2022 Annual Groundwater Monitoring Report

Review of 2022 Annual Groundwater Monitoring Report, 14-Inch Vac to Jal Legacy: **Content Satisfactory**

1. Continue monitor and sampling of wells MW-2 through MW-8 quarterly for concentrations of BTEX. MW-2 to be monitored and sampled quarterly for chloride.
2. Continue to gauge and remove PSH in MW-1 on a monthly basis.
3. Groundwater recovery to continue from monitoring wells: MW-3, MW-4, MW-8 on a monthly schedule.
4. Groundwater monitoring wells: MW-9,MW-5, MW-6, MW-11, MW-12, MW-13, MW-14 may be sampled on a semi-annual basis.
5. Results of the 2023 sampling events to be reported in the 2023 Annual Monitoring Report to OCD no later than April 1, 2024.

REVIEWED
By Mike Buchanan at 2:13 pm, May 16, 2023

Plains All American Pipeline, LP
14-Inch Vac to Jal Legacy
Lea County, New Mexico
Unit Letter "F", Section 25, Township 25 South, Range 37 East
Latitude 32.1029722 North, Longitude 103.1195278 West
Plains SRS #: 2009-092
NMOCD Reference #: 1RP-2162
NMOCD Incident ID#: nAPP2109729126

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1.0 INTRODUCTION & SITE DESCRIPTION

Etech Environmental & Safety Solutions (Etech), on behalf of Plains All American Pipeline, LP (Plains), has prepared this *2022 Annual Groundwater Monitoring Report* for the 14-Inch Vac to Jal Legacy Release Site in accordance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1st of each year.

The legal description of the Release Site is Unit Letter "F" (SE/NW), Section 25, Township 25 South, Range 37 East, in Lea County, New Mexico. The geographic coordinates of the Site are 32.1029722 North latitude and 103.1195278 West longitude. A "Site Location Map" is provided as Figure 1.

2.0 BACKGROUND INFORMATION

On April 9, 2009, Plains discovered a crude oil release from a 14-inch steel pipeline. The cause of the release was attributed to external corrosion of the pipeline. The Release was reported to the New Mexico Oil Conservation Division (NMOCD) on April 9, 2009. During initial response activities, a temporary clamp was installed on the pipeline to mitigate the release. Approximately 250 barrels (bbls) of crude oil was released, with no recovery.

On April 9, 2009, following initial response activities, excavation of hydrocarbon-impacted soil commenced at the Site. To facilitate remediation activities, the excavation was divided into two (2) sections: Main Excavation and West Excavation. Excavated soil was stockpiled on-site on a plastic liner to mitigate the potential leaching of contaminants into the vadose zone. Approximately 18,000 cubic yards (yd^3) of impacted soil was excavated and stockpiled on-site during excavation activities. Final dimensions of the Main Excavation were approximately 400 feet (ft.) in length, approximately 200 ft. in width, and five (5) to 14 ft. in depth. Final dimensions of the West Excavation were approximately 150 ft. in length, approximately 105 ft. in width, and approximately 10 ft. in depth. Due to safety concerns associated with excavating near and supporting two (2) 14-inch diameter pipelines which bisect the Release Site, Plains requested and received NMOCD approval to leave the soil beneath and adjacent to the pipelines in-situ.

On July 2 and 3, 2009, three (3) soil borings (SB-1, SB-2, and SB-3) were advanced at the Release Site to evaluate the vertical extent of soil impact. During the advancement of the soil borings, groundwater was encountered at approximately 64 ft. below ground surface (bgs). On July 1, 2009, soil boring SB-1 was converted to monitor well MW-1.

On July 2, 2009, temporary casing was installed in soil borings SB-2 and SB-3 to allow a preliminary groundwater sample to be collected for analysis. Following collection of the preliminary groundwater sample, the temporary casing was removed from soil borings SB-2 and SB-3, and the soil borings were plugged with cement and bentonite, pursuant to NMOCD and New Mexico Office of the State Engineer (NMOSE) standards.

On December 10, 2009, two (2) soil borings (SB-4 and SB-5) were installed up-gradient of the excavation to evaluate the potential groundwater impact from an up-gradient, off-site source. During the advancement of soil borings SB-4 and SB-5, groundwater was encountered at

approximately 64 ft. bgs. Temporary casing was installed in soil borings SB-4 and SB-5 to allow a preliminary groundwater sample to be collected for analysis. Following collection of the preliminary groundwater sample, the temporary casing was removed from soil borings SB-4 and SB-5, and the soil borings were plugged with cement and bentonite, pursuant to NMOCD and NMOSE standards.

A measurable thickness of Phase-Separate Hydrocarbons (PSH) was detected in monitor well MW-1 during the April 12, 2012, quarterly monitoring event. Monthly gauging and manual recovery of PSH from MW-1 commenced in April 2012.

From May 6 through May 8, 2013, five (5) additional monitor wells (MW-2 through MW-6) were installed to evaluate the status of the groundwater at the Site. The monitor wells were installed to total depths of approximately 80 ft. bgs. Monitor well MW-2 is located approximately 380 ft. to the northwest (up-gradient) of monitor well MW-1. Monitor well MW-3 is located approximately 200 ft. to the northeast (cross-gradient) of monitor well MW-1. Monitor well MW-4 is located approximately 100 ft. to the northwest (up-gradient) of monitor well MW-1. Monitor well MW-5 is located approximately 280 ft. to the west-northwest (cross-gradient) of monitor well MW-1. Monitor well MW-6 is located approximately 150 ft. to the southeast (down-gradient) of monitor well MW-1.

PSH was not observed in monitor wells MW-2 through MW-6. Laboratory analytical results from soil samples collected during the installation of the monitor wells indicated benzene, toluene, ethylbenzene, and total xylenes (BTEX), total petroleum hydrocarbons (TPH), and chloride concentrations were less than NMOCD regulatory standards in each of the submitted soil samples.

From June 25 through June 26, 2014, three (3) additional monitor wells (MW-7, MW-8, and MW-9) were installed to further monitor the down- and cross-gradient migration of the dissolved-phase plume. The monitor wells were installed to total depths of approximately 80 ft. bgs. Monitor well MW-7 is located approximately 45 ft. to the southeast (down-gradient) of monitor well MW-1. Monitor well MW-8 is located approximately 180 ft. to the east-northeast (cross-gradient) of monitor well MW-1. Monitor well MW-9 is located approximately 150 ft. to the southeast (down-gradient) of monitor well MW-1.

PSH was not observed in monitor wells MW-7 through MW-9. Laboratory analytical results from soil samples collected during the installation of the monitor wells indicated benzene, BTEX, TPH, and chloride concentrations were less than NMOCD regulatory standards in each of the submitted soil samples.

The 14-Inch Vac to Jal Legacy Release Site is located approximately 1,147 ft. to the south-southeast of a documented groundwater remediation site (Arco South Justis Unit F-230). It is believed the elevated BTEX concentrations observed in groundwater samples collected from monitor well MW-2 are the result of the downgradient position of the 14-Inch Vac to Jal Legacy Release Site. Information regarding this site can be found in the NMOCD imaging system.

Based on laboratory analytical results from groundwater samples collected from monitor well MW-5, which is located approximately 260 ft. to the west-southwest (cross-gradient) of the release

point, and the absence of elevated chloride concentrations in the soil columns of monitor wells MW-2 through MW-6, Plains requested permission from the NMOCD to cease monitoring of total dissolved solids (TDS) and chloride in the 2013 Annual Monitoring Report, dated March 2014. The request was subsequently approved by the NMOCD, with a caveat requiring a chloride sample be collected from monitor well MW-2 on a quarterly basis. Quarterly chloride monitoring of monitor well MW-2 commenced in November 2014.

On February 20, 2018, five (5) additional monitor wells (MW-10 through MW-14) were installed to further evaluate the status of groundwater at the Site. The monitor wells were each advanced to a total depth of approximately 80 ft. bgs. Monitor well MW-10 is located approximately 210 ft. to the north-northwest (up-gradient) of monitor well MW-1. Monitor well MW-11 is located approximately 350 ft. to the north-northeast (up- and cross-gradient) of monitor well MW-1. Monitor well MW-12 is located approximately 260 ft. to the east-northeast (cross-gradient) of monitor well MW-1. Monitor well MW-13 is located approximately 260 ft. to the east (cross-gradient) of monitor well MW-1. Monitor well MW-14 is located approximately 225 ft. to the southeast (down-gradient) of monitor well MW-1.

On November 9, 2018, the on-site monitor wells were surveyed by a licensed, Professional Land Surveyor.

In February 2023, Etech, at the request of Plains, assumed project management and oversight responsibilities for groundwater remediation activities at the 14-Inch Vac to Jal Legacy Release Site.

Currently, a total of 14 monitor wells (MW-1 through MW-14) are located at the 14-Inch Vac to Jal Legacy Release Site. Monitor wells MW-2 through MW-14 are gauged and sampled on a quarterly schedule, while MW-1 is gauged monthly but not sampled due to the presence of PSH.

3.0 FIELD ACTIVITIES

3.1 Groundwater Remediation Activities

During the quarterly monitoring event on April 12, 2012, a measurable thickness of PSH was detected in monitor well MW-1. In April 2012, monthly gauging and PSH recovery activities commenced and were conducted until November 2013. In November 2013, the frequency of PSH recovery was increased to semi-monthly (twice per month) until June 2014. In June 2014, the frequency was increased to weekly. Weekly recovery continued until the second quarter of 2020, at which time the frequency was reduced to monthly as a result of the COVID-19 pandemic. Monthly gauging and manual recovery events were conducted during the 2022 reporting period, with the exception of December 2022, following a change in project management and oversight.

A total of approximately 40 gallons of PSH were recovered from monitor well MW-1 during the monthly manual recovery events. The PSH thickness measured in MW-1 ranged from 0.10 feet on 1Q2022, to 0.01 feet in 2Q2002. PSH Recovery Data is summarized in Table 3, “Phase-Separate Hydrocarbon (PSH) Thickness & Recovery Summary (MW-1)”.

Quarterly Aggressive Fluid Recovery (AFR) events were conducted on monitor wells MW-1, MW-3, MW-8, and MW-13 in February, May, and September 2022. The exact amount of PSH recovered during the events cannot be determined due to the method utilized to perform the AFR events. A hose is lowered into a well's fluid column and connected to a vacuum truck to recover both groundwater impacted with dissolved-phase hydrocarbons and PSH. An approximate recovery volume was determined based on the volume of PSH in the wells prior to the AFR events, which were recorded as the minimum recovery volumes. A summary of AFR events is provided as Table 8, "Quarterly Aggressive Fluid Recovery (AFR) Summary".

Monthly manual recovery of hydrocarbon-impacted groundwater was conducted on monitor wells MW-3, MW-4, MW-8, and MW-13 in an effort to control the down- and cross-gradient migration of the dissolved-phase plume.

For monitor well MW-3, an estimated 3,040 gallons (72.4 bbls) of hydrocarbon-impacted groundwater was recovered via a combination of manual recovery, a Tornado pump, and AFR events conducted in 2022.

For monitor well MW-4, an estimated 45 gallons (1.07 bbls) of hydrocarbon-impacted groundwater was recovered via manual recovery or a Tornado pump.

For monitor well MW-8, an estimated 5,165 gallons (123 bbls) of hydrocarbon-impacted groundwater was recovered via a combination of manual recovery, a Tornado pump, and AFR events conducted in 2022.

For monitor well MW-13, an estimated 2,521 gallons (60.0 bbls) of hydrocarbon- impacted groundwater was recovered via a combination of manual recovery, a Tornado pump, and AFR events conducted in 2022.

An approximate total of 13,811 gallons (329 bbls) of hydrocarbon-impacted groundwater were recovered from the Site during 2022 via a combination of manual recovery, a Tornado pump, and AFR events. To date, a total of approximately 68,779 gallons (1,638 bbls) of impacted groundwater has been recovered during the AFR events since April of 2019.

All recovered fluids were disposed of at an NMOCD-approved disposal facility.

Summaries of groundwater recovery data are provided in Tables 4 through 8.

3.2 Groundwater Monitoring

The on-site monitor wells were gauged and sampled by a previous environmental contractor on March 8 and 9 (1Q2022), June 23 (2Q2022), and September 21 (3Q2022). Due to a change in project management and oversight, no groundwater sampling was conducted during the fourth (4^{th}) quarter of 2022. Etech assumed oversight responsibilities for the Site in February 2023 and conducted a groundwater monitoring event (4Q2022) on February 24, 2023 (the earliest available opportunity) to assess the levels and extent of PSH and dissolved-phase constituents in the groundwater at the Site. The groundwater monitoring events consisted of measuring static water

levels in the on-site monitor wells (MW-1 through MW-14), checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Purged water was placed into a polystyrene aboveground storage tank (AST) and disposed of at an NMOCD-approved disposal facility.

Groundwater samples were collected utilizing low-flow sampling equipment, including a bladder pump and multi-parameter meter. Prior to sample collection, readings on the multi-parameter meter were recorded for a minimum of four (4) cycles of five (5) minutes each. Each groundwater sample collected was placed in laboratory-supplied containers appropriate to the analysis requested and placed on ice in a cooler.

An annual monitoring event for polycyclic aromatic hydrocarbons (PAH) was conducted on March 8 and 9, 2022. Based on the sampling criteria provided by the NMOCD, only monitor wells MW-3 through MW-9 were subject to annual PAH monitoring. PAH sampling requirements were met for monitor wells MW-3 through MW-9 in June 2013 and May 2014, respectively. However, all monitor wells sampled during the 4th quarter of 2020 were inadvertently analyzed for PAH. The resulting analyses indicated that none of the on-site monitor wells sampled during the 4th quarter of 2020 exceeded PAH Action Levels established by Section 20.6.2.3103 of the New Mexico Administrative Code (NMAC). In an effort to adhere to the requirement for two (2) consecutive years of PAH concentrations below action levels set forth by the NMOCD, monitor wells MW-3 through MW-9 were sampled during the first quarter of 2022 (1Q2022). A summary of PAH analyses is provided as Table 9.

Locations of the groundwater monitor wells and the inferred groundwater elevations, which were constructed from measurements collected during the 2022 quarterly sampling events, are depicted in Figures 2A through 2D. The maps indicate a general groundwater gradient of approximately 0.002 feet/foot to the southeast as measured between monitor wells MW-2 and MW-14. Groundwater elevation and PSH thickness data is summarized in Table 1.

4.0 LABORATORY RESULTS

Groundwater samples collected from the on-site monitor wells during the quarterly and annual monitoring events were delivered to Eurofins Environment Testing South Central, LLC, in Midland, Texas, for determination of chloride, BTEX, and/or PAH constituent concentrations by Environmental Protection Agency (EPA) Methods 300, SW846-8021b, and SW846 8270C, respectively. A summary of laboratory analytical results is presented in Table 2, "Concentrations of Benzene, BTEX & Chloride in Groundwater". A summary of PAH constituent concentrations is presented in Table 9, “Concentrations of Polycyclic Aromatic Hydrocarbons (PAH) in Groundwater". “Groundwater Concentration" maps are provided as Figures 3A through 3D. Laboratory analytical reports are provided as Appendix A.

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in Section 20.6.2.3103 of the New Mexico Administrative Code (NMAC).

Monitor Well MW-1

Monitor well MW-1 was not sampled during the 2022 reporting period due to the presence of PSH.

Monitor Well MW-2

Laboratory analytical results indicate benzene concentrations ranged from 0.00686 mg/L in 3Q2022 to 0.0176 mg/L in 2Q2022. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory method detection limit (MDL) in all submitted groundwater samples. Chloride concentrations ranged from 10,500 mg/L in 2Q2022 and 3Q2022 to 12,800 mg/L in 4Q2022.

Benzene concentrations exceeded the NMOCD regulatory standard of 0.01 mg/L in 1Q2022 and 2Q2022. Toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards in all submitted samples. Chloride concentrations exceeded the NMOCD regulatory standard of 250 mg/L in all submitted samples.

Monitor Well MW-3

Laboratory analytical results indicate benzene concentrations ranged from less than the laboratory MDL in 1Q2022 to 0.0399 mg/L in 3Q2022. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples.

Benzene concentrations exceeded the NMOCD regulatory standard of 0.01 mg/L in 2Q2022 and 3Q2022. Toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards in all submitted samples.

PAH constituent concentrations in the annual groundwater sample were less than the appropriate laboratory MDL and less than New Mexico Water Quality Control Commission (NMWQCC) Drinking Water Standards.

Monitor Well MW-4

Laboratory analytical results indicate benzene concentrations ranged from less than the laboratory MDL in 1Q2022, 2Q2022, and 4Q2022 to 0.000554 mg/L in 3Q2022. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples.

BTEX constituent concentrations were less than NMOCD regulatory standards in all submitted samples.

PAH constituent concentrations in the annual groundwater sample were less than the appropriate laboratory MDL and less than NMWQCC Drinking Water Standards.

Monitor Well MW-5

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

PAH constituent concentrations in the annual groundwater sample were less than the appropriate laboratory MDL and less than NMWQCC Drinking Water Standards.

Monitor Welling MW-6

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

PAH constituent concentrations in the annual groundwater sample were less than the appropriate laboratory MDL and less than NMWQCC Drinking Water Standards.

Monitor Well MW-7

Laboratory analytical results indicate benzene concentrations ranged from less than the laboratory MDL in 1Q2022 and 4Q2022 to 0.00142 mg/L in 2Q2022. Toluene, ethylbenzene, total xylene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples.

Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards in all submitted samples.

PAH constituent concentrations in the annual groundwater sample were less than the appropriate laboratory MDL and less than NMWQCC Drinking Water Standards.

Monitor Well MW-8

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

PAH constituent concentrations in the annual groundwater sample were less than the appropriate laboratory MDL and less than NMWQCC Drinking Water Standards.

Monitor Well MW-9

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

PAH constituent concentrations in the annual groundwater sample were less than the appropriate laboratory MDL and less than NMWQCC Drinking Water Standards.

Monitor Well MW-10

Laboratory analytical results indicate benzene concentrations ranged from less than the laboratory MDL in 1Q2022 to 0.00183 mg/L in 2Q2022 and 4Q2022. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples.

Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards in all submitted samples.

Monitor Well MW-11

Laboratory analytical results indicated benzene, toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

Monitor Well MW-12

Laboratory analytical results indicated benzene, toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

Monitor Well MW-13

Laboratory analytical results indicated benzene, toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

Monitor Well MW-14

Laboratory analytical results indicated benzene, toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL and less than NMOCD regulatory standards in all submitted groundwater samples.

5.0 SUMMARY

This report presents the results of groundwater monitoring activities for the 2022 annual monitoring period. Currently, there are 14 groundwater monitor wells (MW-1 through MW-14) on-site. Monitor well MW-1 was not sampled in 2022 due to the presence of PSH.

Quarterly groundwater monitoring events were conducted on March 8 and 9 (1Q2022), June 23 (2Q2022), and September 29, 2022 (3Q2022); and February 24, 2023 (4Q2022).

Groundwater gauging data collected during the monitoring period indicated a general gradient of approximately 0.002 feet/foot to the southeast as measured between monitor wells MW-2 and MW-14.

A measurable thickness of PSH was detected in monitor well MW-1 throughout the 2022 reporting period. The PSH thickness measured in MW-1 ranged from 0.10 feet in 1Q2022 to 0.01 feet in 4Q2002.

An approximate total of 13,811 gallons (329 bbls) of hydrocarbon-impacted groundwater was recovered from the Site during 2022 via a combination of manual recovery, a Tornado pump, and AFR events. To date, a grand total of approximately 68,779 gallons (1,638 bbls) of impacted groundwater has been recovered during the AFR events since April of 2019.

Review of laboratory analytical results generated from analysis of groundwater samples collected in 2022 indicated benzene concentrations exceeded the NMOCD regulatory standard of 0.01 mg/L in groundwater samples submitted from monitor wells MW-2 (1Q2022 and 2Q2022) and MW-3 (2Q2022 and 3Q2022). Benzene concentrations were less than the NMOCD regulatory standard in all groundwater samples submitted from monitor wells MW-4 through MW-14. Toluene, ethylbenzene and total xylene concentrations were less than NMOCD regulatory standards in all submitted groundwater samples.

Chloride concentrations exceeded the NMOCD regulatory standard of 250 mg/L in all groundwater samples submitted from monitor well MW-1.

PAH constituent concentrations in the annual groundwater samples from monitor wells MW-3 through MW-9 were less than the appropriate laboratory MDL and less than NMWQCC Drinking Water Standards.

6.0 ANTICIPATED ACTIONS

Monitor wells MW-2 through MW-8, MW-10, MW-11, MW-13, and MW-14 will continue to be monitored and sampled quarterly for concentrations of BTEX. Monitor well MW-2 will continue to be monitored and sampled quarterly for concentrations of chloride.

PSH recovery from monitor well MW-1 will continue monthly. Groundwater recovery from monitor wells MW-3, MW-4, and MW-8 will continue on a monthly schedule. AFR events will continue to be conducted on a quarterly basis to enhance recovery of hydrocarbon-impacted groundwater. All recovered fluid will be disposed of at an NMOCD-permitted disposal facility.

Since monitor wells MW-9, MW-13, and MW-14 have exhibited eight (8) or more consecutive quarters with no concentrations of BTEX constituents above NMOCD regulatory standards, the sampling frequency for these wells can safely be reduced from quarterly to semi-annually (i.e., twice per year).

Since monitor wells MW-5, MW-6, MW-11, and MW-12 have exhibited eight (8) or more consecutive quarters with no concentrations of BTEX constituents above NMOCD regulatory standards, the sampling frequency for these wells can safely be reduced from quarterly to annually.

PAH sampling requirements have been met for monitor wells MW-2 through MW-8. No additional PAH sampling will be conducted from the wells.

Results of the 2023 sampling events will be reported in the *2023 Annual Monitoring Report*, which will be submitted to the NMOCD by April 1, 2024.

7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *2022 Annual Groundwater Monitoring Report* to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains All American Pipeline, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Etech and/or Plains All American Pipeline, LP.

8.0 DISTRIBUTION

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Plains All American Pipeline, LP
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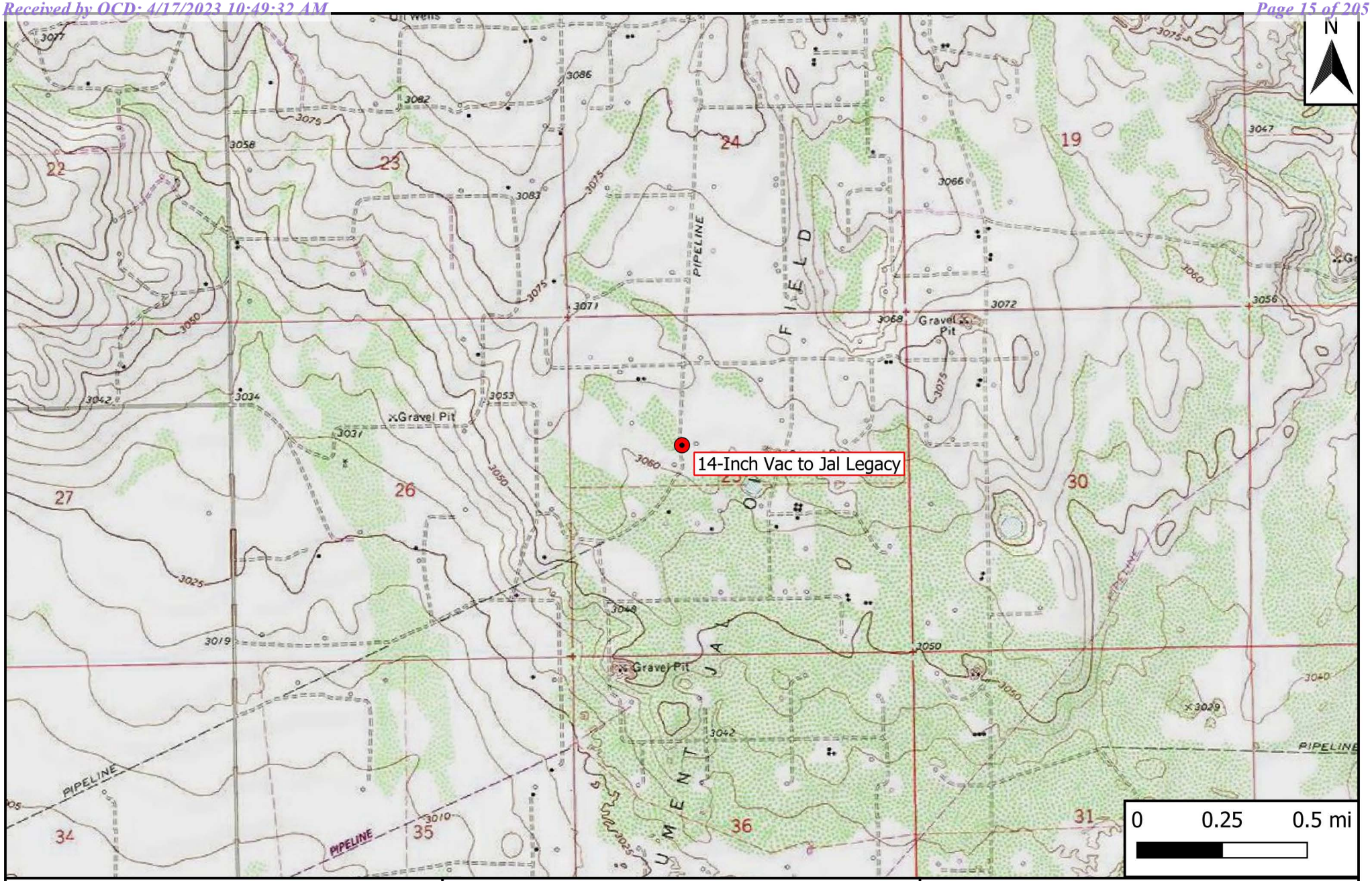
Houston, Texas 77002

(Electronic Submission)

Figure 1
Site Location Map



Legend

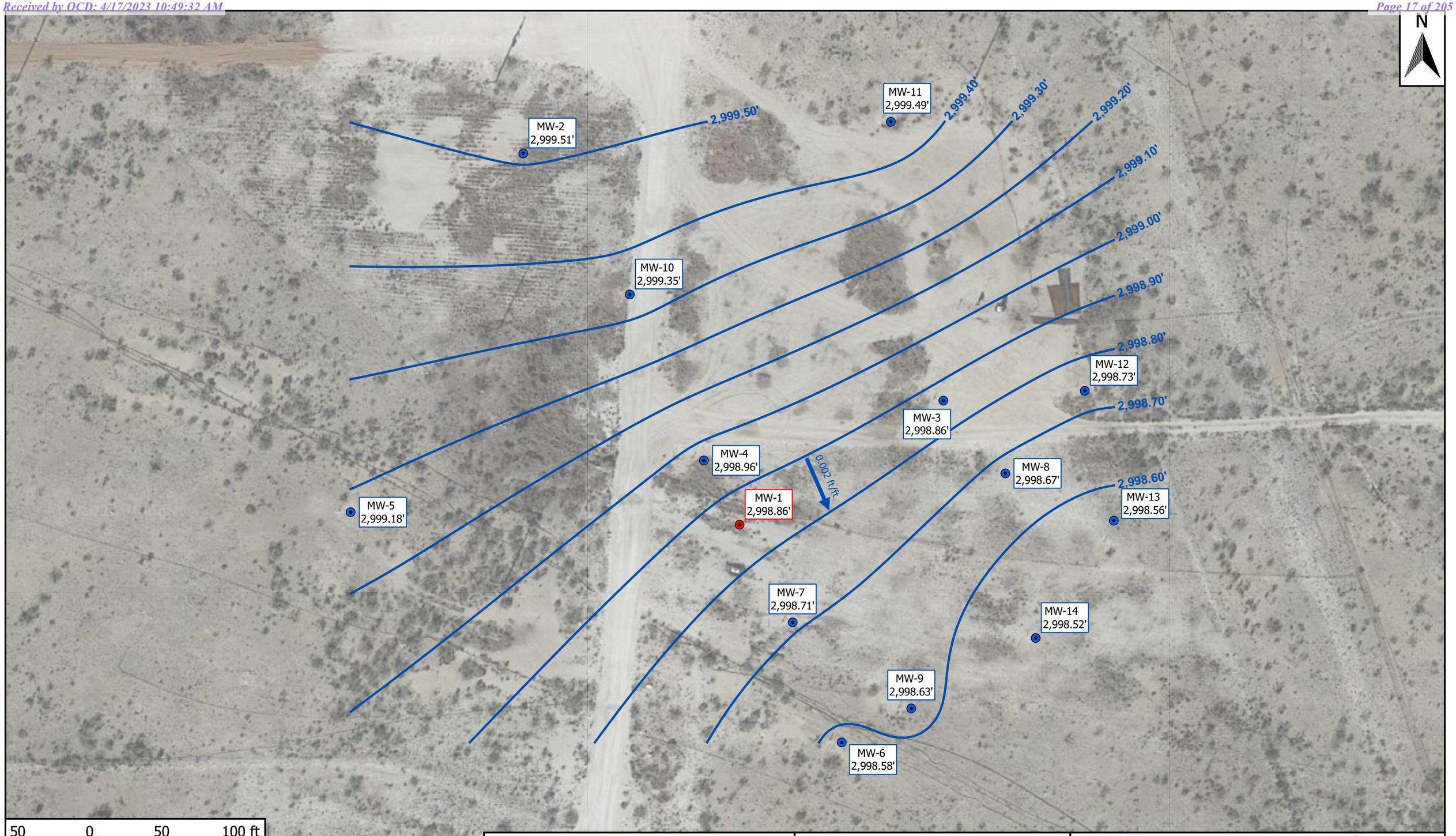
- Site Location

Figure 1
Site Location Map
Plains All American Pipeline, LP
14-Inch Vac to Jal Legacy
GPS: 32.1029722, -103.1195278
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 3/28/23

Figures 2A - 2D
Inferred Groundwater Gradient Maps



Notes:
Groundwater gradient magnitude measured between monitor wells MW-2 and MW-9.
Due to the presence of PSH, monitor well MW-1 was not utilized in map construction.

