351496
(S) Toluene-d8	*106*		*80.0-120*		*09/25/2019 05:32*	WG1351496
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/25/2019 05:32*	WG1351496
(S) 1,2-Dichloroethane-d4	*124*		*70.0-130*		*09/25/2019 05:32*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	7700		500	500	09/26/2019 19:39	WG1352978
Toluene	12000		500	500	09/26/2019 19:39	WG1352978
Ethylbenzene	833		10.0	10	09/25/2019 05:56	WG1351496
Total Xylenes	8740		1500	500	09/26/2019 19:39	WG1352978
Methyl tert-butyl ether	665		10.0	10	09/25/2019 05:56	WG1351496
Naphthalene	195		50.0	10	09/25/2019 05:56	WG1351496
1,2-Dichloroethane	ND		10.0	10	09/25/2019 05:56	WG1351496
(S) Toluene-d8	*105*		*80.0-120*		*09/25/2019 05:56*	WG1351496
(S) Toluene-d8	*103*		*80.0-120*		*09/26/2019 19:39*	WG1352978
(S) 4-Bromofluorobenzene	*112*		*77.0-126*		*09/25/2019 05:56*	WG1351496
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*09/26/2019 19:39*	WG1352978
(S) 1,2-Dichloroethane-d4	*111*		*70.0-130*		*09/25/2019 05:56*	WG1351496
(S) 1,2-Dichloroethane-d4	*93.0*		*70.0-130*		*09/26/2019 19:39*	WG1352978

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/26/2019 19:59	WG1352978
Toluene	ND		1.00	1	09/26/2019 19:59	WG1352978
Ethylbenzene	ND		1.00	1	09/25/2019 06:21	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 06:21	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 06:21	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 06:21	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 06:21	WG1351496
(S) Toluene-d8	*109*		*80.0-120*		*09/25/2019 06:21*	WG1351496
(S) Toluene-d8	*103*		*80.0-120*		*09/26/2019 19:59*	WG1352978
(S) 4-Bromofluorobenzene	*108*		*77.0-126*		*09/25/2019 06:21*	WG1351496
(S) 4-Bromofluorobenzene	*101*		*77.0-126*		*09/26/2019 19:59*	WG1352978
(S) 1,2-Dichloroethane-d4	*123*		*70.0-130*		*09/25/2019 06:21*	WG1351496
(S) 1,2-Dichloroethane-d4	*92.3*		*70.0-130*		*09/26/2019 19:59*	WG1352978

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 06:45	WG1351496
Toluene	ND		1.00	1	09/25/2019 06:45	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 06:45	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 06:45	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 06:45	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 06:45	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 06:45	WG1351496
(S) Toluene-d8	*110*		*80.0-120*		*09/25/2019 06:45*	WG1351496
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/25/2019 06:45*	WG1351496
(S) 1,2-Dichloroethane-d4	*121*		*70.0-130*		*09/25/2019 06:45*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1.53		1.00	1	09/25/2019 07:09	WG1351496
Toluene	ND		1.00	1	09/25/2019 07:09	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 07:09	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 07:09	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 07:09	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 07:09	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 07:09	WG1351496
(S) Toluene-d8	*110*		*80.0-120*		*09/25/2019 07:09*	WG1351496
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*09/25/2019 07:09*	WG1351496
(S) 1,2-Dichloroethane-d4	*119*		*70.0-130*		*09/25/2019 07:09*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1.04		1.00	1	09/26/2019 20:19	WG1352978
Toluene	1.09		1.00	1	09/26/2019 20:19	WG1352978
Ethylbenzene	ND		1.00	1	09/26/2019 20:19	WG1352978
Total Xylenes	5.00		3.00	1	09/26/2019 20:19	WG1352978
Methyl tert-butyl ether	ND		1.00	1	09/26/2019 20:19	WG1352978
Naphthalene	ND		5.00	1	09/26/2019 20:19	WG1352978
1,2-Dichloroethane	ND		1.00	1	09/26/2019 20:19	WG1352978
(S) Toluene-d8	*104*		*80.0-120*		*09/26/2019 20:19*	WG1352978
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/26/2019 20:19*	WG1352978
(S) 1,2-Dichloroethane-d4	*88.8*		*70.0-130*		*09/26/2019 20:19*	WG1352978

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/26/2019 20:40	WG1352978
Toluene	3.87		1.00	1	09/26/2019 20:40	WG1352978
Ethylbenzene	2.05		1.00	1	09/26/2019 20:40	WG1352978
Total Xylenes	16.2		3.00	1	09/26/2019 20:40	WG1352978
Methyl tert-butyl ether	ND		1.00	1	09/26/2019 20:40	WG1352978
Naphthalene	ND		5.00	1	09/26/2019 20:40	WG1352978
1,2-Dichloroethane	ND		1.00	1	09/26/2019 20:40	WG1352978
(S) Toluene-d8	*102*		*80.0-120*		*09/26/2019 20:40*	WG1352978
(S) 4-Bromofluorobenzene	*99.0*		*77.0-126*		*09/26/2019 20:40*	WG1352978
(S) 1,2-Dichloroethane-d4	*91.5*		*70.0-130*		*09/26/2019 20:40*	WG1352978

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 08:22	WG1351496
Toluene	ND		1.00	1	09/25/2019 08:22	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 08:22	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 08:22	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 08:22	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 08:22	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 08:22	WG1351496
(S) Toluene-d8	*113*		*80.0-120*		*09/25/2019 08:22*	WG1351496
(S) 4-Bromofluorobenzene	*108*		*77.0-126*		*09/25/2019 08:22*	WG1351496
(S) 1,2-Dichloroethane-d4	*120*		*70.0-130*		*09/25/2019 08:22*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	23.1		1.00	1	09/25/2019 08:47	WG1351496
Toluene	ND		1.00	1	09/25/2019 08:47	WG1351496
Ethylbenzene	2.33		1.00	1	09/25/2019 08:47	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 08:47	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 08:47	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 08:47	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 08:47	WG1351496
(S) Toluene-d8	*109*		*80.0-120*		*09/25/2019 08:47*	WG1351496
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*09/25/2019 08:47*	WG1351496
(S) 1,2-Dichloroethane-d4	*118*		*70.0-130*		*09/25/2019 08:47*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 09:11	WG1351496
Toluene	ND		1.00	1	09/25/2019 09:11	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 09:11	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 09:11	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 09:11	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 09:11	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 09:11	WG1351496
(S) Toluene-d8	*110*		*80.0-120*		*09/25/2019 09:11*	WG1351496
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/25/2019 09:11*	WG1351496
(S) 1,2-Dichloroethane-d4	*120*		*70.0-130*		*09/25/2019 09:11*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/25/2019 09:35	WG1351496
Toluene	ND		1.00	1	09/25/2019 09:35	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 09:35	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 09:35	WG1351496
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 09:35	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 09:35	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 09:35	WG1351496
(S) Toluene-d8	*109*		*80.0-120*		*09/25/2019 09:35*	WG1351496
(S) 4-Bromofluorobenzene	*99.8*		*77.0-126*		*09/25/2019 09:35*	WG1351496
(S) 1,2-Dichloroethane-d4	*119*		*70.0-130*		*09/25/2019 09:35*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1.25		1.00	1	09/25/2019 10:00	WG1351496
Toluene	ND		1.00	1	09/25/2019 10:00	WG1351496
Ethylbenzene	ND		1.00	1	09/25/2019 10:00	WG1351496
Total Xylenes	ND		3.00	1	09/25/2019 10:00	WG1351496
Methyl tert-butyl ether	4.73		1.00	1	09/25/2019 10:00	WG1351496
Naphthalene	ND		5.00	1	09/25/2019 10:00	WG1351496
1,2-Dichloroethane	ND		1.00	1	09/25/2019 10:00	WG1351496
(S) Toluene-d8	*111*		*80.0-120*		*09/25/2019 10:00*	WG1351496
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*09/25/2019 10:00*	WG1351496
(S) 1,2-Dichloroethane-d4	*122*		*70.0-130*		*09/25/2019 10:00*	WG1351496

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	3870		100	100	09/26/2019 02:30	WG1351565
Toluene	3920		100	100	09/26/2019 02:30	WG1351565
Ethylbenzene	260		100	100	09/26/2019 02:30	WG1351565
Total Xylenes	2720		300	100	09/26/2019 02:30	WG1351565
Methyl tert-butyl ether	188		100	100	09/26/2019 02:30	WG1351565
Naphthalene	ND		500	100	09/26/2019 02:30	WG1351565
1,2-Dichloroethane	ND		100	100	09/26/2019 02:30	WG1351565
(S) Toluene-d8	*104*		*80.0-120*		*09/26/2019 02:30*	WG1351565
(S) 4-Bromofluorobenzene	*96.8*		*77.0-126*		*09/26/2019 02:30*	WG1351565
(S) 1,2-Dichloroethane-d4	*88.8*		*70.0-130*		*09/26/2019 02:30*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	09/25/2019 16:09	WG1352155
Benzene	ND		1.00	1	09/25/2019 16:09	WG1352155
Bromochloromethane	ND		1.00	1	09/25/2019 16:09	WG1352155
Bromodichloromethane	ND		1.00	1	09/25/2019 16:09	WG1352155
Bromoform	ND		1.00	1	09/25/2019 16:09	WG1352155
Bromomethane	ND		5.00	1	09/25/2019 16:09	WG1352155
Carbon disulfide	ND		1.00	1	09/25/2019 16:09	WG1352155
Carbon tetrachloride	ND		1.00	1	09/25/2019 16:09	WG1352155
Chlorobenzene	ND		1.00	1	09/25/2019 16:09	WG1352155
Chlorodibromomethane	ND		1.00	1	09/25/2019 16:09	WG1352155
Chloroethane	ND		5.00	1	09/25/2019 16:09	WG1352155
Chloroform	ND		5.00	1	09/25/2019 16:09	WG1352155
Chloromethane	ND		2.50	1	09/25/2019 16:09	WG1352155
Cyclohexane	ND		1.00	1	09/25/2019 16:09	WG1352155
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/25/2019 16:09	WG1352155
1,2-Dibromoethane	ND		1.00	1	09/25/2019 16:09	WG1352155
1,2-Dichlorobenzene	ND		1.00	1	09/25/2019 16:09	WG1352155
1,3-Dichlorobenzene	ND		1.00	1	09/25/2019 16:09	WG1352155
1,4-Dichlorobenzene	ND		1.00	1	09/25/2019 16:09	WG1352155
Dichlorodifluoromethane	ND		5.00	1	09/25/2019 16:09	WG1352155
1,1-Dichloroethane	ND		1.00	1	09/25/2019 16:09	WG1352155
1,2-Dichloroethane	ND		1.00	1	09/25/2019 16:09	WG1352155
1,1-Dichloroethene	ND		1.00	1	09/25/2019 16:09	WG1352155
cis-1,2-Dichloroethene	ND		1.00	1	09/25/2019 16:09	WG1352155
trans-1,2-Dichloroethene	ND		1.00	1	09/25/2019 16:09	WG1352155
1,2-Dichloropropane	ND		1.00	1	09/25/2019 16:09	WG1352155
cis-1,3-Dichloropropene	ND		1.00	1	09/25/2019 16:09	WG1352155
trans-1,3-Dichloropropene	ND		1.00	1	09/25/2019 16:09	WG1352155
Ethylbenzene	ND		1.00	1	09/25/2019 16:09	WG1352155
2-Hexanone	ND		10.0	1	09/25/2019 16:09	WG1352155
Isopropylbenzene	ND		1.00	1	09/25/2019 16:09	WG1352155
2-Butanone (MEK)	ND		10.0	1	09/25/2019 16:09	WG1352155
Methyl Acetate	ND		20.0	1	09/25/2019 16:09	WG1352155
Methyl Cyclohexane	ND		1.00	1	09/25/2019 16:09	WG1352155
Methylene Chloride	ND		5.00	1	09/25/2019 16:09	WG1352155
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/25/2019 16:09	WG1352155
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 16:09	WG1352155
Styrene	ND		1.00	1	09/25/2019 16:09	WG1352155
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/25/2019 16:09	WG1352155
Tetrachloroethene	ND		1.00	1	09/25/2019 16:09	WG1352155
Toluene	ND		1.00	1	09/25/2019 16:09	WG1352155
1,2,3-Trichlorobenzene	ND		1.00	1	09/25/2019 16:09	WG1352155
1,2,4-Trichlorobenzene	ND		1.00	1	09/25/2019 16:09	WG1352155
1,1,1-Trichloroethane	ND		1.00	1	09/25/2019 16:09	WG1352155
1,1,2-Trichloroethane	ND		1.00	1	09/25/2019 16:09	WG1352155
Trichloroethene	ND		1.00	1	09/25/2019 16:09	WG1352155
Trichlorofluoromethane	ND		5.00	1	09/25/2019 16:09	WG1352155
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/25/2019 16:09	WG1352155
Vinyl chloride	ND		1.00	1	09/25/2019 16:09	WG1352155
Xylenes, Total	ND		3.00	1	09/25/2019 16:09	WG1352155
(S) Toluene-d8	*115*		*80.0-120*		*09/25/2019 16:09*	WG1352155
(S) 4-Bromofluorobenzene	*94.8*		*77.0-126*		*09/25/2019 16:09*	WG1352155
(S) 1,2-Dichloroethane-d4	*99.4*		*70.0-130*		*09/25/2019 16:09*	WG1352155

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/26/2019 02:50	WG1351565
Toluene	ND		1.00	1	09/26/2019 02:50	WG1351565
Ethylbenzene	ND		1.00	1	09/26/2019 02:50	WG1351565
Total Xylenes	ND		3.00	1	09/26/2019 02:50	WG1351565
Methyl tert-butyl ether	ND		1.00	1	09/26/2019 02:50	WG1351565
Naphthalene	ND		5.00	1	09/26/2019 02:50	WG1351565
1,2-Dichloroethane	ND		1.00	1	09/26/2019 02:50	WG1351565
(S) Toluene-d8	*104*		*80.0-120*		*09/26/2019 02:50*	WG1351565
(S) 4-Bromofluorobenzene	*99.4*		*77.0-126*		*09/26/2019 02:50*	WG1351565
(S) 1,2-Dichloroethane-d4	*90.0*		*70.0-130*		*09/26/2019 02:50*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	7950		500	500	09/26/2019 03:10	WG1351565
Toluene	33700		500	500	09/26/2019 03:10	WG1351565
Ethylbenzene	2570		500	500	09/26/2019 03:10	WG1351565
Total Xylenes	14300		1500	500	09/26/2019 03:10	WG1351565
Methyl tert-butyl ether	ND		500	500	09/26/2019 03:10	WG1351565
Naphthalene	ND		2500	500	09/26/2019 03:10	WG1351565
1,2-Dichloroethane	ND		500	500	09/26/2019 03:10	WG1351565
(S) Toluene-d8	*101*		*80.0-120*		*09/26/2019 03:10*	WG1351565
(S) 4-Bromofluorobenzene	*93.8*		*77.0-126*		*09/26/2019 03:10*	WG1351565
(S) 1,2-Dichloroethane-d4	*90.9*		*70.0-130*		*09/26/2019 03:10*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	360		10.0	10	09/26/2019 03:30	WG1351565
Toluene	46.0		10.0	10	09/26/2019 03:30	WG1351565
Ethylbenzene	ND		10.0	10	09/26/2019 03:30	WG1351565
Total Xylenes	188		30.0	10	09/26/2019 03:30	WG1351565
Methyl tert-butyl ether	ND		10.0	10	09/26/2019 03:30	WG1351565
Naphthalene	ND		50.0	10	09/26/2019 03:30	WG1351565
1,2-Dichloroethane	ND		10.0	10	09/26/2019 03:30	WG1351565
(S) Toluene-d8	*101*		*80.0-120*		*09/26/2019 03:30*	WG1351565
(S) 4-Bromofluorobenzene	*95.8*		*77.0-126*		*09/26/2019 03:30*	WG1351565
(S) 1,2-Dichloroethane-d4	*87.4*		*70.0-130*		*09/26/2019 03:30*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	344		5.00	5	09/26/2019 03:50	WG1351565
Toluene	46.0		5.00	5	09/26/2019 03:50	WG1351565
Ethylbenzene	ND		5.00	5	09/26/2019 03:50	WG1351565
Total Xylenes	190		15.0	5	09/26/2019 03:50	WG1351565
Methyl tert-butyl ether	ND		5.00	5	09/26/2019 03:50	WG1351565
Naphthalene	ND		25.0	5	09/26/2019 03:50	WG1351565
1,2-Dichloroethane	ND		5.00	5	09/26/2019 03:50	WG1351565
(S) Toluene-d8	*102*		*80.0-120*		*09/26/2019 03:50*	WG1351565
(S) 4-Bromofluorobenzene	*95.4*		*77.0-126*		*09/26/2019 03:50*	WG1351565
(S) 1,2-Dichloroethane-d4	*85.8*		*70.0-130*		*09/26/2019 03:50*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/26/2019 04:10	WG1351565
Toluene	ND		1.00	1	09/26/2019 04:10	WG1351565
Ethylbenzene	ND		1.00	1	09/26/2019 04:10	WG1351565
Total Xylenes	ND		3.00	1	09/26/2019 04:10	WG1351565
Methyl tert-butyl ether	ND		1.00	1	09/26/2019 04:10	WG1351565
Naphthalene	ND		5.00	1	09/26/2019 04:10	WG1351565
1,2-Dichloroethane	ND		1.00	1	09/26/2019 04:10	WG1351565
(S) Toluene-d8	*98.3*		*80.0-120*		*09/26/2019 04:10*	WG1351565
(S) 4-Bromofluorobenzene	*95.6*		*77.0-126*		*09/26/2019 04:10*	WG1351565
(S) 1,2-Dichloroethane-d4	*89.0*		*70.0-130*		*09/26/2019 04:10*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/26/2019 04:30	WG1351565
Toluene	ND		1.00	1	09/26/2019 04:30	WG1351565
Ethylbenzene	ND		1.00	1	09/26/2019 04:30	WG1351565
Total Xylenes	ND		3.00	1	09/26/2019 04:30	WG1351565
Methyl tert-butyl ether	ND		1.00	1	09/26/2019 04:30	WG1351565
Naphthalene	ND		5.00	1	09/26/2019 04:30	WG1351565
1,2-Dichloroethane	ND		1.00	1	09/26/2019 04:30	WG1351565
(S) Toluene-d8	*104*		*80.0-120*		*09/26/2019 04:30*	WG1351565
(S) 4-Bromofluorobenzene	*98.3*		*77.0-126*		*09/26/2019 04:30*	WG1351565
(S) 1,2-Dichloroethane-d4	*91.7*		*70.0-130*		*09/26/2019 04:30*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/26/2019 04:50	WG1351565
Toluene	ND		1.00	1	09/26/2019 04:50	WG1351565
Ethylbenzene	ND		1.00	1	09/26/2019 04:50	WG1351565
Total Xylenes	ND		3.00	1	09/26/2019 04:50	WG1351565
Methyl tert-butyl ether	ND		1.00	1	09/26/2019 04:50	WG1351565
Naphthalene	ND		5.00	1	09/26/2019 04:50	WG1351565
1,2-Dichloroethane	ND		1.00	1	09/26/2019 04:50	WG1351565
(S) Toluene-d8	*101*		*80.0-120*		*09/26/2019 04:50*	WG1351565
(S) 4-Bromofluorobenzene	*96.7*		*77.0-126*		*09/26/2019 04:50*	WG1351565
(S) 1,2-Dichloroethane-d4	*89.1*		*70.0-130*		*09/26/2019 04:50*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/26/2019 05:10	WG1351565
Toluene	ND		1.00	1	09/26/2019 05:10	WG1351565
Ethylbenzene	ND		1.00	1	09/26/2019 05:10	WG1351565
Total Xylenes	ND		3.00	1	09/26/2019 05:10	WG1351565
Methyl tert-butyl ether	ND		1.00	1	09/26/2019 05:10	WG1351565
Naphthalene	ND		5.00	1	09/26/2019 05:10	WG1351565
1,2-Dichloroethane	ND		1.00	1	09/26/2019 05:10	WG1351565
(S) Toluene-d8	*105*		*80.0-120*		*09/26/2019 05:10*	WG1351565
(S) 4-Bromofluorobenzene	*97.0*		*77.0-126*		*09/26/2019 05:10*	WG1351565
(S) 1,2-Dichloroethane-d4	*86.7*		*70.0-130*		*09/26/2019 05:10*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	4.50		1.00	1	09/26/2019 05:30	WG1351565
Toluene	3.17		1.00	1	09/26/2019 05:30	WG1351565
Ethylbenzene	ND		1.00	1	09/26/2019 05:30	WG1351565
Total Xylenes	ND		3.00	1	09/26/2019 05:30	WG1351565
Methyl tert-butyl ether	ND		1.00	1	09/26/2019 05:30	WG1351565
Naphthalene	ND		5.00	1	09/26/2019 05:30	WG1351565
1,2-Dichloroethane	ND		1.00	1	09/26/2019 05:30	WG1351565
(S) Toluene-d8	*101*		*80.0-120*		*09/26/2019 05:30*	WG1351565
(S) 4-Bromofluorobenzene	*97.1*		*77.0-126*		*09/26/2019 05:30*	WG1351565
(S) 1,2-Dichloroethane-d4	*87.1*		*70.0-130*		*09/26/2019 05:30*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	12.9		1.00	1	09/26/2019 05:50	WG1351565
Toluene	ND		1.00	1	09/26/2019 05:50	WG1351565
Ethylbenzene	ND		1.00	1	09/26/2019 05:50	WG1351565
Total Xylenes	ND		3.00	1	09/26/2019 05:50	WG1351565
Methyl tert-butyl ether	109		1.00	1	09/26/2019 05:50	WG1351565
Naphthalene	ND		5.00	1	09/26/2019 05:50	WG1351565
1,2-Dichloroethane	ND		1.00	1	09/26/2019 05:50	WG1351565
(S) Toluene-d8	*103*		*80.0-120*		*09/26/2019 05:50*	WG1351565
(S) 4-Bromofluorobenzene	*99.4*		*77.0-126*		*09/26/2019 05:50*	WG1351565
(S) 1,2-Dichloroethane-d4	*89.8*		*70.0-130*		*09/26/2019 05:50*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1.67		1.00	1	09/26/2019 06:10	WG1351565
Toluene	ND		1.00	1	09/26/2019 06:10	WG1351565
Ethylbenzene	ND		1.00	1	09/26/2019 06:10	WG1351565
Total Xylenes	ND		3.00	1	09/26/2019 06:10	WG1351565
Methyl tert-butyl ether	121		1.00	1	09/26/2019 06:10	WG1351565
Naphthalene	ND		5.00	1	09/26/2019 06:10	WG1351565
1,2-Dichloroethane	ND		1.00	1	09/26/2019 06:10	WG1351565
(S) Toluene-d8	*99.1*		*80.0-120*		*09/26/2019 06:10*	WG1351565
(S) 4-Bromofluorobenzene	*88.9*		*77.0-126*		*09/26/2019 06:10*	WG1351565
(S) 1,2-Dichloroethane-d4	*92.9*		*70.0-130*		*09/26/2019 06:10*	WG1351565

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	09/25/2019 16:29	WG1352155
Benzene	ND		1.00	1	09/25/2019 16:29	WG1352155
Bromochloromethane	ND		1.00	1	09/25/2019 16:29	WG1352155
Bromodichloromethane	ND		1.00	1	09/25/2019 16:29	WG1352155
Bromoform	ND		1.00	1	09/25/2019 16:29	WG1352155
Bromomethane	ND		5.00	1	09/25/2019 16:29	WG1352155
Carbon disulfide	ND		1.00	1	09/25/2019 16:29	WG1352155
Carbon tetrachloride	ND		1.00	1	09/25/2019 16:29	WG1352155
Chlorobenzene	ND		1.00	1	09/25/2019 16:29	WG1352155
Chlorodibromomethane	ND		1.00	1	09/25/2019 16:29	WG1352155
Chloroethane	ND		5.00	1	09/25/2019 16:29	WG1352155
Chloroform	ND		5.00	1	09/25/2019 16:29	WG1352155
Chloromethane	ND		2.50	1	09/25/2019 16:29	WG1352155
Cyclohexane	ND		1.00	1	09/25/2019 16:29	WG1352155
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/25/2019 16:29	WG1352155
1,2-Dibromoethane	ND		1.00	1	09/25/2019 16:29	WG1352155
1,2-Dichlorobenzene	ND		1.00	1	09/25/2019 16:29	WG1352155
1,3-Dichlorobenzene	ND		1.00	1	09/25/2019 16:29	WG1352155
1,4-Dichlorobenzene	ND		1.00	1	09/25/2019 16:29	WG1352155
Dichlorodifluoromethane	ND		5.00	1	09/25/2019 16:29	WG1352155
1,1-Dichloroethane	ND		1.00	1	09/25/2019 16:29	WG1352155
1,2-Dichloroethane	ND		1.00	1	09/25/2019 16:29	WG1352155
1,1-Dichloroethene	ND		1.00	1	09/25/2019 16:29	WG1352155
cis-1,2-Dichloroethene	ND		1.00	1	09/25/2019 16:29	WG1352155
trans-1,2-Dichloroethene	ND		1.00	1	09/25/2019 16:29	WG1352155
1,2-Dichloropropane	ND		1.00	1	09/25/2019 16:29	WG1352155
cis-1,3-Dichloropropene	ND		1.00	1	09/25/2019 16:29	WG1352155
trans-1,3-Dichloropropene	ND		1.00	1	09/25/2019 16:29	WG1352155
Ethylbenzene	ND		1.00	1	09/25/2019 16:29	WG1352155
2-Hexanone	ND		10.0	1	09/25/2019 16:29	WG1352155
Isopropylbenzene	ND		1.00	1	09/25/2019 16:29	WG1352155
2-Butanone (MEK)	ND		10.0	1	09/25/2019 16:29	WG1352155
Methyl Acetate	ND		20.0	1	09/25/2019 16:29	WG1352155
Methyl Cyclohexane	ND		1.00	1	09/25/2019 16:29	WG1352155
Methylene Chloride	ND		5.00	1	09/25/2019 16:29	WG1352155
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/25/2019 16:29	WG1352155
Methyl tert-butyl ether	ND		1.00	1	09/25/2019 16:29	WG1352155
Styrene	ND		1.00	1	09/25/2019 16:29	WG1352155
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/25/2019 16:29	WG1352155
Tetrachloroethene	ND		1.00	1	09/25/2019 16:29	WG1352155
Toluene	ND		1.00	1	09/25/2019 16:29	WG1352155
1,2,3-Trichlorobenzene	ND		1.00	1	09/25/2019 16:29	WG1352155
1,2,4-Trichlorobenzene	ND		1.00	1	09/25/2019 16:29	WG1352155
1,1,1-Trichloroethane	ND		1.00	1	09/25/2019 16:29	WG1352155
1,1,2-Trichloroethane	ND		1.00	1	09/25/2019 16:29	WG1352155
Trichloroethene	ND		1.00	1	09/25/2019 16:29	WG1352155
Trichlorofluoromethane	ND		5.00	1	09/25/2019 16:29	WG1352155
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/25/2019 16:29	WG1352155
Vinyl chloride	ND		1.00	1	09/25/2019 16:29	WG1352155
Xylenes, Total	ND		3.00	1	09/25/2019 16:29	WG1352155
(S) Toluene-d8	*116*		*80.0-120*		*09/25/2019 16:29*	WG1352155
(S) 4-Bromofluorobenzene	*95.1*		*77.0-126*		*09/25/2019 16:29*	WG1352155
(S) 1,2-Dichloroethane-d4	*95.4*		*70.0-130*		*09/25/2019 16:29*	WG1352155

Method Blank (MB)

(MB) R3454987-2 09/25/19 01:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	1.62	J	1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*106*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3454987-1 09/25/19 01:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	25.6	102	70.0-130	
1,2-Dichloroethane	25.0	26.6	106	70.0-130	
Ethylbenzene	25.0	23.2	93.0	70.0-130	
Methyl tert-butyl ether	25.0	26.8	107	70.0-130	
Naphthalene	25.0	22.8	91.1	70.0-130	
Toluene	25.0	23.2	92.6	70.0-130	
Xylenes, Total	75.0	72.9	97.2	70.0-130	
(S) Toluene-d8			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*107*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*116*	*70.0-130*	

Method Blank (MB)

(MB) R3454780-2 09/26/19 00:50

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*94.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*88.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3454780-1 09/26/19 00:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	22.9	91.8	70.0-130	
1,2-Dichloroethane	25.0	22.0	88.1	70.0-130	
Ethylbenzene	25.0	24.1	96.3	70.0-130	
Methyl tert-butyl ether	25.0	21.3	85.3	70.0-130	
Naphthalene	25.0	22.2	88.6	70.0-130	
Toluene	25.0	22.3	89.2	70.0-130	
Xylenes, Total	75.0	72.7	96.9	70.0-130	
(S) Toluene-d8			*94.7*	*80.0-120*	
(S) 4-Bromofluorobenzene			*94.9*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*98.0*	*70.0-130*	

Method Blank (MB)

(MB) R3454710-3 09/25/19 14:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
Cyclohexane	U		0.390	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Isopropylbenzene	U		0.326	1.00
2-Butanone (MEK)	U		3.93	10.0
Methyl Acetate	U		4.30	20.0
Methyl Cyclohexane	U		0.380	1.00
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Styrene	U		0.307	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00

Method Blank (MB)

(MB) R3454710-3 09/25/19 14:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*114*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3454710-1 09/25/19 13:46 • (LCSD) R3454710-2 09/25/19 14:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	116	123	92.7	98.1	70.0-130			5.69	27
Benzene	25.0	25.1	24.3	101	97.1	70.0-130			3.54	20
Bromodichloromethane	25.0	26.3	25.2	105	101	70.0-130			4.39	20
Bromochloromethane	25.0	26.1	25.3	104	101	70.0-130			3.05	20
Bromoform	25.0	25.4	24.0	101	96.0	70.0-130			5.53	20
Bromomethane	25.0	23.8	22.7	95.3	91.0	70.0-130			4.61	25
Carbon disulfide	25.0	24.4	23.4	97.5	93.7	70.0-130			3.95	20
Carbon tetrachloride	25.0	22.9	20.9	91.4	83.8	70.0-130			8.75	20
Chlorobenzene	25.0	24.1	22.5	96.3	89.9	70.0-130			6.91	20
Chlorodibromomethane	25.0	27.2	24.8	109	99.2	70.0-130			9.28	20
Chloroethane	25.0	23.0	22.3	92.2	89.1	70.0-130			3.41	20
Chloroform	25.0	23.8	23.4	95.4	93.7	70.0-130			1.77	20
Chloromethane	25.0	21.3	20.5	85.0	81.8	70.0-130			3.88	20
1,2-Dibromo-3-Chloropropane	25.0	24.5	24.7	98.0	98.7	70.0-130			0.708	20
1,2-Dibromoethane	25.0	25.7	23.9	103	95.5	70.0-130			7.25	20
1,2-Dichlorobenzene	25.0	22.7	22.8	90.7	91.2	70.0-130			0.597	20
1,3-Dichlorobenzene	25.0	22.9	23.1	91.6	92.5	70.0-130			0.908	20
1,4-Dichlorobenzene	25.0	21.6	22.4	86.4	89.8	70.0-130			3.84	20
Dichlorodifluoromethane	25.0	21.8	22.0	87.4	88.1	70.0-130			0.793	20
1,1-Dichloroethane	25.0	24.2	23.5	96.8	94.1	70.0-130			2.82	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3454710-1 09/25/19 13:46 • (LCSD) R3454710-2 09/25/19 14:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	25.0	24.7	24.1	99.0	96.4	70.0-130			2.60	20
1,1-Dichloroethene	25.0	23.9	22.6	95.7	90.5	70.0-130			5.57	20
cis-1,2-Dichloroethene	25.0	23.0	22.4	92.1	89.6	70.0-130			2.75	20
trans-1,2-Dichloroethene	25.0	22.8	22.1	91.2	88.2	70.0-130			3.29	20
1,2-Dichloropropane	25.0	27.7	26.4	111	105	70.0-130			5.15	20
cis-1,3-Dichloropropene	25.0	27.6	26.6	110	106	70.0-130			3.61	20
trans-1,3-Dichloropropene	25.0	26.9	24.9	107	99.8	70.0-130			7.40	20
Ethylbenzene	25.0	23.3	21.3	93.2	85.0	70.0-130			9.11	20
2-Hexanone	125	139	131	112	105	70.0-130			6.41	20
Isopropylbenzene	25.0	23.4	21.8	93.5	87.4	70.0-130			6.78	20
2-Butanone (MEK)	125	135	132	108	106	70.0-130			1.99	20
Methylene Chloride	25.0	22.8	21.7	91.1	86.6	70.0-130			5.04	20
4-Methyl-2-pentanone (MIBK)	125	130	122	104	97.5	70.0-130			6.73	20
Methyl tert-butyl ether	25.0	18.2	18.6	72.7	74.5	70.0-130			2.56	20
Styrene	25.0	25.5	23.6	102	94.3	70.0-130			7.69	20
1,1,2,2-Tetrachloroethane	25.0	22.3	22.3	89.3	89.0	70.0-130			0.361	20
Tetrachloroethene	25.0	24.4	22.7	97.5	91.0	70.0-130			6.91	20
Toluene	25.0	24.2	22.0	97.0	87.9	70.0-130			9.88	20
1,1,2-Trichlorotrifluoroethane	25.0	20.8	19.8	83.2	79.4	70.0-130			4.71	20
1,2,3-Trichlorobenzene	25.0	19.2	19.9	76.7	79.7	70.0-130			3.80	20
1,2,4-Trichlorobenzene	25.0	20.4	21.1	81.5	84.5	70.0-130			3.55	20
1,1,1-Trichloroethane	25.0	22.1	21.3	88.4	85.1	70.0-130			3.82	20
1,1,2-Trichloroethane	25.0	26.5	23.9	106	95.6	70.0-130			10.5	20
Trichloroethene	25.0	26.5	24.3	106	97.3	70.0-130			8.57	20
Trichlorofluoromethane	25.0	23.1	22.3	92.4	89.2	70.0-130			3.59	20
Vinyl chloride	25.0	25.6	24.3	102	97.1	70.0-130			5.27	20
Xylenes, Total	75.0	70.3	64.8	93.7	86.4	70.0-130			8.14	20
(S) Toluene-d8				*107*	*101*	*80.0-120*				
(S) 4-Bromofluorobenzene				*99.3*	*93.0*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*111*	*107*	*70.0-130*				

Method Blank (MB)

(MB) R3455138-2 09/26/19 17:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dichloroethane	U		0.361	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*96.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*93.2*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3455138-1 09/26/19 16:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	22.8	91.3	70.0-130	
1,2-Dichloroethane	25.0	20.8	83.3	70.0-130	
Ethylbenzene	25.0	23.7	95.0	70.0-130	
Methyl tert-butyl ether	25.0	23.0	92.0	70.0-130	
Naphthalene	25.0	18.9	75.5	70.0-130	
Toluene	25.0	22.7	91.0	70.0-130	
Xylenes, Total	75.0	71.5	95.3	70.0-130	
(S) Toluene-d8			*99.1*	*80.0-120*	
(S) 4-Bromofluorobenzene			*102*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*91.0*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

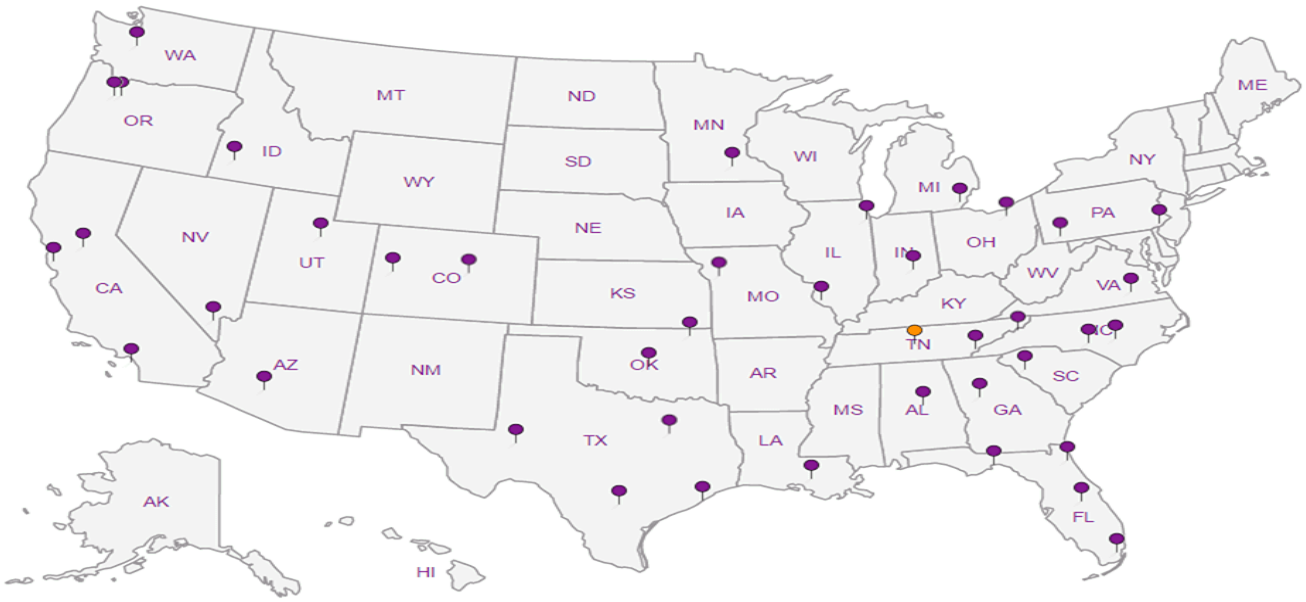
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 600
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Pres Chk

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARREN

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	*NITRATE,SULFATE* 125mlHDPE-NoPres	ALK,CO2 125mlHDPE-NoPres	RSK175 40mlAmb HCl	V8260BTEXMNSC 40mlAmb-HCl	V8260TCLSC-TB 40mlAmb-NoPres-Blk	Remarks	Sample # (lab only)
MW-07-091919	GRAB	GW	NA	09/19/19	0950	3				X		SHEEN, DILUTE	01
MW-29-091919		GW			0855	3				X			02
MW-26-091919		GW			0910	3				X			03
MW-26B-091919		GW			0920	3				X			04
MW-23-091919		GW			0935	3				X			05
MW-23-D-091919		GW			0930	3				X			06
MW-23B-091919		GW			0945	3				X			07
MW-45B-091919		GW			0955	3				X			08
MW-21-091919		GW			1010	3				X			09
MW-17B-091919		GW			1025	3				X			10

Analysis / Container / Preservative

Chain of Custody Page 1 of 4

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1141722

H135

Acctnum: KINCH2MGA

Template: T130277

Prelogin: P695785

TSR: 526 - Chris McCord

PB: 2-27-19

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *NITRATE/SULFATE* has a 48hr hold time.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 1203 5780 4363
1203 5780 4374

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: / Y __N
Preservation Correct/Checked: __Y __N

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	09/19/19	1700		2
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				1.2+.1=1.3 A3 OK 96
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
				9/20/19 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 600
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARREN

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Chain of Custody Page 2 of 4

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 114122

Table #

Acctnum: KINCH2MGA
Template: T130277
Prelogin: P695785
TSR: 526 - Chris McCord
PB:

Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Pres Chk	*NITRATE,SULFATE* 125mlHDPE-NoPres	ALK,CO2 125mlHDPE-NoPres	RSK175 40mlAmb HCl	V8260BTEXMNSC 40mlAmb-HCl	V8260TCLSC-TB 40mlAmb-NoPres-Blk	Remarks	Sample # (lab only)
MW-44B-091919	GRAB	GW	NA	09/19/19	1050	3					X			11
MW-01-091919		GW			1100	3					X			12
MW-01B-091919		GW			1110	3					X			13
MW-27-091919		GW			1120	3					X			14
MW-27B-091919		GW			1125	3					X			15
MW-12-091919		GW			1330	3					X			16
MW-12B-091919		GW			1335	3					X			17
MW-25-091919		GW			1345	3					X			18
MW-25B-091919		GW			1350	3					X			19
MW-15-091919		GW			1405	3					X			20

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *NITRATE/SULFATE* has a 48hr hold time.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: X Y __N
Preservation Correct/Checked: __Y __N
RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	09/19/19	1700		X	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
				1.2+.1=1.3	96
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date:	Time:
				9/20/19	8:45

Hold: Condition: NCF / OK

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 600
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Pres Chk

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARNER

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y Y

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	*NITRATE,SULFATE* 125mlHDPE-NoPres	ALK,CO2 125mlHDPE-NoPres	RSK175 40mlAmb HCl	V8260BTEXMNSC 40mlAmb-HCl	V8260TCLSC-TB 40mlAmb-NoPres-Blk	Remarks	Sample # (lab only)
MW-15B-091919	GRAB	GW	NA	09/19/19	1420	3				X			21
TB04-091919		GW			—	1					X		22
FB03-091919		GW			1425	3				X			23
MW-11-091919		GW			1515	3				X		SHEEN	24
MW-36-091919		GW			1535	3				X			25
MW-36-D-091919		GW			1540	3				X			26
MW-36B-091919		GW			1545	3				X			27
MW-41-D-091919		GW			1445	3				X			28
MW-41-091919		GW			1440	3				X			29
MW-42-091919		GW			1455	3				X			30

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *NITRATE/SULFATE* has a 48hr hold time.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: X NP X Y __N
COC Signed/Accurate: ok X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: X Y __N
Preservation Correct/Checked: __Y __N
RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	09/19/19	1700		2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
				1.2+.1=1.3 ok 96	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: Condition: NCF / OK
			Hailey	9/20/19 8:45	

Chain of Custody Page 3 of 4

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 114127

Table #

Acctnum: KINCH2MGA
Template: T130277
Prelogin: P695785
TSR: 526 - Chris McCord
PB:

Shipped Via: FedEX Ground

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 600
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARLEY

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Rush? (Lab MUST be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately
Packed on Ice N ___ Y X

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	*NITRATE,SULFATE* 125mlHDPE-NoPres	ALK,CO2 125mlHDPE-NoPres	RSK175 40mlAmb HCl	V8260BTEXMNSC 40mlAmb-HCl	V8260TCLSC-TB 40mlAmb-NoPres-Blk	Remarks	Sample # (lab only)
MW-40-091919	GRAB	GW	NA	09/19/19	1435	3				X			31
MW-34-091919		GW			1425	3				X			32
MW-39-091919		GW			1430	3				X			33
TB05-091919		GW			—	1					X		34
		GW											
		GW											
		GW											
		GW											
		GW											
		GW											

Chain of Custody Page 4 of 4

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 114122

Table #

Acctnum: KINCH2MGA
Template: T130277
Prelogin: P695785
TSR: 526 - Chris McCord
PB:

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *NITRATE/SULFATE* has a 48hr hold time.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: X __N
Preservation Correct/Checked: __Y __N
RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	09/19/19	1700		2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
				1.2+1=1.3 CK 96	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: Condition: NCF / OK
				9/20/19 8:45	

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 30, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1120449
Samples Received:	07/19/2019
Project Number:	D3161400 B PN GEN
Description:	Lewis Drive Site
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 600 Atlanta, GA 30328

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

TABLE OF CONTENTS

SS-01-071819 L1120449-01 Solid

Collected by: Melissa Warren | Collected date/time: 07/18/19 16:00 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1317404	1	07/26/19 09:33	07/26/19 09:44	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318101	1	07/18/19 16:00	07/26/19 14:40	JAH	Mt. Juliet, TN

SS-02-071819 L1120449-02 Solid

Collected by: Melissa Warren | Collected date/time: 07/18/19 16:20 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1317404	1	07/26/19 09:33	07/26/19 09:44	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318101	8	07/18/19 16:20	07/26/19 14:59	JAH	Mt. Juliet, TN

SS-03-071819 L1120449-03 Solid

Collected by: Melissa Warren | Collected date/time: 07/18/19 16:55 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1317404	1	07/26/19 09:33	07/26/19 09:44	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318101	1	07/18/19 16:55	07/26/19 15:37	JAH	Mt. Juliet, TN

SS-04-071819 L1120449-04 Solid

Collected by: Melissa Warren | Collected date/time: 07/18/19 17:40 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1317404	1	07/26/19 09:33	07/26/19 09:44	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318101	1	07/18/19 17:40	07/26/19 15:56	JAH	Mt. Juliet, TN

TB03-071819 L1120449-05 Solid

Collected by: Melissa Warren | Collected date/time: 07/18/19 15:55 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318101	1	07/18/19 15:55	07/26/19 11:48	JAH	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	77.9		1	07/26/2019 09:44	WG1317404

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Benzene	ND		1.28	1	07/26/2019 14:40	WG1318101
Toluene	ND		6.42	1	07/26/2019 14:40	WG1318101
Ethylbenzene	ND		3.21	1	07/26/2019 14:40	WG1318101
Total Xylenes	ND		8.34	1	07/26/2019 14:40	WG1318101
Naphthalene	ND		16.0	1	07/26/2019 14:40	WG1318101
(S) Toluene-d8	*101*		*75.0-131*		*07/26/2019 14:40*	WG1318101
(S) 4-Bromofluorobenzene	*93.6*		*67.0-138*		*07/26/2019 14:40*	WG1318101
(S) 1,2-Dichloroethane-d4	*117*		*70.0-130*		*07/26/2019 14:40*	WG1318101