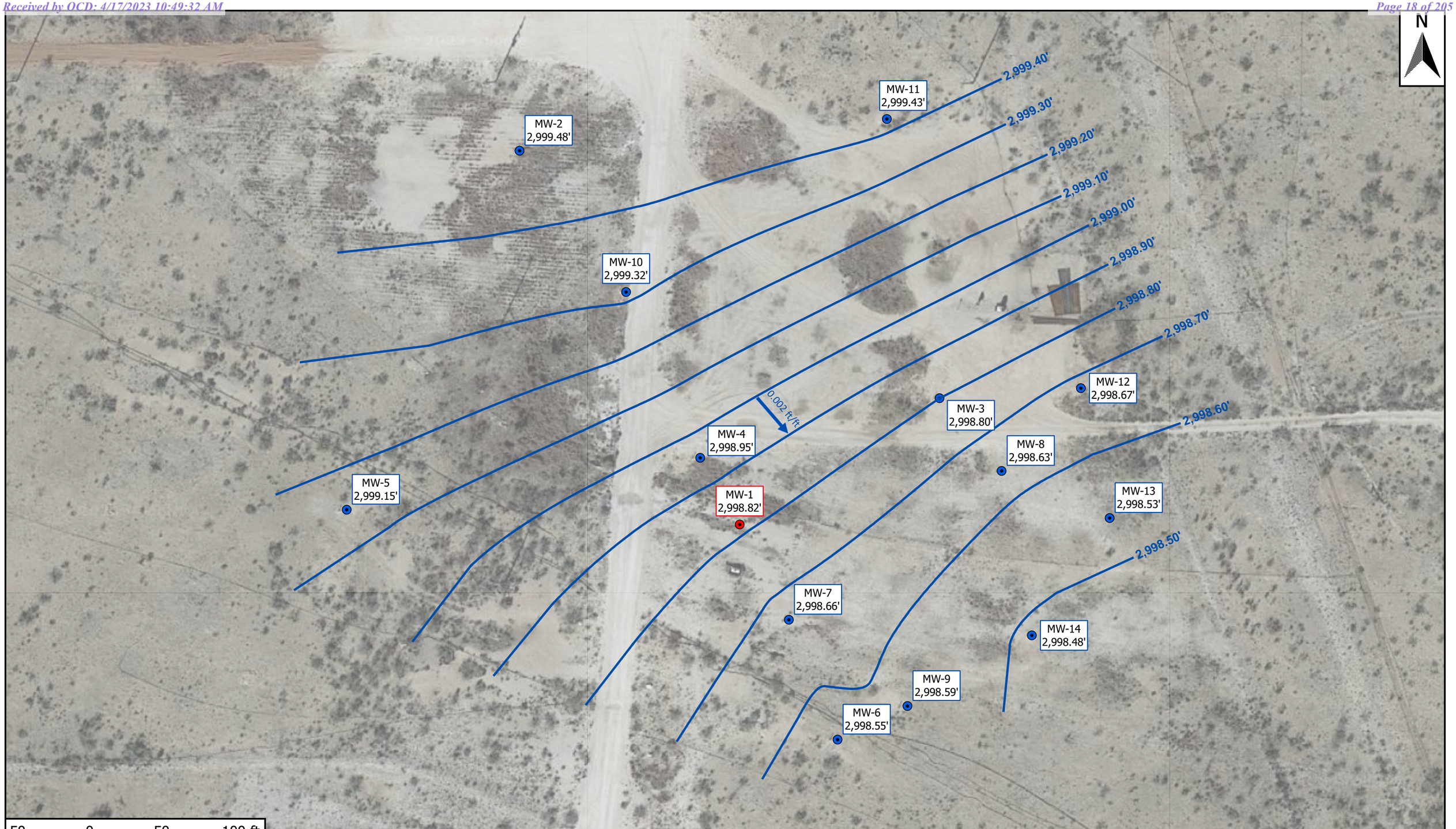
Legend

- Monitor Well
- Recovery Well
- Groundwater Elevation Contour (ft)
- Groundwater Gradient/Magnitude

Figure 2A
Inferred Groundwater Gradient Map – 1Q2022
Plains All American Pipeline, LP
14-Inch Vac to Jal Legacy
GPS: 32.1029722, -103.1195278
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 4/4/2023



Notes:
Groundwater gradient magnitude measured between monitor wells MW-2 and MW-14.
Due to the presence of PSH, monitor well MW-1 was not utilized in map construction.

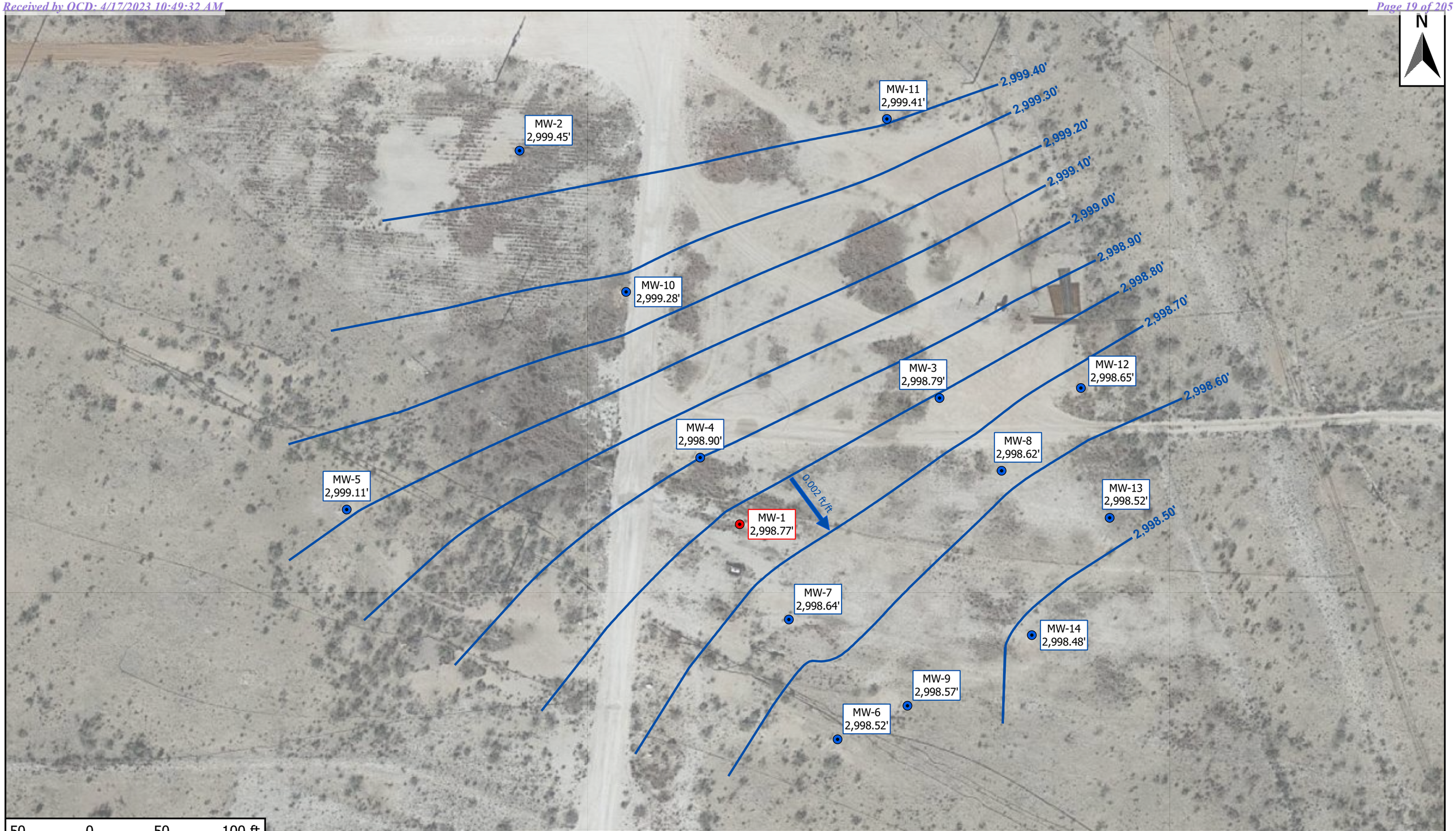
Legend

- Monitor Well
- Recovery Well
- Groundwater Elevation Contour (ft)
- Groundwater Gradient/Magnitude

Figure 2B
Inferred Groundwater Gradient Map – 2Q2022
Plains All American Pipeline, LP
14-Inch Vac to Jal Legacy
GPS: 32.1029722, -103.1195278
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 4/4/2023



Notes:
Groundwater gradient magnitude measured between monitor wells MW-2 and MW-14.
Due to the presence of PSH, monitor well MW-1 was not utilized in map construction.

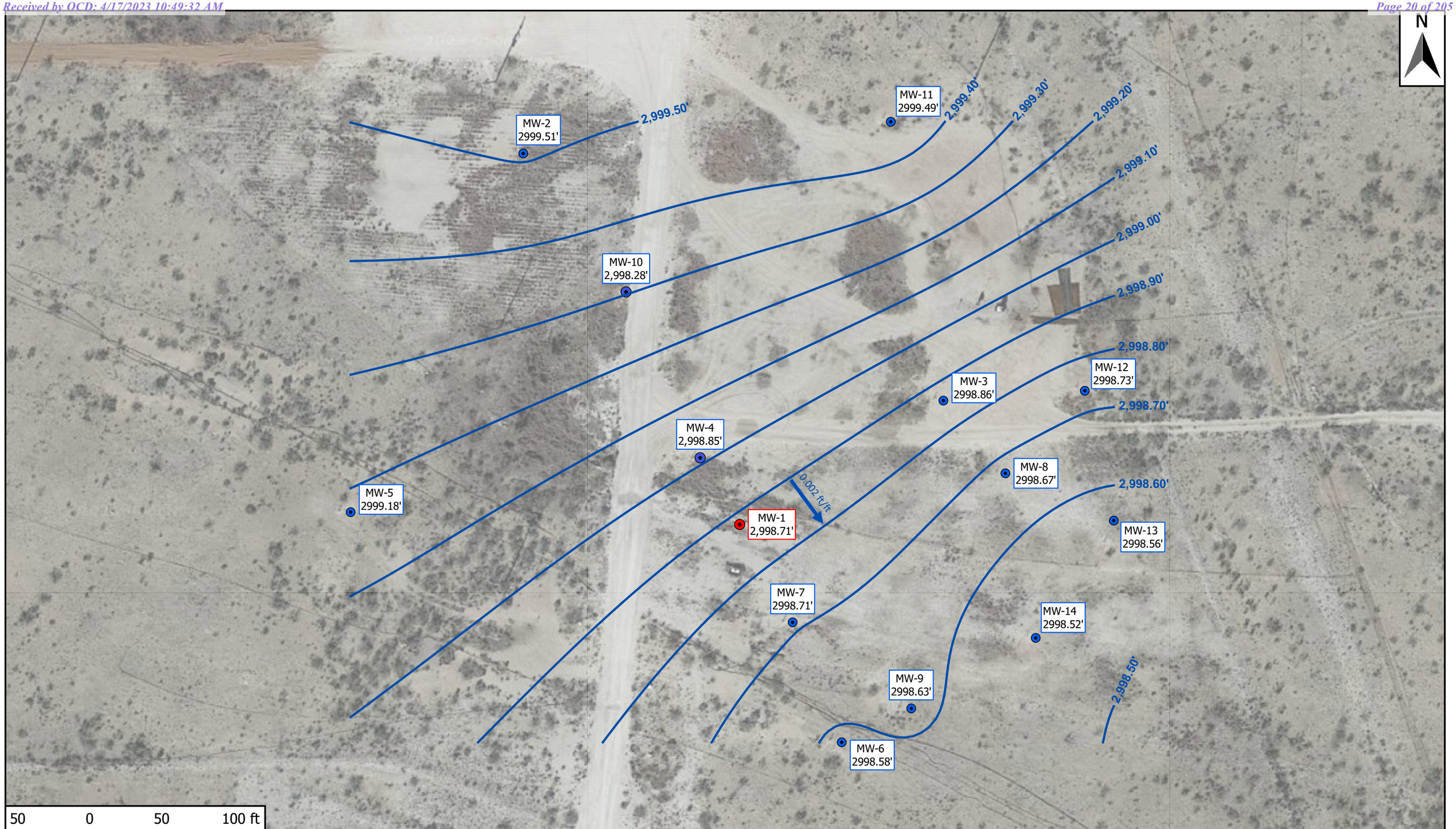
Legend

- Monitor Well
- Recovery Well
- Groundwater Elevation Contour (ft)
- Groundwater Gradient/Magnitude

Figure 2C
Inferred Groundwater Gradient Map – 3Q2022
Plains All American Pipeline, LP
14-Inch Vac to Jal Legacy
GPS: 32.1029722, -103.1195278
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 4/4/2023



Notes:
Groundwater gradient magnitude measured between monitor wells MW-2 and MW-14.
Due to the presence of PSH, monitoring well MW-1 was not utilized in map construction. Monitoring wells MW-4 and MW-10 were also not utilized in map construction.

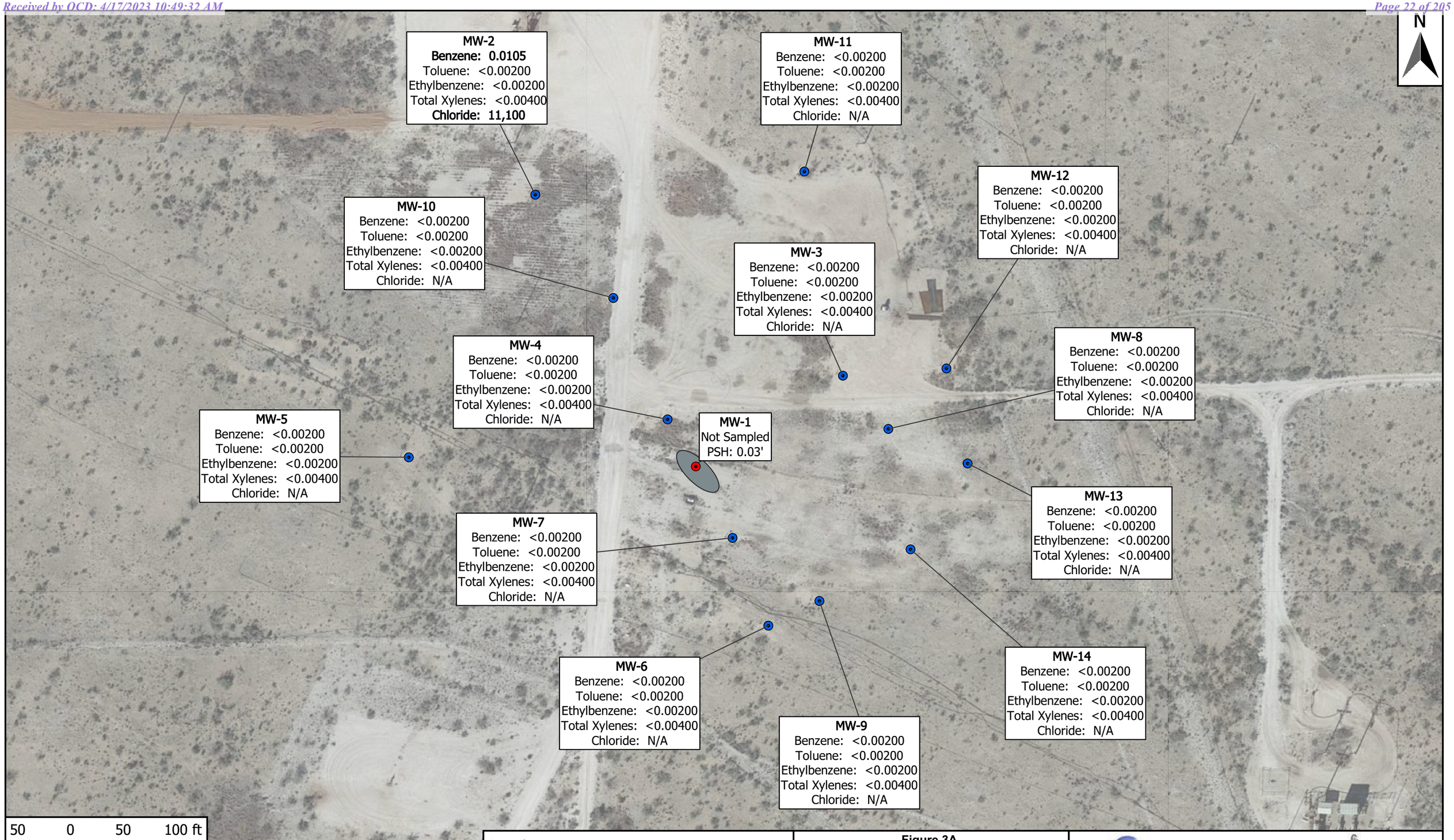
Legend
- Monitor Well
- Recovery Well
- Groundwater Elevation Contour (ft)
- Groundwater Gradient/Magnitude

Figure 2D
Inferred Groundwater Gradient Map – 4Q2022
Plains All American Pipeline, LP
14-Inch Vac to Jal Legacy
GPS: 32.1029722, -103.1195278
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 4/13/2023

Figures 3A - 3D
Groundwater Concentration Maps



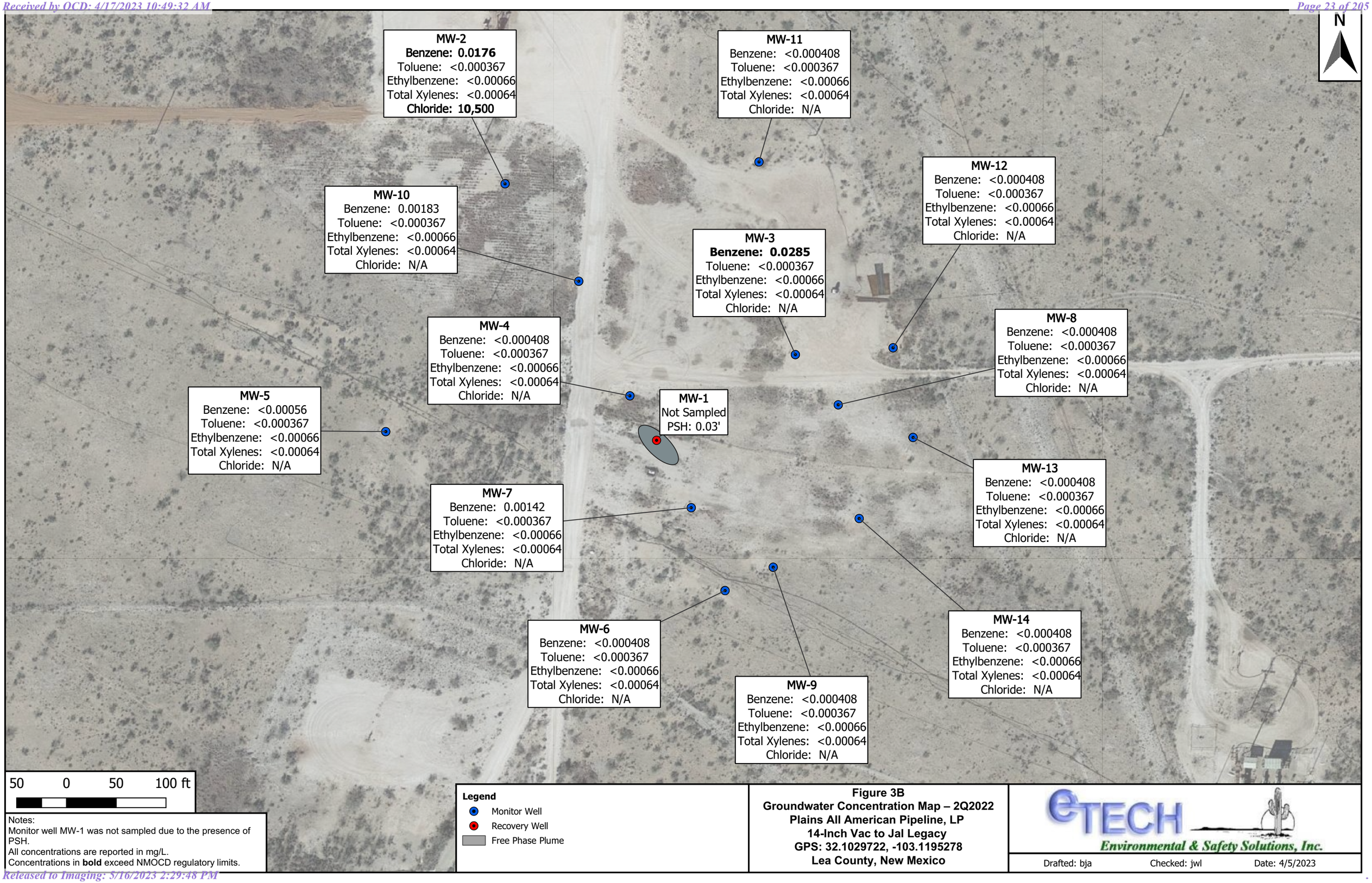
Notes:
Monitor well MW-1 was not sampled due to the presence of PSH.
All concentrations are reported in mg/L.
Concentrations in **bold** exceed NMOCD regulatory limits.

Legend
- Monitor Well
- Recovery Well
- Free Phase Plume

Figure 3A
Groundwater Concentration Map – 1Q2022
Plains All American Pipeline, LP
14-Inch Vac to Jal Legacy
GPS: 32.1029722, -103.1195278
Lea County, New Mexico

ETECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 4/5/2023



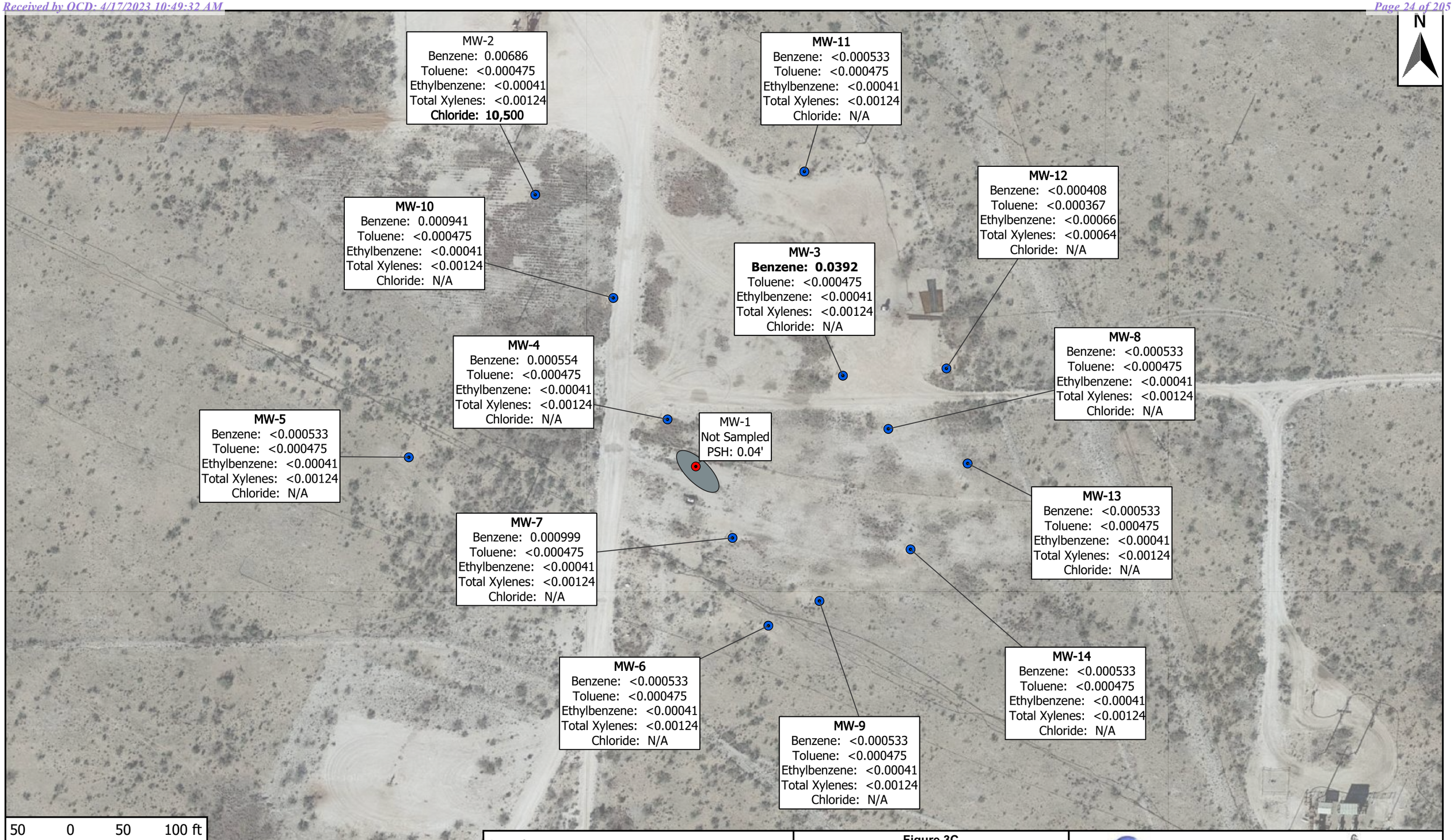
Notes:
Monitor well MW-1 was not sampled due to the presence of PSH.
All concentrations are reported in mg/L.
Concentrations in **bold** exceed NMOCD regulatory limits.

Legend
- Monitor Well
- Recovery Well
- Free Phase Plume

Figure 3B
Groundwater Concentration Map – 2Q2022
Plains All American Pipeline, LP
14-Inch Vac to Jal Legacy
GPS: 32.1029722, -103.1195278
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 4/5/2023



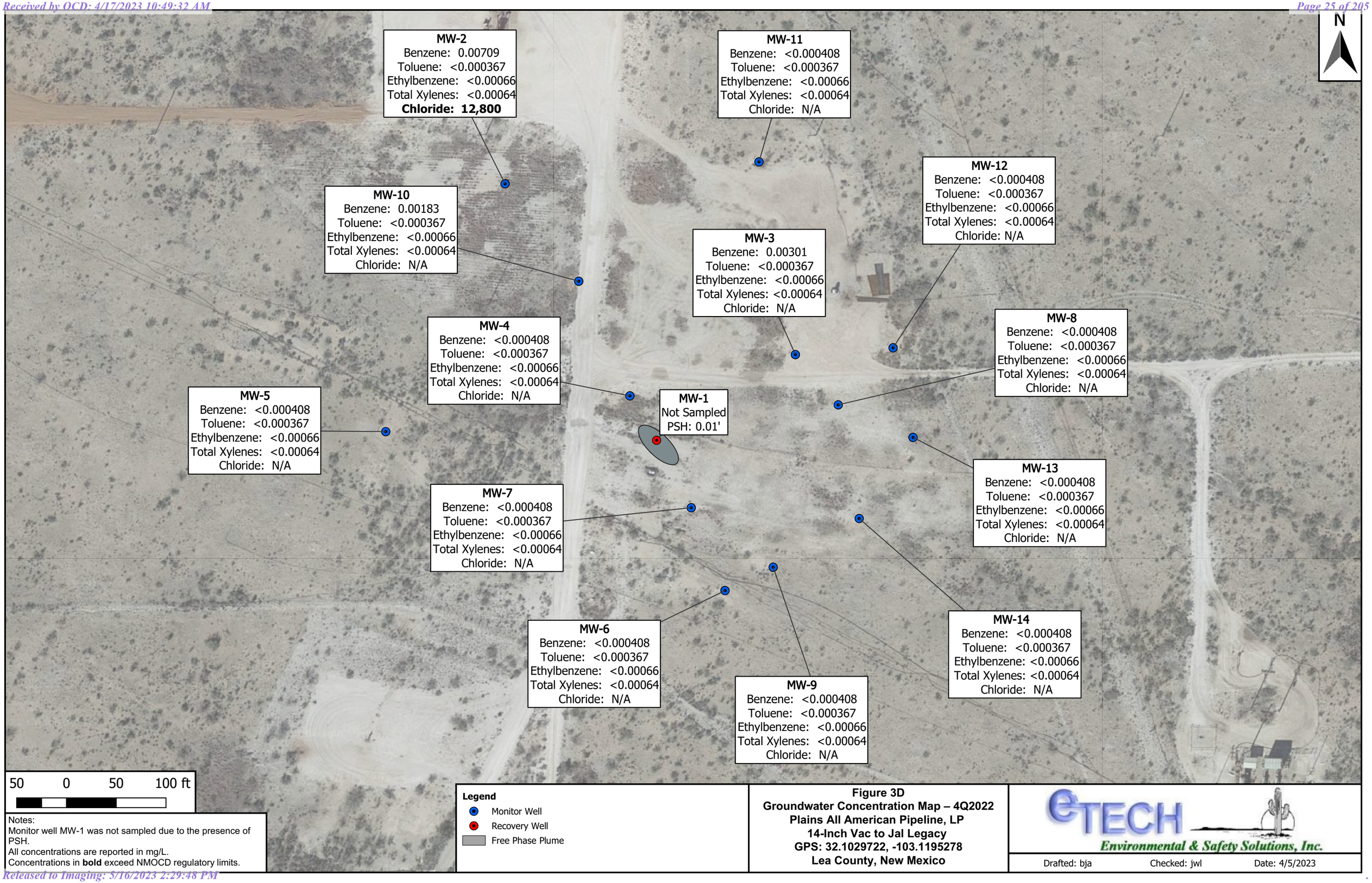
Notes:
Monitor well MW-1 was not sampled due to the presence of PSH.
All concentrations are reported in mg/L.
Concentrations in **bold** exceed NMOCD regulatory limits.

Legend
- Monitor Well
- Recovery Well
- Free Phase Plume

Figure 3C
Groundwater Concentration Map – 3Q2022
Plains All American Pipeline, LP
14-Inch Vac to Jal Legacy
GPS: 32.1029722, -103.1195278
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 4/5/2023



Notes:
Monitor well MW-1 was not sampled due to the presence of PSH.
All concentrations are reported in mg/L.
Concentrations in **bold** exceed NMOCD regulatory limits.

Legend
- Monitor Well
- Recovery Well
- Free Phase Plume

Figure 3D
Groundwater Concentration Map – 4Q2022
Plains All American Pipeline, LP
14-Inch Vac to Jal Legacy
GPS: 32.1029722, -103.1195278
Lea County, New Mexico

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 4/5/2023

Tables 1 - 9

Table 1
Groundwater Elevation Data & PSH* Thickness Summary

14-Inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID#: nAPP2109729126

Well ID	Date Measured	Well Casing Elevation**	Depth to Product (feet)	Depth to Water (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation†
MW-1	03/08/2021	3,062.62	63.55	63.67	0.12	2,999.05
	06/08/2021		63.64	63.69	0.05	2,998.97
	09/20/2021		63.64	63.96	0.32	2,998.93
	12/07/2021		63.74	63.81	0.07	2,998.87
	12/07/2021		63.74	63.81	0.07	2,998.87
	03/07/2022		63.76	63.79	0.03	2,998.86
	06/20/2022		63.8	63.83	0.03	2,998.82
	09/19/2022		63.84	63.88	0.04	2,998.77
	02/24/2023		63.91	63.92	0.01	2,998.71
MW-2	03/08/2021	3,062.56	-	62.86	-	2,999.70
	06/08/2021		-	62.93	-	2,999.63
	09/20/2021		-	62.97	-	2,999.59
	12/07/2021		-	62.99	-	2,999.57
	03/07/2022		-	63.05	-	2,999.51
	06/20/2022		-	63.08	-	2,999.48
	09/19/2022		-	63.11	-	2,999.45
	02/24/2023		-	63.14	-	2,999.42
MW-3	03/08/2021	3,062.73	-	63.71	-	2,999.02
	06/08/2021		-	63.74	-	2,998.99
	09/20/2021		-	63.77	-	2,998.96
	12/07/2021		-	63.86	-	2,998.87
	03/07/2022		-	63.87	-	2,998.86
	06/20/2022		-	63.93	-	2,998.80
	09/19/2022		-	63.94	-	2,998.79
	02/24/2023		-	64.06	-	2,998.67
MW-4	03/08/2021	3,062.43	-	63.27	-	2,999.16
	06/08/2021		-	63.32	-	2,999.11
	09/20/2021		-	63.38	-	2,999.05
	12/07/2021		-	63.45	-	2,998.98
	03/07/2022		-	63.47	-	2,998.96
	06/20/2022		-	63.48	-	2,998.95
	09/19/2022		-	63.53	-	2,998.90
	02/24/2023		-	63.58	-	2,998.85
MW-5	03/08/2021	3,063.23	-	63.90	-	2,999.33
	06/08/2021		-	63.95	-	2,999.28
	09/20/2021		-	63.96	-	2,999.27
	12/07/2021		-	64.10	-	2,999.13
	03/07/2022		-	64.05	-	2,999.18
	06/20/2022		-	64.08	-	2,999.15
	09/19/2022		-	64.12	-	2,999.11
	02/24/2023		-	64.15	-	2,999.08
MW-6	03/08/2021	3,062.60	-	63.83	-	2,998.77
	06/08/2021		-	63.86	-	2,998.74
	09/20/2021		-	63.90	-	2,998.70
	12/07/2021		-	63.96	-	2,998.64
	03/07/2022		-	64.02	-	2,998.58
	06/20/2022		-	64.05	-	2,998.55
	09/19/2022		-	64.08	-	2,998.52
	02/24/2023		-	64.19	-	2,998.41
MW-7	03/08/2021	3,062.69	-	63.80	-	2,998.89
	06/08/2021		-	63.85	-	2,998.84
	09/20/2021		-	63.88	-	2,998.81
	12/07/2021		-	63.95	-	2,998.74
	03/07/2022		-	63.98	-	2,998.71
	06/20/2022		-	64.03	-	2,998.66
	09/19/2022		-	64.05	-	2,998.64
	02/24/2023		-	64.05	-	2,998.64

Notes:
*PSH: Phase Separated Hydrocarbons
**Elevations based on the North American Vertical Datum of 1988.
† Corrected groundwater elevations were extrapolated using a PSH specific gravity of 0.85, if PSH was gauged in the monitoring well.

Table 1
Groundwater Elevation Data & PSH* Thickness Summary

14-Inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID#: nAPP2109729126

Well ID	Date Measured	Well Casing Elevation**	Depth to Product (feet)	Depth to Water (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation†
MW-8	03/08/2021	3,062.42	-	63.53	-	2,998.89
	06/08/2021		-	63.58	-	2,998.84
	09/20/2021		-	63.64	-	2,998.78
	12/07/2021		-	63.70	-	2,998.72
	03/07/2022		-	63.75	-	2,998.67
	06/20/2022		-	63.79	-	2,998.63
	09/19/2022		-	63.80	-	2,998.62
	02/24/2023		-	63.83	-	2,998.59
MW-9	03/08/2021	3,062.77	-	63.95	-	2,998.82
	06/08/2021		-	64.00	-	2,998.77
	09/20/2021		-	64.03	-	2,998.74
	12/07/2021		-	64.10	-	2,998.67
	03/07/2022		-	64.14	-	2,998.63
	06/20/2022		-	64.18	-	2,998.59
	09/19/2022		-	64.20	-	2,998.57
	02/24/2023		-	64.21	-	2,998.56
MW-10	03/08/2021	3,062.50	-	62.98	-	2,999.52
	06/08/2021		-	63.03	-	2,999.47
	09/20/2021		-	63.07	-	2,999.43
	12/07/2021		-	63.11	-	2,999.39
	03/07/2022		-	63.15	-	2,999.35
	06/20/2022		-	63.18	-	2,999.32
	09/19/2022		-	63.22	-	2,999.28
	02/24/2023		-	64.22	-	2,998.28
MW-11	03/08/2021	3,063.50	-	63.86	-	2,999.64
	06/08/2021		-	63.91	-	2,999.59
	09/20/2021		-	63.92	-	2,999.58
	12/07/2021		-	63.97	-	2,999.53
	03/07/2022		-	64.01	-	2,999.49
	06/20/2022		-	64.07	-	2,999.43
	09/19/2022		-	64.09	-	2,999.41
	02/24/2023		-	64.18	-	2,999.32
MW-12	03/08/2021	3,062.20	-	63.27	-	2,998.93
	06/08/2021		-	63.33	-	2,998.87
	09/20/2021		-	63.36	-	2,998.84
	12/07/2021		-	63.44	-	2,998.76
	03/07/2022		-	63.47	-	2,998.73
	06/20/2022		-	63.53	-	2,998.67
	09/19/2022		-	63.55	-	2,998.65
	02/24/2023		-	63.58	-	2,998.62
MW-13	03/08/2021	3,062.71	-	63.95	-	2,998.76
	06/08/2021		-	63.99	-	2,998.72
	09/20/2021		-	64.03	-	2,998.68
	12/07/2021		-	64.11	-	2,998.60
	03/07/2022		-	64.15	-	2,998.56
	06/20/2022		-	64.18	-	2,998.53
	09/19/2022		-	64.19	-	2,998.52
	02/24/2023		-	64.35	-	2,998.36
MW-14	03/08/2021	3,062.50	-	63.78	-	2,998.72
	06/08/2021		-	63.83	-	2,998.67
	09/20/2021		-	63.86	-	2,998.64
	12/07/2021		-	63.93	-	2,998.57
	03/07/2022		-	63.98	-	2,998.52
	06/20/2022		-	64.02	-	2,998.48
	09/19/2022		-	64.02	-	2,998.48
	02/24/2023		-	64.08	-	2,998.42

Notes:
*PSH: Phase Separated Hydrocarbons

**Elevations based on the North American Vertical Datum of 1988.

† Corrected groundwater elevations were extrapolated using a PSH specific gravity of 0.85, if PSH was gauged in the monitoring well.

Table 2
Concentrations of Benzene, BTEX[1] & Chloride in Groundwater

14-Inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID#: nAPP2109729126

Well ID	Date Sampled	EPA SW 846-8021B							
		Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	M,P-Xylenes (mg/L)	O-Xylenes (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	Chloride (mg/L)
NMWQCC Standard[2]		0.01	0.75	0.75	TOTAL XYLENES 0.62			NE[3]	250
MW-1	03/09/2021	Not sampled due to the presence of Phase-Separated Hydrocarbons (PSH)							
	06/09/2021								
	09/20/2021								
	12/07/2021								
	03/09/2022								
	06/23/2022								
	09/21/2022								
	02/24/2023								
MW-2	03/09/2021	**0.0177**	0.00313	0.000940 J	0.000910 J	0.00308	0.00399	0.0258	**9,940**
	06/10/2021	**0.0137**	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.0137	**10,200**
	09/21/2021	**0.0112**	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.0122	**10,900**
	12/08/2021	**0.0276**	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.0276	**10,800**
	03/09/2022	**0.0105**	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.0105	**11,100**
	06/23/2022	**0.0176**	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	0.0176	**10,500**
	09/21/2022	0.00686	<0.000475	<0.000411	<0.00124	0.000551	<0.00124	0.00686	**10,500**
	02/24/2023	0.00709	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	0.00709	**12,800**
MW-3	03/08/2021	**0.100**	0.00216	<0.000657	0.000690 J	0.00114 J	0.00183 J	0.104	-
	06/10/2021	**0.0401**	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.0401	-
	DUP-2	**0.0471**	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.0471	-
	09/21/2021	**0.161**	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.161	-
	DUP-2	**0.19**	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.190	-
	12/08/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	DUP-2	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/09/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	DUP-2	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	**0.0285**	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	0.0285	-
	09/21/2022	**0.0399**	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	0.0399	-
	DUP-1	**0.0392**	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	0.0392	-
	02/24/2023	0.00301	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	0.00301	-
MW-4	03/09/2021	<0.000480	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
	DUP-2	<0.000480	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
	06/10/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	09/21/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	12/08/2021	0.00568	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.00611	-
	03/09/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
	DUP-1	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
	09/21/2022	0.000554	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	02/24/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
MW-5	03/09/2021	0.000440 J	0.000940 J	0.000770 J	<0.000630	0.000800 J	0.000800 J	0.00295	-
	06/09/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	09/20/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	12/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/08/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	<0.00056	<0.000367	<0.000657	<0.000629	<0.000642	<0.000629	<0.000657	-
	09/21/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	02/24/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
MW-6	03/09/2021	<0.000408	0.00105 J	<0.000657	<0.000630	0.00110 J	0.00110 J	0.00215	-
	06/09/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	09/20/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	12/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/08/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
	09/21/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	02/24/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
MW-7	03/09/2021	<0.000408	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
	06/09/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	09/20/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	12/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/08/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	0.00142	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	0.00142	-
	09/21/2022	0.000999	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	02/24/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-

Notes:
1. BTEX: Benzene, Toluene, Ethylbenzene, and Total Xylenes
2. NMWQCC: New Mexico Water Quality Control Commission
3. NE: Not Established
Dash (-): Not analyzed OR Not Applicable
J: The target analyte was positively identified below the quantitation limit and above the detection limit
Bold text indicates a concentration exceeding NMWQCC Drinking Water Standards.

Table 2
Concentrations of Benzene, BTEX[1] & Chloride in Groundwater

14-Inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID#: nAPP2109729126

Well ID	Date Sampled	EPA SW 846-8021B							
		Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	M,P-Xylenes (mg/L)	O-Xylenes (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	Chloride (mg/L)
NMWQCC Standard[2]		0.01	0.75	0.75	TOTAL XYLENES 0.62			NE[3]	250
MW-8	03/09/2021	<0.000408	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
	06/10/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	DUP-1	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	09/21/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	12/08/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/08/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	DUP-1	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
	09/21/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	02/24/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
MW-9	03/08/2021	<0.000408	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
	06/09/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	09/20/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	12/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/08/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	<0.000408	<0.000367	<0.000657	<0.00629	<0.000642	<0.000642	<0.000657	-
	09/21/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	02/24/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
MW-10	03/09/2021	0.00153 J	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	0.00153 J	-
	06/09/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	09/20/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	12/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/08/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	0.00183	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	0.00183	-
	09/21/2022	0.000941	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	02/24/2023	0.00183J	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	0.00183J	-
MW-11	03/08/2021	<0.000408	<0.000367	<0.000657	0.00299 J	0.00200 J	0.00499	0.00499	-
	06/10/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	09/20/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	12/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/08/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
	09/21/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	02/24/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
MW-12	03/08/2021	<0.000408	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
	06/10/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	09/21/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	12/07/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/09/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
	09/21/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
	02/24/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
MW-13	03/08/2021	<0.000408	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
	DUP-1	<0.000408	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
	06/10/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	09/21/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	12/08/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/09/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
	09/21/2022	<0.000533	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	02/24/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
MW-14	03/08/2021	<0.000408	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
	06/09/2021	0.00232	0.00491	<0.00200	<0.00400	<0.00200	<0.00400	0.00723	-
	09/21/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	DUP-1	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	-
	12/08/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	DUP-1	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	03/09/2022	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
	06/23/2022	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
	DUP-2	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-
	09/29/2022	<0.000553	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	DUP-2	<0.000553	<0.000475	<0.000411	<0.00124	<0.000551	<0.00124	<0.00124	-
	02/24/2023	<0.000408	<0.000367	<0.000657	<0.000629	<0.000642	<0.000642	<0.000657	-

Notes:
1. BTEX: Benzene, Toluene, Ethylbenzene, and Total Xylenes
2. NMWQCC: New Mexico Water Quality Control Commission
3. NE: Not Established
Dash (-): Not analyzed OR Not Applicable
J: The target analyte was positively identified below the quantitation limit and above the detection limit
Bold text indicates a concentration exceeding NMWQCC Drinking Water Standards.

Table 3
Phase-Separate Hydrocarbon (PSH) Thickness & Recovery Summary (MW-1)

14-inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID#: nAPP2109729126

Well ID	Date Measured	Well Casing Elevation*	Depth to Product (feet)	Depth to Water (feet)	PSH Thickness (feet)	Total Fluid Recovery (gallons)	PSH Recovered (gallons)
MW-1	01/29/2021	3,062.62	63.56	63.89	0.33	3.0	0.054
	02/25/2021		63.59	63.84	0.25	1,260.0	0.041
	03/25/2021		63.57	63.89	0.32	5.0	0.052
	04/28/2021		63.30	63.79	0.49	5.0	0.080
	05/20/2021		63.61	63.78	0.17	1,470.0	0.028
	06/29/2021		63.64	63.79	0.15	5.0	0.024
	07/28/2021		63.69	63.77	0.08	5.0	0.013
	08/12/2021		63.70	63.75	0.05	1,575.0	0.008
	08/24/2021		-	-	-	5.0	-
	10/26/2021		63.08	64.05	0.97	5.0	0.158
	11/11/2021		63.75	63.96	0.21	1,575.0	0.034
	11/30/2021		63.73	63.86	0.13	5.0	0.021
	12/21/2021		63.76	64.15	0.39	5.0	0.064
	01/24/2022		-	-	-	5.0	-
	02/10/2022		63.78	63.88	0.10	840.0	0.016
	02/21/2022		Sheen	63.73	-	5.0	-
	03/30/2022		63.84	63.88	0.04	5.0	0.007
	04/26/2022		63.78	63.82	0.04	5.0	0.007
	05/19/2022		69.03	Probe not working properly		810.00	
	05/26/2022		63.81	63.82	0.01	5	0.00163
	08/24/2022		63.85	63.94	0.09	5	0.01467
	09/29/2022		63.84	63.88	0.04	1350	0.00652
	10/31/2022		63.92	63.96	0.04	5	0.00652
	11/22/2022		-	63.85	No sheen	5	-
	02/24/2023		63.91	63.92	0.01	-	-
2022 Average PSH Thickness & Recovery Totals					**0.05**	**3,040**	**0.06**

Notes:

* Elevation measurements are in feet above mean sea level, based on the North American Vertical Datum of 1988.

Dash (-): Not measured or Not Applicable

Table 4
Gauging & Groundwater Recovery Summary (MW-3)

14-Inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID#: nAPP2109729126

Well ID	Date Measured	Well Casing Elevation*	Groundwater Recovered (gallons)
MW-3	01/29/2021	3,062.73	3.0
	02/24/2021		1,050
	03/25/2021		5.0
	04/28/2021		5.0
	05/19/2021		1,260
	06/29/2021		5.0
	07/28/2021		5.0
	08/11/2021		1,575
	08/24/2021		5.0
	10/26/2021		5.0
	11/10/2021		855
	11/30/2021		5.0
	12/21/2021		5.0
	01/24/2022		5.0
	02/09/2022		840
	02/21/2022		5.0
	03/30/2022		5.0
	04/26/2022		5.0
	05/18/2022		810
	5/26/2022		5.0
	8/24/2022		5.0
	9/28/2022		1,350
	10/31/2022		5.0
	11/22/2022		5.0
	02/24/2023		10.0
		2022 Total Recovered	**3,040**

Notes:
* Elevation measurements are in feet above mean sea level, based on the North American Vertical Datum of 1988.
- = Not measured or Not Applicable

Table 5
Gauging & Groundwater Recovery Summary (MW-4)

14-Inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID#: nAPP2109729126

Well ID	Date Measured	Well Casing Elevation*	Groundwater Recovered (gallons)
MW-4	01/29/2021	3,062.43	3.0
	02/23/2021		10.0
	03/25/2021		5.0
	04/28/2021		5.0
	05/17/2021		5.0
	06/29/2021		5.0
	07/28/2021		5.0
	08/12/2021		5.0
	08/24/2021		5.0
	10/26/2021		5.0
	11/11/2021		5.0
	11/30/2021		5.0
	12/21/2021		5.0
	01/24/2022		5.0
	02/10/2022		10.0
	02/21/2022		5.0
	03/30/2022		5.0
	Not bailed 2Q		-
	08/24/2022		5.0
	09/29/2022		5.0
	10/31/2022		5.0
	11/22/2022		5.0
	02/24/2023		40.0
2022 Total Recovered			**45.0**

Notes:
* Elevation measurements are in feet above mean sea level, based on the North American Vertical Datum of 1988.
- = Not measured or Not Applicable

Table 6
Gauging & Groundwater Recovery Summary (MW-8)

14-Inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID#: nAPP2109729126

Well ID	Date Measured	Well Casing Elevation*	Groundwater Recovered (gallons)
MW-8	01/29/2021	3,062.42	3.0
	02/22/2021		1,176
	03/25/2021		5.0
	04/28/2021		5.0
	05/18/2021		1,176
	06/29/2021		5.0
	07/28/2021		5.0
	08/10/2021		1,125
	08/24/2021		5.0
	10/26/2021		5.0
	11/09/2021		1,080
	11/30/2021		5.0
	12/21/2021		5.0
	01/24/2022		5.0
	02/08/2022		1,260
	02/21/2022		5.0
	03/30/2022		5.0
	04/26/2022		5.0
	05/17/2022		1,170
	05/26/2022		5.0
	08/24/2022		5.0
	09/27/2022		2,700
	10/31/2022		5.0
	11/22/2022		5.0
	02/24/2023		9.0
2022 Total Recovered			**5,165**

Notes:

* Elevation measurements are in feet above mean sea level, based on the North American Vertical Datum of 1988.

- = Not measured or Not Applicable

Table 7
Gauging & Groundwater Recovery Summary (MW-13)

14-Inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID#: nAPP2109729126

Well ID	Date Measured	Well Casing Elevation*	Groundwater Recovered (gallons)
MW-13	01/29/2021	3,062.71	3.0
	02/23/2021		1,260
	03/25/2021		5.0
	04/28/2021		5.0
	05/17/2021		1,260
	06/29/2021		5.0
	07/28/2021		5.0
	08/09/2021		1,260
	08/24/2021		5.0
	10/26/2021		5.0
	11/08/2021		585
	11/30/2021		5.0
	12/21/2021		5.0
	01/24/2022		5.0
	02/07/2022		546
	02/21/2022		5.0
	03/30/2022		5.0
	04/26/2022		5.0
	05/16/2022		585
	05/26/2022		5.0
	08/24/2022		5.0
	09/26/2022		1,350
	10/31/2022		5.0
	11/22/2022		5.0
	02/24/2023		10.0
2022 Total Recovered			**2,521**

Notes:
* Elevation measurements are in feet above mean sea level, based on the North American Vertical Datum of 1988.
- = Not measured or Not Applicable

Table 8
Quarterly Aggressive Fluid Recovery (AFR) Summary

14-inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID#: nAPP2109729126

Monitoring Well	Date	Targeted Constituent	Fluid Volume (gallons)	Notes
4Q21 Total Recovered			**3,822**	
2021 Total Recovered			**18,900**	
MW-1	02/10/2022	PSH* & BTEX**	840	Vac Truck
MW-3	02/09/2022	BTEX	840	Vac Truck
MW-8	02/08/2022	BTEX	1,260	Vac Truck
MW-13	02/07/2022	BTEX	546	Vac Truck
1Q22 Total Recovered			**3,486**	
MW-1	05/19/2022	PSH/BTEX	810	Vac Truck
MW-3	05/18/2022	BTEX	810	Vac Truck
MW-8	05/17/2022	BTEX	1,170	Vac Truck
MW-13	05/16/2022	BTEX	585	Vac Truck
2Q22 Total Recovered			**3,375**	
MW-1	09/29/2022	PSH/BTEX	1,350	Vac Truck
MW-3	09/28/2022	BTEX	1,350	Vac Truck
MW-8	09/27/2022	BTEX	2,700	Vac Truck
MW-13	09/26/2022	BTEX	1,350	Vac Truck
3Q22 Total Recovered				
MW-1		PSH/BTEX	21,778	Total Recovered to Date
MW-3		BTEX	17,834	Total Recovered to Date
MW-8		BTEX	18,074	Total Recovered to Date
MW-13		BTEX	11,093	Total Recovered to Date
Total Recovered to Date			**68,779**	

Notes:
*PSH: Phase-Separated Hydrocarbons
**BTEX: Benzene, toluene, ethylbenzene, and total xylenes.

Table 9
Concentrations of Polycyclic Aromatic Hydrocarbons (PAH) in Groundwater

14-Inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID #: nAPP2109729126

All concentrations are reported in milligrams per liter (mg/L)

SAMPLE LOCATION	SAMPLE DATE	EPA 8270D																
		Naphthalene	Benzo(a)pyrene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	Phenanthrene	Pyrene
NMWQCC[1] Standards		0.03	0.0007	NE[2]														
MW-1	11/25/2019	Not sampled due to the presence of Phase-Separated Hydrocarbons (PSH)																
	12/08/2020																	
MW-2	06/07/2013	N/A	<0.00021	<0.005	<0.005	<0.00017	<0.005	<0.00039	<0.005	<0.00053	<0.005	<0.005	N/A	<0.00026	<0.00032	<0.005	<0.00029	<0.00029
	05/12/2014	N/A	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	N/A	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053
	11/25/2019	N/A	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	N/A	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053
	12/09/2020	0.000242 J	<0.0000588	<0.000103	<0.000086	<0.0000893	<0.000139	<0.0000733	<0.000117	<0.000120	<0.000161	<0.0000784	NA	<0.000162	<0.000104	<0.0000942	<0.0000877	<0.000134
MW-3	06/07/2013	N/A	<0.00021	<0.005	<0.005	<0.00017	<0.005	<0.00039	<0.005	<0.00054	<0.005	<0.005	N/A	<0.00026	<0.00032	<0.005	<0.00029	<0.00029
	05/12/2014	N/A	<0.000051	<0.000051	<0.000051	<0.000051	<0.000051	<0.000051	<0.000051	<0.000051	<0.000051	<0.000051	N/A	<0.000051	<0.000051	<0.000051	<0.000051	<0.000051
	11/25/2019	Well Not Sampled																
	12/09/2020	<0.000101	<0.0000594	<0.000104	<0.000087	<0.0000902	<0.000140	<0.0000741	<0.000118	<0.000121	<0.000163	<0.0000792	NA	<0.000164	<0.000105	<0.0000951	<0.0000886	<0.000136
	03/09/2022	<0.00362	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181
MW-4	06/07/2013	N/A	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053	N/A	<0.000053	<0.000053	<0.000053	<0.000053	<0.000053
	05/12/2014	N/A	<0.00021	<0.005	<0.005	<0.00017	<0.005	<0.00040	<0.005	<0.00054	<0.005	<0.005	N/A	<0.00027	<0.00032	<0.005	<0.00029	<0.00030
	11/25/2019	Well Not Sampled																
	12/09/2020	<0.000103	<0.0000604	<0.000106	<0.000089	<0.0000917	<0.000142	<0.0000753	<0.000120	<0.000123	<0.000165	<0.0000805	N/A	<0.000166	<0.000107	<0.0000967	<0.0000901	<0.000138
	03/09/2022	<0.00361	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181
MW-5	06/07/2013	N/A	<0.00021	<0.005	<0.005	<0.00017	<0.005	<0.00039	<0.005	<0.00054	<0.005	<0.005	N/A	<0.00026	<0.00032	<0.005	<0.00029	<0.00029
	05/12/2014	N/A	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	N/A	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052
	11/25/2019	Well Not Sampled																
	12/08/2020	<0.000100	<0.0000589	<0.000103	<0.000086	<0.0000894	<0.000139	<0.0000734	<0.000117	<0.000120	<0.000161	<0.0000785	N/A	<0.000162	<0.000104	<0.0000943	<0.0000878	<0.000135
	03/08/2022	<0.00360	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181
MW-6	06/07/2013	N/A	<0.00021	<0.005	<0.005	<0.00017	<0.005	<0.00040	<0.005	<0.00055	<0.005	<0.005	N/A	<0.00027	<0.00033	<0.005	<0.00030	<0.00030
	05/12/2014	N/A	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052	N/A	<0.000052	<0.000052	<0.000052	<0.000052	<0.000052
	11/25/2019	Well Not Sampled																
	12/08/2020	<0.000117	<0.0000689	<0.000121	<0.000102	<0.000105	<0.000162	<0.0000858	<0.000137	<0.000140	<0.000189	<0.0000918	N/A	<0.000190	<0.000122	<0.000110	<0.000103	<0.000157
	03/08/2022	<0.00362	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181
MW-7	07/02/2014	N/A	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	N/A	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	11/25/2019	Well Not Sampled																
	12/08/2020	<0.000133	<0.0000778	<0.000136	<0.000115	<0.000118	<0.000183	<0.0000969	<0.000154	<0.000158	<0.000213	<0.000104	N/A	<0.000214	<0.000137	<0.000124	<0.000116	<0.000178
	03/08/2022	<0.00385	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193	<0.000193

Notes:
1. NMQCC: New Mexico Water Quality Control Commission
2. NE: Not Established
J: The target analyte was positively identified below the quantitation limit and above the detection limit
Bold text indicates a concentration exceeding NMWQCC Drinking Water Standards.