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	74.3		1	07/26/2019 09:44	WG1317404

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Benzene	529		10.8	8	07/26/2019 14:59	WG1318101
Toluene	55.5		53.8	8	07/26/2019 14:59	WG1318101
Ethylbenzene	637		26.9	8	07/26/2019 14:59	WG1318101
Total Xylenes	10700		70.0	8	07/26/2019 14:59	WG1318101
Naphthalene	1480		135	8	07/26/2019 14:59	WG1318101
(S) Toluene-d8	*99.9*		*75.0-131*		*07/26/2019 14:59*	WG1318101
(S) 4-Bromofluorobenzene	*95.6*		*67.0-138*		*07/26/2019 14:59*	WG1318101
(S) 1,2-Dichloroethane-d4	*109*		*70.0-130*		*07/26/2019 14:59*	WG1318101

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	75.2		1	07/26/2019 09:44	WG1317404

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Benzene	385		1.33	1	07/26/2019 15:37	WG1318101
Toluene	25.5		6.64	1	07/26/2019 15:37	WG1318101
Ethylbenzene	349		3.32	1	07/26/2019 15:37	WG1318101
Total Xylenes	2660		8.64	1	07/26/2019 15:37	WG1318101
Naphthalene	84.6		16.6	1	07/26/2019 15:37	WG1318101
(S) Toluene-d8	*102*		*75.0-131*		*07/26/2019 15:37*	WG1318101
(S) 4-Bromofluorobenzene	*93.2*		*67.0-138*		*07/26/2019 15:37*	WG1318101
(S) 1,2-Dichloroethane-d4	*106*		*70.0-130*		*07/26/2019 15:37*	WG1318101

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.9		1	07/26/2019 09:44	WG1317404

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Benzene	4.54		1.37	1	07/26/2019 15:56	WG1318101
Toluene	ND		6.85	1	07/26/2019 15:56	WG1318101
Ethylbenzene	6.25		3.43	1	07/26/2019 15:56	WG1318101
Total Xylenes	27.8		8.91	1	07/26/2019 15:56	WG1318101
Naphthalene	ND		17.1	1	07/26/2019 15:56	WG1318101
(S) Toluene-d8	*102*		*75.0-131*		*07/26/2019 15:56*	WG1318101
(S) 4-Bromofluorobenzene	*94.8*		*67.0-138*		*07/26/2019 15:56*	WG1318101
(S) 1,2-Dichloroethane-d4	*120*		*70.0-130*		*07/26/2019 15:56*	WG1318101

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/26/2019 11:48	WG1318101
Toluene	ND		0.00500	1	07/26/2019 11:48	WG1318101
Ethylbenzene	ND		0.00250	1	07/26/2019 11:48	WG1318101
Total Xylenes	ND		0.00650	1	07/26/2019 11:48	WG1318101
Naphthalene	ND		0.0125	1	07/26/2019 11:48	WG1318101
(S) Toluene-d8	*106*		*75.0-131*		*07/26/2019 11:48*	WG1318101
(S) 4-Bromofluorobenzene	*92.6*		*67.0-138*		*07/26/2019 11:48*	WG1318101
(S) 1,2-Dichloroethane-d4	*122*		*70.0-130*		*07/26/2019 11:48*	WG1318101

Method Blank (MB)

(MB) R3434809-1 07/26/19 09:44

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1120470-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120470-01 07/26/19 09:44 • (DUP) R3434809-3 07/26/19 09:44

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	90.5	90.5	1	0.0901		10

Laboratory Control Sample (LCS)

(LCS) R3434809-2 07/26/19 09:44

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3434737-3 07/26/19 10:44

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/kg		ug/kg	ug/kg
Benzene	U		0.400	1.00
Ethylbenzene	U		0.530	2.50
Naphthalene	U		3.12	12.5
Toluene	U		1.25	5.00
Xylenes, Total	U		4.78	6.50
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*91.0*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434737-1 07/26/19 09:29 • (LCSD) R3434737-2 07/26/19 09:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/kg	ug/kg	ug/kg	%	%	%			%	%
Benzene	125	114	115	91.3	92.4	70.0-130			1.13	20
Ethylbenzene	125	128	124	102	99.0	70.0-130			3.16	20
Naphthalene	125	98.5	97.9	78.8	78.3	70.0-130			0.651	20
Toluene	125	119	117	94.9	93.8	70.0-130			1.09	20
Xylenes, Total	375	317	309	84.5	82.4	70.0-130			2.56	20
(S) Toluene-d8				*99.9*	*97.9*	*75.0-131*				
(S) 4-Bromofluorobenzene				*97.4*	*96.0*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*117*	*116*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

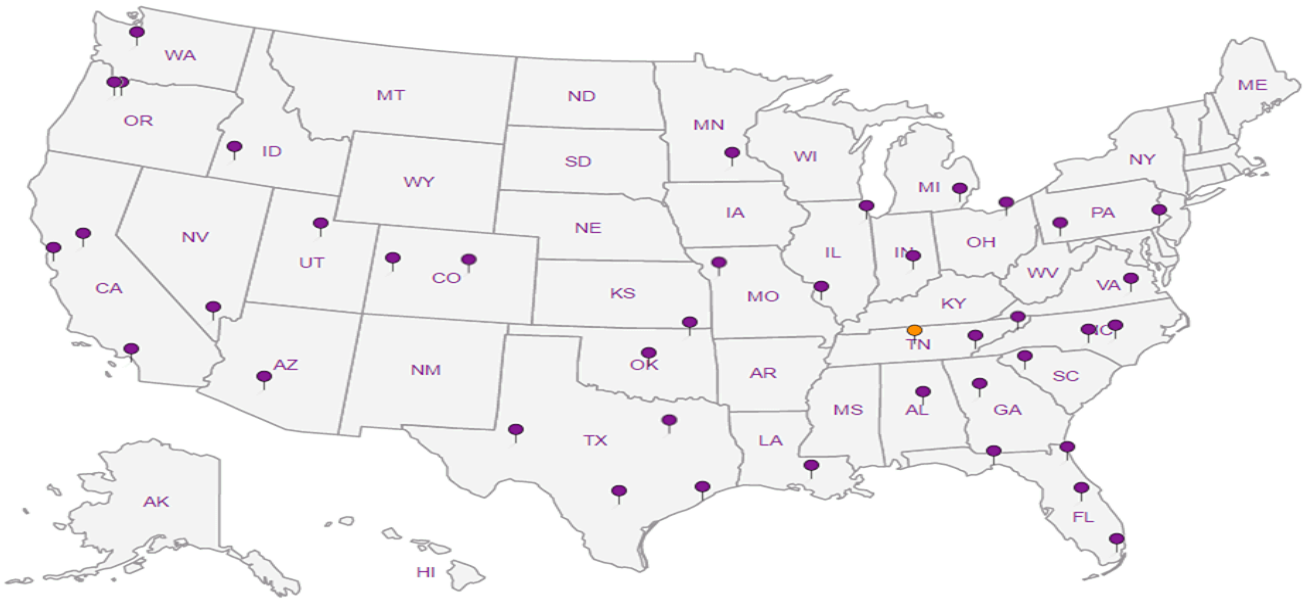
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 600
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Pres Chk

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Bethany Garvey**

Email To: bethany.garvey@jacobs.com; jonathan.grimes@jacobs.com

Project Description: ~~[illegible] Mountain Pelham, AL~~ Lewis Drive

City/State Collected: Belton, SC

Phone: 770-604-9182
Fax:

Client Project #: D3161400.B.PN.GEN.LDOMR.GW

Lab Project #: KINCH2MGA-~~DM~~ Lewis12

1120449
A011
Table #

Collected by (print): MELISSA WARREN

Site/Facility ID #: LEWIS DRIVE

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Acctnum: **KINCH2MGA**
Template: **T133018**
Prelogin: **P678837**
TSR: **526 - Chris McCord**
PB: TB 10-31-18
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative: ~~...NO2,SO4,NO3 250mlHDPE-NoPres~~; ~~FEDICP, MNDICP LF 250mlHDPE-NoPres~~; ~~SULFIDE 125mlAmb-5 NaOH+ZnAc~~; ~~TOC 250mlAmb-HCl~~; BTEX+Naph - 5035/8260B (X); % Moisture (X); Trip Blank (X)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX+Naph - 5035/8260B	% Moisture	Trip Blank	Remarks	Sample # (lab only)
SS-01-071819	Grab	SS	NA	07/18/19	1600	2	X	X		LIMITED VOLUME	01
SS02-071819	GRAB	SS	↓	↓	1620	2	X	X		LIMTED VOLUME	02
SS03-071819	GRAB	SS	↓	↓	1655	2	X	X		LIMITED VOLUME	03
SS04-071819	GRAB	SS	↓	↓	1740	2	X	X		LIMITED VOLUME	04
TB03-071819	GRAB	SS	↓	↓	1555	1	X	X	X		05

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:

RAD SCREEN: <0.5 mR/hr

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: __ UPS __ FedEx __ Courier __ ______

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP _Y _N
COC Signed/Accurate: ✓Y _N
Bottles arrive intact: ✓Y _N
Correct bottles used: ✓Y _N
Sufficient volume sent: _Y _N
If Applicable
VOA Zero Headspace: ✓Y _N
Preservation Correct/Checked: _Y _N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)		
[signature]	07/18/19	1900		Trip Blank Received: (Yes) / No HCL / MeoH TBR 1	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C R.C to:: ... Bottles Received: 8+TB	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Mallik P.	Date: 7/19 Time: 8:45	Hold: Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 26, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1120363
Samples Received:	07/19/2019
Project Number:	03161400.B.PN.GEN.LD
Description:	Lewis Drive Surface Water
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 600 Atlanta, GA 30328

Entire Report Reviewed By:

Jordan N Zito
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

SW01-071819 L1120363-01 GW

Collected by: Melissa Warren | Collected date/time: 07/18/19 13:35 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 15:33	07/25/19 15:33	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314918	1	07/21/19 03:23	07/21/19 03:23	ZJM	Mt. Juliet, TN

SW02-071819 L1120363-02 GW

Collected by: Melissa Warren | Collected date/time: 07/18/19 13:15 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 16:38	07/25/19 16:38	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314918	1	07/21/19 03:43	07/21/19 03:43	ZJM	Mt. Juliet, TN

SW03-071819 L1120363-03 GW

Collected by: Melissa Warren | Collected date/time: 07/18/19 14:25 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 16:55	07/25/19 16:55	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314918	1	07/21/19 04:03	07/21/19 04:03	ZJM	Mt. Juliet, TN

SW04-071819 L1120363-04 GW

Collected by: Melissa Warren | Collected date/time: 07/18/19 13:05 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 17:11	07/25/19 17:11	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314920	1	07/21/19 04:09	07/21/19 04:09	JCP	Mt. Juliet, TN

SW08-071819 L1120363-05 GW

Collected by: Melissa Warren | Collected date/time: 07/18/19 11:20 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 17:28	07/25/19 17:28	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314920	1	07/21/19 04:30	07/21/19 04:30	JCP	Mt. Juliet, TN

SW09-071819 L1120363-06 GW

Collected by: Melissa Warren | Collected date/time: 07/18/19 11:10 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 18:17	07/25/19 18:17	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314920	1	07/21/19 04:50	07/21/19 04:50	JCP	Mt. Juliet, TN

SW10-071819 L1120363-07 GW

Collected by: Melissa Warren | Collected date/time: 07/18/19 10:55 | Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 18:33	07/25/19 18:33	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314920	1	07/21/19 05:10	07/21/19 05:10	JCP	Mt. Juliet, TN

SW11-071819 L1120363-08 GW

Collected by: Melissa Warren
Collected date/time: 07/18/19 10:40
Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 18:50	07/25/19 18:50	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314920	1	07/21/19 05:30	07/21/19 05:30	JCP	Mt. Juliet, TN

SW12-071819 L1120363-09 GW

Collected by: Melissa Warren
Collected date/time: 07/18/19 14:00
Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 19:06	07/25/19 19:06	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314920	1	07/21/19 05:51	07/21/19 05:51	JCP	Mt. Juliet, TN

SW13-071819 L1120363-10 GW

Collected by: Melissa Warren
Collected date/time: 07/18/19 13:25
Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 19:22	07/25/19 19:22	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314920	1	07/21/19 06:12	07/21/19 06:12	JCP	Mt. Juliet, TN

SW14-071819 L1120363-11 GW

Collected by: Melissa Warren
Collected date/time: 07/18/19 14:45
Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1317147	1	07/25/19 19:39	07/25/19 19:39	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314920	1	07/21/19 06:32	07/21/19 06:32	JCP	Mt. Juliet, TN

TB02-071819 L1120363-12 GW

Collected by: Melissa Warren
Collected date/time: 07/18/19 10:00
Received date/time: 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1314920	1	07/21/19 03:49	07/21/19 03:49	JCP	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jordan N Zito
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 15:33	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 03:23	WG1314918
Toluene	ND		1.00	1	07/21/2019 03:23	WG1314918
Ethylbenzene	ND		1.00	1	07/21/2019 03:23	WG1314918
o-Xylene	ND		1.00	1	07/21/2019 03:23	WG1314918
m&p-Xylene	ND		2.00	1	07/21/2019 03:23	WG1314918
Total Xylenes	ND		3.00	1	07/21/2019 03:23	WG1314918
Methyl tert-butyl ether	2.30		1.00	1	07/21/2019 03:23	WG1314918
Naphthalene	ND		5.00	1	07/21/2019 03:23	WG1314918
(S) Toluene-d8	*102*		*80.0-120*		*07/21/2019 03:23*	WG1314918
(S) 4-Bromofluorobenzene	*91.5*		*77.0-126*		*07/21/2019 03:23*	WG1314918
(S) 1,2-Dichloroethane-d4	*108*		*70.0-130*		*07/21/2019 03:23*	WG1314918

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 16:38	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 03:43	WG1314918
Toluene	ND		1.00	1	07/21/2019 03:43	WG1314918
Ethylbenzene	ND		1.00	1	07/21/2019 03:43	WG1314918
o-Xylene	ND		1.00	1	07/21/2019 03:43	WG1314918
m&p-Xylene	ND		2.00	1	07/21/2019 03:43	WG1314918
Total Xylenes	ND		3.00	1	07/21/2019 03:43	WG1314918
Methyl tert-butyl ether	1.11		1.00	1	07/21/2019 03:43	WG1314918
Naphthalene	ND		5.00	1	07/21/2019 03:43	WG1314918
(S) Toluene-d8	*95.2*		*80.0-120*		*07/21/2019 03:43*	WG1314918
(S) 4-Bromofluorobenzene	*93.9*		*77.0-126*		*07/21/2019 03:43*	WG1314918
(S) 1,2-Dichloroethane-d4	*106*		*70.0-130*		*07/21/2019 03:43*	WG1314918

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 16:55	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 04:03	WG1314918
Toluene	ND		1.00	1	07/21/2019 04:03	WG1314918
Ethylbenzene	ND		1.00	1	07/21/2019 04:03	WG1314918
o-Xylene	ND		1.00	1	07/21/2019 04:03	WG1314918
m&p-Xylene	ND		2.00	1	07/21/2019 04:03	WG1314918
Total Xylenes	ND		3.00	1	07/21/2019 04:03	WG1314918
Methyl tert-butyl ether	ND		1.00	1	07/21/2019 04:03	WG1314918
Naphthalene	ND		5.00	1	07/21/2019 04:03	WG1314918
(S) Toluene-d8	*97.7*		*80.0-120*		*07/21/2019 04:03*	WG1314918
(S) 4-Bromofluorobenzene	*87.5*		*77.0-126*		*07/21/2019 04:03*	WG1314918
(S) 1,2-Dichloroethane-d4	*109*		*70.0-130*		*07/21/2019 04:03*	WG1314918

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 17:11	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 04:09	WG1314920
Toluene	ND		1.00	1	07/21/2019 04:09	WG1314920
Ethylbenzene	ND		1.00	1	07/21/2019 04:09	WG1314920
o-Xylene	ND		1.00	1	07/21/2019 04:09	WG1314920
m&p-Xylene	ND		2.00	1	07/21/2019 04:09	WG1314920
Total Xylenes	ND		3.00	1	07/21/2019 04:09	WG1314920
Methyl tert-butyl ether	1.12		1.00	1	07/21/2019 04:09	WG1314920
Naphthalene	ND		5.00	1	07/21/2019 04:09	WG1314920
(S) Toluene-d8	*105*		*80.0-120*		*07/21/2019 04:09*	WG1314920
(S) 4-Bromofluorobenzene	*108*		*77.0-126*		*07/21/2019 04:09*	WG1314920
(S) 1,2-Dichloroethane-d4	*92.6*		*70.0-130*		*07/21/2019 04:09*	WG1314920

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 17:28	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 04:30	WG1314920
Toluene	ND		1.00	1	07/21/2019 04:30	WG1314920
Ethylbenzene	ND		1.00	1	07/21/2019 04:30	WG1314920
o-Xylene	ND		1.00	1	07/21/2019 04:30	WG1314920
m&p-Xylene	ND		2.00	1	07/21/2019 04:30	WG1314920
Total Xylenes	ND		3.00	1	07/21/2019 04:30	WG1314920
Methyl tert-butyl ether	ND		1.00	1	07/21/2019 04:30	WG1314920
Naphthalene	ND		5.00	1	07/21/2019 04:30	WG1314920
(S) Toluene-d8	*103*		*80.0-120*		*07/21/2019 04:30*	WG1314920
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*07/21/2019 04:30*	WG1314920
(S) 1,2-Dichloroethane-d4	*91.0*		*70.0-130*		*07/21/2019 04:30*	WG1314920

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 18:17	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 04:50	WG1314920
Toluene	ND		1.00	1	07/21/2019 04:50	WG1314920
Ethylbenzene	ND		1.00	1	07/21/2019 04:50	WG1314920
o-Xylene	ND		1.00	1	07/21/2019 04:50	WG1314920
m&p-Xylene	ND		2.00	1	07/21/2019 04:50	WG1314920
Total Xylenes	ND		3.00	1	07/21/2019 04:50	WG1314920
Methyl tert-butyl ether	ND		1.00	1	07/21/2019 04:50	WG1314920
Naphthalene	ND		5.00	1	07/21/2019 04:50	WG1314920
(S) Toluene-d8	*105*		*80.0-120*		*07/21/2019 04:50*	WG1314920
(S) 4-Bromofluorobenzene	*110*		*77.0-126*		*07/21/2019 04:50*	WG1314920
(S) 1,2-Dichloroethane-d4	*91.7*		*70.0-130*		*07/21/2019 04:50*	WG1314920

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 18:33	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 05:10	WG1314920
Toluene	ND		1.00	1	07/21/2019 05:10	WG1314920
Ethylbenzene	ND		1.00	1	07/21/2019 05:10	WG1314920
o-Xylene	ND		1.00	1	07/21/2019 05:10	WG1314920
m&p-Xylene	ND		2.00	1	07/21/2019 05:10	WG1314920
Total Xylenes	ND		3.00	1	07/21/2019 05:10	WG1314920
Methyl tert-butyl ether	ND		1.00	1	07/21/2019 05:10	WG1314920
Naphthalene	ND		5.00	1	07/21/2019 05:10	WG1314920
(S) Toluene-d8	*103*		*80.0-120*		*07/21/2019 05:10*	WG1314920
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*07/21/2019 05:10*	WG1314920
(S) 1,2-Dichloroethane-d4	*94.0*		*70.0-130*		*07/21/2019 05:10*	WG1314920

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 18:50	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 05:30	WG1314920
Toluene	ND		1.00	1	07/21/2019 05:30	WG1314920
Ethylbenzene	ND		1.00	1	07/21/2019 05:30	WG1314920
o-Xylene	ND		1.00	1	07/21/2019 05:30	WG1314920
m&p-Xylene	ND		2.00	1	07/21/2019 05:30	WG1314920
Total Xylenes	ND		3.00	1	07/21/2019 05:30	WG1314920
Methyl tert-butyl ether	ND		1.00	1	07/21/2019 05:30	WG1314920
Naphthalene	ND		5.00	1	07/21/2019 05:30	WG1314920
(S) Toluene-d8	*104*		*80.0-120*		*07/21/2019 05:30*	WG1314920
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*07/21/2019 05:30*	WG1314920
(S) 1,2-Dichloroethane-d4	*94.5*		*70.0-130*		*07/21/2019 05:30*	WG1314920

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 19:06	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	1.09		1.00	1	07/21/2019 05:51	WG1314920
Toluene	ND		1.00	1	07/21/2019 05:51	WG1314920
Ethylbenzene	ND		1.00	1	07/21/2019 05:51	WG1314920
o-Xylene	ND		1.00	1	07/21/2019 05:51	WG1314920
m&p-Xylene	ND		2.00	1	07/21/2019 05:51	WG1314920
Total Xylenes	ND		3.00	1	07/21/2019 05:51	WG1314920
Methyl tert-butyl ether	ND		1.00	1	07/21/2019 05:51	WG1314920
Naphthalene	ND		5.00	1	07/21/2019 05:51	WG1314920
(S) Toluene-d8	*103*		*80.0-120*		*07/21/2019 05:51*	WG1314920
(S) 4-Bromofluorobenzene	*110*		*77.0-126*		*07/21/2019 05:51*	WG1314920
(S) 1,2-Dichloroethane-d4	*96.7*		*70.0-130*		*07/21/2019 05:51*	WG1314920

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 19:22	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 06:12	WG1314920
Toluene	ND		1.00	1	07/21/2019 06:12	WG1314920
Ethylbenzene	ND		1.00	1	07/21/2019 06:12	WG1314920
o-Xylene	ND		1.00	1	07/21/2019 06:12	WG1314920
m&p-Xylene	ND		2.00	1	07/21/2019 06:12	WG1314920
Total Xylenes	ND		3.00	1	07/21/2019 06:12	WG1314920
Methyl tert-butyl ether	ND		1.00	1	07/21/2019 06:12	WG1314920
Naphthalene	ND		5.00	1	07/21/2019 06:12	WG1314920
(S) Toluene-d8	*104*		*80.0-120*		*07/21/2019 06:12*	WG1314920
(S) 4-Bromofluorobenzene	*109*		*77.0-126*		*07/21/2019 06:12*	WG1314920
(S) 1,2-Dichloroethane-d4	*93.8*		*70.0-130*		*07/21/2019 06:12*	WG1314920

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	07/25/2019 19:39	WG1317147

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 06:32	WG1314920
Toluene	ND		1.00	1	07/21/2019 06:32	WG1314920
Ethylbenzene	ND		1.00	1	07/21/2019 06:32	WG1314920
o-Xylene	ND		1.00	1	07/21/2019 06:32	WG1314920
m&p-Xylene	ND		2.00	1	07/21/2019 06:32	WG1314920
Total Xylenes	ND		3.00	1	07/21/2019 06:32	WG1314920
Methyl tert-butyl ether	ND		1.00	1	07/21/2019 06:32	WG1314920
Naphthalene	ND		5.00	1	07/21/2019 06:32	WG1314920
(S) Toluene-d8	*108*		*80.0-120*		*07/21/2019 06:32*	WG1314920
(S) 4-Bromofluorobenzene	*113*		*77.0-126*		*07/21/2019 06:32*	WG1314920
(S) 1,2-Dichloroethane-d4	*93.4*		*70.0-130*		*07/21/2019 06:32*	WG1314920

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	07/21/2019 03:49	WG1314920
Toluene	ND		1.00	1	07/21/2019 03:49	WG1314920
Ethylbenzene	ND		1.00	1	07/21/2019 03:49	WG1314920
o-Xylene	ND		1.00	1	07/21/2019 03:49	WG1314920
m&p-Xylene	ND		2.00	1	07/21/2019 03:49	WG1314920
Total Xylenes	ND		3.00	1	07/21/2019 03:49	WG1314920
Methyl tert-butyl ether	ND		1.00	1	07/21/2019 03:49	WG1314920
Naphthalene	ND		5.00	1	07/21/2019 03:49	WG1314920
(S) Toluene-d8	*105*		*80.0-120*		*07/21/2019 03:49*	WG1314920
(S) 4-Bromofluorobenzene	*111*		*77.0-126*		*07/21/2019 03:49*	WG1314920
(S) 1,2-Dichloroethane-d4	*91.5*		*70.0-130*		*07/21/2019 03:49*	WG1314920

Method Blank (MB)

(MB) R3434476-1 07/25/19 14:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	250	J	77.4	5000

L1120363-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120363-01 07/25/19 15:33 • (DUP) R3434476-3 07/25/19 15:49

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	ND	357	1	0.000		15

L1121169-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1121169-02 07/26/19 01:07 • (DUP) R3434476-6 07/26/19 01:23

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	ND	465	1	0.000		15

Laboratory Control Sample (LCS)

(LCS) R3434476-2 07/25/19 14:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	39000	97.5	80.0-120	

L1120363-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120363-01 07/25/19 15:33 • (MS) R3434476-4 07/25/19 16:05 • (MSD) R3434476-5 07/25/19 16:22

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	ND	50300	50000	100	99.5	1	80.0-120			0.486	15

L1121169-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1121169-02 07/26/19 01:07 • (MS) R3434476-7 07/26/19 01:40

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	ND	50100	99.5	1	80.0-120	

Method Blank (MB)

(MB) R3433370-3 07/20/19 21:23

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
o-Xylene	U		0.341	1.00
m&p-Xylenes	U		0.719	2.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*99.3*			*80.0-120*
(S) 4-Bromofluorobenzene	*93.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433370-1 07/20/19 20:23 • (LCSD) R3433370-2 07/20/19 20:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	27.8	27.9	111	111	70.0-130			0.0814	20
Methyl tert-butyl ether	25.0	27.3	26.9	109	107	70.0-130			1.63	20
Ethylbenzene	25.0	23.4	23.9	93.8	95.7	70.0-130			2.00	20
Naphthalene	25.0	22.3	22.1	89.1	88.4	70.0-130			0.792	20
o-Xylene	25.0	23.9	24.3	95.7	97.3	70.0-130			1.63	20
m&p-Xylenes	50.0	46.7	47.7	93.4	95.4	70.0-130			2.10	20
Toluene	25.0	23.0	23.1	91.9	92.4	70.0-130			0.570	20
Xylenes, Total	75.0	70.6	72.0	94.1	96.0	70.0-130			1.96	20
(S) Toluene-d8				*89.5*	*91.1*	*80.0-120*				
(S) 4-Bromofluorobenzene				*92.3*	*98.8*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*118*	*122*	*70.0-130*				

L1120270-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120270-05 07/21/19 00:03 • (MS) R3433370-4 07/21/19 04:23 • (MSD) R3433370-5 07/21/19 04:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	U	29.5	29.1	118	116	1	17.0-158			1.33	27
Methyl tert-butyl ether	25.0	U	26.7	27.3	107	109	1	28.0-150			2.27	29
Ethylbenzene	25.0	U	26.5	24.4	106	97.4	1	30.0-155			8.36	27
Naphthalene	25.0	U	24.4	23.4	97.7	93.5	1	12.0-156			4.33	35
o-Xylene	25.0	U	25.9	24.8	104	99.0	1	45.0-144			4.46	26

L1120270-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120270-05 07/21/19 00:03 • (MS) R3433370-4 07/21/19 04:23 • (MSD) R3433370-5 07/21/19 04:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
m&p-Xylenes	50.0	U	52.1	49.4	104	98.8	1	43.0-146			5.30	26
Toluene	25.0	U	24.8	23.0	99.1	92.1	1	26.0-154			7.37	28
Xylenes, Total	75.0	U	78.0	74.2	104	98.9	1	29.0-154			4.99	28
(S) Toluene-d8					*92.6*	*84.2*		*80.0-120*				
(S) 4-Bromofluorobenzene					*94.8*	*88.9*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*125*	*124*		*70.0-130*				

L1120270-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120270-14 07/21/19 03:03 • (MS) R3433370-6 07/21/19 05:03 • (MSD) R3433370-7 07/21/19 05:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	U	29.1	29.1	116	116	1	17.0-158			0.0850	27
Methyl tert-butyl ether	25.0	U	27.8	27.0	111	108	1	28.0-150			2.95	29
Ethylbenzene	25.0	U	27.2	27.9	109	112	1	30.0-155			2.39	27
Naphthalene	25.0	U	25.5	24.5	102	98.1	1	12.0-156			4.06	35
o-Xylene	25.0	U	27.7	28.1	111	112	1	45.0-144			1.37	26
m&p-Xylenes	50.0	U	54.4	54.1	109	108	1	43.0-146			0.472	26
Toluene	25.0	U	25.9	26.5	104	106	1	26.0-154			2.14	28
Xylenes, Total	75.0	U	82.1	82.2	109	110	1	29.0-154			0.122	28
(S) Toluene-d8					*91.7*	*95.3*		*80.0-120*				
(S) 4-Bromofluorobenzene					*97.3*	*98.3*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*122*	*124*		*70.0-130*				

Method Blank (MB)

(MB) R3433695-3 07/21/19 03:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
o-Xylene	U		0.341	1.00
m&p-Xylenes	U		0.719	2.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*106*			*80.0-120*
(S) 4-Bromofluorobenzene	*111*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*91.2*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433695-1 07/21/19 02:27 • (LCSD) R3433695-2 07/21/19 02:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	27.3	26.1	109	105	70.0-130			4.33	20
Ethylbenzene	25.0	28.4	27.7	114	111	70.0-130			2.57	20
Methyl tert-butyl ether	25.0	25.5	23.9	102	95.7	70.0-130			6.48	20
Naphthalene	25.0	22.2	23.3	88.7	93.3	70.0-130			5.14	20
o-Xylene	25.0	28.1	27.2	112	109	70.0-130			3.36	20
m&p-Xylenes	50.0	56.0	55.4	112	111	70.0-130			1.18	20
Toluene	25.0	25.2	24.6	101	98.5	70.0-130			2.18	20
Xylenes, Total	75.0	84.1	82.6	112	110	70.0-130			1.80	20
(S) Toluene-d8				*96.8*	*96.3*	*80.0-120*				
(S) 4-Bromofluorobenzene				*109*	*110*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*99.9*	*97.1*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

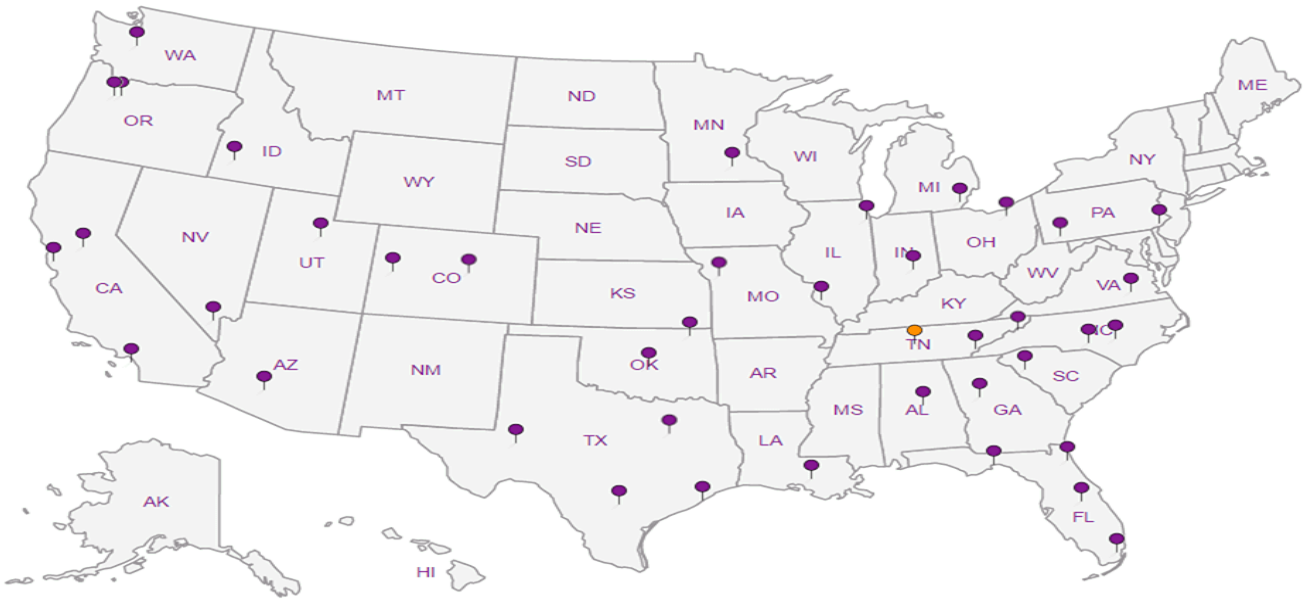
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Chain of Custody Page 1 of 2

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L1120363
A010

Acctnum: KINCH2MGA
Template: T150983
Prelogin: P711012
TSR: 526 - Chris McCord
PB: 5-29-19 6m
Shipped Via: FedEX Ground

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 600
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Surface Water

City/State Collected: BELTON, SC

Phone: 770-604-9182
Fax:

Client Project # 03161400.B.PN.GEN. LDOMR.GW

Lab Project # KINCH2MGA-LEWIS

Collected by (print): MELISSA WARNER

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260BTEXMNSC 40mlAmb-HCl	Remarks	Sample # (lab only)
SW01- 071819	GRAB	GW	NA	07/18/19	1335	3 4	X		-01
SW02- 071819		GW			1315	3 4	X		-02
SW03- 071819		GW			1425	3 4	X		-03
SW04- 071819		GW			1305	3 4	X		-04
~~SW05- 071819~~		~~GW~~				3	X		
~~SW06-~~		~~GW~~				3	X		
~~SW07-~~		~~GW~~				3	X		-05
SW08- 071819	GRAB	GW	NA	07/18/19	1120	3 4	X		-06
SW09- 071819		GW			1110	3 4	X		-07
SW10- 071819		GW			1055	3 4	X		

RAD SCREEN: <0.5 mR/hr

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		✓Y N
Bottles arrive intact:		✓Y N
Correct bottles used:		✓Y N
Sufficient volume sent:		✓Y N
If Applicable		
VOA Zero Headspace:		✓Y N
Preservation Correct/Checked:		Y N

	Date:	Time:		
Relinquished by: (Signature)	07/18/19	1900	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR (1)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.6 °C Bottles Received: 39+3
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Mark T.	Date: 7/19 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Chain of Custody Page 2 of 2

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 600
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Report to: **Bethany Garvey**

Project Description: **Lewis Drive Surface Water**

City/State Collected: BELTON, SC

Phone: **770-604-9182**
Fax:

Client Project # D3161400.B.PN.GEN.LDOMR.GW

Lab Project # **KINCH2MGA-LEWIS**

Collected by (print): MELISSA WALKER

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

L# L1120363

Table # L

Acctnum: **KINCH2MGA**
Template: **T150983**
Prelogin: **P711012**
TSR: **526 - Chris McCord**
PB: 5-29-19 6m

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC - TB (TRIP BLANK)	Remarks	Sample # (lab only)
SW11- 071819	GRAB	GW	NA	07/18/19	1040	3	X			-08
SW12- 071819		GW			1400	3	X			-09
SW13- 071819		GW			1325	3	X			-10
SW14- 071819		GW			1445	3	X			-11
TB02-071819		GW			1000	1	X	X		-12

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

RAD SCREEN: <0.5 mR/hr

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
~~Correct bottles used:~~ Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	07/18/19	1900	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 2.5 °C Bottles Received: 39+TB

Date: 7/19 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

Login #:L1120363	Client: KINCH2MGA	Date: 7/19/19	Evaluated by: Brock Fariss

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courie
	Insufficient sample volume.	x	Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Received ID MW-37-071819 w/ date 7/18/19 and time 0945 and ID MW-38-071819 w/ same date and time 1110

Client informed by:		Call		Email		Voice Mail		Date:	Time:
TSR Initials:	Client Contact:								

Login Instructions:

Enter MW-37-071819 and MW-38-071819 into a separate SDG using the attached COC

Login #: 1120363	Client: KINCH2MGA	Date:07/19	Evaluated by:Kelsey S

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courier
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:Lexxi R
	Broken container:		Chain of Custody is missing		Date/Time:07/19/19 0845
	Sufficient sample remains				Temp./Cont. Rec./pH:2.2/ 13
					Carrier:Fedex
					Tracking#4686 6469 1326

Login Comments:Project: Lewis Drive Groundwater Project #: KINCH2MGA-LEWIS12 AND Project: Lewis Drive Surface Water
Received 1 250ml-nopres per id
Please see attached list written by unpacker for IDs and times.

Client informed by:		Call		Email	X	Voice Mail		Date: 7/24/19	Time: 1235
TSR Initials: JCR	Client Contact: Bethany Garvey								

Login Instructions:

These should have arrived yesterday, 07/23. Please add containers and SULFATE analysis to L1120363-01 thru -11 and L1121169-01/-02

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

August 29, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1131276
Samples Received:	08/21/2019
Project Number:	D3161400
Description:	Lewis Drive Site Surface water event
Site:	LEWIS DR
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 500 Atlanta, GA 30328

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

TABLE OF CONTENTS

SW11-082019 L1131276-01 GW

Collected by: Melissa Warren | Collected date/time: 08/20/19 09:35 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 10:11	08/25/19 10:11	JHH	Mt. Juliet, TN

SW10-082019 L1131276-02 GW

Collected by: Melissa Warren | Collected date/time: 08/20/19 09:45 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 10:31	08/25/19 10:31	JHH	Mt. Juliet, TN

SW09-082019 L1131276-03 GW

Collected by: Melissa Warren | Collected date/time: 08/20/19 10:00 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 10:51	08/25/19 10:51	JHH	Mt. Juliet, TN

SW08-082019 L1131276-04 GW

Collected by: Melissa Warren | Collected date/time: 08/20/19 10:05 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 11:11	08/25/19 11:11	JHH	Mt. Juliet, TN

SW13-082019 L1131276-05 GW

Collected by: Melissa Warren | Collected date/time: 08/20/19 10:20 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1332945	1	08/22/19 12:09	08/22/19 12:09	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 11:31	08/25/19 11:31	JHH	Mt. Juliet, TN

SW04-082019 L1131276-06 GW

Collected by: Melissa Warren | Collected date/time: 08/20/19 11:05 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1332945	1	08/22/19 12:26	08/22/19 12:26	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 11:51	08/25/19 11:51	JHH	Mt. Juliet, TN

SW02-082019 L1131276-07 GW

Collected by: Melissa Warren | Collected date/time: 08/20/19 11:15 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1332945	1	08/22/19 12:42	08/22/19 12:42	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 12:10	08/25/19 12:10	JHH	Mt. Juliet, TN

SW01-082019 L1131276-08 GW

Collected by: Melissa Warren | Collected date/time: 08/20/19 15:20 | Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1332945	1	08/22/19 13:32	08/22/19 13:32	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 12:29	08/25/19 12:29	JHH	Mt. Juliet, TN

SW03-082019 L1131276-09 GW

Collected by: Melissa Warren
Collected date/time: 08/20/19 15:55
Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 12:49	08/25/19 12:49	JHH	Mt. Juliet, TN

SW14-082019 L1131276-10 GW

Collected by: Melissa Warren
Collected date/time: 08/20/19 16:05
Received date/time: 08/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1332945	1	08/22/19 13:48	08/22/19 13:48	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1334544	1	08/25/19 13:09	08/25/19 13:09	JHH	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Project Manager

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 10:11	WG1334544
Toluene	ND		1.00	1	08/25/2019 10:11	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 10:11	WG1334544
o-Xylene	ND		1.00	1	08/25/2019 10:11	WG1334544
m&p-Xylene	ND		2.00	1	08/25/2019 10:11	WG1334544
Xylenes, Total	ND		3.00	1	08/25/2019 10:11	WG1334544
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 10:11	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 10:11	WG1334544
(S) Toluene-d8	*110*		*80.0-120*		*08/25/2019 10:11*	WG1334544
(S) 4-Bromofluorobenzene	*97.5*		*77.0-126*		*08/25/2019 10:11*	WG1334544
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*08/25/2019 10:11*	WG1334544

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 10:31	WG1334544
Toluene	ND		1.00	1	08/25/2019 10:31	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 10:31	WG1334544
o-Xylene	ND		1.00	1	08/25/2019 10:31	WG1334544
m&p-Xylene	ND		2.00	1	08/25/2019 10:31	WG1334544
Xylenes, Total	ND		3.00	1	08/25/2019 10:31	WG1334544
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 10:31	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 10:31	WG1334544
(S) Toluene-d8	*113*		*80.0-120*		*08/25/2019 10:31*	WG1334544
(S) 4-Bromofluorobenzene	*96.1*		*77.0-126*		*08/25/2019 10:31*	WG1334544
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*08/25/2019 10:31*	WG1334544

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 10:51	WG1334544
Toluene	ND		1.00	1	08/25/2019 10:51	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 10:51	WG1334544
o-Xylene	ND		1.00	1	08/25/2019 10:51	WG1334544
m&p-Xylene	ND		2.00	1	08/25/2019 10:51	WG1334544
Xylenes, Total	ND		3.00	1	08/25/2019 10:51	WG1334544
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 10:51	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 10:51	WG1334544
(S) Toluene-d8	*107*		*80.0-120*		*08/25/2019 10:51*	WG1334544
(S) 4-Bromofluorobenzene	*95.0*		*77.0-126*		*08/25/2019 10:51*	WG1334544
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*08/25/2019 10:51*	WG1334544

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 11:11	WG1334544
Toluene	ND		1.00	1	08/25/2019 11:11	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 11:11	WG1334544
o-Xylene	ND		1.00	1	08/25/2019 11:11	WG1334544
m&p-Xylene	ND		2.00	1	08/25/2019 11:11	WG1334544
Xylenes, Total	ND		3.00	1	08/25/2019 11:11	WG1334544
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 11:11	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 11:11	WG1334544
(S) Toluene-d8	*111*		*80.0-120*		*08/25/2019 11:11*	WG1334544
(S) 4-Bromofluorobenzene	*97.1*		*77.0-126*		*08/25/2019 11:11*	WG1334544
(S) 1,2-Dichloroethane-d4	*106*		*70.0-130*		*08/25/2019 11:11*	WG1334544

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	08/22/2019 12:09	WG1332945

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 11:31	WG1334544
Toluene	ND		1.00	1	08/25/2019 11:31	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 11:31	WG1334544
o-Xylene	ND		1.00	1	08/25/2019 11:31	WG1334544
m&p-Xylene	ND		2.00	1	08/25/2019 11:31	WG1334544
Xylenes, Total	ND		3.00	1	08/25/2019 11:31	WG1334544
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 11:31	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 11:31	WG1334544
(S) Toluene-d8	*113*		*80.0-120*		*08/25/2019 11:31*	WG1334544
(S) 4-Bromofluorobenzene	*97.1*		*77.0-126*		*08/25/2019 11:31*	WG1334544
(S) 1,2-Dichloroethane-d4	*106*		*70.0-130*		*08/25/2019 11:31*	WG1334544

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	08/22/2019 12:26	WG1332945

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 11:51	WG1334544
Toluene	ND		1.00	1	08/25/2019 11:51	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 11:51	WG1334544
o-Xylene	ND		1.00	1	08/25/2019 11:51	WG1334544
m&p-Xylene	ND		2.00	1	08/25/2019 11:51	WG1334544
Xylenes, Total	ND		3.00	1	08/25/2019 11:51	WG1334544
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 11:51	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 11:51	WG1334544
(S) Toluene-d8	*113*		*80.0-120*		*08/25/2019 11:51*	WG1334544
(S) 4-Bromofluorobenzene	*99.9*		*77.0-126*		*08/25/2019 11:51*	WG1334544
(S) 1,2-Dichloroethane-d4	*106*		*70.0-130*		*08/25/2019 11:51*	WG1334544

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	08/22/2019 12:42	WG1332945

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 12:10	WG1334544
Toluene	ND		1.00	1	08/25/2019 12:10	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 12:10	WG1334544
o-Xylene	ND		1.00	1	08/25/2019 12:10	WG1334544
m&p-Xylene	ND		2.00	1	08/25/2019 12:10	WG1334544
Xylenes, Total	ND		3.00	1	08/25/2019 12:10	WG1334544
Methyl tert-butyl ether	1.35		1.00	1	08/25/2019 12:10	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 12:10	WG1334544
(S) Toluene-d8	*114*		*80.0-120*		*08/25/2019 12:10*	WG1334544
(S) 4-Bromofluorobenzene	*101*		*77.0-126*		*08/25/2019 12:10*	WG1334544
(S) 1,2-Dichloroethane-d4	*110*		*70.0-130*		*08/25/2019 12:10*	WG1334544

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	08/22/2019 13:32	WG1332945

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 12:29	WG1334544
Toluene	ND		1.00	1	08/25/2019 12:29	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 12:29	WG1334544
o-Xylene	ND		1.00	1	08/25/2019 12:29	WG1334544
m&p-Xylene	ND		2.00	1	08/25/2019 12:29	WG1334544
Xylenes, Total	ND		3.00	1	08/25/2019 12:29	WG1334544
Methyl tert-butyl ether	1.31		1.00	1	08/25/2019 12:29	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 12:29	WG1334544
(S) Toluene-d8	*112*		*80.0-120*		*08/25/2019 12:29*	WG1334544
(S) 4-Bromofluorobenzene	*99.7*		*77.0-126*		*08/25/2019 12:29*	WG1334544
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*08/25/2019 12:29*	WG1334544