Table 9
Concentrations of Polycyclic Aromatic Hydrocarbons (PAH) in Groundwater

14-Inch Vac to Jal Legacy
Lea County, New Mexico
Plains SRS #: 2009-092
Etech Project #: 17474
NMOCD Incident ID #: nAPP2109729126

All concentrations are reported in milligrams per liter (mg/L)

SAMPLE LOCATION	SAMPLE DATE	EPA 8270D																
		Naphthalene	Benzo(a)pyrene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)Pyrene	Phenanthrene	Pyrene
NMWQCC[1] Standards		0.03	0.0007	NE[2]														
MW-8	07/02/2014	N/A	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	N/A	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	11/25/2019	Well Not Sampled																
	12/09/2020	<0.000114	<0.0000667	<0.000117	<0.000098	<0.000101	<0.000157	<0.0000831	<0.000132	<0.000136	<0.000183	<0.0000889	N/A	<0.000184	<0.000118	<0.000107	<0.0000994	<0.000152
	03/09/2022	<0.00360	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180	<0.000180
MW-9	07/02/2014	N/A	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	N/A	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	11/25/2019	Well Not Sampled																
	12/08/2020	<0.000116	<0.0000679	<0.000119	<0.000100	<0.000103	<0.000160	<0.0000846	<0.000135	<0.000138	<0.000186	<0.0000904	N/A	<0.000187	<0.000120	<0.000109	<0.000101	<0.000155
	03/08/2022	<0.00362	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181	<0.000181
MW-10	11/25/2019	<1.16	N/A	<2.09	<1.12	<0.811	N/A	N/A	N/A	N/A	<1.38	N/A	N/A	<0.740	<1.09	N/A	<0.771	<1.38
	12/08/2020	<0.000110	<0.0000646	<0.000113	<0.000095	<0.0000981	<0.000152	<0.0000805	<0.000128	<0.000132	<0.000177	<0.0000861	N/A	<0.000178	<0.000114	<0.000103	<0.0000963	<0.000148
MW-11	11/25/2019	<1.16	N/A	<2.09	<1.12	<0.811	N/A	N/A	N/A	N/A	<1.38	N/A	N/A	<0.740	<1.09	N/A	<0.771	<1.38
	12/08/2020	<0.000100	<0.0000587	<0.000103	<0.000086	<0.0000891	<0.000138	<0.0000731	<0.000116	<0.000119	<0.000161	<0.0000781	N/A	<0.000162	<0.000104	<0.0000939	<0.0000874	<0.000134
MW-12	11/25/2019	<1.16	N/A	<2.09	<1.12	<0.811	N/A	N/A	N/A	N/A	<1.38	N/A	N/A	<0.740	<1.09	N/A	<0.771	<1.38
	12/09/2020	<0.0000997	<0.0000585	<0.000102	<0.000086	<0.0000888	<0.000138	<0.0000729	<0.000116	<0.000119	<0.000160	<0.0000779	N/A	<0.000161	<0.000103	<0.0000936	<0.0000872	<0.000134
MW-13	11/25/2019	<1.16	N/A	<2.09	<1.12	<0.811	N/A	N/A	N/A	N/A	<1.38	N/A	N/A	<0.740	<1.09	N/A	<0.771	<1.38
	12/09/2020	<0.000115	<0.0000674	<0.000118	<0.000099	<0.000102	<0.000159	<0.0000840	<0.000134	<0.000137	<0.000184	<0.0000898	N/A	<0.000186	<0.000119	<0.000108	<0.000100	<0.000154
MW-14	11/25/2019	<1.16	N/A	<2.09	<1.12	<0.811	N/A	N/A	N/A	N/A	<1.38	N/A	N/A	<0.740	<1.09	N/A	<0.771	<1.38
	12/08/2020	<0.000107	<0.0000627	<0.000110	<0.000092	<0.0000952	<0.000148	<0.0000781	<0.000124	<0.000128	<0.000172	<0.0000835	N/A	<0.000173	<0.000111	<0.000100	<0.0000935	<0.000143

Notes:
1. NMQCC: New Mexico Water Quality Control Commission
2. NE: Not Established
J: The target analyte was positively identified below the quantitation limit and above the detection limit
Bold text indicates a concentration exceeding NMWQCC Drinking Water Standards.

Appendix A
Laboratory Analytical Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-3626-1
Laboratory Sample Delivery Group: AR227010
Client Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

For:
Terracon Consulting Eng & Scientists
1211 West Florida Avenue
Midland, Texas 79701

Attn: Brett Dennis

JKramer

Authorized for release by:
3/22/2022 12:11:25 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Laboratory Job ID: 820-3626-1
SDG: AR227010

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Qualifiers

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Job ID: 820-3626-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-3626-1

Receipt
The samples were received on 3/10/2022 9:42 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 880-21954 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Client Sample ID: MW-10

Lab Sample ID: 820-3626-1
Matrix: Water
Date Collected: 03/08/22 11:07
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/16/22 18:10	1
Toluene	<0.00200	U	0.00200		mg/L			03/16/22 18:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/16/22 18:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/16/22 18:10	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/16/22 18:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/16/22 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*03/16/22 18:10*	*1*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*		*03/16/22 18:10*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/18/22 13:35	1

Client Sample ID: MW-6

Lab Sample ID: 820-3626-2
Matrix: Water
Date Collected: 03/08/22 12:38
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/16/22 18:37	1
Toluene	<0.00200	U	0.00200		mg/L			03/16/22 18:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/16/22 18:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/16/22 18:37	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/16/22 18:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/16/22 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*		*03/16/22 18:37*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*		*03/16/22 18:37*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/18/22 13:35	1

Client Sample ID: MW-5

Lab Sample ID: 820-3626-3
Matrix: Water
Date Collected: 03/08/22 13:19
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/16/22 19:04	1
Toluene	<0.00200	U	0.00200		mg/L			03/16/22 19:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/16/22 19:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/16/22 19:04	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/16/22 19:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/16/22 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*		*03/16/22 19:04*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*		*03/16/22 19:04*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Client Sample ID: MW-5

Lab Sample ID: 820-3626-3
Matrix: Water
Date Collected: 03/08/22 13:19
Date Received: 03/10/22 09:42

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/18/22 13:35	1

Client Sample ID: MW-9

Lab Sample ID: 820-3626-4
Matrix: Water
Date Collected: 03/08/22 14:08
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/16/22 19:30	1
Toluene	<0.00200	U	0.00200		mg/L			03/16/22 19:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/16/22 19:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/16/22 19:30	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/16/22 19:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/16/22 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*		*03/16/22 19:30*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*		*03/16/22 19:30*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/18/22 13:35	1

Client Sample ID: MW-7

Lab Sample ID: 820-3626-5
Matrix: Water
Date Collected: 03/08/22 15:01
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/16/22 19:57	1
Toluene	<0.00200	U	0.00200		mg/L			03/16/22 19:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/16/22 19:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/16/22 19:57	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/16/22 19:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/16/22 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*139*	*S1+*	*70 - 130*		*03/16/22 19:57*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*		*03/16/22 19:57*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/18/22 13:35	1

Client Sample ID: MW-11

Lab Sample ID: 820-3626-6
Matrix: Water
Date Collected: 03/08/22 15:40
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/16/22 20:24	1
Toluene	<0.00200	U	0.00200		mg/L			03/16/22 20:24	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Client Sample ID: MW-11

Lab Sample ID: 820-3626-6
Matrix: Water
Date Collected: 03/08/22 15:40
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/16/22 20:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/16/22 20:24	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/16/22 20:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/16/22 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*03/16/22 20:24*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*		*03/16/22 20:24*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/18/22 13:35	1

Client Sample ID: MW-12

Lab Sample ID: 820-3626-7
Matrix: Water
Date Collected: 03/09/22 10:34
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/16/22 20:50	1
Toluene	<0.00200	U	0.00200		mg/L			03/16/22 20:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/16/22 20:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/16/22 20:50	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/16/22 20:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/16/22 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*		*03/16/22 20:50*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*		*03/16/22 20:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/18/22 13:35	1

Client Sample ID: MW-2

Lab Sample ID: 820-3626-8
Matrix: Water
Date Collected: 03/09/22 11:30
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0105**		0.00200		mg/L			03/18/22 17:47	1
Toluene	<0.00200	U	0.00200		mg/L			03/18/22 17:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/18/22 17:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/18/22 17:47	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/18/22 17:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/18/22 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*03/18/22 17:47*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*		*03/18/22 17:47*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Client Sample ID: MW-2

Lab Sample ID: 820-3626-8
Date Collected: 03/09/22 11:30
Matrix: Water
Date Received: 03/10/22 09:42

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0105**		0.00400		mg/L			03/18/22 13:35	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11100**		50.0		mg/L			03/21/22 12:25	100

Client Sample ID: MW-13

Lab Sample ID: 820-3626-9
Date Collected: 03/09/22 12:09
Matrix: Water
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/18/22 18:07	1
Toluene	<0.00200	U	0.00200		mg/L			03/18/22 18:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/18/22 18:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/18/22 18:07	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/18/22 18:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/18/22 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*03/18/22 18:07*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*		*03/18/22 18:07*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/18/22 13:35	1

Client Sample ID: MW-8

Lab Sample ID: 820-3626-10
Date Collected: 03/09/22 12:42
Matrix: Water
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/18/22 18:28	1
Toluene	<0.00200	U	0.00200		mg/L			03/18/22 18:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/18/22 18:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/18/22 18:28	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/18/22 18:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/18/22 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*03/18/22 18:28*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*		*03/18/22 18:28*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/18/22 13:35	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Client Sample ID: MW-3

Lab Sample ID: 820-3626-11
Matrix: Water
Date Collected: 03/09/22 13:35
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/17/22 00:50	1
Toluene	<0.00200	U	0.00200		mg/L			03/17/22 00:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/17/22 00:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/17/22 00:50	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/17/22 00:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/17/22 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*03/17/22 00:50*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*		*03/17/22 00:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/17/22 11:55	1

Client Sample ID: MW-4

Lab Sample ID: 820-3626-12
Matrix: Water
Date Collected: 03/09/22 14:22
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/17/22 01:10	1
Toluene	<0.00200	U	0.00200		mg/L			03/17/22 01:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/17/22 01:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/17/22 01:10	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/17/22 01:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/17/22 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*03/17/22 01:10*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*		*03/17/22 01:10*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/17/22 11:55	1

Client Sample ID: MW-14

Lab Sample ID: 820-3626-13
Matrix: Water
Date Collected: 03/09/22 14:59
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/17/22 01:30	1
Toluene	<0.00200	U	0.00200		mg/L			03/17/22 01:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/17/22 01:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/17/22 01:30	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/17/22 01:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/17/22 01:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*03/17/22 01:30*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*		*03/17/22 01:30*	*1*

Eurofins Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Client Sample ID: MW-14

Lab Sample ID: 820-3626-13
Matrix: Water
Date Collected: 03/09/22 14:59
Date Received: 03/10/22 09:42

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/17/22 11:55	1

Client Sample ID: DUP-1

Lab Sample ID: 820-3626-14
Matrix: Water
Date Collected: 03/09/22 00:00
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/17/22 01:51	1
Toluene	<0.00200	U	0.00200		mg/L			03/17/22 01:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/17/22 01:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/17/22 01:51	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/17/22 01:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/17/22 01:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*03/17/22 01:51*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*		*03/17/22 01:51*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/17/22 11:55	1

Client Sample ID: DUP-2

Lab Sample ID: 820-3626-15
Matrix: Water
Date Collected: 03/09/22 00:00
Date Received: 03/10/22 09:42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/17/22 02:11	1
Toluene	<0.00200	U	0.00200		mg/L			03/17/22 02:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/17/22 02:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/17/22 02:11	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/17/22 02:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/17/22 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*03/17/22 02:11*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*		*03/17/22 02:11*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			03/17/22 11:55	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
820-3626-1	MW-10	108	70										
820-3626-2	MW-6	130	77										
820-3626-3	MW-5	135 S1+	76										
820-3626-4	MW-9	138 S1+	84										
820-3626-5	MW-7	139 S1+	83										
820-3626-6	MW-11	108	95										
820-3626-7	MW-12	140 S1+	117										
820-3626-8	MW-2	104	104										
820-3626-8 MS	MW-2	98	102										
820-3626-8 MSD	MW-2	97	103										
820-3626-9	MW-13	106	104										
820-3626-10	MW-8	110	105										
820-3626-11	MW-3	105	102										
820-3626-11 MS	MW-3	101	102										
820-3626-11 MSD	MW-3	102	103										
820-3626-12	MW-4	112	103										
820-3626-13	MW-14	109	104										
820-3626-14	DUP-1	107	104										
820-3626-15	DUP-2	110	103										
880-12249-B-1 MS	Matrix Spike	110	71										
880-12249-B-1 MSD	Matrix Spike Duplicate	138 S1+	76										
LCS 880-21683/3	Lab Control Sample	114	85										
LCS 880-21692/34	Lab Control Sample	97	98										
LCS 880-21850/3	Lab Control Sample	93	102										
LCSD 880-21683/4	Lab Control Sample Dup	112	79										
LCSD 880-21692/35	Lab Control Sample Dup	100	102										
LCSD 880-21850/4	Lab Control Sample Dup	94	100										
MB 880-21671/5-A	Method Blank	97	99										
MB 880-21683/8	Method Blank	64 S1-	92										
MB 880-21692/39	Method Blank	100	100										
MB 880-21850/8	Method Blank	98	98										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21671/5-A
Matrix: Water
Analysis Batch: 21692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L		03/16/22 08:30	03/16/22 12:46	1
Toluene	<0.00200	U	0.00200		mg/L		03/16/22 08:30	03/16/22 12:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/L		03/16/22 08:30	03/16/22 12:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L		03/16/22 08:30	03/16/22 12:46	1
o-Xylene	<0.00200	U	0.00200		mg/L		03/16/22 08:30	03/16/22 12:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/L		03/16/22 08:30	03/16/22 12:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/16/22 08:30*	*03/16/22 12:46*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/16/22 08:30*	*03/16/22 12:46*	*1*

Lab Sample ID: MB 880-21683/8
Matrix: Water
Analysis Batch: 21683

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/16/22 11:57	1
Toluene	<0.00200	U	0.00200		mg/L			03/16/22 11:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/16/22 11:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/16/22 11:57	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/16/22 11:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/16/22 11:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*64*	*S1-*	*70 - 130*		*03/16/22 11:57*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*		*03/16/22 11:57*	*1*

Lab Sample ID: LCS 880-21683/3
Matrix: Water
Analysis Batch: 21683

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1007		mg/L		101	70 - 130
Toluene	0.100	0.08725		mg/L		87	70 - 130
Ethylbenzene	0.100	0.08808		mg/L		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1721		mg/L		86	70 - 130
o-Xylene	0.100	0.09183		mg/L		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

Lab Sample ID: LCSD 880-21683/4
Matrix: Water
Analysis Batch: 21683

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08326		mg/L		83	70 - 130	19	20

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-21683/4
Matrix: Water
Analysis Batch: 21683

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.09720		mg/L		97	70 - 130	11	20
Ethylbenzene			0.100	0.09386		mg/L		94	70 - 130	6	20
m-Xylene & p-Xylene			0.200	0.2060		mg/L		103	70 - 130	18	20
o-Xylene			0.100	0.09950		mg/L		100	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*

Lab Sample ID: 880-12249-B-1 MS
Matrix: Water
Analysis Batch: 21683

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F2	0.100	0.07240		mg/L		72	70 - 130
Toluene	<0.00200	U	0.100	0.08579		mg/L		85	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.08956		mg/L		90	70 - 130
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1741		mg/L		87	70 - 130
o-Xylene	<0.00200	U	0.100	0.08795		mg/L		88	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*

Lab Sample ID: 880-12249-B-1 MSD
Matrix: Water
Analysis Batch: 21683

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F2	0.100	0.1075	F2	mg/L		108	70 - 130	39	25
Toluene	<0.00200	U	0.100	0.1045		mg/L		104	70 - 130	20	25
Ethylbenzene	<0.00200	U	0.100	0.1127		mg/L		113	70 - 130	23	25
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2194		mg/L		110	70 - 130	23	25
o-Xylene	<0.00200	U	0.100	0.1104		mg/L		110	70 - 130	23	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*

Lab Sample ID: MB 880-21692/39
Matrix: Water
Analysis Batch: 21692

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/17/22 00:21	1
Toluene	<0.00200	U	0.00200		mg/L			03/17/22 00:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/17/22 00:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/17/22 00:21	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-21692/39
Matrix: Water
Analysis Batch: 21692

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/L			03/17/22 00:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/17/22 00:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*03/17/22 00:21*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*		*03/17/22 00:21*	*1*

Lab Sample ID: LCS 880-21692/34
Matrix: Water
Analysis Batch: 21692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09083		mg/L		91	70 - 130		
Toluene			0.100	0.09097		mg/L		91	70 - 130		
Ethylbenzene			0.100	0.09060		mg/L		91	70 - 130		
m-Xylene & p-Xylene			0.200	0.2127		mg/L		106	70 - 130		
o-Xylene			0.100	0.1053		mg/L		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-21692/35
Matrix: Water
Analysis Batch: 21692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09965		mg/L		100	70 - 130	9	20
Toluene			0.100	0.09874		mg/L		99	70 - 130	8	20
Ethylbenzene			0.100	0.09846		mg/L		98	70 - 130	8	20
m-Xylene & p-Xylene			0.200	0.2328		mg/L		116	70 - 130	9	20
o-Xylene			0.100	0.1147		mg/L		115	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 820-3626-11 MS
Matrix: Water
Analysis Batch: 21692

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U	0.100	0.1127		mg/L		112	70 - 130		
Toluene	<0.00200	U	0.100	0.1090		mg/L		108	70 - 130		
Ethylbenzene	<0.00200	U	0.100	0.1068		mg/L		107	70 - 130		
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2527		mg/L		126	70 - 130		
o-Xylene	<0.00200	U	0.100	0.1249		mg/L		125	70 - 130		

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 820-3626-11 MS
Matrix: Water
Analysis Batch: 21692

Client Sample ID: MW-3
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 820-3626-11 MSD
Matrix: Water
Analysis Batch: 21692

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.1046		mg/L		104	70 - 130	7	25
Toluene	<0.00200	U	0.100	0.1011		mg/L		100	70 - 130	7	25
Ethylbenzene	<0.00200	U	0.100	0.09962		mg/L		100	70 - 130	7	25
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2363		mg/L		118	70 - 130	7	25
o-Xylene	<0.00200	U	0.100	0.1168		mg/L		117	70 - 130	7	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 880-21850/8
Matrix: Water
Analysis Batch: 21850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			03/18/22 17:18	1
Toluene	<0.00200	U	0.00200		mg/L			03/18/22 17:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			03/18/22 17:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			03/18/22 17:18	1
o-Xylene	<0.00200	U	0.00200		mg/L			03/18/22 17:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			03/18/22 17:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*03/18/22 17:18*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*		*03/18/22 17:18*	*1*

Lab Sample ID: LCS 880-21850/3
Matrix: Water
Analysis Batch: 21850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08896		mg/L		89	70 - 130		
Toluene			0.100	0.08630		mg/L		86	70 - 130		
Ethylbenzene			0.100	0.08561		mg/L		86	70 - 130		
m-Xylene & p-Xylene			0.200	0.2014		mg/L		101	70 - 130		
o-Xylene			0.100	0.09887		mg/L		99	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-21850/3
Matrix: Water
Analysis Batch: 21850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-21850/4
Matrix: Water
Analysis Batch: 21850

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08505		mg/L		85	70 - 130	5	20
Toluene			0.100	0.08714		mg/L		87	70 - 130	1	20
Ethylbenzene			0.100	0.08695		mg/L		87	70 - 130	2	20
m-Xylene & p-Xylene			0.200	0.2005		mg/L		100	70 - 130	0	20
o-Xylene			0.100	0.09949		mg/L		99	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 820-3626-8 MS
Matrix: Water
Analysis Batch: 21850

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	0.0105		0.100	0.1067		mg/L		96	70 - 130		
Toluene	<0.00200	U	0.100	0.09271		mg/L		92	70 - 130		
Ethylbenzene	<0.00200	U	0.100	0.09096		mg/L		91	70 - 130		
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2144		mg/L		107	70 - 130		
o-Xylene	<0.00200	U	0.100	0.1052		mg/L		105	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 820-3626-8 MSD
Matrix: Water
Analysis Batch: 21850

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0105		0.100	0.1096		mg/L		99	70 - 130	3	25
Toluene	<0.00200	U	0.100	0.09423		mg/L		93	70 - 130	2	25
Ethylbenzene	<0.00200	U	0.100	0.09345		mg/L		93	70 - 130	3	25
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2194		mg/L		110	70 - 130	2	25
o-Xylene	<0.00200	U	0.100	0.1078		mg/L		108	70 - 130	2	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21954/3
Matrix: Water
Analysis Batch: 21954

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			03/21/22 07:13	1

Lab Sample ID: LCS 880-21954/4
Matrix: Water
Analysis Batch: 21954

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			25.0	26.81		mg/L		107	90 - 110		

Lab Sample ID: LCSD 880-21954/5
Matrix: Water
Analysis Batch: 21954

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			25.0	27.07		mg/L		108	90 - 110	1	20

Lab Sample ID: 880-12359-F-1 MS
Matrix: Water
Analysis Batch: 21954

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	433	F1	250	725.9	F1	mg/L		117	90 - 110		

Lab Sample ID: 880-12359-F-1 MSD
Matrix: Water
Analysis Batch: 21954

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	433	F1	250	756.2	F1	mg/L		129	90 - 110	4	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

GC VOA

Prep Batch: 21671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21671/5-A	Method Blank	Total/NA	Water	5035	

Analysis Batch: 21683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3626-1	MW-10	Total/NA	Water	8021B	
820-3626-2	MW-6	Total/NA	Water	8021B	
820-3626-3	MW-5	Total/NA	Water	8021B	
820-3626-4	MW-9	Total/NA	Water	8021B	
820-3626-5	MW-7	Total/NA	Water	8021B	
820-3626-6	MW-11	Total/NA	Water	8021B	
820-3626-7	MW-12	Total/NA	Water	8021B	
MB 880-21683/8	Method Blank	Total/NA	Water	8021B	
LCS 880-21683/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-21683/4	Lab Control Sample Dup	Total/NA	Water	8021B	
880-12249-B-1 MS	Matrix Spike	Total/NA	Water	8021B	
880-12249-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

Analysis Batch: 21692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3626-11	MW-3	Total/NA	Water	8021B	
820-3626-12	MW-4	Total/NA	Water	8021B	
820-3626-13	MW-14	Total/NA	Water	8021B	
820-3626-14	DUP-1	Total/NA	Water	8021B	
820-3626-15	DUP-2	Total/NA	Water	8021B	
MB 880-21671/5-A	Method Blank	Total/NA	Water	8021B	21671
MB 880-21692/39	Method Blank	Total/NA	Water	8021B	
LCS 880-21692/34	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-21692/35	Lab Control Sample Dup	Total/NA	Water	8021B	
820-3626-11 MS	MW-3	Total/NA	Water	8021B	
820-3626-11 MSD	MW-3	Total/NA	Water	8021B	

Analysis Batch: 21807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3626-11	MW-3	Total/NA	Water	Total BTEX	
820-3626-12	MW-4	Total/NA	Water	Total BTEX	
820-3626-13	MW-14	Total/NA	Water	Total BTEX	
820-3626-14	DUP-1	Total/NA	Water	Total BTEX	
820-3626-15	DUP-2	Total/NA	Water	Total BTEX	

Analysis Batch: 21850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3626-8	MW-2	Total/NA	Water	8021B	
820-3626-9	MW-13	Total/NA	Water	8021B	
820-3626-10	MW-8	Total/NA	Water	8021B	
MB 880-21850/8	Method Blank	Total/NA	Water	8021B	
LCS 880-21850/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-21850/4	Lab Control Sample Dup	Total/NA	Water	8021B	
820-3626-8 MS	MW-2	Total/NA	Water	8021B	
820-3626-8 MSD	MW-2	Total/NA	Water	8021B	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

GC VOA

Analysis Batch: 21908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3626-1	MW-10	Total/NA	Water	Total BTEX	
820-3626-2	MW-6	Total/NA	Water	Total BTEX	
820-3626-3	MW-5	Total/NA	Water	Total BTEX	
820-3626-4	MW-9	Total/NA	Water	Total BTEX	
820-3626-5	MW-7	Total/NA	Water	Total BTEX	
820-3626-6	MW-11	Total/NA	Water	Total BTEX	
820-3626-7	MW-12	Total/NA	Water	Total BTEX	
820-3626-8	MW-2	Total/NA	Water	Total BTEX	
820-3626-9	MW-13	Total/NA	Water	Total BTEX	
820-3626-10	MW-8	Total/NA	Water	Total BTEX	

HPLC/IC

Analysis Batch: 21954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3626-8	MW-2	Total/NA	Water	300.0	
MB 880-21954/3	Method Blank	Total/NA	Water	300.0	
LCS 880-21954/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-21954/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-12359-F-1 MS	Matrix Spike	Total/NA	Water	300.0	
880-12359-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Client Sample ID: MW-10
Date Collected: 03/08/22 11:07
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21683	03/16/22 18:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21908	03/18/22 13:35	AJ	XEN MID

Client Sample ID: MW-6
Date Collected: 03/08/22 12:38
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21683	03/16/22 18:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21908	03/18/22 13:35	AJ	XEN MID

Client Sample ID: MW-5
Date Collected: 03/08/22 13:19
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21683	03/16/22 19:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21908	03/18/22 13:35	AJ	XEN MID

Client Sample ID: MW-9
Date Collected: 03/08/22 14:08
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21683	03/16/22 19:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21908	03/18/22 13:35	AJ	XEN MID

Client Sample ID: MW-7
Date Collected: 03/08/22 15:01
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21683	03/16/22 19:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21908	03/18/22 13:35	AJ	XEN MID

Client Sample ID: MW-11
Date Collected: 03/08/22 15:40
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21683	03/16/22 20:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21908	03/18/22 13:35	AJ	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Client Sample ID: MW-12
Date Collected: 03/09/22 10:34
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21683	03/16/22 20:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21908	03/18/22 13:35	AJ	XEN MID

Client Sample ID: MW-2
Date Collected: 03/09/22 11:30
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/18/22 17:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21908	03/18/22 13:35	AJ	XEN MID
Total/NA	Analysis	300.0		100			21954	03/21/22 12:25	CH	XEN MID

Client Sample ID: MW-13
Date Collected: 03/09/22 12:09
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/18/22 18:07	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21908	03/18/22 13:35	AJ	XEN MID

Client Sample ID: MW-8
Date Collected: 03/09/22 12:42
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/18/22 18:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21908	03/18/22 13:35	AJ	XEN MID

Client Sample ID: MW-3
Date Collected: 03/09/22 13:35
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21692	03/17/22 00:50	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21807	03/17/22 11:55	AJ	XEN MID

Client Sample ID: MW-4
Date Collected: 03/09/22 14:22
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3626-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21692	03/17/22 01:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21807	03/17/22 11:55	AJ	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Client Sample ID: MW-14

Lab Sample ID: 820-3626-13

Date Collected: 03/09/22 14:59
Matrix: Water
Date Received: 03/10/22 09:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21692	03/17/22 01:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21807	03/17/22 11:55	AJ	XEN MID

Client Sample ID: DUP-1

Lab Sample ID: 820-3626-14

Date Collected: 03/09/22 00:00
Matrix: Water
Date Received: 03/10/22 09:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21692	03/17/22 01:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21807	03/17/22 11:55	AJ	XEN MID

Client Sample ID: DUP-2

Lab Sample ID: 820-3626-15

Date Collected: 03/09/22 00:00
Matrix: Water
Date Received: 03/10/22 09:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	21692	03/17/22 02:11	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21807	03/17/22 11:55	AJ	XEN MID

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Water	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5030B	Purge and Trap	SW846	XEN MID