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 12:49	WG1334544
Toluene	ND		1.00	1	08/25/2019 12:49	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 12:49	WG1334544
o-Xylene	ND		1.00	1	08/25/2019 12:49	WG1334544
m&p-Xylene	ND		2.00	1	08/25/2019 12:49	WG1334544
Xylenes, Total	ND		3.00	1	08/25/2019 12:49	WG1334544
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 12:49	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 12:49	WG1334544
(S) Toluene-d8	*113*		*80.0-120*		*08/25/2019 12:49*	WG1334544
(S) 4-Bromofluorobenzene	*99.5*		*77.0-126*		*08/25/2019 12:49*	WG1334544
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*08/25/2019 12:49*	WG1334544

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	08/22/2019 13:48	WG1332945

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	08/25/2019 13:09	WG1334544
Toluene	ND		1.00	1	08/25/2019 13:09	WG1334544
Ethylbenzene	ND		1.00	1	08/25/2019 13:09	WG1334544
o-Xylene	ND		1.00	1	08/25/2019 13:09	WG1334544
m&p-Xylene	ND		2.00	1	08/25/2019 13:09	WG1334544
Xylenes, Total	ND		3.00	1	08/25/2019 13:09	WG1334544
Methyl tert-butyl ether	ND		1.00	1	08/25/2019 13:09	WG1334544
Naphthalene	ND		5.00	1	08/25/2019 13:09	WG1334544
(S) Toluene-d8	*110*		*80.0-120*		*08/25/2019 13:09*	WG1334544
(S) 4-Bromofluorobenzene	*97.1*		*77.0-126*		*08/25/2019 13:09*	WG1334544
(S) 1,2-Dichloroethane-d4	*111*		*70.0-130*		*08/25/2019 13:09*	WG1334544

Method Blank (MB)

(MB) R3443434-1 08/22/19 08:27

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	U		77.4	5000

L1131208-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1131208-01 08/22/19 11:20 • (DUP) R3443434-3 08/22/19 11:37

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	ND	730	1	0.000		15

L1131383-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1131383-04 08/22/19 18:43 • (DUP) R3443434-10 08/22/19 19:00

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	1870000	1870000	1	0.0774	E	15

Laboratory Control Sample (LCS)

(LCS) R3443434-2 08/22/19 08:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	39200	98.0	80.0-120	

L1131379-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1131379-02 08/22/19 14:21 • (MS) R3443434-4 08/22/19 14:37 • (MSD) R3443434-5 08/22/19 14:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	20700	71400	70800	101	100	1	80.0-120			0.859	15

L1131379-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1131379-04 08/22/19 15:26 • (MS) R3443434-6 08/22/19 15:43 • (MSD) R3443434-7 08/22/19 15:59

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	176000	221000	221000	89.9	90.2	1	80.0-120	E	E	0.0595	15

L1131383-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1131383-03 08/22/19 17:54 • (MS) R3443434-8 08/22/19 18:11 • (MSD) R3443434-9 08/22/19 18:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	1860000	1850000	1850000	0.000	0.000	1	80.0-120	E V	E V	0.0663	15

Method Blank (MB)

(MB) R3444489-3 08/25/19 05:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
o-Xylene	U		0.341	1.00
m&p-Xylenes	U		0.719	2.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*111*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.5*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*99.2*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3444489-1 08/25/19 04:49 • (LCSD) R3444489-2 08/25/19 05:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	23.2	22.8	92.7	91.3	70.0-130			1.54	20
Ethylbenzene	25.0	28.2	27.9	113	111	70.0-130			1.19	20
Methyl tert-butyl ether	25.0	21.4	21.3	85.5	85.3	70.0-130			0.242	20
Naphthalene	25.0	21.3	21.8	85.3	87.1	70.0-130			2.11	20
o-Xylene	25.0	26.2	26.4	105	105	70.0-130			0.470	20
m&p-Xylenes	50.0	54.2	54.7	108	109	70.0-130			0.905	20
Toluene	25.0	25.6	25.5	102	102	70.0-130			0.419	20
Xylenes, Total	75.0	80.4	81.1	107	108	70.0-130			0.867	20
(S) Toluene-d8				*111*	*113*	*80.0-120*				
(S) 4-Bromofluorobenzene				*98.5*	*97.6*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*105*	*103*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

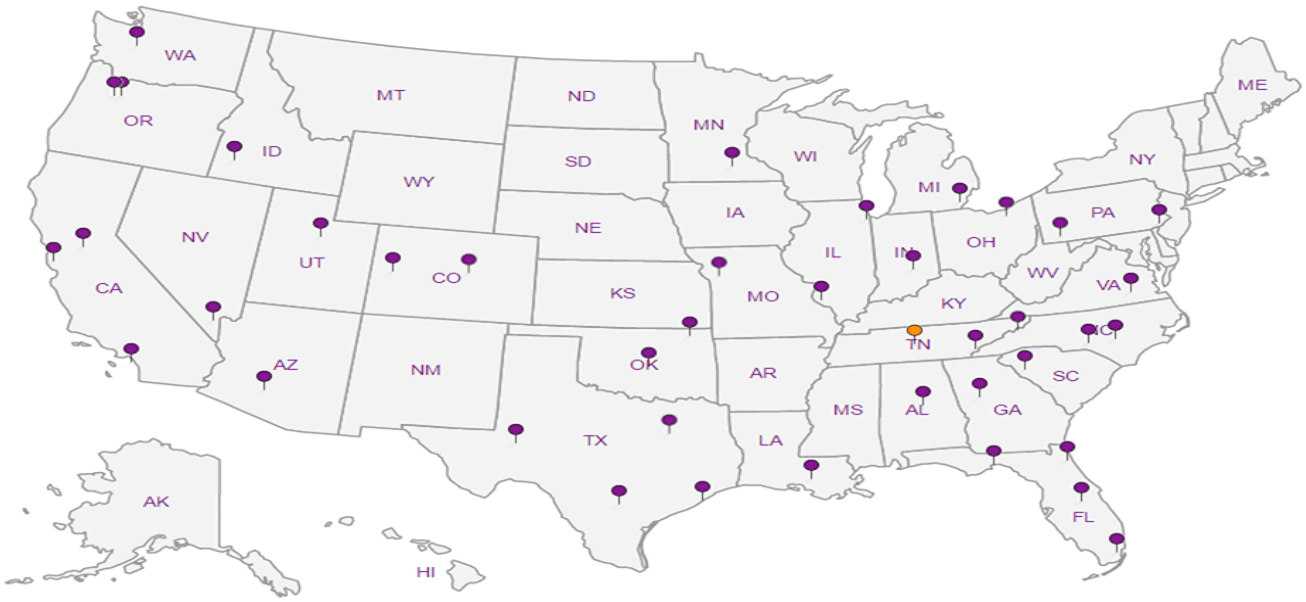
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Site Surface water

City/State Collected: Belton, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS

Collected by (print): Melissa Warren

Site/Facility ID # Lewis DR

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

Pres Chk: HCl

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260BTEXNSC 40mlAmb-HCl BTEX+MTBE+Naph
SW11-082019	Grab	GW	—	8/20/19	0935	3	X
SW10-082019		GW	—		0945	3	X
SW09-082019		GW	—		1000	3	X
SW08-082019		GW	—		1005	3	X
SW13-082019		GW	—		1020	3 4	X
SW04-082019		GW	—		1105	3 4	X
SW02-082019		GW	—		1115	3 4	X
SW01-082019		GW	—		1520	3 4	X
SW12-082019		GW	—		1545	3 0	X
SW03-082019		GW	—		1555	3	X

SW 8/20/19

TD

Chain of Custody Page 1 of 2

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1131276

A204

Acctnum: KINCH2MGA

Template: T120701

Prelogin: P724309

PM: 526 - Chris McCord

PB: 8-13-19

Shipped Via: FedEX Standard

Remarks	Sample # (lab only)
	-01
	-02
	-03
	-04
	-05
	-06
	-07
	-08
	-09
	-10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXNSC=BTEX + Naphthalene + MTBE

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx X Courier _____

Tracking # 108259988092

Sample Receipt Checklist

COC Seal Present/Intact:	NP	✓Y N
COC Signed/Accurate:		✓Y N
Bottles arrive intact:		✓Y N
Correct bottles used:		✓Y N
Sufficient volume sent:		✓Y N
If Applicable		
VOA Zero Headspace:		✓Y N
Preservation Correct/Checked:		✓Y N
RAD Screen <0.5 mR/hr:		✓Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Bethany Garvey	8/20/19	1800		1	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 17.3°F °C 1.5+.3=1.8	Bottles Received: 35
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/21	Time: 0845

Hold: | Condition: NCF / OK

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Site Surface water

City/State Collected: Belton, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS

Collected by (print): Melissa Warren

Site/Facility ID # Lewis Drive

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260BTEXNSC 40ml Amb-HCl	Pres Chk	Remarks	Sample # (lab only)
SW14-082019	Grab	~~GW~~ SW	—	8/20/19	1605	3	X			-10
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1134276

Table #

Acctnum: KINCH2MGA

Template: T120701

Prelogin: P724309

PM: 526 - Chris McCord

PB: 8/13/19

Shipped Via: FedEX Standard

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXNSC=BTEX + Naphthalene + MTBE

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx X Courier _____

Tracking # 1082 5998 8092

Sample Receipt Checklist

COC Seal Present/Intact:	NP ✓Y N
COC Signed/Accurate:	✓Y N
Bottles arrive intact:	✓Y N
Correct bottles used:	✓Y N
Sufficient volume sent:	✓Y N
If Applicable	
VOA Zero Headspace:	✓Y N
Preservation Correct/Checked:	Y N
RAD Screen <0.5 mR/hr:	✓Y N

Relinquished by: (Signature) Bethany Garvey	Date: 8/20/19	Time: 1800	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: A3BF °C 1.5+.7=1.8 Bottles Received: 35
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/21 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

August 30, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1132161
Samples Received:	08/23/2019
Project Number:	D3161400
Description:	Lewis Drive Site Surface water event
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 500 Atlanta, GA 30328

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

TABLE OF CONTENTS

SW12-082219 L1132161-01 GW

Collected by: Tyler L. Hall
Collected date/time: 08/22/19 11:10
Received date/time: 08/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1337483	1	08/30/19 02:41	08/30/19 02:41	ADM	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Project Manager

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	3.33		1.00	1	08/30/2019 02:41	WG1337483
Toluene	ND		1.00	1	08/30/2019 02:41	WG1337483
Ethylbenzene	ND		1.00	1	08/30/2019 02:41	WG1337483
o-Xylene	ND		1.00	1	08/30/2019 02:41	WG1337483
m&p-Xylene	ND		2.00	1	08/30/2019 02:41	WG1337483
Xylenes, Total	ND		3.00	1	08/30/2019 02:41	WG1337483
Methyl tert-butyl ether	ND		1.00	1	08/30/2019 02:41	WG1337483
Naphthalene	ND		5.00	1	08/30/2019 02:41	WG1337483
(S) Toluene-d8	*103*		*80.0-120*		*08/30/2019 02:41*	WG1337483
(S) 4-Bromofluorobenzene	*98.9*		*77.0-126*		*08/30/2019 02:41*	WG1337483
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*08/30/2019 02:41*	WG1337483

Method Blank (MB)

(MB) R3446071-2 08/29/19 23:23

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
o-Xylene	U		0.341	1.00
m&p-Xylenes	U		0.719	2.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*100*			*80.0-120*
(S) 4-Bromofluorobenzene	*101*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3446071-1 08/29/19 22:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	25.0	21.3	85.2	70.0-130	
Ethylbenzene	25.0	21.1	84.4	70.0-130	
Methyl tert-butyl ether	25.0	25.4	102	70.0-130	
Naphthalene	25.0	20.2	80.7	70.0-130	
o-Xylene	25.0	22.1	88.6	70.0-130	
m&p-Xylenes	50.0	43.8	87.5	70.0-130	
Toluene	25.0	20.4	81.5	70.0-130	
Xylenes, Total	75.0	65.9	87.9	70.0-130	
(S) Toluene-d8			*101*	*80.0-120*	
(S) 4-Bromofluorobenzene			*99.9*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*113*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

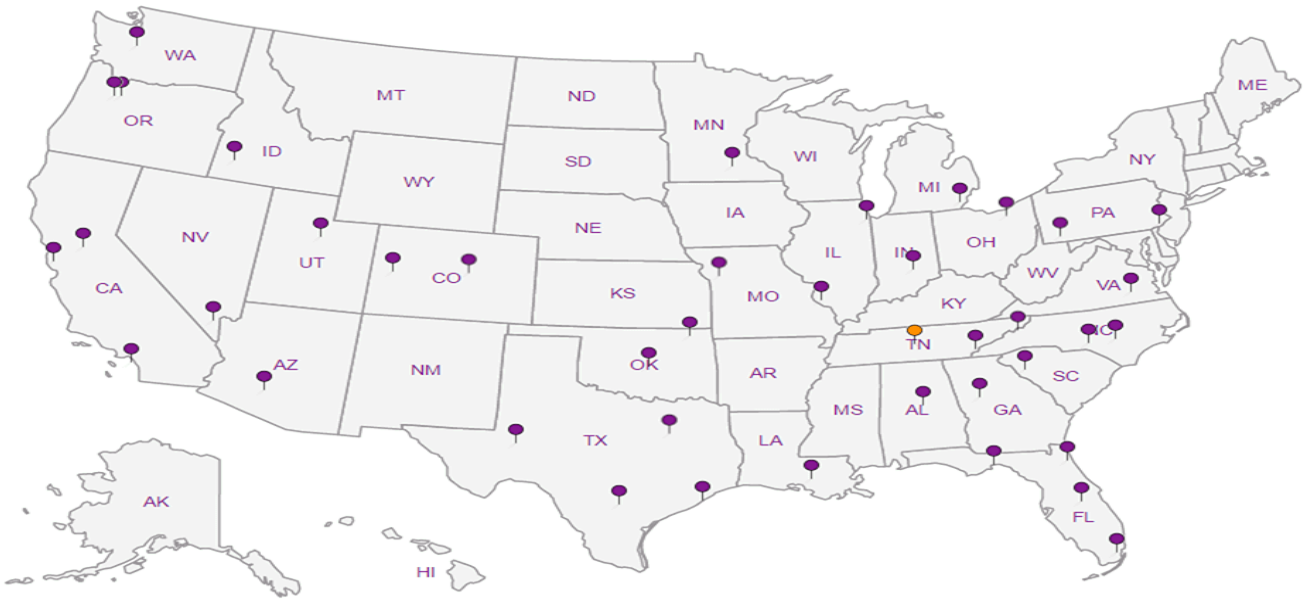
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive Site Surface water

City/State Collected: Button, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # D3161400

Lab Project # KINCH2MGA-LEWIS

Collected by (print): Tyler Hall

Site/Facility ID # Lewis. Drive

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk: HCl

Analysis / Container / Preservative: V8260BTEXNSC 40mlAmb-HCl

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1132161

A055

Acctnum: KINCH2MGA

Template: T120701

Prelogin: P724309

PM: 526 - Chris McCord

PB: 8.13.19

Shipped Via: FedEX Standard

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260BTEXNSC 40mlAmb-HCl	Remarks	Sample # (lab only)
SW12-082219	Grab	~~SW~~ ~~GW~~	—	8.22.19	1110	3	X		-1
		GW				3	X		
		GW				3	X		
		GW				3	X		
		GW				3	X		
		GW				3	X		
		GW				3	X		

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXNSC=BTEX + Naphthalene + MTBE

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx X Courier _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

	Date:	Time:		
Relinquished by: (Signature) Bethany Garvey	8.22.19	1730	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: A3BF °C Bottles Received: 1.4±0=1.4 3
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 08/23 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 26, 2019

Kinder Morgan- Atlanta, GA

Sample Delivery Group:	L1141137
Samples Received:	09/19/2019
Project Number:	D3161400
Description:	Lewis Drive Surface Water
Site:	LEWIS DRIVE
Report To:	Bethany Garvey 6600 Peachtree Dunwoody Road 400 Embassy Row - Suite 500 Atlanta, GA 30328

Entire Report Reviewed By:

Jason Romer
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

TABLE OF CONTENTS

SW09-091819 L1141137-02 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 14:50 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350818	1	09/24/19 06:33	09/24/19 06:33	JCP	Mt. Juliet, TN

SW11-091819 L1141137-03 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 14:30 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350818	1	09/24/19 06:54	09/24/19 06:54	JCP	Mt. Juliet, TN

SW10-091819 L1141137-04 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 14:40 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350818	1	09/24/19 07:15	09/24/19 07:15	JCP	Mt. Juliet, TN

SW08-091819 L1141137-05 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 15:00 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350818	1	09/24/19 07:36	09/24/19 07:36	JCP	Mt. Juliet, TN

SW04-091819 L1141137-06 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 15:55 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1349279	1	09/20/19 15:43	09/20/19 15:43	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350818	1	09/24/19 07:57	09/24/19 07:57	JCP	Mt. Juliet, TN

SW02-091819 L1141137-07 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 16:05 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1349279	1	09/20/19 17:12	09/20/19 17:12	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350818	1	09/24/19 08:18	09/24/19 08:18	JCP	Mt. Juliet, TN

SW01-091819 L1141137-08 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 16:25 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1349279	1	09/20/19 17:27	09/20/19 17:27	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350818	1	09/24/19 08:39	09/24/19 08:39	JCP	Mt. Juliet, TN

SW12-091819 L1141137-09 GW

Collected by: Melissa Warren | Collected date/time: 09/18/19 16:50 | Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1349279	1	09/20/19 17:42	09/20/19 17:42	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350818	1	09/24/19 09:00	09/24/19 09:00	JCP	Mt. Juliet, TN

SW14-091819 L1141137-10 GW

Collected by: Melissa Warren
Collected date/time: 09/18/19 17:25
Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1349279	1	09/20/19 17:57	09/20/19 17:57	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350818	1	09/24/19 09:20	09/24/19 09:20	JCP	Mt. Juliet, TN

TB03-091819 L1141137-11 GW

Collected by: Melissa Warren
Collected date/time: 09/18/19 00:00
Received date/time: 09/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1350818	1	09/24/19 05:31	09/24/19 05:31	JCP	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jason Romer
Project Manager

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 06:33	WG1350818
Toluene	ND		1.00	1	09/24/2019 06:33	WG1350818
Ethylbenzene	ND		1.00	1	09/24/2019 06:33	WG1350818
o-Xylene	ND		1.00	1	09/24/2019 06:33	WG1350818
m&p-Xylene	ND		2.00	1	09/24/2019 06:33	WG1350818
Total Xylenes	ND		3.00	1	09/24/2019 06:33	WG1350818
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 06:33	WG1350818
Naphthalene	ND		5.00	1	09/24/2019 06:33	WG1350818
(S) Toluene-d8	*108*		*80.0-120*		*09/24/2019 06:33*	WG1350818
(S) 4-Bromofluorobenzene	*109*		*77.0-126*		*09/24/2019 06:33*	WG1350818
(S) 1,2-Dichloroethane-d4	*88.4*		*70.0-130*		*09/24/2019 06:33*	WG1350818

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 06:54	WG1350818
Toluene	ND		1.00	1	09/24/2019 06:54	WG1350818
Ethylbenzene	ND		1.00	1	09/24/2019 06:54	WG1350818
o-Xylene	ND		1.00	1	09/24/2019 06:54	WG1350818
m&p-Xylene	ND		2.00	1	09/24/2019 06:54	WG1350818
Total Xylenes	ND		3.00	1	09/24/2019 06:54	WG1350818
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 06:54	WG1350818
Naphthalene	ND		5.00	1	09/24/2019 06:54	WG1350818
(S) Toluene-d8	*107*		*80.0-120*		*09/24/2019 06:54*	WG1350818
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*09/24/2019 06:54*	WG1350818
(S) 1,2-Dichloroethane-d4	*88.1*		*70.0-130*		*09/24/2019 06:54*	WG1350818

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 07:15	WG1350818
Toluene	ND		1.00	1	09/24/2019 07:15	WG1350818
Ethylbenzene	ND		1.00	1	09/24/2019 07:15	WG1350818
o-Xylene	ND		1.00	1	09/24/2019 07:15	WG1350818
m&p-Xylene	ND		2.00	1	09/24/2019 07:15	WG1350818
Total Xylenes	ND		3.00	1	09/24/2019 07:15	WG1350818
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 07:15	WG1350818
Naphthalene	ND		5.00	1	09/24/2019 07:15	WG1350818
(S) Toluene-d8	*107*		*80.0-120*		*09/24/2019 07:15*	WG1350818
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/24/2019 07:15*	WG1350818
(S) 1,2-Dichloroethane-d4	*88.1*		*70.0-130*		*09/24/2019 07:15*	WG1350818

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 07:36	WG1350818
Toluene	ND		1.00	1	09/24/2019 07:36	WG1350818
Ethylbenzene	ND		1.00	1	09/24/2019 07:36	WG1350818
o-Xylene	ND		1.00	1	09/24/2019 07:36	WG1350818
m&p-Xylene	ND		2.00	1	09/24/2019 07:36	WG1350818
Total Xylenes	ND		3.00	1	09/24/2019 07:36	WG1350818
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 07:36	WG1350818
Naphthalene	ND		5.00	1	09/24/2019 07:36	WG1350818
(S) Toluene-d8	*106*		*80.0-120*		*09/24/2019 07:36*	WG1350818
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*09/24/2019 07:36*	WG1350818
(S) 1,2-Dichloroethane-d4	*88.4*		*70.0-130*		*09/24/2019 07:36*	WG1350818

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	09/20/2019 15:43	WG1349279

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 07:57	WG1350818
Toluene	ND		1.00	1	09/24/2019 07:57	WG1350818
Ethylbenzene	ND		1.00	1	09/24/2019 07:57	WG1350818
o-Xylene	ND		1.00	1	09/24/2019 07:57	WG1350818
m&p-Xylene	ND		2.00	1	09/24/2019 07:57	WG1350818
Total Xylenes	ND		3.00	1	09/24/2019 07:57	WG1350818
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 07:57	WG1350818
Naphthalene	ND		5.00	1	09/24/2019 07:57	WG1350818
(S) Toluene-d8	*107*		*80.0-120*		*09/24/2019 07:57*	WG1350818
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/24/2019 07:57*	WG1350818
(S) 1,2-Dichloroethane-d4	*87.8*		*70.0-130*		*09/24/2019 07:57*	WG1350818