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3626-1
SDG: AR227010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-3626-1	MW-10	Water	03/08/22 11:07	03/10/22 09:42
820-3626-2	MW-6	Water	03/08/22 12:38	03/10/22 09:42
820-3626-3	MW-5	Water	03/08/22 13:19	03/10/22 09:42
820-3626-4	MW-9	Water	03/08/22 14:08	03/10/22 09:42
820-3626-5	MW-7	Water	03/08/22 15:01	03/10/22 09:42
820-3626-6	MW-11	Water	03/08/22 15:40	03/10/22 09:42
820-3626-7	MW-12	Water	03/09/22 10:34	03/10/22 09:42
820-3626-8	MW-2	Water	03/09/22 11:30	03/10/22 09:42
820-3626-9	MW-13	Water	03/09/22 12:09	03/10/22 09:42
820-3626-10	MW-8	Water	03/09/22 12:42	03/10/22 09:42
820-3626-11	MW-3	Water	03/09/22 13:35	03/10/22 09:42
820-3626-12	MW-4	Water	03/09/22 14:22	03/10/22 09:42
820-3626-13	MW-14	Water	03/09/22 14:59	03/10/22 09:42
820-3626-14	DUP-1	Water	03/09/22 00:00	03/10/22 09:42
820-3626-15	DUP-2	Water	03/09/22 00:00	03/10/22 09:42

Loc: 820
3626

3626

CHAIN OF CUSTODY RECORD

terracon

Laboratory: Xenco Laboratories
Address: 6701 Aberdeen Avenue, Suite 9
Lubbock, TX 79424
Phone: (806) 794-1296
Contact: Brett Dennis
PO/SO #:

Office Location: Lubbock
Project Manager: Brett Dennis
Sampler's Name: Aaron Adams
Sampler's Signature:

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): -0.1/+0.2 TR 3/10

Page 1 of 2

Project Number: AR227010
Project Name: 14" Vac to Jal Legacy (SRS # 2009-092)

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 40 ml VOA	250 ml Poly			BTEX (EPA Method 8021B)	Chloride (Total) (EPA 300)						Lab Sample ID
GW	03/08/22	11:07		X	MW-10			3				X							
GW	03/08/22	12:38		X	MW-6			3				X							
GW	03/08/22	13:19		X	MW-5			3				X							
GW	03/08/22	14:08		X	MW-9			3				X							
GW	03/08/22	15:01		X	MW-7			3				X							
GW	03/08/22	15:40		X	MW-11			3				X							
GW	03/09/22	10:34		X	MW-12			3				X							
GW	03/09/22	11:30		X	MW-2			3	1			X	X						
GW	03/09/22	12:09		X	MW-13			3				X							
GW	03/09/22	12:42		X	MW-8			3				X							

820-3626 Chain of Custody

TURNAROUND TIME: [X] Normal [ ] 48-Hour Rush [ ] 24-Hour Rush
TRRP Laboratory Review Checklist [ ] Yes [ ] No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
Aaron Adams	3-9-22	18:32		3-9-22	18:32
	3-10-22	9:42	Teddy Randolph	3/10/22	0942

NOTES:
E-MAIL RESULTS TO:
1. CJBRYANT@PAALP.COM
2. BRETT.DENNIS@TERRACON.COM
3. ERIN.LOYD@TERRACON.COM

Matrix: WW-Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube SL - Sludge
Container: VOA - 40 ml vial A/G - Amber Glass 1L 250 ml = Glass wide mouth P/O - Plastic or other _____

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco Laboratories
Address: 6701 Aberdeen Avenue, Suite 9
Lubbock, TX 79424

Office Location: Lubbock
Phone: (806) 794-1296
Project Manager: Brett Dennis
Contact: Brett Dennis
PO/SO #:
Sampler's Name: Aaron Adams
Sampler's Signature:

Project Number: AR227010
Project Name: 14" Vac to Jal Legacy (SRS # 2009-092)

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): -0.1/+0.1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 40 ml VOA				BTEX (EPA Method 8021B)							Lab Sample ID
GW	03/09/22	13:35		X	MW-3			3				X							
GW	03/09/22	14:22		X	MW-4			3				X							
GW	03/09/22	14:59		X	MW-14			3				X							
GW	03/09/22			X	DUP-1			3				X							
GW	03/09/22			X	DUP-2			3				X							

TURNAROUND TIME: [X] Normal [ ] 48-Hour Rush [ ] 24-Hour Rush
TRRP Laboratory Review Checklist: [ ] Yes [ ] No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
	3-9-22	18:32		3-9-22	18:32
	3/10/22	9:42	Teddy Kendall Le	3/10/22	0942

NOTES:
E-MAIL RESULTS TO:
1. CJBRYANT@PAAAP.COM
2. BRETT.DENNIS@TERRACON.COM
3. ERIN.LOYD@TERRACON.COM

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml = Glass wide mouth; P/O - Plastic or other _____

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-3628-1
Laboratory Sample Delivery Group: AR227010
Client Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

For:
Terracon Consulting Eng & Scientists
1211 West Florida Avenue
Midland, Texas 79701

Attn: Brett Dennis

JKramer

Authorized for release by:
3/16/2022 7:13:23 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Laboratory Job ID: 820-3628-1
SDG: AR227010

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Job ID: 820-3628-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-3628-1

Receipt
The samples were received on 3/10/2022 9:42 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C

GC/MS Semi VOA
Method 8270D_SIM: The surrogate recovery for the laboratory Control Sample Duplicate (LCSD) associated with preparation batch 860-44739 and analytical batch 860-44919 was outside the upper control limits. Spiked analytes were recovered within control limits, therefore data was accepted.

Method 8270D_SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-44739 and analytical batch 860-44919 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D_SIM: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample: (860-22287-N-5-A MS). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Method 8270D_SIM: Surrogate recovery for the following samples were outside the upper control limit: MW-3 (820-3628-1), MW-5 (820-3628-3), MW-6 (820-3628-4), MW-7 (820-3628-5), MW-8 (820-3628-6) and MW-9 (820-3628-7). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-3

Date Collected: 03/09/22 13:35
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-1

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
2-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Acenaphthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Acenaphthylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Benzo[a]anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Benzo[a]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Benzo[b]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Benzo[g,h,i]perylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Benzo[k]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Chrysene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Dibenz(a,h)anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Dibenzofuran	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Fluorene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Indeno[1,2,3-cd]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Naphthalene	<0.00362	U	0.00362		mg/L		03/11/22 18:38	03/15/22 12:24	1
Phenanthrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*151*	*S1+*	*54 - 146*	*03/11/22 18:38*	*03/15/22 12:24*	*1*
Nitrobenzene-d5	*125*		*46 - 151*	*03/11/22 18:38*	*03/15/22 12:24*	*1*
p-Terphenyl-d14	*85*		*51 - 139*	*03/11/22 18:38*	*03/15/22 12:24*	*1*

Client Sample ID: MW-4

Date Collected: 03/09/22 14:22
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-2

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
2-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Acenaphthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Acenaphthylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Benzo[a]anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Benzo[a]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Benzo[b]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Benzo[g,h,i]perylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Benzo[k]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Chrysene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Dibenz(a,h)anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Dibenzofuran	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Fluorene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Indeno[1,2,3-cd]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Naphthalene	<0.00361	U	0.00361		mg/L		03/11/22 18:38	03/15/22 12:43	1
Phenanthrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-4
Date Collected: 03/09/22 14:22
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	134		54 - 146	03/11/22 18:38	03/15/22 12:43	1
Nitrobenzene-d5	115		46 - 151	03/11/22 18:38	03/15/22 12:43	1
p-Terphenyl-d14	61		51 - 139	03/11/22 18:38	03/15/22 12:43	1

Client Sample ID: MW-5
Date Collected: 03/08/22 13:19
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-3
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
2-Methylnaphthalene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Acenaphthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Acenaphthylene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Benzo[a]anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Benzo[a]pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Benzo[b]fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Benzo[g,h,i]perylene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Benzo[k]fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Chrysene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Dibenz(a,h)anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Dibenzofuran	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Fluorene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Indeno[1,2,3-cd]pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Naphthalene	<0.00360	U	0.00360		mg/L		03/11/22 18:38	03/15/22 13:02	1
Phenanthrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	174	S1+	54 - 146	03/11/22 18:38	03/15/22 13:02	1
Nitrobenzene-d5	145		46 - 151	03/11/22 18:38	03/15/22 13:02	1
p-Terphenyl-d14	67		51 - 139	03/11/22 18:38	03/15/22 13:02	1

Client Sample ID: MW-6
Date Collected: 03/08/22 12:38
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-4
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
2-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Acenaphthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Acenaphthylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Benzo[a]anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Benzo[a]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Benzo[b]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Benzo[g,h,i]perylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Benzo[k]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1

Eurofins Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-6

Date Collected: 03/08/22 12:38
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-4
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Dibenz(a,h)anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Dibenzofuran	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Fluorene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Indeno[1,2,3-cd]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Naphthalene	<0.00362	U	0.00362		mg/L		03/11/22 18:38	03/15/22 13:22	1
Phenanthrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*158*	*S1+*	*54 - 146*	*03/11/22 18:38*	*03/15/22 13:22*	*1*
Nitrobenzene-d5	*132*		*46 - 151*	*03/11/22 18:38*	*03/15/22 13:22*	*1*
p-Terphenyl-d14	*81*		*51 - 139*	*03/11/22 18:38*	*03/15/22 13:22*	*1*

Client Sample ID: MW-7

Date Collected: 03/08/22 15:01
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-5
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
2-Methylnaphthalene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Acenaphthene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Acenaphthylene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Anthracene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Benzo[a]anthracene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Benzo[a]pyrene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Benzo[b]fluoranthene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Benzo[g,h,i]perylene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Benzo[k]fluoranthene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Chrysene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Dibenz(a,h)anthracene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Dibenzofuran	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Fluoranthene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Fluorene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Indeno[1,2,3-cd]pyrene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Naphthalene	<0.00385	U	0.00385		mg/L		03/11/22 18:38	03/15/22 13:41	1
Phenanthrene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Pyrene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*149*	*S1+*	*54 - 146*	*03/11/22 18:38*	*03/15/22 13:41*	*1*
Nitrobenzene-d5	*130*		*46 - 151*	*03/11/22 18:38*	*03/15/22 13:41*	*1*
p-Terphenyl-d14	*96*		*51 - 139*	*03/11/22 18:38*	*03/15/22 13:41*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-8

Date Collected: 03/09/22 12:42
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-6

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
2-Methylnaphthalene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Acenaphthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Acenaphthylene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Benzo[a]anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Benzo[a]pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Benzo[b]fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Benzo[g,h,i]perylene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Benzo[k]fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Chrysene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Dibenz(a,h)anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Dibenzofuran	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Fluorene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Indeno[1,2,3-cd]pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Naphthalene	<0.00360	U	0.00360		mg/L		03/11/22 18:38	03/15/22 14:00	1
Phenanthrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*161*	*S1+*	*54 - 146*	*03/11/22 18:38*	*03/15/22 14:00*	*1*
Nitrobenzene-d5	*137*		*46 - 151*	*03/11/22 18:38*	*03/15/22 14:00*	*1*
p-Terphenyl-d14	*71*		*51 - 139*	*03/11/22 18:38*	*03/15/22 14:00*	*1*

Client Sample ID: MW-9

Date Collected: 03/08/22 14:08
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-7

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
2-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Acenaphthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Acenaphthylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Benzo[a]anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Benzo[a]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Benzo[b]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Benzo[g,h,i]perylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Benzo[k]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Chrysene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Dibenz(a,h)anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Dibenzofuran	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Fluorene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Indeno[1,2,3-cd]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Naphthalene	<0.00362	U	0.00362		mg/L		03/11/22 18:38	03/15/22 14:19	1
Phenanthrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-9
Date Collected: 03/08/22 14:08
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	175	S1+	54 - 146	03/11/22 18:38	03/15/22 14:19	1
Nitrobenzene-d5	146		46 - 151	03/11/22 18:38	03/15/22 14:19	1
p-Terphenyl-d14	102		51 - 139	03/11/22 18:38	03/15/22 14:19	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(54-146)	(46-151)	(51-139)
820-3628-1	MW-3	151 S1+	125	85
820-3628-2	MW-4	134	115	61
820-3628-3	MW-5	174 S1+	145	67
820-3628-4	MW-6	158 S1+	132	81
820-3628-5	MW-7	149 S1+	130	96
820-3628-6	MW-8	161 S1+	137	71
820-3628-7	MW-9	175 S1+	146	102
860-22287-N-5-A MS	Matrix Spike	152 S1+	138	128
860-22287-O-5-B MSD	Matrix Spike Duplicate	140	129	106
LCS 860-44739/2-A	Lab Control Sample	128	127	133
LCSD 860-44739/3-A	Lab Control Sample Dup	137	131	140 S1+
MB 860-44739/1-A	Method Blank	144	120	126

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHd14 = p-Terphenyl-d14

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 860-44739/1-A
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44739

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
2-Methylnaphthalene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Acenaphthene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Acenaphthylene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Anthracene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Benzo[a]anthracene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Benzo[a]pyrene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Benzo[b]fluoranthene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Benzo[g,h,i]perylene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Benzo[k]fluoranthene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Chrysene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Dibenz(a,h)anthracene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Dibenzofuran	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Fluoranthene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Fluorene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Indeno[1,2,3-cd]pyrene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Naphthalene	<0.00365	U	0.00365		mg/L		03/11/22 18:38	03/14/22 19:18	1
Phenanthrene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Pyrene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*144*		*54 - 146*	*03/11/22 18:38*	*03/14/22 19:18*	*1*
Nitrobenzene-d5	*120*		*46 - 151*	*03/11/22 18:38*	*03/14/22 19:18*	*1*
p-Terphenyl-d14	*126*		*51 - 139*	*03/11/22 18:38*	*03/14/22 19:18*	*1*

Lab Sample ID: LCS 860-44739/2-A
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44739

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	0.0182	0.02477		mg/L		136	64 - 167
2-Methylnaphthalene	0.0182	0.02580		mg/L		142	63 - 166
Acenaphthene	0.0182	0.02460		mg/L		135	66 - 174
Acenaphthylene	0.0182	0.02540		mg/L		140	67 - 182
Anthracene	0.0182	0.02525		mg/L		139	55 - 191
Benzo[a]anthracene	0.0182	0.02279		mg/L		125	16 - 171
Benzo[a]pyrene	0.0182	0.02301		mg/L		127	10 - 165
Benzo[b]fluoranthene	0.0182	0.02406		mg/L		132	10 - 166
Benzo[g,h,i]perylene	0.0182	0.02246		mg/L		124	10 - 154
Benzo[k]fluoranthene	0.0182	0.02299		mg/L		126	10 - 178
Chrysene	0.0182	0.02324		mg/L		128	10 - 172
Dibenz(a,h)anthracene	0.0182	0.02332		mg/L		128	10 - 168
Dibenzofuran	0.0182	0.02543		mg/L		140	68 - 178
Fluoranthene	0.0182	0.02526		mg/L		139	52 - 185
Fluorene	0.0182	0.02512		mg/L		138	64 - 184
Indeno[1,2,3-cd]pyrene	0.0182	0.02380		mg/L		131	10 - 160
Naphthalene	0.0182	0.02436		mg/L		134	66 - 166
Phenanthrene	0.0182	0.02478		mg/L		136	66 - 184

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 860-44739/2-A
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44739

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Pyrene			0.0182	0.02456		mg/L		135	58 - 181		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*128*		*54 - 146*
Nitrobenzene-d5	*127*		*46 - 151*
p-Terphenyl-d14	*133*		*51 - 139*

Lab Sample ID: LCSD 860-44739/3-A
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 44739

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene			0.0182	0.02515		mg/L		138	64 - 167	2	40
2-Methylnaphthalene			0.0182	0.02616		mg/L		144	63 - 166	1	40
Acenaphthene			0.0182	0.02529		mg/L		139	66 - 174	3	40
Acenaphthylene			0.0182	0.02600		mg/L		143	67 - 182	2	40
Anthracene			0.0182	0.02591		mg/L		142	55 - 191	3	40
Benzo[a]anthracene			0.0182	0.02351		mg/L		129	16 - 171	3	50
Benzo[a]pyrene			0.0182	0.02417		mg/L		133	10 - 165	5	50
Benzo[b]fluoranthene			0.0182	0.02540		mg/L		139	10 - 166	5	50
Benzo[g,h,i]perylene			0.0182	0.02424		mg/L		133	10 - 154	8	50
Benzo[k]fluoranthene			0.0182	0.02395		mg/L		131	10 - 178	4	50
Chrysene			0.0182	0.02423		mg/L		133	10 - 172	4	50
Dibenz(a,h)anthracene			0.0182	0.02511		mg/L		138	10 - 168	7	50
Dibenzofuran			0.0182	0.02589		mg/L		142	68 - 178	2	40
Fluoranthene			0.0182	0.02572		mg/L		141	52 - 185	2	40
Fluorene			0.0182	0.02572		mg/L		141	64 - 184	2	40
Indeno[1,2,3-cd]pyrene			0.0182	0.02559		mg/L		140	10 - 160	7	50
Naphthalene			0.0182	0.02485		mg/L		136	66 - 166	2	40
Phenanthrene			0.0182	0.02545		mg/L		140	66 - 184	3	40
Pyrene			0.0182	0.02521		mg/L		138	58 - 181	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*137*		*54 - 146*
Nitrobenzene-d5	*131*		*46 - 151*
p-Terphenyl-d14	*140*	*S1+*	*51 - 139*

Lab Sample ID: 860-22287-N-5-A MS
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 44739

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1-Methylnaphthalene	<0.000183	U	0.0182	0.02508		mg/L		137	70 - 146		
2-Methylnaphthalene	<0.000183	U F1	0.0182	0.02592	F1	mg/L		142	74 - 141		
Acenaphthene	<0.000183	U	0.0182	0.02582		mg/L		141	75 - 147		
Acenaphthylene	<0.000183	U	0.0182	0.02630		mg/L		144	78 - 153		
Anthracene	<0.000183	U	0.0182	0.02618		mg/L		143	73 - 155		
Benzo[a]anthracene	<0.000183	U	0.0182	0.02423		mg/L		133	77 - 151		

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 860-22287-N-5-A MS
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 44739

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	<0.000183	U	0.0182	0.02570		mg/L		141	56 - 163
Benzo[b]fluoranthene	<0.000183	U F1	0.0182	0.02765	F1	mg/L		152	74 - 148
Benzo[g,h,i]perylene	<0.000183	U	0.0182	0.02602		mg/L		143	77 - 147
Benzo[k]fluoranthene	<0.000183	U	0.0182	0.02551		mg/L		140	67 - 152
Chrysene	<0.000183	U	0.0182	0.02516		mg/L		138	66 - 156
Dibenz(a,h)anthracene	<0.000183	U	0.0182	0.02705		mg/L		148	71 - 152
Dibenzofuran	<0.000183	U	0.0182	0.02668		mg/L		146	70 - 168
Fluoranthene	<0.000183	U	0.0182	0.02600		mg/L		142	78 - 158
Fluorene	<0.000183	U	0.0182	0.02637		mg/L		145	79 - 158
Indeno[1,2,3-cd]pyrene	<0.000183	U	0.0182	0.02758		mg/L		151	76 - 160
Naphthalene	<0.00365	U	0.0182	0.02425		mg/L		133	72 - 142
Phenanthrene	<0.000183	U F1	0.0182	0.02597	F1	mg/L		142	76 - 139
Pyrene	<0.000183	U	0.0182	0.02555		mg/L		140	74 - 158

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*152*	*S1+*	*54 - 146*
Nitrobenzene-d5	*138*		*46 - 151*
p-Terphenyl-d14	*128*		*51 - 139*

Lab Sample ID: 860-22287-O-5-B MSD
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 44739

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.000183	U	0.0182	0.02403		mg/L		132	70 - 146	4	30
2-Methylnaphthalene	<0.000183	U F1	0.0182	0.02494		mg/L		137	74 - 141	4	30
Acenaphthene	<0.000183	U	0.0182	0.02438		mg/L		134	75 - 147	6	30
Acenaphthylene	<0.000183	U	0.0182	0.02509		mg/L		138	78 - 153	5	30
Anthracene	<0.000183	U	0.0182	0.02489		mg/L		137	73 - 155	5	30
Benzo[a]anthracene	<0.000183	U	0.0182	0.02129		mg/L		117	77 - 151	13	30
Benzo[a]pyrene	<0.000183	U	0.0182	0.02174		mg/L		119	56 - 163	17	30
Benzo[b]fluoranthene	<0.000183	U F1	0.0182	0.02397		mg/L		132	74 - 148	14	30
Benzo[g,h,i]perylene	<0.000183	U	0.0182	0.02175		mg/L		119	77 - 147	18	30
Benzo[k]fluoranthene	<0.000183	U	0.0182	0.02152		mg/L		118	67 - 152	17	30
Chrysene	<0.000183	U	0.0182	0.02134		mg/L		117	66 - 156	16	30
Dibenz(a,h)anthracene	<0.000183	U	0.0182	0.02260		mg/L		124	71 - 152	18	30
Dibenzofuran	<0.000183	U	0.0182	0.02516		mg/L		138	70 - 168	6	30
Fluoranthene	<0.000183	U	0.0182	0.02431		mg/L		133	78 - 158	7	30
Fluorene	<0.000183	U	0.0182	0.02499		mg/L		137	79 - 158	5	30
Indeno[1,2,3-cd]pyrene	<0.000183	U	0.0182	0.02303		mg/L		126	76 - 160	18	30
Naphthalene	<0.00365	U	0.0182	0.02382		mg/L		131	72 - 142	2	30
Phenanthrene	<0.000183	U F1	0.0182	0.02458		mg/L		135	76 - 139	6	30
Pyrene	<0.000183	U	0.0182	0.02352		mg/L		129	74 - 158	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*140*		*54 - 146*
Nitrobenzene-d5	*129*		*46 - 151*
p-Terphenyl-d14	*106*		*51 - 139*

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

GC/MS Semi VOA

Prep Batch: 44739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3628-1	MW-3	Total/NA	Water	3511	
820-3628-2	MW-4	Total/NA	Water	3511	
820-3628-3	MW-5	Total/NA	Water	3511	
820-3628-4	MW-6	Total/NA	Water	3511	
820-3628-5	MW-7	Total/NA	Water	3511	
820-3628-6	MW-8	Total/NA	Water	3511	
820-3628-7	MW-9	Total/NA	Water	3511	
MB 860-44739/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-44739/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 860-44739/3-A	Lab Control Sample Dup	Total/NA	Water	3511	
860-22287-N-5-A MS	Matrix Spike	Total/NA	Water	3511	
860-22287-O-5-B MSD	Matrix Spike Duplicate	Total/NA	Water	3511	

Analysis Batch: 44919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-44739/1-A	Method Blank	Total/NA	Water	8270D SIM	44739
LCS 860-44739/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	44739
LCSD 860-44739/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	44739
860-22287-N-5-A MS	Matrix Spike	Total/NA	Water	8270D SIM	44739
860-22287-O-5-B MSD	Matrix Spike Duplicate	Total/NA	Water	8270D SIM	44739

Analysis Batch: 44947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3628-1	MW-3	Total/NA	Water	8270D SIM	44739
820-3628-2	MW-4	Total/NA	Water	8270D SIM	44739
820-3628-3	MW-5	Total/NA	Water	8270D SIM	44739
820-3628-4	MW-6	Total/NA	Water	8270D SIM	44739
820-3628-5	MW-7	Total/NA	Water	8270D SIM	44739
820-3628-6	MW-8	Total/NA	Water	8270D SIM	44739
820-3628-7	MW-9	Total/NA	Water	8270D SIM	44739

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-3
Date Collected: 03/09/22 13:35
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.3 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 12:24	IS	XEN STF

Client Sample ID: MW-4
Date Collected: 03/09/22 14:22
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.4 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 12:43	IS	XEN STF

Client Sample ID: MW-5
Date Collected: 03/08/22 13:19
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.6 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 13:02	IS	XEN STF

Client Sample ID: MW-6
Date Collected: 03/08/22 12:38
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.3 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 13:22	IS	XEN STF

Client Sample ID: MW-7
Date Collected: 03/08/22 15:01
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			52 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 13:41	IS	XEN STF

Client Sample ID: MW-8
Date Collected: 03/09/22 12:42
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.6 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 14:00	IS	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-9

Date Collected: 03/08/22 14:08
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.3 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 14:19	IS	XEN STF

Laboratory References:

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8270D SIM	3511	Water	1-Methylnaphthalene
8270D SIM	3511	Water	2-Methylnaphthalene
8270D SIM	3511	Water	Dibenzofuran

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Method	Method Description	Protocol	Laboratory
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	XEN STF
3511	Microextraction of Organic Compounds	SW846	XEN STF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-3628-1	MW-3	Water	03/09/22 13:35	03/10/22 09:42
820-3628-2	MW-4	Water	03/09/22 14:22	03/10/22 09:42
820-3628-3	MW-5	Water	03/08/22 13:19	03/10/22 09:42
820-3628-4	MW-6	Water	03/08/22 12:38	03/10/22 09:42
820-3628-5	MW-7	Water	03/08/22 15:01	03/10/22 09:42
820-3628-6	MW-8	Water	03/09/22 12:42	03/10/22 09:42
820-3628-7	MW-9	Water	03/08/22 14:08	03/10/22 09:42

Loc: 820
3628

3628

820-3628 Chain of Custody

CHAIN OF CUSTODY RECORD

TERRACON

Laboratory:	Xenco Laboratories	ANALYSIS REQUESTED	LAB USE ONLY
Address:	6701 Aberdeen Avenue, Suite 9 Lubbock, TX 79424		DUE DATE:
			TEMP OF COOLER WHEN RECEIVED (°C) -0.1/+0.1
Office Location	Lubbock	Phone:	(806) 794-1296
		Contact:	Brett Dennis
Project Manager:	Brett Dennis	PO/SO #:	Page 1 of 1
Sampler's Name:	Aaron Adams	Sampler's Signature	

Project Number	Project Name
AR227010	14" Vac to Jal Legacy (SRS # 2009-092)

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 60 ml VOA	PAHs (EPA Method 8270C)	Lab Sample ID
GW	03/09/22	13:35		X	MW-3			2	X	
GW	03/09/22	14:22	TRR per Aaron Adams	X	MW-4			2	X	
GW	03/08/22	~~14:39~~ 13:19		X	MW-5			2	X	
GW	03/08/22	12:38		X	MW-6			2	X	
GW	03/08/22	15:01		X	MW-7			2	X	
GW	03/09/22	12:42		X	MW-8			2	X	
GW	03/08/22	14:08		X	MW-9			2	X	

TURNAROUND TIME ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
	3-9-22	18:32		3-9-22	18:32
	3/10/22	9:42	Teddy Rendell Lo	3/10/22	0942

NOTES:

E-MAIL RESULTS TO:
1. CJBRYANT@PAALP.COM
2. BRETT.DENNIS@TERRACON.COM
3. ERIN.LOYD@TERRACON.COM

Matrix: WW-Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube SL - Sludge
Container: VOA - 40 ml vial A/G - Amber Glass 1L 250 ml = Glass wide mouth P/O - Plastic or other _____

Eurofins Lubbock
6701 Aberdeen Ave. Suite 8
Lubbock, TX 79424
Phone: 806-794-1296

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-3337 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Texas		Job #: 820-3628-1
Address: 4145 Greenbriar Dr	Due Date Requested: 3/16/2022			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: 14' Vac to Jal Legacy (SRS# 2009-092)	Project #: 82000284			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)
Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	8270D_SIM/3511	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-3 (820-3628-1)	3/9/22	13:35 Central		Water			X		
MW-4 (820-3628-2)	3/9/22	14:22 Central		Water			X		
MW-5 (820-3628-3)	3/9/22	13:19 Central		Water			X		
MW-6 (820-3628-4)	3/8/22	12:38 Central		Water			X		
MW-7 (820-3628-5)	3/8/22	15:01 Central		Water			X		
MW-8 (820-3628-6)	3/9/22	12:42 Central		Water			X		
MW-9 (820-3628-7)	3/8/22	14:08 Central		Water			X		

Temp: 12 IR ID:HOU-223
C/F -0.1
Corrected Temp: 1.1

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II III, IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Teddy Rundell Lee	3/10/22 17:00		FedEx		
Relinquished by: FedEx	Date/Time:	Company	Received by:	Date/Time: 3/11/2022 11:45	Company EX
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-3628-1
SDG Number: AR227010

Login Number: 3628
List Number: 1
Creator: Lee, Randell

List Source: Eurofins Lubbock

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-3628-1
SDG Number: AR227010

Login Number: 3628
List Number: 2
Creator: Milone, Jeancarlo

List Source: Eurofins Houston
List Creation: 03/11/22 12:40 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-3628-1
Laboratory Sample Delivery Group: AR227010
Client Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

For:
Terracon Consulting Eng & Scientists
1211 West Florida Avenue
Midland, Texas 79701

Attn: Brett Dennis

JKramer

Authorized for release by:
3/16/2022 7:13:23 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Laboratory Job ID: 820-3628-1
SDG: AR227010

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Job ID: 820-3628-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-3628-1

Receipt
The samples were received on 3/10/2022 9:42 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C

GC/MS Semi VOA
Method 8270D_SIM: The surrogate recovery for the laboratory Control Sample Duplicate (LCSD) associated with preparation batch 860-44739 and analytical batch 860-44919 was outside the upper control limits. Spiked analytes were recovered within control limits, therefore data was accepted.