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	09/20/2019 17:12	WG1349279

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 08:18	WG1350818
Toluene	ND		1.00	1	09/24/2019 08:18	WG1350818
Ethylbenzene	ND		1.00	1	09/24/2019 08:18	WG1350818
o-Xylene	ND		1.00	1	09/24/2019 08:18	WG1350818
m&p-Xylene	ND		2.00	1	09/24/2019 08:18	WG1350818
Total Xylenes	ND		3.00	1	09/24/2019 08:18	WG1350818
Methyl tert-butyl ether	1.96		1.00	1	09/24/2019 08:18	WG1350818
Naphthalene	ND		5.00	1	09/24/2019 08:18	WG1350818
(S) Toluene-d8	*106*		*80.0-120*		*09/24/2019 08:18*	WG1350818
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/24/2019 08:18*	WG1350818
(S) 1,2-Dichloroethane-d4	*88.5*		*70.0-130*		*09/24/2019 08:18*	WG1350818

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	09/20/2019 17:27	WG1349279

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 08:39	WG1350818
Toluene	ND		1.00	1	09/24/2019 08:39	WG1350818
Ethylbenzene	ND		1.00	1	09/24/2019 08:39	WG1350818
o-Xylene	ND		1.00	1	09/24/2019 08:39	WG1350818
m&p-Xylene	ND		2.00	1	09/24/2019 08:39	WG1350818
Total Xylenes	ND		3.00	1	09/24/2019 08:39	WG1350818
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 08:39	WG1350818
Naphthalene	ND		5.00	1	09/24/2019 08:39	WG1350818
(S) Toluene-d8	*107*		*80.0-120*		*09/24/2019 08:39*	WG1350818
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/24/2019 08:39*	WG1350818
(S) 1,2-Dichloroethane-d4	*89.5*		*70.0-130*		*09/24/2019 08:39*	WG1350818

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	09/20/2019 17:42	WG1349279

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 09:00	WG1350818
Toluene	ND		1.00	1	09/24/2019 09:00	WG1350818
Ethylbenzene	ND		1.00	1	09/24/2019 09:00	WG1350818
o-Xylene	ND		1.00	1	09/24/2019 09:00	WG1350818
m&p-Xylene	ND		2.00	1	09/24/2019 09:00	WG1350818
Total Xylenes	ND		3.00	1	09/24/2019 09:00	WG1350818
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 09:00	WG1350818
Naphthalene	ND		5.00	1	09/24/2019 09:00	WG1350818
(S) Toluene-d8	*106*		*80.0-120*		*09/24/2019 09:00*	WG1350818
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/24/2019 09:00*	WG1350818
(S) 1,2-Dichloroethane-d4	*88.2*		*70.0-130*		*09/24/2019 09:00*	WG1350818

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfate	ND		5000	1	09/20/2019 17:57	WG1349279

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 09:20	WG1350818
Toluene	ND		1.00	1	09/24/2019 09:20	WG1350818
Ethylbenzene	ND		1.00	1	09/24/2019 09:20	WG1350818
o-Xylene	ND		1.00	1	09/24/2019 09:20	WG1350818
m&p-Xylene	ND		2.00	1	09/24/2019 09:20	WG1350818
Total Xylenes	ND		3.00	1	09/24/2019 09:20	WG1350818
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 09:20	WG1350818
Naphthalene	ND		5.00	1	09/24/2019 09:20	WG1350818
(S) Toluene-d8	*107*		*80.0-120*		*09/24/2019 09:20*	WG1350818
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/24/2019 09:20*	WG1350818
(S) 1,2-Dichloroethane-d4	*87.5*		*70.0-130*		*09/24/2019 09:20*	WG1350818

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Benzene	ND		1.00	1	09/24/2019 05:31	WG1350818
Toluene	ND		1.00	1	09/24/2019 05:31	WG1350818
Ethylbenzene	ND		1.00	1	09/24/2019 05:31	WG1350818
o-Xylene	ND		1.00	1	09/24/2019 05:31	WG1350818
m&p-Xylene	ND		2.00	1	09/24/2019 05:31	WG1350818
Total Xylenes	ND		3.00	1	09/24/2019 05:31	WG1350818
Methyl tert-butyl ether	ND		1.00	1	09/24/2019 05:31	WG1350818
Naphthalene	ND		5.00	1	09/24/2019 05:31	WG1350818
(S) Toluene-d8	*108*		*80.0-120*		*09/24/2019 05:31*	WG1350818
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*09/24/2019 05:31*	WG1350818
(S) 1,2-Dichloroethane-d4	*87.6*		*70.0-130*		*09/24/2019 05:31*	WG1350818

Method Blank (MB)

(MB) R3453134-1 09/20/19 12:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	U		77.4	5000

L1141137-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1141137-06 09/20/19 15:43 • (DUP) R3453134-3 09/20/19 15:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	ND	499	1	0.000		15

L1141326-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1141326-04 09/20/19 20:56 • (DUP) R3453134-6 09/20/19 21:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	8330	8200	1	1.49		15

Laboratory Control Sample (LCS)

(LCS) R3453134-2 09/20/19 12:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	39300	98.3	80.0-120	

L1141137-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1141137-06 09/20/19 15:43 • (MS) R3453134-8 09/21/19 09:32 • (MSD) R3453134-9 09/21/19 09:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	ND	49700	49600	98.4	98.3	1	80.0-120			0.114	15

L1141326-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1141326-04 09/20/19 20:56 • (MS) R3453134-10 09/21/19 10:02

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	8330	56600	96.5	1	80.0-120	

Method Blank (MB)

(MB) R3454859-3 09/24/19 05:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
o-Xylene	U		0.341	1.00
m&p-Xylenes	U		0.719	2.00
(S) Toluene-d8	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*105*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*87.9*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3454859-1 09/24/19 04:08 • (LCSD) R3454859-2 09/24/19 04:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	24.4	23.9	97.4	95.4	70.0-130			2.09	20
Ethylbenzene	25.0	26.6	25.8	106	103	70.0-130			2.82	20
Methyl tert-butyl ether	25.0	22.6	22.2	90.2	88.6	70.0-130			1.76	20
Naphthalene	25.0	28.0	27.7	112	111	70.0-130			0.995	20
Toluene	25.0	25.6	25.2	102	101	70.0-130			1.47	20
Xylenes, Total	75.0	80.8	79.7	108	106	70.0-130			1.37	20
o-Xylene	25.0	27.3	26.8	109	107	70.0-130			1.67	20
m&p-Xylenes	50.0	53.5	52.9	107	106	70.0-130			1.02	20
(S) Toluene-d8				*104*	*105*	*80.0-120*				
(S) 4-Bromofluorobenzene				*101*	*100*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*93.6*	*93.2*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

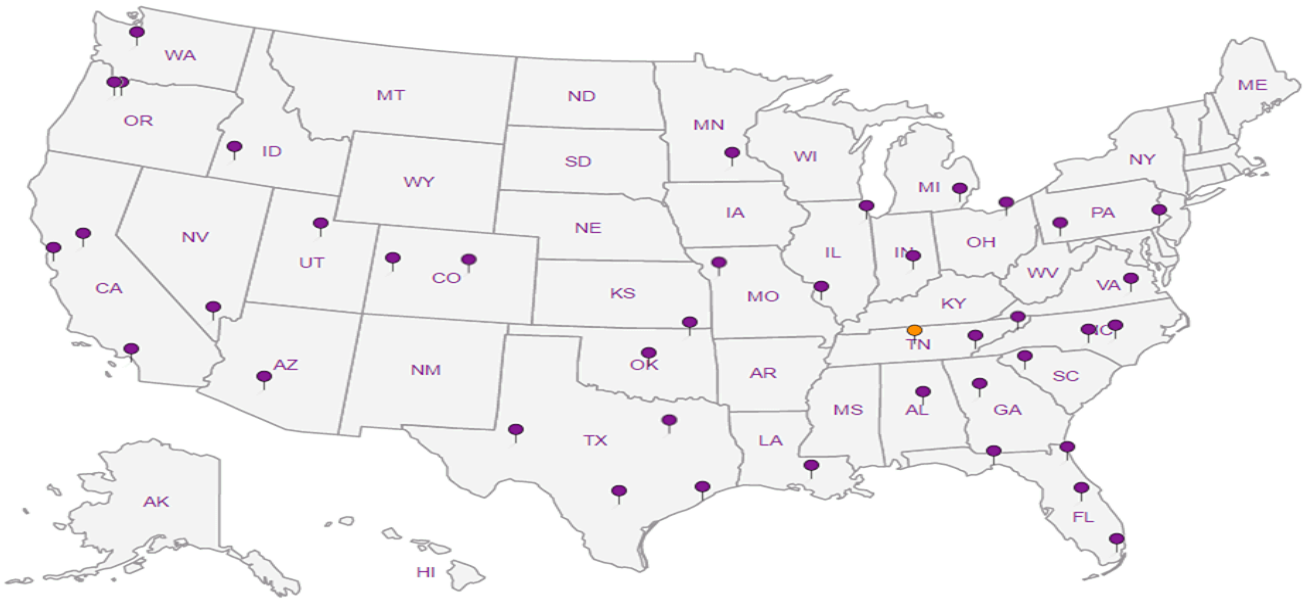
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Report to: Bethany Garvey

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Project Description: Lewis Drive SURFACE WATER ~~Groundwater~~

City/State Collected: BELTON, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project #: D3161400

Lab Project #: KINCH2MGA-LEWIS12

Collected by (print): MELISSA WARREN

Site/Facility ID #: LEWIS DRIVE

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	SULFATE 125mlHDPE-NoPres	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
SW13-091819	GRAB	GW	NA	09/18/19	1515	4	X	X			01
SW09-091819		GW			1450	3	[illegible]	X			02
SW11-091819		GW			1430	3		X			03
SW10-091819		GW			1440	3		X			04
SW08-091819		GW			1500	3		X			05
SW04-091819		GW			1555	4	X	X			06
SW02-091819		GW			1605	4	X	X			07
SW01-091819		GW			1625	4	X	X			08
SW12-091819		GW			1650	4	X	X			09
SW14-091819		GW			1725	4	X	X			10

Chain of Custody Page 1 of 2

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 114137

B139

Acctnum: KINCH2MGA
Template: T131319
Prelogin: P724307
PM: 526 - Chris McCord
PB: 8-13-19 Gm
Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXMNSC = BTEX,MTBE,Naphthalene,[illegible]

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS X FedEx __ Courier _____

Tracking # 1203 5180 4341

Sample Receipt Checklist

COC Seal Present/Intact:	NP	X Y N
COC Signed/Accurate:		X Y N
Bottles arrive intact:		X Y N
Correct bottles used:		X Y N
Sufficient volume sent:		X Y N
If Applicable		
VOA Zero Headspace:		X Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		X Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
[signature]	09/18/19	1900		1	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.6 °C Bottles Received: 36	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 9/19/19 Time: 8:45	Hold: / Condition: NCF / OK

Chain of Custody Page 2 of 2

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Kinder Morgan- Atlanta, GA

6600 Peachtree Dunwoody Road
400 Embassy Row - Suite 500
Atlanta, GA 30328

Billing Information:
Accounts Payable
1000 Windward Concourse
Ste 450
Alpharetta, GA 30005

Email To: bethany.garvey@jacobs.com; tom.wiley@jacobs.com

Report to: Bethany Garvey

Project Description: Lewis Drive Groundwater

City/State Collected: BELTON, SC

Please Circle: PT MT CT ET

Phone: 770-604-9182
Fax:

Client Project # 60361400

Lab Project # KINCH2MGA-LEWIS12

Collected by (print): MELISSA WALDEN

Site/Facility ID # LEWIS DRIVE

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

SDG # 1141137

Table #

Acctnum: KINCH2MGA

Template: T155769

Prelogin: P729887

PM: 526 - Chris McCord

PB: 9-11-19

Shipped Via: FedEx Ground

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260BTEXMNSC 40mlAmb-HCl	V8260BTEXMNSC-TB 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
TB03-091819	GRAB	GW	NA	09/18/19	—	1	X	X	TRIP BLANK	11
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			
		GW				3	X			

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: V8260BTEXMNSC=BTEX, MTBE, Naphthalene, ~~[illegible]~~

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: ___ UPS X FedEx ___ Courier _____

Tracking # 1203 5780 4341

Sample Receipt Checklist
COC Seal Present/Intact: ___NP X Y ___N
COC Signed/Accurate: X Y ___N
Bottles arrive intact: X Y ___N
Correct bottles used: X Y ___N
Sufficient volume sent: X Y ___N
If Applicable
VOA Zero Headspace: ___ Y ___N
Preservation Correct/Checked: ___ Y ___N
RAD Screen <0.5 mR/hr: X Y ___N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	09/18/19	NA		1
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				1.6+0=1.6 36
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
			Teryka Sitcher	9/19/19 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Andy Vann

From: Chris McCord
Sent: Friday, September 20, 2019 2:27 PM
To: Project Service; Due WetLab; Due VOC
Subject: L1141137 *KINCH2MGA* place on hold

Please place SULFATE and V8260BTEXMNSC on L1141137-01 on hold per client email below.

SULFATE = LG:DONE: WET:WG:WG1349279 RPT:NEED:
V8260BTEXMNSC = LG:DONE: VOL:HERE:

Thanks,
Christopher McCord
Project Manager

Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road | Mt. Juliet, TN 37122
615.773.3281 | Cell 615.504.3183
cmccord@pacenational.com|pacenational.com

ESC Lab Sciences is now Pace Analytical National Center for Testing & Innovation! Please make note of my new email address and website.

From: Garvey, Bethany/ATL [mailto:Bethany.Garvey@jacobs.com]
Sent: Friday, September 20, 2019 1:59 PM
To: Chris McCord
Subject: RE: a few things regarding the Lewis Drive samples

Hi Chris,

Please disregard the email I just sent and see the updated bullets below....

- MW-18, MW-11, and MW-07 may need to be analyzed at a dilution. Please make sure the lab is aware.
- Please place SW-13 "on hold", we may cancel or recollect this sample.

Thanks,
Bethany

Attachment E
Field Summary Report from
Redox Tech, LLC

REDOX TECH, LLC

"Providing Innovative In Situ Soil and Groundwater Treatment"

Field Summary Report for Belton, SC

Prepared by Geoff Ives on September 12, 2019			
Project Name	Plantation Pipe Line Lewis Drive Site	**Start and End Date**	August 7 - 29, 2019
City and State	Belton, SC	**Address**	Intersection of W. Calhoun Rd and Lewis Drive, Belton, SC
Contaminant of Concern	Gasoline and a small amount of diesel fuel	**Contaminated Media**	Soil and Groundwater
Field Contractor	Redox Tech, LLC	**Client**	William Waldron Jacobs Engineering Group Email: William.Waldron@jacobs.com
Address	200 Quade Drive Cary, NC	**Address**	USAPInvoices@jacobs.com
Field Lead	Robert Sullivan	**Oversight**	Micheal Tekle
Phone Number	770-778-9787	**Phone Number**	704-302-0386
Email	sullivan@redox-tech.com	**Email**	Micheal.Tekle@jacobs.com
Crew Members	Robert Sullivan, Geoff Ives, Ivan Blackman, Zack Poole, and Bradford Bailiff	**Number of Points and Depths**	66 locations; 64 planned and two "make-up" locations because of daylighting - 20, 18, 16, 14, 12, 10, 8, and 6 feet
Chemical	Oxygen BioChem (OBC)	**Mass or Volume**	38,400 pounds (lbs) OBC
Concentration of Chemical	600 lbs of OBC in 360 gal of solution	**Volume of Solution or Slurry**	23,000 gallons (gal)

Brief Narrative

Between August 9 and 28, 2019, Redox Tech performed direct-push technology (DPT) injections of Oxygen BioChem (OBC™) at a total of 66 injection locations (see Figure 1), targeting petroleum hydrocarbons in the groundwater near the intersection of West Calhoun Road and Lewis Drive in Belton, South Carolina. Injections were conducted at two target areas, the Cupboard Creek injection location (Figure 2) and the Brown's Creek injection location (Figure 3). Injection points were spaced approximately 15 feet apart in transects perpendicular to the direction of groundwater flow.

Redox Tech advanced DPT borings using Geoprobe® 6610 and 6620 track-mounted drill rigs. The maximum vertical interval of injection ranged from 20 ft to 6 ft below ground surface (bgs), but actual vertical intervals varied on a point-by-point basis depending on the depth of refusal reached by the Geoprobe® rigs. To ensure proper vertical distribution of the OBC™ solution, injections were conducted at two-foot increments from the bottom of the borehole working upwards.

A 2,000 gal water truck was used to shuttle potable water from the Belton City Hall to the injection staging area for mixing OBC™ solution. The solution was mixed in two 550 gal polymer (poly) tanks equipped with pneumatic mixers, which were deployed near each injection area, while diaphragm pumps were used to inject the amendment. Secondary containment was set up around both the poly tanks and the pumps. Redox Tech installed an air bridge over the 26-inch Plantation pipeline whenever it was necessary to cross with a drill rig.

Each injection point (IP) received 600 lbs of OBC™ in 360 gal solution unless otherwise stated (see Table 2). Any changes made to the planned injections are documented in Table 1. The target flow rate for injection ranged from 10 – 15 gal/min, while care was taken to keep injection pressures below 60 pounds per square inch (psi). Daylighting was an issue at both the Cupboard Creek and Brown's Creek injection areas. Surface flow controls were instituted and the contingency plan for daylighting outlined in the Redox Injection Work Plan and HASP was followed when daylighting issues were encountered. Ultimately, some points had to be abandoned and additional points were necessary to get the full mass of OBC™ in the ground.

Daylighting was problematic at IP-11, IP-12, IP-36, and IP-39 in the Cupboard Creek injection area. IP-12A was added to receive the volume of OBC™ solution remaining from IP-12, and IP-39A was added to receive the volume remaining from IP-39. IP-35 accepted the volume remaining from IP-36. The Cupboard Creek injection area received a total of 24,000 lbs OBC™.

At Brown's Creek, IP-47, IP-51, IP-57, IP-60, and IP-62 daylighted. IP-56 received the volume of OBC™ solution remaining from IP-57 and IP-43 received the volume remaining from IP-62. The volume remaining from IP-47 and IP-51 was used to mix the batch of solution for IP-42. The concentration of OBC™ was increased for the last ten IP's completed in order to get the remaining mass in the ground. The following points received approximately 663 lbs OBC™ in 360 gal solution: IP-44, IP-45, IP-46, IP-48, IP-49, IP-50, IP-52, IP-59, IP-60, and IP-61. IP-60 had daylighting issues, so the remaining volume was injected at IP-59. The Brown's Creek injection area received a total of 14,400 lbs OBC™.

Boreholes were sealed with Portland cement/bentonite slurry to land surface upon completion of each injection location. When boreholes collapsed, Geoprobe® rigs were used in combination with blunt DPT tips to clear to 5 ft bgs, and then the holes were grouted to land surface with Portland cement/bentonite slurry. Grass seed and straw were spread at both the Cupboard Creek and Brown's Creek locations to restore vegetation to the work areas.

Redox crewmembers that participated in the remedial fieldwork included Robert Sullivan, Ivan Blackman, Geoff Ives, Bradford Bailiff, and Zack Poole, with oversight provided primarily by Jacobs' Micheal Tekle.

The Redox Tech crew fully demobilized on Thursday August 29, 2019.