Method 8270D_SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-44739 and analytical batch 860-44919 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D_SIM: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample: (860-22287-N-5-A MS). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Method 8270D_SIM: Surrogate recovery for the following samples were outside the upper control limit: MW-3 (820-3628-1), MW-5 (820-3628-3), MW-6 (820-3628-4), MW-7 (820-3628-5), MW-8 (820-3628-6) and MW-9 (820-3628-7). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-3

Date Collected: 03/09/22 13:35
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-1
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
2-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Acenaphthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Acenaphthylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Benzo[a]anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Benzo[a]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Benzo[b]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Benzo[g,h,i]perylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Benzo[k]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Chrysene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Dibenz(a,h)anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Dibenzofuran	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Fluorene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Indeno[1,2,3-cd]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Naphthalene	<0.00362	U	0.00362		mg/L		03/11/22 18:38	03/15/22 12:24	1
Phenanthrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1
Pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*151*	*S1+*	*54 - 146*	*03/11/22 18:38*	*03/15/22 12:24*	*1*
Nitrobenzene-d5	*125*		*46 - 151*	*03/11/22 18:38*	*03/15/22 12:24*	*1*
p-Terphenyl-d14	*85*		*51 - 139*	*03/11/22 18:38*	*03/15/22 12:24*	*1*

Client Sample ID: MW-4

Date Collected: 03/09/22 14:22
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-2
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
2-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Acenaphthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Acenaphthylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Benzo[a]anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Benzo[a]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Benzo[b]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Benzo[g,h,i]perylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Benzo[k]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Chrysene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Dibenz(a,h)anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Dibenzofuran	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Fluorene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Indeno[1,2,3-cd]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Naphthalene	<0.00361	U	0.00361		mg/L		03/11/22 18:38	03/15/22 12:43	1
Phenanthrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1
Pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 12:43	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-4

Date Collected: 03/09/22 14:22
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	134		54 - 146	03/11/22 18:38	03/15/22 12:43	1
Nitrobenzene-d5	115		46 - 151	03/11/22 18:38	03/15/22 12:43	1
p-Terphenyl-d14	61		51 - 139	03/11/22 18:38	03/15/22 12:43	1

Client Sample ID: MW-5

Date Collected: 03/08/22 13:19
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-3

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
2-Methylnaphthalene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Acenaphthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Acenaphthylene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Benzo[a]anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Benzo[a]pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Benzo[b]fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Benzo[g,h,i]perylene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Benzo[k]fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Chrysene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Dibenz(a,h)anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Dibenzofuran	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Fluorene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Indeno[1,2,3-cd]pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Naphthalene	<0.00360	U	0.00360		mg/L		03/11/22 18:38	03/15/22 13:02	1
Phenanthrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1
Pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 13:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	174	S1+	54 - 146	03/11/22 18:38	03/15/22 13:02	1
Nitrobenzene-d5	145		46 - 151	03/11/22 18:38	03/15/22 13:02	1
p-Terphenyl-d14	67		51 - 139	03/11/22 18:38	03/15/22 13:02	1

Client Sample ID: MW-6

Date Collected: 03/08/22 12:38
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-4

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
2-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Acenaphthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Acenaphthylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Benzo[a]anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Benzo[a]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Benzo[b]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Benzo[g,h,i]perylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Benzo[k]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1

Eurofins Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-6

Date Collected: 03/08/22 12:38
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-4

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Dibenz(a,h)anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Dibenzofuran	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Fluorene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Indeno[1,2,3-cd]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Naphthalene	<0.00362	U	0.00362		mg/L		03/11/22 18:38	03/15/22 13:22	1
Phenanthrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1
Pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*158*	*S1+*	*54 - 146*	*03/11/22 18:38*	*03/15/22 13:22*	*1*
Nitrobenzene-d5	*132*		*46 - 151*	*03/11/22 18:38*	*03/15/22 13:22*	*1*
p-Terphenyl-d14	*81*		*51 - 139*	*03/11/22 18:38*	*03/15/22 13:22*	*1*

Client Sample ID: MW-7

Date Collected: 03/08/22 15:01
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-5

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
2-Methylnaphthalene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Acenaphthene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Acenaphthylene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Anthracene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Benzo[a]anthracene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Benzo[a]pyrene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Benzo[b]fluoranthene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Benzo[g,h,i]perylene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Benzo[k]fluoranthene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Chrysene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Dibenz(a,h)anthracene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Dibenzofuran	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Fluoranthene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Fluorene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Indeno[1,2,3-cd]pyrene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Naphthalene	<0.00385	U	0.00385		mg/L		03/11/22 18:38	03/15/22 13:41	1
Phenanthrene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1
Pyrene	<0.000193	U	0.000193		mg/L		03/11/22 18:38	03/15/22 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*149*	*S1+*	*54 - 146*	*03/11/22 18:38*	*03/15/22 13:41*	*1*
Nitrobenzene-d5	*130*		*46 - 151*	*03/11/22 18:38*	*03/15/22 13:41*	*1*
p-Terphenyl-d14	*96*		*51 - 139*	*03/11/22 18:38*	*03/15/22 13:41*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-8

Date Collected: 03/09/22 12:42
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-6

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
2-Methylnaphthalene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Acenaphthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Acenaphthylene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Benzo[a]anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Benzo[a]pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Benzo[b]fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Benzo[g,h,i]perylene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Benzo[k]fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Chrysene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Dibenz(a,h)anthracene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Dibenzofuran	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Fluoranthene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Fluorene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Indeno[1,2,3-cd]pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Naphthalene	<0.00360	U	0.00360		mg/L		03/11/22 18:38	03/15/22 14:00	1
Phenanthrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1
Pyrene	<0.000180	U	0.000180		mg/L		03/11/22 18:38	03/15/22 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*161*	*S1+*	*54 - 146*	*03/11/22 18:38*	*03/15/22 14:00*	*1*
Nitrobenzene-d5	*137*		*46 - 151*	*03/11/22 18:38*	*03/15/22 14:00*	*1*
p-Terphenyl-d14	*71*		*51 - 139*	*03/11/22 18:38*	*03/15/22 14:00*	*1*

Client Sample ID: MW-9

Date Collected: 03/08/22 14:08
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-7

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
2-Methylnaphthalene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Acenaphthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Acenaphthylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Benzo[a]anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Benzo[a]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Benzo[b]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Benzo[g,h,i]perylene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Benzo[k]fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Chrysene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Dibenz(a,h)anthracene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Dibenzofuran	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Fluoranthene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Fluorene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Indeno[1,2,3-cd]pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Naphthalene	<0.00362	U	0.00362		mg/L		03/11/22 18:38	03/15/22 14:19	1
Phenanthrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1
Pyrene	<0.000181	U	0.000181		mg/L		03/11/22 18:38	03/15/22 14:19	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-9
Date Collected: 03/08/22 14:08
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	175	S1+	54 - 146	03/11/22 18:38	03/15/22 14:19	1
Nitrobenzene-d5	146		46 - 151	03/11/22 18:38	03/15/22 14:19	1
p-Terphenyl-d14	102		51 - 139	03/11/22 18:38	03/15/22 14:19	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(54-146)	(46-151)	(51-139)
820-3628-1	MW-3	151 S1+	125	85
820-3628-2	MW-4	134	115	61
820-3628-3	MW-5	174 S1+	145	67
820-3628-4	MW-6	158 S1+	132	81
820-3628-5	MW-7	149 S1+	130	96
820-3628-6	MW-8	161 S1+	137	71
820-3628-7	MW-9	175 S1+	146	102
860-22287-N-5-A MS	Matrix Spike	152 S1+	138	128
860-22287-O-5-B MSD	Matrix Spike Duplicate	140	129	106
LCS 860-44739/2-A	Lab Control Sample	128	127	133
LCSD 860-44739/3-A	Lab Control Sample Dup	137	131	140 S1+
MB 860-44739/1-A	Method Blank	144	120	126

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHd14 = p-Terphenyl-d14

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 860-44739/1-A
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44739

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
2-Methylnaphthalene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Acenaphthene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Acenaphthylene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Anthracene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Benzo[a]anthracene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Benzo[a]pyrene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Benzo[b]fluoranthene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Benzo[g,h,i]perylene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Benzo[k]fluoranthene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Chrysene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Dibenz(a,h)anthracene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Dibenzofuran	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Fluoranthene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Fluorene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Indeno[1,2,3-cd]pyrene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Naphthalene	<0.00365	U	0.00365		mg/L		03/11/22 18:38	03/14/22 19:18	1
Phenanthrene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1
Pyrene	<0.000182	U	0.000182		mg/L		03/11/22 18:38	03/14/22 19:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*144*		*54 - 146*	*03/11/22 18:38*	*03/14/22 19:18*	*1*
Nitrobenzene-d5	*120*		*46 - 151*	*03/11/22 18:38*	*03/14/22 19:18*	*1*
p-Terphenyl-d14	*126*		*51 - 139*	*03/11/22 18:38*	*03/14/22 19:18*	*1*

Lab Sample ID: LCS 860-44739/2-A
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44739

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	0.0182	0.02477		mg/L		136	64 - 167
2-Methylnaphthalene	0.0182	0.02580		mg/L		142	63 - 166
Acenaphthene	0.0182	0.02460		mg/L		135	66 - 174
Acenaphthylene	0.0182	0.02540		mg/L		140	67 - 182
Anthracene	0.0182	0.02525		mg/L		139	55 - 191
Benzo[a]anthracene	0.0182	0.02279		mg/L		125	16 - 171
Benzo[a]pyrene	0.0182	0.02301		mg/L		127	10 - 165
Benzo[b]fluoranthene	0.0182	0.02406		mg/L		132	10 - 166
Benzo[g,h,i]perylene	0.0182	0.02246		mg/L		124	10 - 154
Benzo[k]fluoranthene	0.0182	0.02299		mg/L		126	10 - 178
Chrysene	0.0182	0.02324		mg/L		128	10 - 172
Dibenz(a,h)anthracene	0.0182	0.02332		mg/L		128	10 - 168
Dibenzofuran	0.0182	0.02543		mg/L		140	68 - 178
Fluoranthene	0.0182	0.02526		mg/L		139	52 - 185
Fluorene	0.0182	0.02512		mg/L		138	64 - 184
Indeno[1,2,3-cd]pyrene	0.0182	0.02380		mg/L		131	10 - 160
Naphthalene	0.0182	0.02436		mg/L		134	66 - 166
Phenanthrene	0.0182	0.02478		mg/L		136	66 - 184

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 860-44739/2-A
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44739

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Pyrene			0.0182	0.02456		mg/L		135	58 - 181		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*128*		*54 - 146*
Nitrobenzene-d5	*127*		*46 - 151*
p-Terphenyl-d14	*133*		*51 - 139*

Lab Sample ID: LCSD 860-44739/3-A
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 44739

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene			0.0182	0.02515		mg/L		138	64 - 167	2	40
2-Methylnaphthalene			0.0182	0.02616		mg/L		144	63 - 166	1	40
Acenaphthene			0.0182	0.02529		mg/L		139	66 - 174	3	40
Acenaphthylene			0.0182	0.02600		mg/L		143	67 - 182	2	40
Anthracene			0.0182	0.02591		mg/L		142	55 - 191	3	40
Benzo[a]anthracene			0.0182	0.02351		mg/L		129	16 - 171	3	50
Benzo[a]pyrene			0.0182	0.02417		mg/L		133	10 - 165	5	50
Benzo[b]fluoranthene			0.0182	0.02540		mg/L		139	10 - 166	5	50
Benzo[g,h,i]perylene			0.0182	0.02424		mg/L		133	10 - 154	8	50
Benzo[k]fluoranthene			0.0182	0.02395		mg/L		131	10 - 178	4	50
Chrysene			0.0182	0.02423		mg/L		133	10 - 172	4	50
Dibenz(a,h)anthracene			0.0182	0.02511		mg/L		138	10 - 168	7	50
Dibenzofuran			0.0182	0.02589		mg/L		142	68 - 178	2	40
Fluoranthene			0.0182	0.02572		mg/L		141	52 - 185	2	40
Fluorene			0.0182	0.02572		mg/L		141	64 - 184	2	40
Indeno[1,2,3-cd]pyrene			0.0182	0.02559		mg/L		140	10 - 160	7	50
Naphthalene			0.0182	0.02485		mg/L		136	66 - 166	2	40
Phenanthrene			0.0182	0.02545		mg/L		140	66 - 184	3	40
Pyrene			0.0182	0.02521		mg/L		138	58 - 181	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*137*		*54 - 146*
Nitrobenzene-d5	*131*		*46 - 151*
p-Terphenyl-d14	*140*	*S1+*	*51 - 139*

Lab Sample ID: 860-22287-N-5-A MS
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 44739

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1-Methylnaphthalene	<0.000183	U	0.0182	0.02508		mg/L		137	70 - 146		
2-Methylnaphthalene	<0.000183	U F1	0.0182	0.02592	F1	mg/L		142	74 - 141		
Acenaphthene	<0.000183	U	0.0182	0.02582		mg/L		141	75 - 147		
Acenaphthylene	<0.000183	U	0.0182	0.02630		mg/L		144	78 - 153		
Anthracene	<0.000183	U	0.0182	0.02618		mg/L		143	73 - 155		
Benzo[a]anthracene	<0.000183	U	0.0182	0.02423		mg/L		133	77 - 151		

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 860-22287-N-5-A MS
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 44739

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	<0.000183	U	0.0182	0.02570		mg/L		141	56 - 163
Benzo[b]fluoranthene	<0.000183	U F1	0.0182	0.02765	F1	mg/L		152	74 - 148
Benzo[g,h,i]perylene	<0.000183	U	0.0182	0.02602		mg/L		143	77 - 147
Benzo[k]fluoranthene	<0.000183	U	0.0182	0.02551		mg/L		140	67 - 152
Chrysene	<0.000183	U	0.0182	0.02516		mg/L		138	66 - 156
Dibenz(a,h)anthracene	<0.000183	U	0.0182	0.02705		mg/L		148	71 - 152
Dibenzofuran	<0.000183	U	0.0182	0.02668		mg/L		146	70 - 168
Fluoranthene	<0.000183	U	0.0182	0.02600		mg/L		142	78 - 158
Fluorene	<0.000183	U	0.0182	0.02637		mg/L		145	79 - 158
Indeno[1,2,3-cd]pyrene	<0.000183	U	0.0182	0.02758		mg/L		151	76 - 160
Naphthalene	<0.00365	U	0.0182	0.02425		mg/L		133	72 - 142
Phenanthrene	<0.000183	U F1	0.0182	0.02597	F1	mg/L		142	76 - 139
Pyrene	<0.000183	U	0.0182	0.02555		mg/L		140	74 - 158

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*152*	*S1+*	*54 - 146*
Nitrobenzene-d5	*138*		*46 - 151*
p-Terphenyl-d14	*128*		*51 - 139*

Lab Sample ID: 860-22287-O-5-B MSD
Matrix: Water
Analysis Batch: 44919

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 44739

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.000183	U	0.0182	0.02403		mg/L		132	70 - 146	4	30
2-Methylnaphthalene	<0.000183	U F1	0.0182	0.02494		mg/L		137	74 - 141	4	30
Acenaphthene	<0.000183	U	0.0182	0.02438		mg/L		134	75 - 147	6	30
Acenaphthylene	<0.000183	U	0.0182	0.02509		mg/L		138	78 - 153	5	30
Anthracene	<0.000183	U	0.0182	0.02489		mg/L		137	73 - 155	5	30
Benzo[a]anthracene	<0.000183	U	0.0182	0.02129		mg/L		117	77 - 151	13	30
Benzo[a]pyrene	<0.000183	U	0.0182	0.02174		mg/L		119	56 - 163	17	30
Benzo[b]fluoranthene	<0.000183	U F1	0.0182	0.02397		mg/L		132	74 - 148	14	30
Benzo[g,h,i]perylene	<0.000183	U	0.0182	0.02175		mg/L		119	77 - 147	18	30
Benzo[k]fluoranthene	<0.000183	U	0.0182	0.02152		mg/L		118	67 - 152	17	30
Chrysene	<0.000183	U	0.0182	0.02134		mg/L		117	66 - 156	16	30
Dibenz(a,h)anthracene	<0.000183	U	0.0182	0.02260		mg/L		124	71 - 152	18	30
Dibenzofuran	<0.000183	U	0.0182	0.02516		mg/L		138	70 - 168	6	30
Fluoranthene	<0.000183	U	0.0182	0.02431		mg/L		133	78 - 158	7	30
Fluorene	<0.000183	U	0.0182	0.02499		mg/L		137	79 - 158	5	30
Indeno[1,2,3-cd]pyrene	<0.000183	U	0.0182	0.02303		mg/L		126	76 - 160	18	30
Naphthalene	<0.00365	U	0.0182	0.02382		mg/L		131	72 - 142	2	30
Phenanthrene	<0.000183	U F1	0.0182	0.02458		mg/L		135	76 - 139	6	30
Pyrene	<0.000183	U	0.0182	0.02352		mg/L		129	74 - 158	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*140*		*54 - 146*
Nitrobenzene-d5	*129*		*46 - 151*
p-Terphenyl-d14	*106*		*51 - 139*

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

GC/MS Semi VOA

Prep Batch: 44739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3628-1	MW-3	Total/NA	Water	3511	
820-3628-2	MW-4	Total/NA	Water	3511	
820-3628-3	MW-5	Total/NA	Water	3511	
820-3628-4	MW-6	Total/NA	Water	3511	
820-3628-5	MW-7	Total/NA	Water	3511	
820-3628-6	MW-8	Total/NA	Water	3511	
820-3628-7	MW-9	Total/NA	Water	3511	
MB 860-44739/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-44739/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 860-44739/3-A	Lab Control Sample Dup	Total/NA	Water	3511	
860-22287-N-5-A MS	Matrix Spike	Total/NA	Water	3511	
860-22287-O-5-B MSD	Matrix Spike Duplicate	Total/NA	Water	3511	

Analysis Batch: 44919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-44739/1-A	Method Blank	Total/NA	Water	8270D SIM	44739
LCS 860-44739/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	44739
LCSD 860-44739/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	44739
860-22287-N-5-A MS	Matrix Spike	Total/NA	Water	8270D SIM	44739
860-22287-O-5-B MSD	Matrix Spike Duplicate	Total/NA	Water	8270D SIM	44739

Analysis Batch: 44947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3628-1	MW-3	Total/NA	Water	8270D SIM	44739
820-3628-2	MW-4	Total/NA	Water	8270D SIM	44739
820-3628-3	MW-5	Total/NA	Water	8270D SIM	44739
820-3628-4	MW-6	Total/NA	Water	8270D SIM	44739
820-3628-5	MW-7	Total/NA	Water	8270D SIM	44739
820-3628-6	MW-8	Total/NA	Water	8270D SIM	44739
820-3628-7	MW-9	Total/NA	Water	8270D SIM	44739

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-3
Date Collected: 03/09/22 13:35
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.3 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 12:24	IS	XEN STF

Client Sample ID: MW-4
Date Collected: 03/09/22 14:22
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.4 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 12:43	IS	XEN STF

Client Sample ID: MW-5
Date Collected: 03/08/22 13:19
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.6 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 13:02	IS	XEN STF

Client Sample ID: MW-6
Date Collected: 03/08/22 12:38
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.3 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 13:22	IS	XEN STF

Client Sample ID: MW-7
Date Collected: 03/08/22 15:01
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			52 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 13:41	IS	XEN STF

Client Sample ID: MW-8
Date Collected: 03/09/22 12:42
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.6 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 14:00	IS	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Client Sample ID: MW-9
Date Collected: 03/08/22 14:08
Date Received: 03/10/22 09:42

Lab Sample ID: 820-3628-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			55.3 mL	2 mL	44739	03/11/22 18:38	MR	XEN STF
Total/NA	Analysis	8270D SIM		1			44947	03/15/22 14:19	IS	XEN STF

Laboratory References:

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8270D SIM	3511	Water	1-Methylnaphthalene
8270D SIM	3511	Water	2-Methylnaphthalene
8270D SIM	3511	Water	Dibenzofuran

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Method	Method Description	Protocol	Laboratory
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	XEN STF
3511	Microextraction of Organic Compounds	SW846	XEN STF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS# 2009-092)

Job ID: 820-3628-1
SDG: AR227010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-3628-1	MW-3	Water	03/09/22 13:35	03/10/22 09:42
820-3628-2	MW-4	Water	03/09/22 14:22	03/10/22 09:42
820-3628-3	MW-5	Water	03/08/22 13:19	03/10/22 09:42
820-3628-4	MW-6	Water	03/08/22 12:38	03/10/22 09:42
820-3628-5	MW-7	Water	03/08/22 15:01	03/10/22 09:42
820-3628-6	MW-8	Water	03/09/22 12:42	03/10/22 09:42
820-3628-7	MW-9	Water	03/08/22 14:08	03/10/22 09:42

Loc: 820
3628

3628

820-3628 Chain of Custody

CHAIN OF CUSTODY RECORD

TERRACON

Office Location	Lubbock	Laboratory:	Xenco Laboratories
Project Manager:	Brett Dennis	Address:	6701 Aberdeen Avenue, Suite 9, Lubbock, TX 79424
Sampler's Name:	Aaron Adams	Phone:	(806) 794-1296
Project Number	AR227010	Contact:	Brett Dennis
Project Name	14" Vac to Jal Legacy (SRS # 2009-092)	PO/SO #:	
Sampler's Signature			

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:

TEMP OF COOLER WHEN RECEIVED (°C): -0.1/+0.1

Page 1 of 1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 60 ml VOA	PAHs (EPA Method 8270C)	Lab Sample ID
GW	03/09/22	13:35		X	MW-3			2	X	
GW	03/09/22	14:22	TRR per Aaron Adams	X	MW-4			2	X	
GW	03/08/22	~~14:39~~ 13:19		X	MW-5			2	X	
GW	03/08/22	12:38		X	MW-6			2	X	
GW	03/08/22	15:01		X	MW-7			2	X	
GW	03/09/22	12:42		X	MW-8			2	X	
GW	03/08/22	14:08		X	MW-9			2	X	

TURNAROUND TIME ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
	3-9-22	18:32		3-9-22	18:32
	3/10/22	9:42	Teddy Rendell Lo	3/10/22	0942

NOTES:

E-MAIL RESULTS TO:
1. CJBRYANT@PAALP.COM
2. BRETT.DENNIS@TERRACON.COM
3. ERIN.LOYD@TERRACON.COM

Matrix: WW-Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube SL - Sludge
Container: VOA - 40 ml vial A/G - Amber Glass 1L 250 ml = Glass wide mouth P/O - Plastic or other _____

Eurofins Lubbock
6701 Aberdeen Ave. Suite 8
Lubbock, TX 79424
Phone: 806-794-1296

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-3337 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Texas		Job #: 820-3628-1
Address: 4145 Greenbriar Dr	Due Date Requested: 3/16/2022			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: 14' Vac to Jal Legacy (SRS# 2009-092)	Project #: 82000284			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_SIM/3511	Total Number of containers	Special Instructions/Note:
		Preservation Code:							
MW-3 (820-3628-1)	3/9/22	13:35 Central		Water			X		
MW-4 (820-3628-2)	3/9/22	14:22 Central		Water			X		
MW-5 (820-3628-3)	3/9/22	13:19 Central		Water			X		
MW-6 (820-3628-4)	3/8/22	12:38 Central		Water			X		
MW-7 (820-3628-5)	3/8/22	15:01 Central		Water			X		
MW-8 (820-3628-6)	3/9/22	12:42 Central		Water			X		
MW-9 (820-3628-7)	3/8/22	14:08 Central		Water			X		

Temp: 12 IR ID:HOU-223
C/F-0.1
Corrected Temp: 11

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II III, IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Teddy Rundell Lee	3/10/22 17:00		FedEx		
2	FedEx				3/11/2022 11:45	EX
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-3628-1
SDG Number: AR227010

Login Number: 3628
List Number: 1
Creator: Lee, Randell

List Source: Eurofins Lubbock

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-3628-1
SDG Number: AR227010

Login Number: 3628
List Number: 2
Creator: Milone, Jeancarlo

List Source: Eurofins Houston
List Creation: 03/11/22 12:40 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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ANALYTICAL REPORT

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-4742-1
Laboratory Sample Delivery Group: AR227010
Client Project/Site: 14-inch Vac to Jal Legacy

For:
Terracon Consulting Eng & Scientists
5847 50th St
Lubbock, Texas 79424

Attn: Brett Dennis

JKramer

Authorized for release by:
7/7/2022 1:30:51 PM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD,and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs
· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically “SAFE” if no coliform bacteria are detected. To be considered “SAFE” your report should indicate “<1 cfu/100mL” or “NEG” for the coliform test. If you report indicates a positive result “POS” or a value greater than or equal to one, then your supply is “UNSAFE FOR DRINKING” contact your local health department.

Warranties, Terms, and Conditions
· Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:
ERF = field staff performs tests under NJ State certification #02015
VL = field staff performs tests under NJ State certification #06005
WG = field staff performs tests under NJ State certification #PA001
H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-05499

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as “grab” samples unless otherwise identified.

· Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins’ online data portal “TotalAccess” will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).