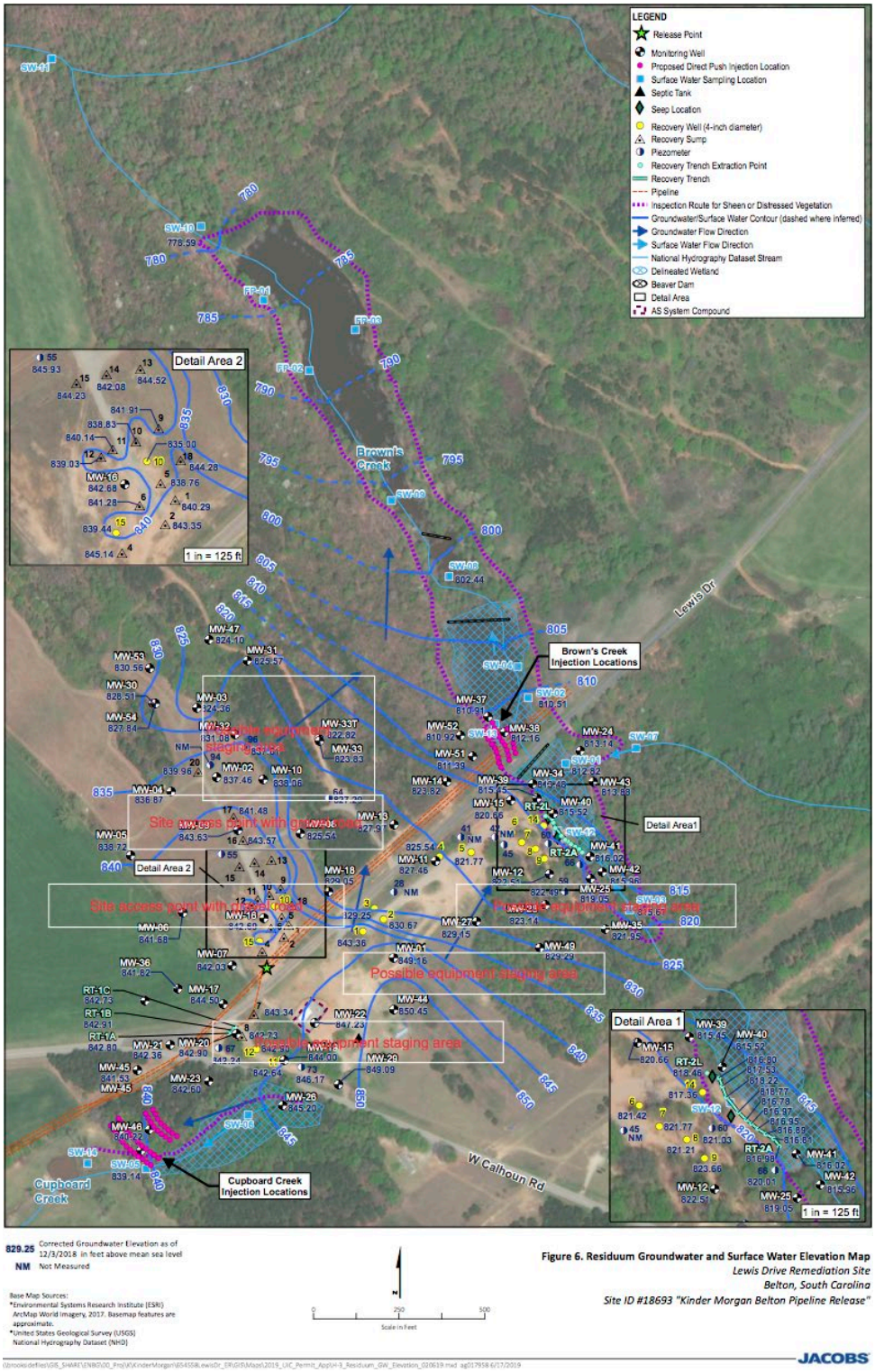


Figure 1. Injection Location Map

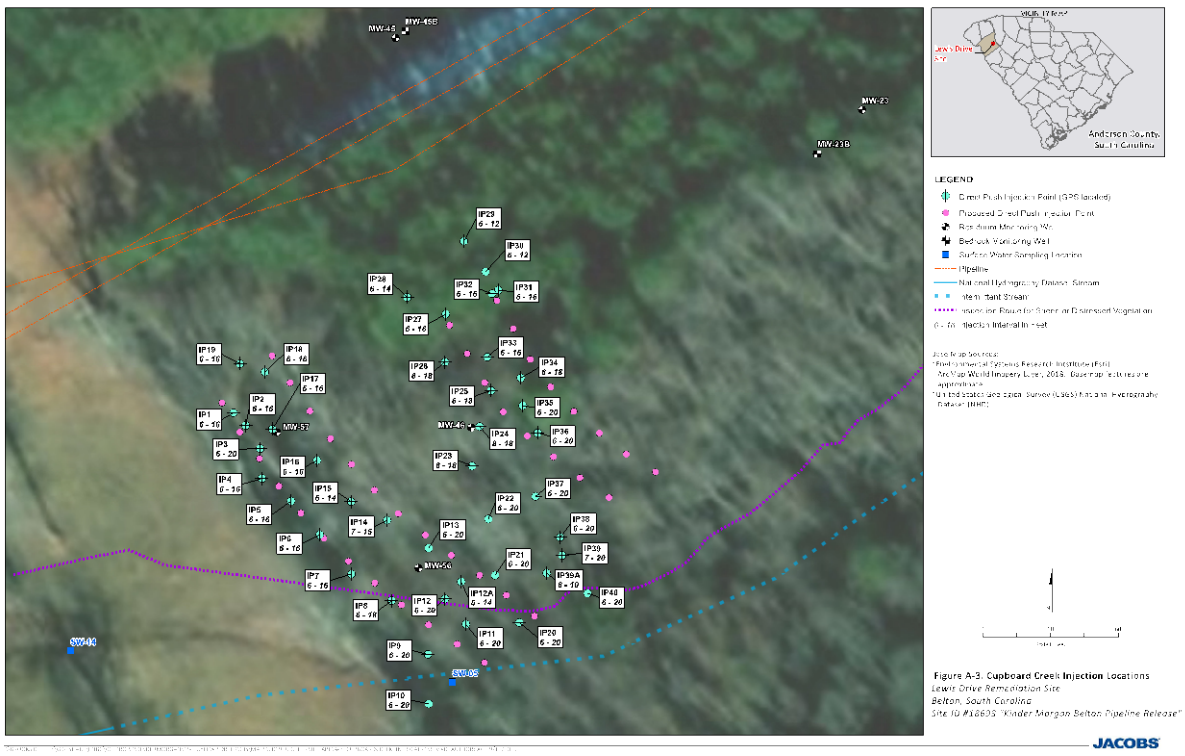


Figure 2. Cupboard Creek Injection Locations

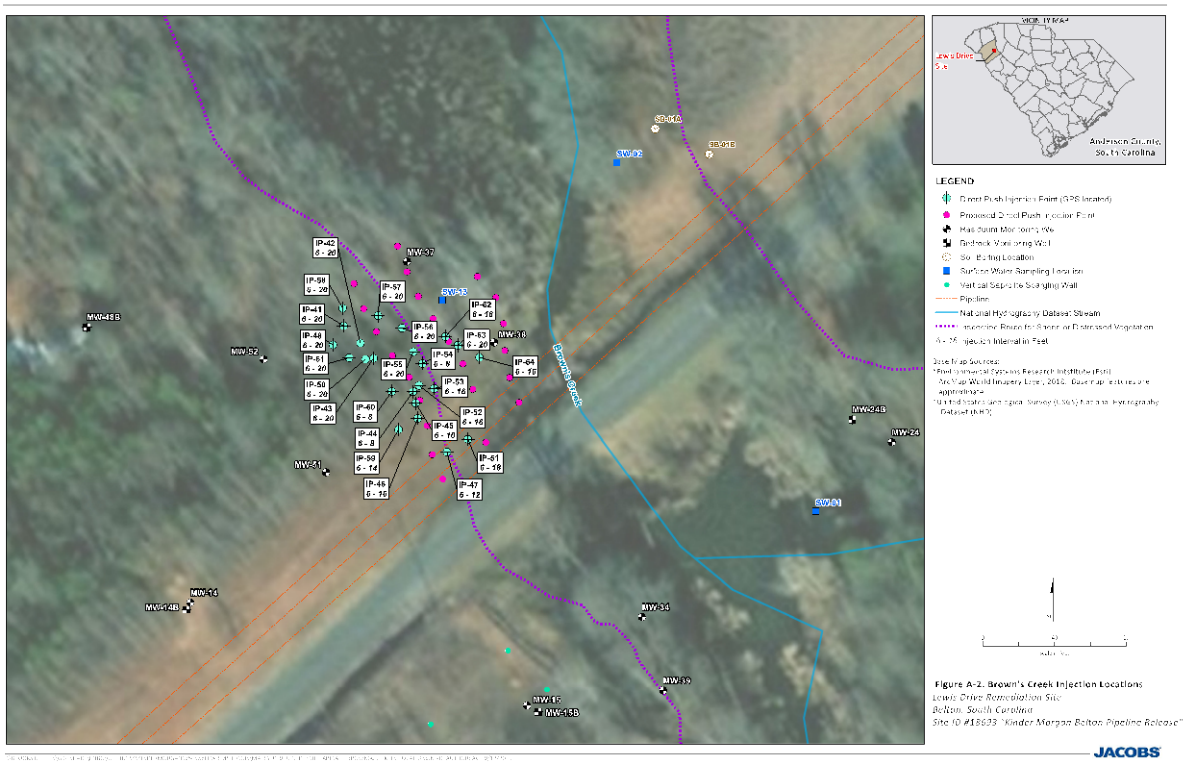


Figure 3. Brown's Creek Injection Locations

Table 1. Injection Logs									
Date	**Injection Point (IP)**	**Depth Interval (ft)**	**Start Time**	**Stop Time**	**Injection Pressure (psi)**	**Flow Rate (gpm)**	**Planned Volume Injected (gal)**	**Actual Volume Injected (gal)**	**Notes (flow change, etc.)**
Cupboard Creek Injection Location									
8/9/19	IP-4	16	11:54	11:57	40	20.0	60	60	
8/9/19	IP-4	14	11:57	12:05	35	7.5	60	60	
8/9/19	IP-4	12	12:05	12:12	30	8.6	60	60	
8/9/19	IP-4	10	12:16	12:23	25	8.6	60	60	
8/9/19	IP-4	8	12:23	12:45	20	2.7	60	60	ARO pump not working right
8/9/19	IP-4	6	12:45	12:57	5	5.0	60	60	
8/9/19	IP-5	16	14:58	15:09	35	5.5	60	60	Camlock fitting came loose on pump
8/9/19	IP-5	14	15:09	15:14	35	12.0	60	60	
8/9/19	IP-5	12	15:14	15:19	30	12.0	60	60	
8/9/19	IP-5	10	15:22	15:28	0	10.0	60	60	
8/9/19	IP-5	8	15:28	15:32	0	15.0	60	60	
8/9/19	IP-5	6	15:32	15:36	0	15.0	60	60	
8/12/19	IP-8	18	14:39	14:43	60	12.9	51.43	51.43	
8/12/19	IP-8	16	14:43	14:48	55	10.3	51.43	51.43	
8/12/19	IP-8	14	14:51	14:55	50	12.9	51.43	51.43	
8/12/19	IP-8	12	14:55	15:00	50	10.3	51.43	51.43	
8/12/19	IP-8	10	15:00	15:04	50	12.9	51.43	51.43	
8/12/19	IP-8	8	15:04	15:08	50	12.9	51.43	51.43	
8/12/19	IP-8	6	15:08	15:12	50	12.9	51.43	51.43	
8/12/19	IP-7	16	15:22	15:29	45	8.6	60	60	
8/12/19	IP-7	14	15:29	15:32	40	20.0	60	60	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/12/19	IP-7	12	15:33	15:36	40	20.0	60	60	
8/12/19	IP-7	10	15:39	15:43	30	15.0	60	60	
8/12/19	IP-7	8	15:43	15:47	30	15.0	60	60	
8/12/19	IP-7	6	15:47	15:51	25	15.0	60	60	
8/12/19	IP-6	16	16:25	16:32	50	8.6	60	60	Took a few minutes to get expendable rod tip out
8/12/19	IP-6	14	16:32	16:36	50	15.0	60	60	
8/12/19	IP-6	12	16:36	16:40	50	15.0	60	60	
8/12/19	IP-6	10	16:44	16:48	40	15.0	60	60	
8/12/19	IP-6	8	16:48	16:52	40	15.0	60	60	
8/12/19	IP-6	6	16:52	17:00	35	7.5	60	60	
8/12/19	IP-10	20	17:30	17:33	60	15.0	45	45	
8/12/19	IP-10	18	17:33	17:36	60	15.0	45	45	
8/12/19	IP-10	14	17:43	17:46	45	15.0	45	45	
8/12/19	IP-10	16	17:36	17:40	45	11.3	45	45	
8/12/19	IP-10	12	17:46	17:50	45	11.3	45	45	
8/12/19	IP-10	10	17:51	17:55	35	11.3	45	45	
8/12/19	IP-10	8	17:55	17:59	30	11.3	45	45	
8/12/19	IP-10	6	17:59	18:02	35	15.0	45	45	
8/12/19	IP-9	20	18:29	18:32	50	15.0	45	45	
8/12/19	IP-9	18	18:32	18:35	40	15.0	45	45	
8/12/19	IP-9	16	18:35	18:39	35	11.3	45	45	
8/12/19	IP-9	14	18:42	18:46	35	11.3	45	45	
8/12/19	IP-9	12	18:46	18:50	35	11.3	45	45	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/12/19	IP-9	10	18:52	18:56	25	11.3	45	45	
8/12/19	IP-9	8	18:56	18:58	35	22.5	45	45	
8/12/19	IP-9	6	18:58	19:02	30	11.3	45	45	
8/13/19	IP-15	14	12:03	12:07	50	18.0	72	72	
8/13/19	IP-15	12	12:07	12:11	35	18.0	72	72	
8/13/19	IP-15	10	12:11	12:15	35	18.0	72	72	
8/13/19	IP-15	8	12:18	12:23	30	14.4	72	72	
8/13/19	IP-15	6	12:23	12:30	30	10.3	72	72	
8/13/19	IP-18	16	14:25	14:28	65	20.0	60	60	
8/13/19	IP-18	14	14:28	14:33	30	12.0	60	60	
8/13/19	IP-18	12	14:33	14:38	30	12.0	60	60	
8/13/19	IP-18	10	14:42	14:46	30	15.0	60	60	
8/13/19	IP-18	8	14:46	14:50	20	15.0	60	60	
8/13/19	IP-18	6	14:50	14:58	20	7.5	60	60	
8/13/19	IP-19	16	15:31	15:33	30	30.0	60	60	
8/13/19	IP-19	14	15:34	15:37	30	20.0	60	60	
8/13/19	IP-19	12	15:37	15:42	30	12.0	60	60	
8/13/19	IP-19	10	15:45	15:50	25	12.0	60	60	
8/13/19	IP-19	8	15:50	15:58	30	7.5	60	60	
8/13/19	IP-19	6	15:59	16:03	25	15.0	60	60	
8/13/19	IP-17	16	16:45	16:50	30	12.0	60	60	
8/13/19	IP-17	14	16:51	16:55	30	15.0	60	60	
8/13/19	IP-17	12	16:55	16:59	30	15.0	60	60	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/13/19	IP-17	10	17:04	17:08	25	15.0	60	60	
8/13/19	IP-17	8	17:08	17:14	25	10.0	60	60	
8/13/19	IP-17	6	17:14	17:20	25	10.0	60	60	
8/13/19	IP-14	15	14:48	14:55	60	10.3	72	72	
8/13/19	IP-14	13	14:55	15:02	40	10.3	72	72	
8/13/19	IP-14	11	15:02	15:08	35	12.0	72	72	Tight formation, backpressure
8/13/19	IP-14	9	15:16	15:22	30	12.0	72	72	
8/13/19	IP-14	7	15:22	15:28	30	12.0	72	72	
8/13/19	IP-13	20	16:00	16:05	50	9.0	45	45	
8/13/19	IP-13	18	16:05	16:09	35	11.3	45	45	
8/13/19	IP-13	16	16:09	16:13	35	11.3	45	45	
8/13/19	IP-13	14	16:17	16:21	30	11.3	45	45	
8/13/19	IP-13	12	16:21	16:25	30	11.3	45	45	
8/13/19	IP-13	10	16:25	16:28	30	15.0	45	45	Slight backpressure
8/13/19	IP-13	8	16:34	16:37	30	15.0	45	45	
8/13/19	IP-13	6	16:37	16:40	30	15.0	45	45	
8/14/19	IP-16	16	9:33	9:37	40	15.0	60	60	
8/14/19	IP-16	14	9:37	9:42	40	12.0	60	60	
8/14/19	IP-16	12	9:42	9:47	40	12.0	60	60	
8/14/19	IP-16	10	9:49	9:54	30	12.0	60	60	
8/14/19	IP-16	8	9:54	9:59	30	12.0	60	60	
8/14/19	IP-16	6	9:59	10:05	30	10.0	60	60	
8/14/19	IP-3	16	10:47	10:50	40	20.0	60	60	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/14/19	IP-3	14	10:50	10:55	40	12.0	60	60	
8/14/19	IP-3	12	10:55	10:59	37	15.0	60	60	
8/14/19	IP-3	10	11:03	11:07	30	15.0	60	60	
8/14/19	IP-3	8	11:07	11:11	30	15.0	60	60	
8/14/19	IP-3	6	11:11	11:16	30	12.0	60	60	
8/14/19	IP-1	16	11:56	12:01	45	12.0	60	60	
8/14/19	IP-1	14	12:01	12:05	45	15.0	60	60	
8/14/19	IP-1	12	12:05	12:10	40	12.0	60	60	
8/14/19	IP-1	10	12:14	12:18	35	15.0	60	60	
8/14/19	IP-1	8	12:18	12:22	35	15.0	60	60	
8/14/19	IP-1	6	12:22	12:27	35	12.0	60	60	
8/14/19	IP-2	16	14:44	14:50	50	10.0	60	60	
8/14/19	IP-2	14	14:50	14:56	50	10.0	60	60	
8/14/19	IP-2	12	14:56	15:01	45	12.0	60	60	
8/14/19	IP-2	10	15:05	15:10	30	12.0	60	60	
8/14/19	IP-2	8	15:11	15:15	30	15.0	60	60	
8/14/19	IP-2	6	15:15	15:19	30	15.0	60	60	
8/14/19	IP-23	18	16:06	16:10	40	12.9	51.43	51.43	
8/14/19	IP-23	16	16:10	16:14	40	12.9	51.43	51.43	
8/14/19	IP-23	14	16:14	16:17	35	17.2	51.43	51.43	
8/14/19	IP-23	12	16:17	16:23	35	8.6	51.43	51.43	
8/14/19	IP-23	10	16:27	16:31	30	12.9	51.43	51.43	
8/14/19	IP-23	8	16:31	16:34	40	17.2	51.43	51.43	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/14/19	IP-23	6	16:34	16:38	30	12.9	51.43	51.43	
8/14/19	IP-24	18	17:16	17:23	50	7.4	51.43	51.43	
8/14/19	IP-24	16	17:23	17:27	50	12.9	51.43	51.43	
8/14/19	IP-24	14	17:32	17:36	30	12.9	51.43	51.43	
8/14/19	IP-24	12	17:36	17:40	40	12.9	51.43	51.43	
8/14/19	IP-24	10	17:43	17:46	30	17.2	51.43	51.43	
8/14/19	IP-24	8	17:46	17:49	30	17.2	51.43	51.43	
8/15/19	IP-24	6	8:45	8:50	30	10.3	51.43	51.43	
8/14/19	IP-20	20	9:38	9:42	40	11.3	45	45	
8/14/19	IP-20	18	9:41	9:45	30	11.3	45	45	
8/14/19	IP-20	16	9:45	9:49	30	11.3	45	45	Backpressure
8/14/19	IP-20	14	10:02	10:06	30	11.3	45	45	
8/14/19	IP-20	12	10:06	10:09	30	15.0	45	45	
8/14/19	IP-20	10	10:09	10:12	30	15.0	45	45	
8/14/19	IP-20	8	10:15	10:18	30	15.0	45	45	
8/14/19	IP-20	6	10:18	10:21	30	15.0	45	45	
8/14/19	IP-11	20	10:53	10:56	35	15.0	45	45	
8/14/19	IP-11	18	10:56	11:00	35	11.3	45	45	
8/14/19	IP-11	16	11:00	11:04	30	11.3	45	45	Daylighted ~1gal approximately 5 ft to south
8/14/19	IP-11	14	11:17	11:18	5	0.0	45	0	Daylighting continued even after flowrate reduced, planning to split remaining 225 gal up between intervals for IP-12. 360+225=585/8=73gal per interval
8/14/19	IP-11	12	N/A	N/A	N/A	0.0	0	0	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/14/19	IP-11	10	N/A	N/A	N/A	0.0	0	0	
8/14/19	IP-11	8	N/A	N/A	N/A	0.0	0	0	
8/14/19	IP-11	6	N/A	N/A	N/A	0.0	0	0	
8/14/19	IP-12	20	11:30	11:37	40	10.4	73.13	73.13	
8/14/19	IP-12	18	11:37	11:43	40	12.2	73.13	73.13	
8/14/19	IP-12	16	11:43	11:49	45	12.2	73.13	73.13	
8/14/19	IP-12	14	12:15	12:22	30	10.4	73.13	73.13	
8/14/19	IP-12	12	12:22	12:22	30	0.0	73.13	0	Daylighting 2 ft south of IP-11
8/14/19	IP-12	10	14:27	14:35	10	4.4	98	35	Started daylighting same as last interval, drilled new point (IP-12A) 5 ft east, injecting remaining volume from IP-12 there
8/14/19	IP-12	8	N/A	N/A	N/A	0.0	98	0	
8/14/19	IP-12	6	N/A	N/A	N/A	0.0	98	0	
8/14/19	IP-12A	14	14:55	15:01	15	7.7	46	46	Pumping at low pressure low flow rate, tank had ~230 gal solution in it when starting here
8/14/19	IP-12A	12	15:01	15:08	15	6.6	46	46	
8/14/19	IP-12A	10	15:08	15:14	15	7.7	46	46	Backpressure
8/14/19	IP-12A	8	15:23	15:30	15	6.6	46	46	
8/14/19	IP-12A	6	15:30	15:38	15	5.8	46	46	
8/14/19	IP-21	20	16:14	16:19	30	9.0	45	45	
8/14/19	IP-21	18	16:19	16:23	30	11.3	45	45	
8/14/19	IP-21	16	16:23	16:27	30	11.3	45	45	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/14/19	IP-21	14	16:32	16:36	30	11.3	45	45	
8/14/19	IP-21	12	16:36	16:39	30	11.3	45	45	
8/14/19	IP-21	10	16:39	16:42	30	11.3	45	45	Lots of backpressure
8/14/19	IP-21	8	16:58	17:01	30	15.0	45	45	
8/14/19	IP-21	6	17:01	17:04	30	15.0	45	45	
8/15/19	IP-40	20	9:44	9:47	30	15	45	45	
8/15/19	IP-40	18	9:47	9:50	30	15	45	45	
8/15/19	IP-40	16	9:50	9:54	30	11.25	45	45	Backpressure
8/15/19	IP-40	14	10:10	10:13	20	15	45	45	
8/15/19	IP-40	12	10:13	10:18	20	9	45	45	Backpressure
8/15/19	IP-40	10	10:27	10:30	25	15	45	45	
8/15/19	IP-40	8	10:30	10:32	25	22.5	45	45	
8/15/19	IP-40	6	10:32	10:35	25	15	45	45	
8/15/19	IP-39	20	11:05	11:08	45	15	45	45	
8/15/19	IP-39	18	11:08	11:09	40	5	45	5	Daylighting underneath foot of rig. pulled up to 15ft. pressure/flowrate reduced
8/15/19	IP-39	15	11:19	11:31	20	3.75	62	62	
8/15/19	IP-39	13	11:31	11:41	20	4.5	62	62	
8/15/19	IP-39	11	11:41	11:51	20	4.5	62	62	
8/15/19	IP-39	9	11:55	11:55	20	0	62	0	Daylighting
8/15/19	IP-39	7	N/A	N/A	N/A	0	123	0	Began daylighting before pump turned on. plan is to drill hole 5ft to NNE and inject 3x41 gal intervals

Table 1. Injection Logs									
Date	**Injection Point (IP)**	**Depth Interval (ft)**	**Start Time**	**Stop Time**	**Injection Pressure (psi)**	**Flow Rate (gpm)**	**Planned Volume Injected (gal)**	**Actual Volume Injected (gal)**	**Notes (flow change, etc.)**
8/15/19	IP-39A	10	12:06	12:12	10	6.8	41.3	41.3	
8/15/19	IP-39A	8	12:12	12:16	10	10.25	41.3	41.3	
8/15/19	IP-39A	6	12:16	12:19	10	13.7	41.3	41.3	
8/15/19	IP-38	20	14:20	14:24	40	11.3	45	45	
8/15/19	IP-38	18	14:24	14:29	40	9.0	45	45	
8/15/19	IP-38	16	14:29	14:35	40	7.5	45	45	
8/15/19	IP-38	14	14:36	14:40	35	11.3	45	45	
8/15/19	IP-38	12	14:40	14:45	30	9.0	45	45	
8/15/19	IP-38	10	14:49	14:52	30	15.0	45	45	
8/15/19	IP-38	8	14:52	14:55	30	15.0	45	45	
8/15/19	IP-38	6	14:55	14:58	30	15.0	45	45	
8/15/19	IP-25	18	15:32	15:37	45	10.3	51.43	51.43	
8/15/19	IP-25	16	15:37	15:41	40	12.9	51.43	51.43	
8/15/19	IP-25	14	15:41	15:45	30	12.9	51.43	51.43	
8/15/19	IP-25	12	15:50	15:54	35	12.9	51.43	51.43	
8/15/19	IP-25	10	15:54	15:58	35	12.9	51.43	51.43	
8/15/19	IP-25	8	16:06	16:10	25	12.9	51.43	51.43	
8/15/19	IP-25	6	16:10	16:13	25	17.2	51.43	51.43	
8/15/19	IP-26	18	16:32	16:39	45	7.4	51.43	51.43	
8/15/19	IP-26	16	16:39	16:45	40	8.6	51.43	51.43	Backpressure
8/15/19	IP-26	14	16:53	16:57	30	12.9	51.43	51.43	
8/15/19	IP-26	12	16:57	17:01	30	12.9	51.43	51.43	Backpressure
8/15/19	IP-26	10	17:06	17:11	30	10.3	51.43	51.43	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/15/19	IP-26	8	17:11	17:14	30	17.2	51.43	51.43	
8/15/19	IP-26	6	17:14	17:17	25	17.2	51.43	51.43	
8/15/19	IP-22	20	10:30	10:34	50	11.3	45	45	
8/15/19	IP-22	18	10:34	10:37	50	15.0	45	45	
8/15/19	IP-22	16	10:37	10:40	45	15.0	45	45	
8/15/19	IP-22	14	10:43	10:46	40	15.0	45	45	
8/15/19	IP-22	12	10:46	10:50	40	11.3	45	45	
8/15/19	IP-22	10	10:53	10:56	40	15.0	45	45	
8/15/19	IP-22	8	10:56	11:00	30	11.3	45	45	
8/15/19	IP-22	6	11:00	11:03	30	15.0	45	45	
8/15/19	IP-37	20	11:35	11:39	50	11.3	45	45	
8/15/19	IP-37	18	11:39	11:43	40	11.3	45	45	
8/15/19	IP-37	16	11:43	11:47	40	11.3	45	45	
8/15/19	IP-37	14	11:50	11:54	40	11.3	45	45	
8/15/19	IP-37	12	11:54	11:57	40	15.0	45	45	
8/15/19	IP-37	10	12:01	12:04	35	15.0	45	45	
8/15/19	IP-37	8	12:04	12:07	40	15.0	45	45	
8/15/19	IP-37	6	12:07	12:10	40	15.0	45	45	
8/15/19	IP-36	20	14:24	14:28	45	11.3	45	45	
8/15/19	IP-36	18	14:28	14:32	40	11.3	45	45	
8/15/19	IP-36	16	14:32	14:35	40	15.0	45	45	
8/15/19	IP-36	14	14:37	14:41	30	11.3	45	45	
8/15/19	IP-36	12	14:41	14:46	37	9.0	45	45	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/15/19	IP-36	10	14:49	14:53	30	11.3	45	45	
8/15/19	IP-36	8	14:53	14:56	35	15.0	45	45	
8/15/19	IP-36	6	N/A	N/A	N/A	0.0	45	0	Almost immediate daylighting, relocated to next location (IP-35) at 6ft
8/15/19	IP-35	20	15:35	15:38	45	15.0	45	45	
8/15/19	IP-35	18	15:38	15:41	45	15.0	45	45	
8/15/19	IP-35	16	15:41	15:44	40	15.0	45	45	
8/15/19	IP-35	14	15:49	15:52	40	15.0	45	45	
8/15/19	IP-35	12	15:53	15:56	37	15.0	45	45	
8/15/19	IP-35	10	16:01	16:04	30	15.0	45	45	
8/15/19	IP-35	8	16:04	16:07	30	15.0	45	45	
8/15/19	IP-35	6	16:07	16:12	35	18.0	90	90	Added 6ft interval from IP-36
8/15/19	IP-34	18	16:40	16:45	50	10.3	51.43	51.43	
8/15/19	IP-34	16	16:45	16:50	50	10.3	51.43	51.43	
8/15/19	IP-34	14	16:53	16:58	35	10.3	51.43	51.43	
8/15/19	IP-34	12	16:58	17:03	40	10.3	51.43	51.43	
8/15/19	IP-34	10	17:09	17:12	35	17.2	51.43	51.43	
8/15/19	IP-34	8	17:12	17:17	35	10.3	51.43	51.43	
8/15/19	IP-34	6	17:17	17:20	30	17.2	51.43	51.43	
8/16/19	IP-32	16	9:14	9:19	40	12.0	60	60	
8/16/19	IP-32	14	9:23	9:26	30	20.0	60	60	
8/16/19	IP-32	12	9:26	9:30	30	15.0	60	60	
8/16/19	IP-32	10	9:32	9:37	30	12.0	60	60	

Table 1. Injection Logs									
Date	**Injection Point (IP)**	**Depth Interval (ft)**	**Start Time**	**Stop Time**	**Injection Pressure (psi)**	**Flow Rate (gpm)**	**Planned Volume Injected (gal)**	**Actual Volume Injected (gal)**	**Notes (flow change, etc.)**
8/16/19	IP-32	8	9:38	9:42	30	15.0	60	60	
8/16/19	IP-32	6	9:42	9:48	30	10.0	60	60	
8/16/19	IP-31	16	10:38	10:42	50	15.0	60	60	
8/16/19	IP-31	14	10:43	10:50	45	8.6	60	60	
8/16/19	IP-31	12	10:51	10:54	45	20.0	60	60	
8/16/19	IP-31	10	10:58	11:02	30	15.0	60	60	
8/16/19	IP-31	8	11:02	11:07	40	12.0	60	60	
8/16/19	IP-31	6	11:07	11:12	40	12.0	60	60	
8/16/19	IP-30	12	12:07	12:14	50	12.9	90	90	Refusal at 13ft
8/16/19	IP-30	10	12:17	12:23	30	15.0	90	90	
8/16/19	IP-30	8	12:23	12:29	35	15.0	90	90	
8/16/19	IP-30	6	12:29	12:34	35	18.0	90	90	
8/16/19	IP-29	12	12:38	12:44	50	15.0	90	90	Refusal at 13ft
8/16/19	IP-29	10	12:47	12:54	40	12.9	90	90	
8/16/19	IP-29	8	12:54	13:00	40	15.0	90	90	
8/16/19	IP-29	6	13:00	13:03	30	30.0	90	90	Minor daylighting around rod
8/16/19	IP-28	14	9:18	9:23	45	14.4	72	72	
8/16/19	IP-28	12	9:23	9:27	45	18	72	72	
8/16/19	IP-28	10	9:27	9:32	30	14.4	72	72	
8/16/19	IP-28	8	9:37	9:42	30	14.4	72	72	
8/16/19	IP-28	6	9:42	9:47	30	14.4	72	72	
8/16/19	IP-27	16	10:25	10:30	40	12	60	60	
8/16/19	IP-27	14	10:30	10:36	40	10	60	60	

Table 1. Injection Logs									
Date	**Injection Point (IP)**	**Depth Interval (ft)**	**Start Time**	**Stop Time**	**Injection Pressure (psi)**	**Flow Rate (gpm)**	**Planned Volume Injected (gal)**	**Actual Volume Injected (gal)**	**Notes (flow change, etc.)**
8/16/19	IP-27	12	10:36	10:42	40	10	60	60	
8/16/19	IP-27	10	10:45	10:50	40	12	60	60	
8/16/19	IP-27	8	10:50	10:54	30	15	60	60	
8/16/19	IP-27	6	10:54	10:57	30	20	60	60	
8/16/19	IP-33	16	11:19	11:25	45	10	60	60	
8/16/19	IP-33	14	11:25	11:30	40	12	60	60	Backpressure
8/16/19	IP-33	12	11:37	11:41	35	15	60	60	
8/16/19	IP-33	10	11:41	11:45	35	15	60	60	
8/16/19	IP-33	8	11:49	11:53	30	15	60	60	
8/16/19	IP-33	6	11:53	11:57	30	15	60	60	
Brown's Creek Injection Location									
8/20/19	IP-58	20	12:05	12:16	30	4.09	45	45	Aro double diaphragm seized up, using Versamatic
8/20/19	IP-58	18	12:16	12:26	10	4.50	45	45	
8/20/19	IP-58	16	12:26	12:35	10	5.00	45	45	
8/20/19	IP-58	14	12:42	12:47	10	9.00	45	45	
8/20/19	IP-58	12	12:47	12:53	10	7.50	45	45	
8/20/19	IP-58	10	12:56	13:02	0	7.50	45	45	
8/20/19	IP-58	8	13:02	13:09	0	6.43	45	45	
8/20/19	IP-58	6	13:09	13:16	0	6.43	45	45	
8/20/19	IP-41	20	13:45	13:53	30	5.63	45	45	
8/20/19	IP-41	18	13:53	14:02	25	5.00	45	45	
8/20/19	IP-41	16	14:02	14:11	25	5.00	45	45	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/20/19	IP-41	14	14:31	14:40	25	5.00	45	45	
8/20/19	IP-41	12	14:40	14:50	25	4.50	45	45	
8/20/19	IP-41	10	15:00	15:06	25	7.50	45	45	
8/20/19	IP-41	8	15:06	15:09	20	15.00	45	45	
8/20/19	IP-41	6	15:09	15:20	20	4.09	45	45	
8/20/19	IP-57	20	15:39	15:46	30	6.43	45	45	
8/20/19	IP-57	18	15:46	15:56	30	4.50	45	45	
8/20/19	IP-57	16	15:56	16:06	25	4.50	45	45	
8/20/19	IP-57	14	16:10	16:19	25	5.00	45	45	
8/20/19	IP-57	12	16:19	16:29	25	4.50	45	45	
8/20/19	IP-57	10	16:32	16:42	20	4.50	45	45	
8/20/19	IP-57	8	16:42	16:55	5	0.77	45	10	Flowrate reduced, OBC bubbling up out of ground
8/20/19	IP-57	6	N/A	N/A	N/A	N/A	45	0	Daylighting continued so remaining 80 gal divided up among IP-56
8/20/19	IP-56	20	17:05	17:15	30	5.50	55	55	
8/20/19	IP-56	18	17:15	17:24	25	6.11	55	55	
8/20/19	IP-56	16	17:24	17:33	25	6.11	55	55	
8/20/19	IP-56	14	17:37	17:47	25	5.50	55	55	
8/20/19	IP-56	12	17:47	17:57	25	5.50	55	55	
8/20/19	IP-56	10	18:02	18:17	25	3.67	55	55	
8/20/19	IP-56	8	18:17	18:35	25	3.06	55	55	
8/20/19	IP-56	6	18:35	18:56	5	2.62	55	55	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/21/19	IP-47	12	11:11	11:45	25	2.65	90	90	Tip jammed, center rods used
8/21/19	IP-47	10	11:45	12:00	10	6.00	90	90	ARO diaphragm fixed & using now
8/21/19	IP-47	8	12:18	12:25	15	12.86	90	90	Daylighting from multiple locations around rig
8/21/19	IP-47	6	N/A	N/A	N/A	N/A	90	0	IP abandoned
8/21/19	IP-51	18	15:28	15:38	20	7.20	72	72	Pumping at low pressure/flowrate trying to avoid daylighting, daylighted
8/21/19	IP-51	16	N/A	N/A	N/A	N/A	72	0	IP abandoned
8/21/19	IP-51	14	N/A	N/A	N/A	N/A	72	0	IP abandoned
8/21/19	IP-51	12	N/A	N/A	N/A	N/A	72	0	IP abandoned
8/21/19	IP-51	10	N/A	N/A	N/A	N/A	72	0	IP abandoned
8/21/19	IP-51	8	N/A	N/A	N/A	N/A	45	0	IP abandoned
8/21/19	IP-51	6	N/A	N/A	N/A	N/A	45	0	IP abandoned
8/22/19	IP-42	20	10:24	10:27	30	15.00	45	45	
8/22/19	IP-42	18	10:27	10:30	30	15.00	45	45	
8/22/19	IP-42	16	10:30	10:35	30	9.00	45	45	
8/22/19	IP-42	14	10:41	10:45	35	11.25	45	45	
8/22/19	IP-42	12	10:45	10:50	35	9.00	45	45	
8/22/19	IP-42	10	10:54	10:58	25	11.25	45	45	
8/22/19	IP-42	8	10:58	11:01	25	15.00	45	45	
8/22/19	IP-42	6	11:01	11:04	20	15.00	45	45	
8/22/19	IP-63	20	14:03	14:06	25	15.00	45	45	
8/22/19	IP-63	18	14:06	14:09	25	15.00	45	45	

Table 1. Injection Logs									
Date	**Injection Point (IP)**	**Depth Interval (ft)**	**Start Time**	**Stop Time**	**Injection Pressure (psi)**	**Flow Rate (gpm)**	**Planned Volume Injected (gal)**	**Actual Volume Injected (gal)**	**Notes (flow change, etc.)**
8/22/19	IP-63	16	14:09	14:14	25	9.00	45	45	
8/22/19	IP-63	14	14:21	14:24	25	15.00	45	45	
8/22/19	IP-63	12	14:24	14:27	25	15.00	45	45	Backpressure & influence on MW-38, delay for crew to cap well
8/22/19	IP-63	10	15:07	15:10	25	15.00	45	45	
8/22/19	IP-63	8	15:10	15:13	25	15.00	45	45	
8/22/19	IP-63	6	15:13	15:16	25	15.00	45	45	
8/22/19	IP-62	18	15:32	15:36	35	12.86	51.43	51.43	
8/22/19	IP-62	16	15:36	15:40	30	12.86	51.43	51.43	
8/22/19	IP-62	14	15:44	15:48	30	12.86	51.43	51.43	
8/22/19	IP-62	12	15:48	15:53	30	10.29	51.43	51.43	
8/22/19	IP-62	10	15:58	16:02	30	12.86	51.43	51.43	Daylighting after interval finished
8/22/19	IP-62	8	N/A	N/A	N/A	N/A	51.43	0	IP abandoned, remaining volume distributed among next point
8/22/19	IP-62	6	N/A	N/A	N/A	N/A	51.43	0	
8/22/19	IP-43	20	16:45	16:51	25	10.36	62.17	62.17	
8/22/19	IP-43	18	16:51	16:57	30	10.36	62.17	62.17	
8/22/19	IP-43	16	16:57	17:03	25	10.36	62.17	62.17	
8/22/19	IP-43	14	17:07	17:12	25	12.43	62.17	62.17	
8/22/19	IP-43	12	17:12	17:16	25	15.54	62.17	62.17	
8/22/19	IP-43	10	17:17	17:21	25	15.54	62.17	62.17	
8/22/19	IP-43	8	17:21	17:24	25	15.00	45	45	
8/22/19	IP-43	6	17:24	17:27	25	15.00	45	45	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/23/19	IP-64	16	9:50	9:55	30	12.00	60	60	
8/23/19	IP-64	14	9:55	10:00	25	12.00	60	60	
8/23/19	IP-64	12	10:00	10:05	25	12.00	60	60	
8/23/19	IP-64	10	10:09	10:14	25	12.00	60	60	
8/23/19	IP-64	8	10:14	10:18	25	15.00	60	60	
8/23/19	IP-64	6	10:18	10:22	25	15.00	60	60	
8/23/19	IP-55	20	11:03	11:06	40	15.00	45	45	
8/23/19	IP-55	18	11:06	11:09	40	15.00	45	45	
8/23/19	IP-55	16	11:09	11:13	40	11.25	45	45	
8/23/19	IP-55	14	11:18	11:22	25	11.25	45	45	
8/23/19	IP-55	12	11:22	11:26	25	11.25	45	45	
8/23/19	IP-55	10	11:37	11:41	30	11.25	45	45	
8/23/19	IP-55	8	11:41	11:45	30	11.25	45	45	
8/23/19	IP-55	6	11:45	11:48	30	15.00	45	45	
8/23/19	IP-54	8	14:15	14:40	30	12.60	315	315	
8/23/19	IP-54	6	14:40	14:43	25	15.00	45	45	
8/23/19	IP-53	16	14:58	15:03	35	12.00	60	60	
8/23/19	IP-53	14	15:03	15:09	30	10.00	60	60	
8/23/19	IP-53	12	15:09	15:13	30	15.00	60	60	
8/23/19	IP-53	10	15:19	15:23	30	15.00	60	60	
8/23/19	IP-53	8	15:23	15:27	30	15.00	60	60	
8/23/19	IP-53	6	15:27	15:31	20	15.00	60	60	
8/26/19	IP-46	16	11:49	11:53	50	15.00	60	60	663 lbs OBC/point for remaining 10 IPs

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/26/19	IP-46	14	11:58	12:03	50	12.00	60	60	
8/26/19	IP-46	12	12:03	12:07	50	15.00	60	60	
8/26/19	IP-46	10	12:15	12:20	40	12.00	60	60	
8/26/19	IP-46	8	12:20	12:25	40	12.00	60	60	
8/26/19	IP-46	6	12:25	12:29	40	15.00	60	60	
8/26/19	IP-45	10	14:24	14:36	40	10.00	120	120	
8/26/19	IP-45	8	14:36	14:49	35	9.23	120	120	
8/26/19	IP-45	6	14:49	15:00	35	10.91	120	120	
8/26/19	IP-48	20	15:53	15:56	40	15.00	45	45	
8/26/19	IP-48	18	15:56	16:00	40	11.25	45	45	
8/26/19	IP-48	16	16:00	16:03	40	15.00	45	45	
8/26/19	IP-48	14	16:08	16:11	35	15.00	45	45	
8/26/19	IP-48	12	16:12	16:16	35	11.25	45	45	
8/26/19	IP-48	10	16:20	16:23	35	15.00	45	45	
8/26/19	IP-48	8	16:23	16:27	35	11.25	45	45	
8/26/19	IP-48	6	16:27	16:30	35	15.00	45	45	
8/26/19	IP-61	20	17:00	17:03	45	15.00	45	45	
8/26/19	IP-61	18	17:03	17:07	40	11.25	45	45	
8/26/19	IP-61	16	17:07	17:10	40	15.00	45	45	Delay for phone call about stolen trailer
8/26/19	IP-61	14	17:25	17:28	40	15.00	45	45	
8/26/19	IP-61	12	17:28	17:32	40	11.25	45	45	
8/26/19	IP-61	10	17:40	17:43	40	15.00	45	45	Backpressure
8/26/19	IP-61	8	17:43	17:46	35	15.00	45	45	

Table 1. Injection Logs

Date	Injection Point (IP)	Depth Interval (ft)	Start Time	Stop Time	Injection Pressure (psi)	Flow Rate (gpm)	Planned Volume Injected (gal)	Actual Volume Injected (gal)	Notes (flow change, etc.)
8/26/19	IP-61	6	17:46	17:49	30	15.00	45	45	
8/27/19	IP-44	8	12:15	12:45	40	10.50	315	315	
8/27/19	IP-44	6	12:45	12:49	30	11.25	45	45	
8/27/19	IP-52	16	14:53	14:58	40	12.00	60	60	
8/27/19	IP-52	14	14:58	15:03	30	12.00	60	60	
8/27/19	IP-52	12	15:03	15:08	30	12.00	60	60	
8/27/19	IP-52	10	15:15	15:20	30	12.00	60	60	
8/27/19	IP-52	8	15:20	15:25	30	12.00	60	60	
8/27/19	IP-52	6	15:25	15:30	30	12.00	60	60	
8/27/19	IP-49	12	16:42	16:51	55	10.00	90	90	
8/27/19	IP-49	10	16:56	17:05	40	10.00	90	90	
8/27/19	IP-49	8	17:05	17:13	40	11.25	90	90	
8/27/19	IP-49	6	17:13	17:21	40	11.25	90	90	
8/27/19	IP-60	8	17:52	18:08	30	10.00	315	160	Started daylighting halfway through interval, injection will be continued 8/28
8/28/19	IP-60	8	9:15	9:25	40	10.00	155	100	Daylighting from same location as yesterday. pulling off points and moving to IP-59
8/28/19	IP-60	6	N/A	N/A	N/A	N/A	45	0	Remaining 100 gal from IP 60 split up among 14, 12, and 10 ft
8/28/19	IP-59	14	9:52	10:02	55	12.33	123.33	123.33	
8/28/19	IP-59	12	10:02	10:14	40	10.28	123.33	123.33	
8/28/19	IP-59	10	10:18	10:29	40	11.21	123.33	123.33	

Table 1. Injection Logs									
Date	**Injection Point (IP)**	**Depth Interval (ft)**	**Start Time**	**Stop Time**	**Injection Pressure (psi)**	**Flow Rate (gpm)**	**Planned Volume Injected (gal)**	**Actual Volume Injected (gal)**	**Notes (flow change, etc.)**
8/28/19	IP-59	8	10:29	10:34	35	9.00	45	45	Flowrate reduced to try and avoid daylighting
8/28/19	IP-59	6	10:34	10:40	35	7.50	45	45	
8/28/19	IP-50	20	11:56	12:00	30	11.25	45	45	
8/28/19	IP-50	18	12:00	12:05	30	9.00	45	45	
8/28/19	IP-50	16	12:05	12:09	25	11.25	45	45	Injection hose clogged
8/28/19	IP-50	14	12:58	13:01	35	15.00	45	45	
8/28/19	IP-50	12	13:01	13:05	30	11.25	45	45	
8/28/19	IP-50	10	13:08	13:11	30	15.00	45	45	
8/28/19	IP-50	8	13:11	13:14	30	15.00	45	45	
8/28/19	IP-50	6	13:14	13:17	30	15.00	45	45	
Note: IP = Injection Point, ft = feet, psi = pounds per square inch, gpm = gallons per minute, gal = gallons, OBC = Oxygen Biochem									

Table 2. Points that Daylighted and/or Received more/less than Proposed Dosage OBC

Injection Point	Vol OBC (gal)	Mass OBC (lbs)	Notes
Cupboard Creek Injection Location			
IP-11	135	225	Daylighted
IP-12	327	545	Daylighted
IP-12A	230	383.3	Took volume remaining from IP-12
IP-35	405	675	Took volume remaining from IP-36
IP-36	315	525	Daylighted
IP-39	236	393.3	Daylighted
IP-39A	124	206.6	Took volume remaining from IP-39
Brown's Creek Injection Location			
IP-43	463	771.7	Took volume remaining from IP-62
IP-44	360	663	Received 63 additional lbs OBC
IP-45	360	663	Received 63 additional lbs OBC
IP-46	360	663	Received 63 additional lbs OBC
IP-47	270	450	Daylighted
IP-48	360	663	Received 63 additional lbs OBC
IP-49	360	663	Received 63 additional lbs OBC
IP-50	360	663	Received 63 additional lbs OBC
IP-51	72	120	Daylighted
IP-52	360	663	Received 63 additional lbs OBC
IP-56	440	733.3	Took volume remaining from IP-57 in addition to regular batch (360 gal/600 lbs)
IP-57	280	466.6	Daylighted
IP-59	460	847.17	Took volume remaining from IP-60 (concentrated batch) in addition to concentrated 360 gal/663 lb batch
IP-60	260	478.83	Daylighted
IP-61	360	663	Received 63 additional lbs OBC
IP-62	257.15	428.6	Daylighted

Note: IP = Injection Point, ft = feet, psi = pounds per square inch, gpm = gallons per minute, gal = gallons, OBC = Oxygen Biochem