Jessica Kramer
Project Manager
7/7/2022 1:30:51 PM

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Laboratory Job ID: 820-4742-1
SDG: AR227010

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Qualifiers

GC VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Job ID: 820-4742-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-4742-1

Receipt
The samples were received on 6/23/2022 3:03 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.1°C

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Client Sample ID: MW-5

Lab Sample ID: 820-4742-1
Date Collected: 06/21/22 11:05
Matrix: Water
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000560**	**J b**	0.00200	0.000408	mg/L			06/29/22 17:14	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 17:14	1
Ethylbenzene	<0.000657	U *	0.00200	0.000657	mg/L			06/29/22 17:14	1
m-Xylene & p-Xylene	<0.000629	U *	0.00400	0.000629	mg/L			06/29/22 17:14	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			06/29/22 17:14	1
Xylenes, Total	<0.000642	U *	0.00400	0.000642	mg/L			06/29/22 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*		*06/29/22 17:14*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*		*06/29/22 17:14*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: MW-6

Lab Sample ID: 820-4742-2
Date Collected: 06/21/22 11:49
Matrix: Water
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			06/29/22 17:35	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 17:35	1
Ethylbenzene	<0.000657	U *	0.00200	0.000657	mg/L			06/29/22 17:35	1
m-Xylene & p-Xylene	<0.000629	U *	0.00400	0.000629	mg/L			06/29/22 17:35	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			06/29/22 17:35	1
Xylenes, Total	<0.000642	U *	0.00400	0.000642	mg/L			06/29/22 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*		*06/29/22 17:35*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*		*06/29/22 17:35*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: MW-7

Lab Sample ID: 820-4742-3
Date Collected: 06/21/22 12:26
Matrix: Water
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00142**	**J b**	0.00200	0.000408	mg/L			06/29/22 17:55	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 17:55	1
Ethylbenzene	<0.000657	U *	0.00200	0.000657	mg/L			06/29/22 17:55	1
m-Xylene & p-Xylene	<0.000629	U *	0.00400	0.000629	mg/L			06/29/22 17:55	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			06/29/22 17:55	1
Xylenes, Total	<0.000642	U *	0.00400	0.000642	mg/L			06/29/22 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*		*06/29/22 17:55*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*		*06/29/22 17:55*	*1*

Eurofins Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Client Sample ID: MW-7

Lab Sample ID: 820-4742-3
Matrix: Water
Date Collected: 06/21/22 12:26
Date Received: 06/23/22 15:03

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00142**	**J**	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: MW-9

Lab Sample ID: 820-4742-4
Matrix: Water
Date Collected: 06/21/22 12:57
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			06/29/22 18:16	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 18:16	1
Ethylbenzene	<0.000657	U *	0.00200	0.000657	mg/L			06/29/22 18:16	1
m-Xylene & p-Xylene	<0.000629	U *	0.00400	0.000629	mg/L			06/29/22 18:16	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			06/29/22 18:16	1
Xylenes, Total	<0.000642	U *	0.00400	0.000642	mg/L			06/29/22 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*		*06/29/22 18:16*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*		*06/29/22 18:16*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: MW-11

Lab Sample ID: 820-4742-5
Matrix: Water
Date Collected: 06/21/22 13:31
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			06/29/22 18:37	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 18:37	1
Ethylbenzene	<0.000657	U *	0.00200	0.000657	mg/L			06/29/22 18:37	1
m-Xylene & p-Xylene	<0.000629	U *	0.00400	0.000629	mg/L			06/29/22 18:37	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			06/29/22 18:37	1
Xylenes, Total	<0.000642	U *	0.00400	0.000642	mg/L			06/29/22 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*		*06/29/22 18:37*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*		*06/29/22 18:37*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: MW-10

Lab Sample ID: 820-4742-6
Matrix: Water
Date Collected: 06/21/22 14:07
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00183**	**J b**	0.00200	0.000408	mg/L			06/29/22 18:58	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 18:58	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Client Sample ID: MW-10

Lab Sample ID: 820-4742-6
Date Collected: 06/21/22 14:07
Matrix: Water
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.000657	U *	0.00200	0.000657	mg/L			06/29/22 18:58	1
m-Xylene & p-Xylene	<0.000629	U *	0.00400	0.000629	mg/L			06/29/22 18:58	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			06/29/22 18:58	1
Xylenes, Total	<0.000642	U *	0.00400	0.000642	mg/L			06/29/22 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*		*06/29/22 18:58*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*		*06/29/22 18:58*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00183**	**J**	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: MW-12

Lab Sample ID: 820-4742-7
Date Collected: 06/21/22 14:42
Matrix: Water
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			06/29/22 19:18	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 19:18	1
Ethylbenzene	<0.000657	U *	0.00200	0.000657	mg/L			06/29/22 19:18	1
m-Xylene & p-Xylene	<0.000629	U *	0.00400	0.000629	mg/L			06/29/22 19:18	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			06/29/22 19:18	1
Xylenes, Total	<0.000642	U *	0.00400	0.000642	mg/L			06/29/22 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*		*06/29/22 19:18*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*		*06/29/22 19:18*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: MW-2

Lab Sample ID: 820-4742-8
Date Collected: 06/22/22 10:57
Matrix: Water
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0176**	**b**	0.00200	0.000408	mg/L			06/29/22 19:39	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 19:39	1
Ethylbenzene	<0.000657	U *	0.00200	0.000657	mg/L			06/29/22 19:39	1
m-Xylene & p-Xylene	<0.000629	U *	0.00400	0.000629	mg/L			06/29/22 19:39	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			06/29/22 19:39	1
Xylenes, Total	<0.000642	U *	0.00400	0.000642	mg/L			06/29/22 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*		*06/29/22 19:39*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*		*06/29/22 19:39*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Client Sample ID: MW-2

Lab Sample ID: 820-4742-8
Matrix: Water
Date Collected: 06/22/22 10:57
Date Received: 06/23/22 15:03

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0176**		0.00400	0.000657	mg/L			06/30/22 09:53	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10500**		50.0	2.10	mg/L			06/30/22 21:33	100

Client Sample ID: MW-13

Lab Sample ID: 820-4742-9
Matrix: Water
Date Collected: 06/22/22 11:43
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			06/29/22 20:00	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 20:00	1
Ethylbenzene	<0.000657	U *	0.00200	0.000657	mg/L			06/29/22 20:00	1
m-Xylene & p-Xylene	<0.000629	U *	0.00400	0.000629	mg/L			06/29/22 20:00	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			06/29/22 20:00	1
Xylenes, Total	<0.000642	U *	0.00400	0.000642	mg/L			06/29/22 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*06/29/22 20:00*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*		*06/29/22 20:00*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: MW-8

Lab Sample ID: 820-4742-10
Matrix: Water
Date Collected: 06/22/22 12:13
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			06/29/22 20:21	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 20:21	1
Ethylbenzene	<0.000657	U *	0.00200	0.000657	mg/L			06/29/22 20:21	1
m-Xylene & p-Xylene	<0.000629	U *	0.00400	0.000629	mg/L			06/29/22 20:21	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			06/29/22 20:21	1
Xylenes, Total	<0.000642	U *	0.00400	0.000642	mg/L			06/29/22 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*		*06/29/22 20:21*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*		*06/29/22 20:21*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Client Sample ID: MW-3

Lab Sample ID: 820-4742-11
Matrix: Water
Date Collected: 06/22/22 12:53
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0285**		0.00200	0.000408	mg/L			07/06/22 14:05	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			07/06/22 14:05	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			07/06/22 14:05	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			07/06/22 14:05	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			07/06/22 14:05	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			07/06/22 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*		*07/06/22 14:05*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*		*07/06/22 14:05*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0285**		0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: MW-4

Lab Sample ID: 820-4742-12
Matrix: Water
Date Collected: 06/22/22 13:24
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			07/06/22 14:31	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			07/06/22 14:31	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			07/06/22 14:31	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			07/06/22 14:31	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			07/06/22 14:31	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			07/06/22 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*07/06/22 14:31*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*		*07/06/22 14:31*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: MW-14

Lab Sample ID: 820-4742-13
Matrix: Water
Date Collected: 06/22/22 14:00
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			07/06/22 14:57	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			07/06/22 14:57	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			07/06/22 14:57	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			07/06/22 14:57	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			07/06/22 14:57	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			07/06/22 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*07/06/22 14:57*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*		*07/06/22 14:57*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Client Sample ID: MW-14
Lab Sample ID: 820-4742-13
Date Collected: 06/22/22 14:00
Matrix: Water
Date Received: 06/23/22 15:03

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: DUP-1
Lab Sample ID: 820-4742-14
Date Collected: 06/22/22 00:00
Matrix: Water
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			07/06/22 15:23	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			07/06/22 15:23	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			07/06/22 15:23	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			07/06/22 15:23	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			07/06/22 15:23	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			07/06/22 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*		*07/06/22 15:23*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*		*07/06/22 15:23*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Client Sample ID: DUP-2
Lab Sample ID: 820-4742-15
Date Collected: 06/22/22 00:00
Matrix: Water
Date Received: 06/23/22 15:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			07/06/22 15:49	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			07/06/22 15:49	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			07/06/22 15:49	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			07/06/22 15:49	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			07/06/22 15:49	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			07/06/22 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*07/06/22 15:49*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*		*07/06/22 15:49*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			06/30/22 09:53	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
820-4742-1	MW-5	82	117										
820-4742-2	MW-6	85	117										
820-4742-3	MW-7	82	115										
820-4742-4	MW-9	84	116										
820-4742-5	MW-11	85	117										
820-4742-6	MW-10	84	118										
820-4742-7	MW-12	84	115										
820-4742-8	MW-2	86	114										
820-4742-9	MW-13	89	116										
820-4742-10	MW-8	82	116										
820-4742-11	MW-3	114	89										
820-4742-12	MW-4	112	86										
820-4742-13	MW-14	108	95										
820-4742-14	DUP-1	119	92										
820-4742-15	DUP-2	103	88										
LCS 880-28608/3	Lab Control Sample	80	111										
LCS 880-29107/3	Lab Control Sample	102	103										
LCSD 880-28608/4	Lab Control Sample Dup	104	100										
LCSD 880-29107/4	Lab Control Sample Dup	101	106										
MB 880-28608/8	Method Blank	86	110										
MB 880-29107/8	Method Blank	76	88										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-28608/8
Matrix: Water
Analysis Batch: 28608

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0006620	J	0.00200	0.000408	mg/L			06/29/22 12:21	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			06/29/22 12:21	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			06/29/22 12:21	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			06/29/22 12:21	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			06/29/22 12:21	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			06/29/22 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*		*06/29/22 12:21*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*		*06/29/22 12:21*	*1*

Lab Sample ID: LCS 880-28608/3
Matrix: Water
Analysis Batch: 28608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1117		mg/L		112	70 - 130
Toluene	0.100	0.09153		mg/L		92	70 - 130
Ethylbenzene	0.100	0.07626		mg/L		76	70 - 130
m-Xylene & p-Xylene	0.200	0.1434		mg/L		72	70 - 130
o-Xylene	0.100	0.07624		mg/L		76	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-28608/4
Matrix: Water
Analysis Batch: 28608

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09219		mg/L		92	70 - 130	19	20
Toluene	0.100	0.1023		mg/L		102	70 - 130	11	20
Ethylbenzene	0.100	0.09846	*	mg/L		98	70 - 130	25	20
m-Xylene & p-Xylene	0.200	0.1988	*	mg/L		99	70 - 130	32	20
o-Xylene	0.100	0.1051	*	mg/L		105	70 - 130	32	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 880-29107/8
Matrix: Water
Analysis Batch: 29107

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			07/06/22 12:20	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			07/06/22 12:20	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-29107/8
Matrix: Water
Analysis Batch: 29107

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			07/06/22 12:20	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			07/06/22 12:20	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			07/06/22 12:20	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			07/06/22 12:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*		*07/06/22 12:20*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*		*07/06/22 12:20*	*1*

Lab Sample ID: LCS 880-29107/3
Matrix: Water
Analysis Batch: 29107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08389		mg/L		84	70 - 130		
Toluene			0.100	0.08243		mg/L		82	70 - 130		
Ethylbenzene			0.100	0.07802		mg/L		78	70 - 130		
m-Xylene & p-Xylene			0.200	0.1581		mg/L		79	70 - 130		
o-Xylene			0.100	0.08692		mg/L		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-29107/4
Matrix: Water
Analysis Batch: 29107

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09413		mg/L		94	70 - 130	11	20
Toluene			0.100	0.08565		mg/L		86	70 - 130	4	20
Ethylbenzene			0.100	0.08121		mg/L		81	70 - 130	4	20
m-Xylene & p-Xylene			0.200	0.1668		mg/L		83	70 - 130	5	20
o-Xylene			0.100	0.09194		mg/L		92	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-28725/3
Matrix: Water
Analysis Batch: 28725

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.0210	U	0.500	0.0210	mg/L			06/30/22 14:56	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-28725/4
Matrix: Water
Analysis Batch: 28725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	25.06		mg/L		100	90 - 110

Lab Sample ID: LCSD 880-28725/5
Matrix: Water
Analysis Batch: 28725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25.0	25.17		mg/L		101	90 - 110	0	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

GC VOA

Analysis Batch: 28608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4742-1	MW-5	Total/NA	Water	8021B	
820-4742-2	MW-6	Total/NA	Water	8021B	
820-4742-3	MW-7	Total/NA	Water	8021B	
820-4742-4	MW-9	Total/NA	Water	8021B	
820-4742-5	MW-11	Total/NA	Water	8021B	
820-4742-6	MW-10	Total/NA	Water	8021B	
820-4742-7	MW-12	Total/NA	Water	8021B	
820-4742-8	MW-2	Total/NA	Water	8021B	
820-4742-9	MW-13	Total/NA	Water	8021B	
820-4742-10	MW-8	Total/NA	Water	8021B	
MB 880-28608/8	Method Blank	Total/NA	Water	8021B	
LCS 880-28608/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-28608/4	Lab Control Sample Dup	Total/NA	Water	8021B	

Analysis Batch: 28736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4742-1	MW-5	Total/NA	Water	Total BTEX	
820-4742-2	MW-6	Total/NA	Water	Total BTEX	
820-4742-3	MW-7	Total/NA	Water	Total BTEX	
820-4742-4	MW-9	Total/NA	Water	Total BTEX	
820-4742-5	MW-11	Total/NA	Water	Total BTEX	
820-4742-6	MW-10	Total/NA	Water	Total BTEX	
820-4742-7	MW-12	Total/NA	Water	Total BTEX	
820-4742-8	MW-2	Total/NA	Water	Total BTEX	
820-4742-9	MW-13	Total/NA	Water	Total BTEX	
820-4742-10	MW-8	Total/NA	Water	Total BTEX	
820-4742-11	MW-3	Total/NA	Water	Total BTEX	
820-4742-12	MW-4	Total/NA	Water	Total BTEX	
820-4742-13	MW-14	Total/NA	Water	Total BTEX	
820-4742-14	DUP-1	Total/NA	Water	Total BTEX	
820-4742-15	DUP-2	Total/NA	Water	Total BTEX	

Analysis Batch: 29107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4742-11	MW-3	Total/NA	Water	8021B	
820-4742-12	MW-4	Total/NA	Water	8021B	
820-4742-13	MW-14	Total/NA	Water	8021B	
820-4742-14	DUP-1	Total/NA	Water	8021B	
820-4742-15	DUP-2	Total/NA	Water	8021B	
MB 880-29107/8	Method Blank	Total/NA	Water	8021B	
LCS 880-29107/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-29107/4	Lab Control Sample Dup	Total/NA	Water	8021B	

HPLC/IC

Analysis Batch: 28725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4742-8	MW-2	Total/NA	Water	300.0	
MB 880-28725/3	Method Blank	Total/NA	Water	300.0	
LCS 880-28725/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-28725/5	Lab Control Sample Dup	Total/NA	Water	300.0	

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Client Sample ID: MW-5
Date Collected: 06/21/22 11:05
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	28608	06/29/22 17:14	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: MW-6
Date Collected: 06/21/22 11:49
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	28608	06/29/22 17:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: MW-7
Date Collected: 06/21/22 12:26
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	28608	06/29/22 17:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: MW-9
Date Collected: 06/21/22 12:57
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	28608	06/29/22 18:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: MW-11
Date Collected: 06/21/22 13:31
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	28608	06/29/22 18:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: MW-10
Date Collected: 06/21/22 14:07
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	28608	06/29/22 18:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Client Sample ID: MW-12
Date Collected: 06/21/22 14:42
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	28608	06/29/22 19:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: MW-2
Date Collected: 06/22/22 10:57
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	28608	06/29/22 19:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID
Total/NA	Analysis	300.0		100			28725	06/30/22 21:33	CH	XEN MID

Client Sample ID: MW-13
Date Collected: 06/22/22 11:43
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	28608	06/29/22 20:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: MW-8
Date Collected: 06/22/22 12:13
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	28608	06/29/22 20:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: MW-3
Date Collected: 06/22/22 12:53
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1			29107	07/06/22 14:05	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: MW-4
Date Collected: 06/22/22 13:24
Date Received: 06/23/22 15:03

Lab Sample ID: 820-4742-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1			29107	07/06/22 14:31	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Client Sample ID: MW-14

Lab Sample ID: 820-4742-13
Matrix: Water
Date Collected: 06/22/22 14:00
Date Received: 06/23/22 15:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1			29107	07/06/22 14:57	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: DUP-1

Lab Sample ID: 820-4742-14
Matrix: Water
Date Collected: 06/22/22 00:00
Date Received: 06/23/22 15:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1			29107	07/06/22 15:23	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Client Sample ID: DUP-2

Lab Sample ID: 820-4742-15
Matrix: Water
Date Collected: 06/22/22 00:00
Date Received: 06/23/22 15:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1			29107	07/06/22 15:49	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			28736	06/30/22 09:53	SM	XEN MID

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-23	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Water	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5030B	Purge and Trap	SW846	XEN MID

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14-inch Vac to Jal Legacy

Job ID: 820-4742-1
SDG: AR227010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-4742-1	MW-5	Water	06/21/22 11:05	06/23/22 15:03
820-4742-2	MW-6	Water	06/21/22 11:49	06/23/22 15:03
820-4742-3	MW-7	Water	06/21/22 12:26	06/23/22 15:03
820-4742-4	MW-9	Water	06/21/22 12:57	06/23/22 15:03
820-4742-5	MW-11	Water	06/21/22 13:31	06/23/22 15:03
820-4742-6	MW-10	Water	06/21/22 14:07	06/23/22 15:03
820-4742-7	MW-12	Water	06/21/22 14:42	06/23/22 15:03
820-4742-8	MW-2	Water	06/22/22 10:57	06/23/22 15:03
820-4742-9	MW-13	Water	06/22/22 11:43	06/23/22 15:03
820-4742-10	MW-8	Water	06/22/22 12:13	06/23/22 15:03
820-4742-11	MW-3	Water	06/22/22 12:53	06/23/22 15:03
820-4742-12	MW-4	Water	06/22/22 13:24	06/23/22 15:03
820-4742-13	MW-14	Water	06/22/22 14:00	06/23/22 15:03
820-4742-14	DUP-1	Water	06/22/22 00:00	06/23/22 15:03
820-4742-15	DUP-2	Water	06/22/22 00:00	06/23/22 15:03

Loc: 820
4742

terracon

820-4742 Chain of Custody

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

WHEN RECEIVED (°C) 5.2/5.1 °C

Page 1 of 1

Office Location: Lubbock
Phone:
Contact:
Project Manager: Brett Dennis
SRS #: 2009-092
Sampler's Name: Aaron Adams
Sampler's Signature:

Project Number: AR227010
Project Name: 14-Inch Vac to Jal Legacy

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 40 ml VOA	250 ml Poly			BTEX (EPA Method 8021)	Chloride (EPA Method 300)						Lab Sample ID
GW	6/21/2022	11:05		X	MW-5			3				X							
GW	6/21/2022	11:49		X	MW-6			3				X							
GW	6/21/2022	12:26		X	MW-7			3				X							
GW	6/21/2022	12:57		X	MW-9			3				X							
GW	6/21/2022	13:31		X	MW-11			3				X							
GW	6/21/2022	14:07		X	MW-10			3				X							
GW	6/21/2022	14:42		X	MW-12			3				X							
GW	6/22/2022	10:57		X	MW-2			3	1			X	X						
GW	6/22/2022	11:43		X	MW-13			3				X							
GW	6/22/2022	12:13		X	MW-8			3				X							
GW	6/22/2022	12:53		X	MW-3			3				X							
GW	6/22/2022	13:24		X	MW-4			3				X							
GW	6/22/2022	14:00		X	MW-14			3				X							
GW	6/22/2022			X	DUP-1			3				X							
GW	6/22/2022			X	DUP-2			3				X							

TURNAROUND TIME: ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
	6-23-22	15:03		6/23/22	15:03

NOTES: Bill directly to Plains Pipeline

e-mail results to:
1. CJBRYANT@PAALP.COM
2. MAOCHOA@PAALP.COM
3. BRETT.DENNIS@TERRACON.COM
4. ERIN.LOYD@TERRACON.COM
5. AARON.ADAMS@TERRACON.COM

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml - Glass wide mouth; P/O - Plastic or other _____

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-4742-1
SDG Number: AR227010

Login Number: 4742
List Number: 1
Creator: Ruggles, Ashley

List Source: Eurofins Lubbock

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-4742-1
SDG Number: AR227010

Login Number: 4742
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 06/24/22 10:57 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-5890-1
Laboratory Sample Delivery Group: AR227010
Client Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

For:
Terracon Consulting Eng & Scientists
502 N Big Spring St
Midland, Texas 79701

Attn: Erin Lloyd

Authorized for release by:
10/3/2022 5:47:17 PM
John Builes, Project Manager
(561)558-4549
John.Builes@et.eurofinsus.com

Designee for

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Laboratory Job ID: 820-5890-1
SDG: AR227010

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Job ID: 820-5890-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-5890-1

Receipt
The samples were received on 9/22/2022 11:46 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.7°C

Receipt Exceptions
One or more containers for the following samples were received broken or leaking: MW-7 (820-5890-4), MW-12 (820-5890-6), MW-3 (820-5890-11) and DUP-2 (820-5890-15).

GC/MS VOA
Method 8260C: Surrogate 4-Bromofluorobenzene (Surrogate) recovery for the following samples were outside control limits: MW-8 (820-5890-10) and MW-14 (820-5890-13). This surrogate does not correspond to any of the requested target compounds reported from this analytical batch; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_ORGFM_28D: The method blank for analytical batch 860-71559 contained <AffectedAnalytes> above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 300_ORGFM_28D: The method blank for analytical batch 860-71559 contained Chloride above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Client Sample ID: MW-5

Lab Sample ID: 820-5890-1
Matrix: Water
Date Collected: 09/20/22 11:24
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533	mg/L			09/24/22 02:58	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 02:58	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 02:58	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 02:58	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 02:58	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 02:58	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 02:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*		*09/24/22 02:58*	*1*
4-Bromofluorobenzene (Surr)	*121*		*74 - 124*		*09/24/22 02:58*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 131*		*09/24/22 02:58*	*1*
Toluene-d8 (Surr)	*104*		*80 - 117*		*09/24/22 02:58*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: MW-6

Lab Sample ID: 820-5890-2
Matrix: Water
Date Collected: 09/20/22 12:05
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533	mg/L			09/24/22 03:18	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 03:18	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 03:18	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 03:18	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 03:18	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 03:18	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*09/24/22 03:18*	*1*
4-Bromofluorobenzene (Surr)	*118*		*74 - 124*		*09/24/22 03:18*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 131*		*09/24/22 03:18*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*09/24/22 03:18*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: MW-9

Lab Sample ID: 820-5890-3
Matrix: Water
Date Collected: 09/20/22 12:54
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533	mg/L			09/24/22 03:39	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 03:39	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 03:39	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Client Sample ID: MW-9

Lab Sample ID: 820-5890-3
Matrix: Water
Date Collected: 09/20/22 12:54
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 03:39	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 03:39	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 03:39	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 03:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*63 - 144*		*09/24/22 03:39*	*1*
4-Bromofluorobenzene (Surr)	*119*		*74 - 124*		*09/24/22 03:39*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*09/24/22 03:39*	*1*
Toluene-d8 (Surr)	*105*		*80 - 117*		*09/24/22 03:39*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: MW-7

Lab Sample ID: 820-5890-4
Matrix: Water
Date Collected: 09/20/22 13:37
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000999**	**J**	0.00100	0.000533	mg/L			09/24/22 03:59	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 03:59	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 03:59	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 03:59	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 03:59	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 03:59	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 144*		*09/24/22 03:59*	*1*
4-Bromofluorobenzene (Surr)	*123*		*74 - 124*		*09/24/22 03:59*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*09/24/22 03:59*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*09/24/22 03:59*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: MW-11

Lab Sample ID: 820-5890-5
Matrix: Water
Date Collected: 09/20/22 14:16
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533	mg/L			09/24/22 04:20	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 04:20	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 04:20	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 04:20	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 04:20	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 04:20	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Client Sample ID: MW-11

Lab Sample ID: 820-5890-5
Matrix: Water
Date Collected: 09/20/22 14:16
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 04:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*63 - 144*		*09/24/22 04:20*	*1*
4-Bromofluorobenzene (Surr)	*124*		*74 - 124*		*09/24/22 04:20*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 131*		*09/24/22 04:20*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*09/24/22 04:20*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: MW-10

Lab Sample ID: 820-5890-7
Matrix: Water
Date Collected: 09/21/22 10:30
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000941**	**J**	0.00100	0.000533	mg/L			09/24/22 04:40	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 04:40	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 04:40	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 04:40	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 04:40	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 04:40	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 04:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*63 - 144*		*09/24/22 04:40*	*1*
4-Bromofluorobenzene (Surr)	*124*		*74 - 124*		*09/24/22 04:40*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 131*		*09/24/22 04:40*	*1*
Toluene-d8 (Surr)	*105*		*80 - 117*		*09/24/22 04:40*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: MW-2

Lab Sample ID: 820-5890-8
Matrix: Water
Date Collected: 09/21/22 11:14
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00686**		0.00100	0.000533	mg/L			09/24/22 05:01	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 05:01	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 05:01	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 05:01	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 05:01	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 05:01	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 05:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*63 - 144*		*09/24/22 05:01*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Client Sample ID: MW-2

Lab Sample ID: 820-5890-8
Date Collected: 09/21/22 11:14
Matrix: Water
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*74 - 124*		*09/24/22 05:01*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 131*		*09/24/22 05:01*	*1*
Toluene-d8 (Surr)	*102*		*80 - 117*		*09/24/22 05:01*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00686**	**J**	0.0100	0.00124	mg/L			09/27/22 10:27	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10500**	**b**	25.0	10.0	mg/L			10/02/22 15:01	50

Client Sample ID: MW-13

Lab Sample ID: 820-5890-9
Date Collected: 09/21/22 11:51
Matrix: Water
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533	mg/L			09/24/22 05:21	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 05:21	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 05:21	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 05:21	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 05:21	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 05:21	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 05:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*63 - 144*		*09/24/22 05:21*	*1*
4-Bromofluorobenzene (Surr)	*123*		*74 - 124*		*09/24/22 05:21*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 131*		*09/24/22 05:21*	*1*
Toluene-d8 (Surr)	*105*		*80 - 117*		*09/24/22 05:21*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: MW-8

Lab Sample ID: 820-5890-10
Date Collected: 09/21/22 12:22
Matrix: Water
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533	mg/L			09/24/22 05:42	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 05:42	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 05:42	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 05:42	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 05:42	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 05:42	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 05:42	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Client Sample ID: MW-8

Lab Sample ID: 820-5890-10
Date Collected: 09/21/22 12:22
Matrix: Water
Date Received: 09/22/22 11:46

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		63 - 144		09/24/22 05:42	1
4-Bromofluorobenzene (Surr)	126	X	74 - 124		09/24/22 05:42	1
Dibromofluoromethane (Surr)	100		75 - 131		09/24/22 05:42	1
Toluene-d8 (Surr)	102		80 - 117		09/24/22 05:42	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: MW-3

Lab Sample ID: 820-5890-11
Date Collected: 09/21/22 12:57
Matrix: Water
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0399**		0.00100	0.000533	mg/L			09/24/22 06:02	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 06:02	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 06:02	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 06:02	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 06:02	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 06:02	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 06:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		63 - 144		09/24/22 06:02	1
4-Bromofluorobenzene (Surr)	123		74 - 124		09/24/22 06:02	1
Dibromofluoromethane (Surr)	102		75 - 131		09/24/22 06:02	1
Toluene-d8 (Surr)	103		80 - 117		09/24/22 06:02	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0399**		0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: MW-4

Lab Sample ID: 820-5890-12
Date Collected: 09/21/22 14:05
Matrix: Water
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000554**	**J**	0.00100	0.000533	mg/L			09/24/22 06:23	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 06:23	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 06:23	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 06:23	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 06:23	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 06:23	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 06:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		63 - 144		09/24/22 06:23	1
4-Bromofluorobenzene (Surr)	118		74 - 124		09/24/22 06:23	1
Dibromofluoromethane (Surr)	102		75 - 131		09/24/22 06:23	1
Toluene-d8 (Surr)	103		80 - 117		09/24/22 06:23	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Client Sample ID: MW-4

Lab Sample ID: 820-5890-12
Date Collected: 09/21/22 14:05
Matrix: Water
Date Received: 09/22/22 11:46

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: MW-14

Lab Sample ID: 820-5890-13
Date Collected: 09/21/22 14:37
Matrix: Water
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533	mg/L			09/24/22 06:43	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 06:43	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 06:43	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 06:43	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 06:43	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 06:43	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 06:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*63 - 144*		*09/24/22 06:43*	*1*
4-Bromofluorobenzene (Surr)	*129*	*X*	*74 - 124*		*09/24/22 06:43*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*09/24/22 06:43*	*1*
Toluene-d8 (Surr)	*104*		*80 - 117*		*09/24/22 06:43*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample ID: DUP-1

Lab Sample ID: 820-5890-14
Date Collected: 09/21/22 00:00
Matrix: Water
Date Received: 09/22/22 11:46

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0392**		0.00100	0.000533	mg/L			09/24/22 07:04	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 07:04	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 07:04	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 07:04	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 07:04	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 07:04	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 07:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*09/24/22 07:04*	*1*
4-Bromofluorobenzene (Surr)	*123*		*74 - 124*		*09/24/22 07:04*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*09/24/22 07:04*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*09/24/22 07:04*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0392**		0.0100	0.00124	mg/L			09/27/22 10:27	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Client Sample ID: DUP-2
Date Collected: 09/21/22 00:00
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533	mg/L			09/24/22 07:24	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 07:24	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 07:24	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 07:24	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 07:24	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 07:24	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 07:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*63 - 144*		*09/24/22 07:24*	*1*
4-Bromofluorobenzene (Surr)	*122*		*74 - 124*		*09/24/22 07:24*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*09/24/22 07:24*	*1*
Toluene-d8 (Surr)	*104*		*80 - 117*		*09/24/22 07:24*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00124	U	0.0100	0.00124	mg/L			09/27/22 10:27	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(63-144)	(74-124)	(75-131)	(80-117)
820-5890-1	MW-5	105	121	97	104
820-5890-2	MW-6	103	118	98	103
820-5890-3	MW-9	107	119	99	105
820-5890-4	MW-7	105	123	99	103
820-5890-5	MW-11	106	124	100	103
820-5890-7	MW-10	108	124	97	105
820-5890-8	MW-2	110	122	102	102
820-5890-9	MW-13	106	123	108	105
820-5890-10	MW-8	105	126 X	100	102
820-5890-11	MW-3	110	123	102	103
820-5890-12	MW-4	108	118	102	103
820-5890-13	MW-14	107	129 X	99	104
820-5890-14	DUP-1	100	123	104	103
820-5890-15	DUP-2	107	122	99	104
880-19536-A-3 MS	Matrix Spike	106	96	99	104
LCS 860-70440/3	Lab Control Sample	102	100	100	104
LCSD 860-70440/4	Lab Control Sample Dup	106	98	101	103
MB 860-70440/8	Method Blank	100	119	99	103

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-70440/8
Matrix: Water
Analysis Batch: 70440

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533	mg/L			09/24/22 01:36	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/24/22 01:36	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/24/22 01:36	1
m-Xylene & p-Xylene	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 01:36	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/24/22 01:36	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/24/22 01:36	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/24/22 01:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*09/24/22 01:36*	*1*
4-Bromofluorobenzene (Surr)	*119*		*74 - 124*		*09/24/22 01:36*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 131*		*09/24/22 01:36*	*1*
Toluene-d8 (Surr)	*103*		*80 - 117*		*09/24/22 01:36*	*1*

Lab Sample ID: LCS 860-70440/3
Matrix: Water
Analysis Batch: 70440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.0500	0.05464		mg/L		109	75 - 125		
Toluene			0.0500	0.05608		mg/L		112	70 - 130		
Ethylbenzene			0.0500	0.05501		mg/L		110	75 - 125		
m-Xylene & p-Xylene			0.0500	0.05650		mg/L		113	75 - 125		
o-Xylene			0.0500	0.05647		mg/L		113	75 - 125		
MTBE			0.0500	0.04736		mg/L		95	65 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*
Dibromofluoromethane (Surr)	*100*		*75 - 131*
Toluene-d8 (Surr)	*104*		*80 - 117*

Lab Sample ID: LCSD 860-70440/4
Matrix: Water
Analysis Batch: 70440

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.0500	0.05546		mg/L		111	75 - 125	1	25
Toluene			0.0500	0.05693		mg/L		114	70 - 130	2	25
Ethylbenzene			0.0500	0.05557		mg/L		111	75 - 125	1	25
m-Xylene & p-Xylene			0.0500	0.05680		mg/L		114	75 - 125	1	25
o-Xylene			0.0500	0.05754		mg/L		115	75 - 125	2	25
MTBE			0.0500	0.04878		mg/L		98	65 - 135	3	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*63 - 144*
4-Bromofluorobenzene (Surr)	*98*		*74 - 124*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-70440/4
Matrix: Water
Analysis Batch: 70440

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*101*		*75 - 131*
Toluene-d8 (Surr)	*103*		*80 - 117*

Lab Sample ID: 880-19536-A-3 MS
Matrix: Water
Analysis Batch: 70440

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000533	U	0.0500	0.06015		mg/L		120	66 - 142
Toluene	<0.000475	U	0.0500	0.06016		mg/L		120	59 - 139
Ethylbenzene	<0.000411	U	0.0500	0.05912		mg/L		118	75 - 125
m-Xylene & p-Xylene	<0.00124	U	0.0500	0.06119		mg/L		122	75 - 125
o-Xylene	<0.000551	U	0.0500	0.06192		mg/L		124	75 - 125
MTBE	<0.00139	U	0.0500	0.05526		mg/L		111	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*106*		*63 - 144*
4-Bromofluorobenzene (Surr)	*96*		*74 - 124*
Dibromofluoromethane (Surr)	*99*		*75 - 131*
Toluene-d8 (Surr)	*104*		*80 - 117*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-71559/3
Matrix: Water
Analysis Batch: 71559

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.2593	J	0.500	0.200	mg/L			10/02/22 12:30	1

Lab Sample ID: LCS 860-71559/6
Matrix: Water
Analysis Batch: 71559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.51		mg/L		105	90 - 110

Lab Sample ID: LCSD 860-71559/7
Matrix: Water
Analysis Batch: 71559

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.56		mg/L		106	90 - 110	1	20

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LLCS 860-71559/5
Matrix: Water
Analysis Batch: 71559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			0.500	0.6350		mg/L		127	50 - 150		

Lab Sample ID: 870-11180-B-1 MS
Matrix: Water
Analysis Batch: 71559

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	87.5	b	10.0	96.48	4	mg/L		90	90 - 110		

Lab Sample ID: 870-11180-B-1 MSD
Matrix: Water
Analysis Batch: 71559

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	87.5	b	10.0	96.83	4	mg/L		93	90 - 110	0	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

GC/MS VOA

Analysis Batch: 70440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-5890-1	MW-5	Total/NA	Water	8260C	
820-5890-2	MW-6	Total/NA	Water	8260C	
820-5890-3	MW-9	Total/NA	Water	8260C	
820-5890-4	MW-7	Total/NA	Water	8260C	
820-5890-5	MW-11	Total/NA	Water	8260C	
820-5890-7	MW-10	Total/NA	Water	8260C	
820-5890-8	MW-2	Total/NA	Water	8260C	
820-5890-9	MW-13	Total/NA	Water	8260C	
820-5890-10	MW-8	Total/NA	Water	8260C	
820-5890-11	MW-3	Total/NA	Water	8260C	
820-5890-12	MW-4	Total/NA	Water	8260C	
820-5890-13	MW-14	Total/NA	Water	8260C	
820-5890-14	DUP-1	Total/NA	Water	8260C	
820-5890-15	DUP-2	Total/NA	Water	8260C	
MB 860-70440/8	Method Blank	Total/NA	Water	8260C	
LCS 860-70440/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-70440/4	Lab Control Sample Dup	Total/NA	Water	8260C	
880-19536-A-3 MS	Matrix Spike	Total/NA	Water	8260C	

Analysis Batch: 70732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-5890-1	MW-5	Total/NA	Water	Total BTEX	
820-5890-2	MW-6	Total/NA	Water	Total BTEX	
820-5890-3	MW-9	Total/NA	Water	Total BTEX	
820-5890-4	MW-7	Total/NA	Water	Total BTEX	
820-5890-5	MW-11	Total/NA	Water	Total BTEX	
820-5890-7	MW-10	Total/NA	Water	Total BTEX	
820-5890-8	MW-2	Total/NA	Water	Total BTEX	
820-5890-9	MW-13	Total/NA	Water	Total BTEX	
820-5890-10	MW-8	Total/NA	Water	Total BTEX	
820-5890-11	MW-3	Total/NA	Water	Total BTEX	
820-5890-12	MW-4	Total/NA	Water	Total BTEX	
820-5890-13	MW-14	Total/NA	Water	Total BTEX	
820-5890-14	DUP-1	Total/NA	Water	Total BTEX	
820-5890-15	DUP-2	Total/NA	Water	Total BTEX	

HPLC/IC

Analysis Batch: 71559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-5890-8	MW-2	Total/NA	Water	300.0	
MB 860-71559/3	Method Blank	Total/NA	Water	300.0	
LCS 860-71559/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-71559/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-71559/5	Lab Control Sample	Total/NA	Water	300.0	
870-11180-B-1 MS	Matrix Spike	Total/NA	Water	300.0	
870-11180-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Client Sample ID: MW-5
Date Collected: 09/20/22 11:24
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 02:58	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Client Sample ID: MW-6
Date Collected: 09/20/22 12:05
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 03:18	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Client Sample ID: MW-9
Date Collected: 09/20/22 12:54
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 03:39	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Client Sample ID: MW-7
Date Collected: 09/20/22 13:37
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 03:59	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Client Sample ID: MW-11
Date Collected: 09/20/22 14:16
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 04:20	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Client Sample ID: MW-10
Date Collected: 09/21/22 10:30
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 04:40	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Client Sample ID: MW-2
Date Collected: 09/21/22 11:14
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 05:01	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU
Total/NA	Analysis	300.0		50			71559	10/02/22 15:01	RBNS	EET HOU

Client Sample ID: MW-13
Date Collected: 09/21/22 11:51
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 05:21	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Client Sample ID: MW-8
Date Collected: 09/21/22 12:22
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 05:42	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Client Sample ID: MW-3
Date Collected: 09/21/22 12:57
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 06:02	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Client Sample ID: MW-4
Date Collected: 09/21/22 14:05
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 06:23	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Client Sample ID: MW-14
Date Collected: 09/21/22 14:37
Date Received: 09/22/22 11:46

Lab Sample ID: 820-5890-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 06:43	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Client Sample ID: DUP-1

Lab Sample ID: 820-5890-14

Date Collected: 09/21/22 00:00
Matrix: Water
Date Received: 09/22/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 07:04	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Client Sample ID: DUP-2

Lab Sample ID: 820-5890-15

Date Collected: 09/21/22 00:00
Matrix: Water
Date Received: 09/22/22 11:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	70440	09/24/22 07:24	JBS	EET HOU
Total/NA	Analysis	Total BTEX		1			70732	09/27/22 10:27	JBS	EET HOU

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-04-23
Florida	NELAP	E871002	06-30-23
Louisiana	NELAP	03054	06-30-23
Oklahoma	State	1306	08-31-23
Texas	NELAP	T104704215-22-47	06-30-23
Texas	TCEQ Water Supply	T104704215	12-31-22
USDA	US Federal Programs	P330-22-00025	03-02-23

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
Total BTEX	Total BTEX Calculation	TAL SOP	EET HOU
300.0	Anions, Ion Chromatography	MCAWW	EET HOU
5030C	Purge and Trap	SW846	EET HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy (SRS # 2009-092)

Job ID: 820-5890-1
SDG: AR227010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-5890-1	MW-5	Water	09/20/22 11:24	09/22/22 11:46
820-5890-2	MW-6	Water	09/20/22 12:05	09/22/22 11:46
820-5890-3	MW-9	Water	09/20/22 12:54	09/22/22 11:46
820-5890-4	MW-7	Water	09/20/22 13:37	09/22/22 11:46
820-5890-5	MW-11	Water	09/20/22 14:16	09/22/22 11:46
820-5890-7	MW-10	Water	09/21/22 10:30	09/22/22 11:46
820-5890-8	MW-2	Water	09/21/22 11:14	09/22/22 11:46
820-5890-9	MW-13	Water	09/21/22 11:51	09/22/22 11:46
820-5890-10	MW-8	Water	09/21/22 12:22	09/22/22 11:46
820-5890-11	MW-3	Water	09/21/22 12:57	09/22/22 11:46
820-5890-12	MW-4	Water	09/21/22 14:05	09/22/22 11:46
820-5890-13	MW-14	Water	09/21/22 14:37	09/22/22 11:46
820-5890-14	DUP-1	Water	09/21/22 00:00	09/22/22 11:46
820-5890-15	DUP-2	Water	09/21/22 00:00	09/22/22 11:46

Loc: 820
5890

5890

CHAIN OF CUSTODY RECORD

terracon

Laboratory: Xenco Laboratories
Address: 6701 Aberdeen Avenue, Suite 9
Lubbock, TX 79424

Office Location Lubbock
Phone: (806) 794-1296
Contact: Erin Loyd
Project Manager: Erin Loyd
PO/SO #:
Sampler's Name: Aaron Adams
Sampler's Signature

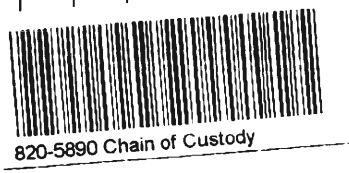
ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C) 3.8 13.7 C

Page 1 of 2

Project Number	Project Name
AR227010	14" Vac to Jal Legacy (SRS # 2009-092)

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 60 ml VOA	250 ml Poly			BTEX/MTBE (EPA Method 8260B)	Chloride (Total) (EPA 300)						Lab Sample ID
GW	09/20/22	11:24		X	MW-5			3				X							
GW	09/20/22	12:05		X	MW-6			3				X							
GW	09/20/22	12:54		X	MW-9			3				X							
GW	09/20/22	13:37		X	MW-7			3				X							
GW	09/20/22	14:16		X	MW-11			3				X							
GW	09/20/22	14:51		X	MW-12			3				X							
GW	09/21/22	10:30		X	MW-10			3				X							
GW	09/21/22	11:14		X	MW-2			3	1			X	X						
GW	09/21/22	11:51		X	MW-13			3				X							
GW	09/21/22	12:22		X	MW-8			3				X							



TURNAROUND TIME X Normal ☐ 48-Hour Rush ☐ 24-Hour Rush TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
	9-21-22	18:45	Robert Cardoza	9-22-22	1135
Robert Cardoza	9-22-22	1146	Ashley T. Ruggles	9/22/22	11:46

NOTES:

E-MAIL RESULTS TO:
1. CJBRYANT@PAALP.COM
2. MAOCHOA@PAALP.COM
3. AARON.ADAMS@TERRACON.COM
4. ERIN.LOYD@TERRACON.COM
5. JOHN.GRAMS@TERRACON.COM

Matrix: WW-Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube SL - Sludge
Container: VOA - 40 ml vial A/G - Amber Glass 1L 250 ml = Glass wide mouth P/O - Plastic or other _____

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco Laboratories
Address: 6701 Aberdeen Avenue, Suite 9, Lubbock, TX 79424
Phone: (806) 794-1296
Contact: Erin Loyd
PO/SO #:

Office Location: Lubbock
Project Manager: Erin Loyd
Sampler's Name: Aaron Adams
Sampler's Signature:

Project Number: AR227010
Project Name: 14" Vac to Jal Legacy (SRS # 2009-092)

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 3.8/3.7°C

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 40 ml VOA	250 ml Poly			BTEX (EPA Method 8021B)							Lab Sample ID
GW	09/21/22	12:57		X	MW-3			3				X							
GW	09/21/22	14:05		X	MW-4			3				X							
GW	09/21/22	14:37		X	MW-14			3				X							
GW	09/21/22			X	DUP-1			3				X							
GW	09/21/22			X	DUP-2			3				X							
					**********END OF COC**********														

TURNAROUND TIME: ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush
TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
	9-21-22	18:45	Robert Cordova	9-22-22	1135
Robert Cardova	1146 9-22-22		Whitney M. Ruggles	9/22/22	11:46

NOTES:
E-MAIL RESULTS TO:
1. CJBRYANT@PAALP.COM
2. MAOCHOA@PAALP.COM
3. AARON.ADAMS@TERRACON.COM
4. ERIN.LOYD@TERRACON.COM
5. JOHN.GRAMS@TERRACON.COM

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml = Glass wide mouth; P/O - Plastic or other _____

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-5890-1
SDG Number: AR227010

Login Number: 5890
List Number: 1
Creator: Ruggles, Ashley

List Source: Eurofins Lubbock

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-5890-1
SDG Number: AR227010

Login Number: 5890
List Number: 2
Creator: Palmar, Pedro

List Source: Eurofins Houston
List Creation: 09/23/22 01:50 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-5992-1
Laboratory Sample Delivery Group: AR227010
Client Project/Site: 14" Vac to Jal Legacy

For:
Terracon Consulting Eng & Scientists
5847 50th St
Lubbock, Texas 79424

Attn: Aaron Adams

JKramer

Authorized for release by:
10/10/2022 2:56:33 PM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Laboratory Job ID: 820-5992-1
SDG: AR227010

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Job ID: 820-5992-1
SDG: AR227010

Qualifiers

GC VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Job ID: 820-5992-1
SDG: AR227010

Job ID: 820-5992-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-5992-1

Receipt
The sample was received on 9/30/2022 11:53 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.7°C

GC VOA
Method 8021B: The laboratory control sample (LCS) associated with analytical batch 880-36469 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Job ID: 820-5992-1
SDG: AR227010

Client Sample ID: MW-12
Date Collected: 09/29/22 13:45
Date Received: 09/30/22 11:53

Lab Sample ID: 820-5992-1
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			10/09/22 15:18	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			10/09/22 15:18	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			10/09/22 15:18	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			10/09/22 15:18	1
o-Xylene	<0.000642	U *	0.00200	0.000642	mg/L			10/09/22 15:18	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			10/09/22 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/09/22 15:18*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*		*10/09/22 15:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			10/10/22 10:23	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Job ID: 820-5992-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
820-5992-1	MW-12	97	93										
LCS 880-36469/3	Lab Control Sample	108	106										
LCSD 880-36469/4	Lab Control Sample Dup	128	92										
MB 880-36469/8	Method Blank	86	91										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Job ID: 820-5992-1
SDG: AR227010

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36469/8
Matrix: Water
Analysis Batch: 36469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			10/09/22 13:35	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			10/09/22 13:35	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			10/09/22 13:35	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			10/09/22 13:35	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			10/09/22 13:35	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			10/09/22 13:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*		*10/09/22 13:35*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*		*10/09/22 13:35*	*1*

Lab Sample ID: LCS 880-36469/3
Matrix: Water
Analysis Batch: 36469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09735		mg/L		97	70 - 130		
Toluene			0.100	0.09020		mg/L		90	70 - 130		
Ethylbenzene			0.100	0.09559		mg/L		96	70 - 130		
m-Xylene & p-Xylene			0.200	0.2049		mg/L		102	70 - 130		
o-Xylene			0.100	0.1134		mg/L		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-36469/4
Matrix: Water
Analysis Batch: 36469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09825		mg/L		98	70 - 130	1	20
Toluene			0.100	0.1000		mg/L		100	70 - 130	10	20
Ethylbenzene			0.100	0.1152		mg/L		115	70 - 130	19	20
m-Xylene & p-Xylene			0.200	0.2504		mg/L		125	70 - 130	20	20
o-Xylene			0.100	0.1404	*	mg/L		140	70 - 130	21	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Job ID: 820-5992-1
SDG: AR227010

GC VOA

Analysis Batch: 36469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-5992-1	MW-12	Total/NA	Water	8021B	
MB 880-36469/8	Method Blank	Total/NA	Water	8021B	
LCS 880-36469/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-36469/4	Lab Control Sample Dup	Total/NA	Water	8021B	

Analysis Batch: 36536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-5992-1	MW-12	Total/NA	Water	Total BTEX	

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Job ID: 820-5992-1
SDG: AR227010

Client Sample ID: MW-12
Date Collected: 09/29/22 13:45
Date Received: 09/30/22 11:53

Lab Sample ID: 820-5992-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	36469	10/09/22 15:18	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36536	10/10/22 10:23	AJ	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Job ID: 820-5992-1
SDG: AR227010

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Water	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Job ID: 820-5992-1
SDG: AR227010

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
5030B	Purge and Trap	SW846	EET MID

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: 14" Vac to Jal Legacy

Job ID: 820-5992-1
SDG: AR227010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-5992-1	MW-12	Water	09/29/22 13:45	09/30/22 11:53

Loc: 820
5992

820-5992 Chain of Custody

Terracon

CHAIN OF CUSTODY RECORD

Laboratory: Eurofins
Address: 6701 Aberdeen, Lubbock, Texas 79424

Office Location: Lubbock
Project Manager: Erin Loyd
Sampler's Name: Austin Worley

Phone:
Contact:
SRS #:
Sampler's Signature: Austin Worley

LAB USE
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 1.8/1.7

Page 1 of 1

Project Number: AR227010
Project Name: 14-Inch Jal Legacy

ANALYSIS REQUESTED: BTEX (EPA Method 8260B) — 9/30/22 8260 8021 per Aaron Adams over the phone

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 40 ml VOA				BTEX (EPA Method 8260B)						Lab Sample ID
W	9/29/2022	13:45		X	MW-12			X				X						

NFE

TURNAROUND TIME: ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
Austin Worley	9-30-22	11:53	[signature]	9/30/22	11:53

Bill To: Plains

e-mail results to:
aaron.adams@terracon.com
austin.worley@terracon.com

Matrix: WW-Wastewater, W - Water, S - Soil, L - Liquid, A - Air Bag, C - Charcoal tube, SL - Sludge
Container: VOA - 40 ml vial, A/G - Amber Glass 1L, 250 ml = Glass wide mouth, P/O - Plastic or other ______

Lubbock Office ■ 5847 50th Street ■ Lubbock, Texas 79424 ■ 806-300-0140

Responsive ■ Resourceful ■ Reliable

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-5992-1
SDG Number: AR227010

Login Number: 5992
List Number: 1
Creator: Lee, Randell

List Source: Eurofins Lubbock

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-5992-1
SDG Number: AR227010

Login Number: 5992
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/04/22 10:26 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Joel Lowry
Etech Environmental & Safety Solutions
PO BOX 62228
Midland, Texas 79711

Generated 3/3/2023 4:18:07 PM

JOB DESCRIPTION

14" Vac to Jal
SDG NUMBER Lea County NM

JOB NUMBER

880-25366-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

Eurofins Midland

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated
3/3/2023 4:18:07 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Laboratory Job ID: 880-25366-1
SDG: Lea County NM

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Definitions/Glossary

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Job ID: 880-25366-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-25366-1

Receipt
The samples were received on 3/1/2023 4:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.7°C

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Client Sample ID: MW-2

Lab Sample ID: 880-25366-1
Matrix: Water
Date Collected: 02/24/23 12:00
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00709**		0.00200	0.000408	mg/L			03/03/23 02:27	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 02:27	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 02:27	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 02:27	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 02:27	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 02:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*03/03/23 02:27*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*		*03/03/23 02:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00709**		0.00400	0.000657	mg/L			03/03/23 13:22	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12800**		50.0	34.6	mg/L			03/03/23 11:36	100

Client Sample ID: MW-3

Lab Sample ID: 880-25366-2
Matrix: Water
Date Collected: 02/24/23 10:00
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00301**		0.00200	0.000408	mg/L			03/03/23 02:47	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 02:47	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 02:47	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 02:47	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 02:47	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*03/03/23 02:47*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*		*03/03/23 02:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00301**	**J**	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample ID: MW-4

Lab Sample ID: 880-25366-3
Matrix: Water
Date Collected: 02/24/23 07:50
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 03:08	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 03:08	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 03:08	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 03:08	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 03:08	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 03:08	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Client Sample ID: MW-4

Lab Sample ID: 880-25366-3
Matrix: Water
Date Collected: 02/24/23 07:50
Date Received: 03/01/23 16:37

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*		*03/03/23 03:08*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*		*03/03/23 03:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample ID: MW-5

Lab Sample ID: 880-25366-4
Matrix: Water
Date Collected: 02/24/23 09:50
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 03:28	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 03:28	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 03:28	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 03:28	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 03:28	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 03:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*03/03/23 03:28*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*		*03/03/23 03:28*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample ID: MW-6

Lab Sample ID: 880-25366-5
Matrix: Water
Date Collected: 02/24/23 10:50
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 03:49	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 03:49	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 03:49	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 03:49	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 03:49	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 03:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*		*03/03/23 03:49*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*		*03/03/23 03:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Client Sample ID: MW-7

Lab Sample ID: 880-25366-6
Matrix: Water
Date Collected: 02/24/23 10:30
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 04:09	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 04:09	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 04:09	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 04:09	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 04:09	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*		*03/03/23 04:09*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*		*03/03/23 04:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample ID: MW-8

Lab Sample ID: 880-25366-7
Matrix: Water
Date Collected: 02/24/23 09:30
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 04:30	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 04:30	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 04:30	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 04:30	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 04:30	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*		*03/03/23 04:30*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*		*03/03/23 04:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample ID: MW-9

Lab Sample ID: 880-25366-8
Matrix: Water
Date Collected: 02/24/23 08:00
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 04:50	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 04:50	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 04:50	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 04:50	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 04:50	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 04:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*03/03/23 04:50*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*		*03/03/23 04:50*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Client Sample ID: MW-9
Lab Sample ID: 880-25366-8
Date Collected: 02/24/23 08:00
Matrix: Water
Date Received: 03/01/23 16:37

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample ID: MW-10
Lab Sample ID: 880-25366-9
Date Collected: 02/24/23 11:10
Matrix: Water
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00183**	**J**	0.00200	0.000408	mg/L			03/03/23 05:11	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 05:11	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 05:11	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 05:11	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 05:11	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 05:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*03/03/23 05:11*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*		*03/03/23 05:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00183**	**J**	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample ID: MW-11
Lab Sample ID: 880-25366-10
Date Collected: 02/24/23 12:30
Matrix: Water
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 07:01	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 07:01	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 07:01	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 07:01	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 07:01	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 07:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*03/03/23 07:01*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*		*03/03/23 07:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample ID: MW-12
Lab Sample ID: 880-25366-11
Date Collected: 02/24/23 09:00
Matrix: Water
Date Received: 03/01/23 16:37

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 07:21	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 07:21	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Client Sample ID: MW-12

Date Collected: 02/24/23 09:00
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-11
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 07:21	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 07:21	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 07:21	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 07:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*03/03/23 07:21*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*		*03/03/23 07:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample ID: MW-13

Date Collected: 02/24/23 08:30
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-12
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 07:42	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 07:42	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 07:42	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 07:42	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 07:42	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 07:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*03/03/23 07:42*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*		*03/03/23 07:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/03/23 13:22	1

Client Sample ID: MW-14

Date Collected: 02/24/23 07:30
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-13
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 08:02	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 08:02	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 08:02	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 08:02	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 08:02	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 08:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*03/03/23 08:02*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*		*03/03/23 08:02*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Client Sample ID: MW-14
Date Collected: 02/24/23 07:30
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-13
Matrix: Water

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000657	U	0.00400	0.000657	mg/L			03/03/23 13:22	1

Surrogate Summary

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-25365-B-1 MS	Matrix Spike	114	112										
880-25365-B-1 MSD	Matrix Spike Duplicate	112	109										
880-25366-1	MW-2	116	109										
880-25366-2	MW-3	116	110										
880-25366-3	MW-4	114	105										
880-25366-4	MW-5	111	105										
880-25366-5	MW-6	114	110										
880-25366-6	MW-7	113	108										
880-25366-7	MW-8	114	110										
880-25366-8	MW-9	116	109										
880-25366-9	MW-10	111	113										
880-25366-10	MW-11	109	111										
880-25366-11	MW-12	105	108										
880-25366-12	MW-13	106	108										
880-25366-13	MW-14	112	116										
LCS 880-47605/34	Lab Control Sample	115	110										
LCSD 880-47605/35	Lab Control Sample Dup	114	109										
MB 880-47338/5-A	Method Blank	104	104										
MB 880-47605/39	Method Blank	104	103										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-47338/5-A
Matrix: Water
Analysis Batch: 47605

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47338

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L		02/27/23 14:58	03/02/23 13:30	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L		02/27/23 14:58	03/02/23 13:30	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L		02/27/23 14:58	03/02/23 13:30	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L		02/27/23 14:58	03/02/23 13:30	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L		02/27/23 14:58	03/02/23 13:30	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L		02/27/23 14:58	03/02/23 13:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*02/27/23 14:58*	*03/02/23 13:30*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*02/27/23 14:58*	*03/02/23 13:30*	*1*

Lab Sample ID: MB 880-47605/39
Matrix: Water
Analysis Batch: 47605

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000408	U	0.00200	0.000408	mg/L			03/03/23 01:38	1
Toluene	<0.000367	U	0.00200	0.000367	mg/L			03/03/23 01:38	1
Ethylbenzene	<0.000657	U	0.00200	0.000657	mg/L			03/03/23 01:38	1
m-Xylene & p-Xylene	<0.000629	U	0.00400	0.000629	mg/L			03/03/23 01:38	1
o-Xylene	<0.000642	U	0.00200	0.000642	mg/L			03/03/23 01:38	1
Xylenes, Total	<0.000642	U	0.00400	0.000642	mg/L			03/03/23 01:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*03/03/23 01:38*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*		*03/03/23 01:38*	*1*

Lab Sample ID: LCS 880-47605/34
Matrix: Water
Analysis Batch: 47605

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1019		mg/L		102	70 - 130
Toluene	0.100	0.1004		mg/L		100	70 - 130
Ethylbenzene	0.100	0.1051		mg/L		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2243		mg/L		112	70 - 130
o-Xylene	0.100	0.1109		mg/L		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: LCSD 880-47605/35
Matrix: Water
Analysis Batch: 47605

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1093		mg/L		109	70 - 130	7	20

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-47605/35
Matrix: Water
Analysis Batch: 47605

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1095		mg/L		109	70 - 130	9	20
Ethylbenzene			0.100	0.1130		mg/L		113	70 - 130	7	20
m-Xylene & p-Xylene			0.200	0.2412		mg/L		121	70 - 130	7	20
o-Xylene			0.100	0.1191		mg/L		119	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 880-25365-B-1 MS
Matrix: Water
Analysis Batch: 47605

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000408	U	0.100	0.1060		mg/L		106	70 - 130
Toluene	<0.000367	U	0.100	0.1019		mg/L		102	70 - 130
Ethylbenzene	<0.000657	U	0.100	0.1065		mg/L		107	70 - 130
m-Xylene & p-Xylene	0.000712	J	0.200	0.2248		mg/L		112	70 - 130
o-Xylene	<0.000642	U	0.100	0.1126		mg/L		113	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: 880-25365-B-1 MSD
Matrix: Water
Analysis Batch: 47605

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000408	U	0.100	0.1123		mg/L		112	70 - 130	6	25
Toluene	<0.000367	U	0.100	0.1082		mg/L		108	70 - 130	6	25
Ethylbenzene	<0.000657	U	0.100	0.1106		mg/L		111	70 - 130	4	25
m-Xylene & p-Xylene	0.000712	J	0.200	0.2332		mg/L		116	70 - 130	4	25
o-Xylene	<0.000642	U	0.100	0.1150		mg/L		115	70 - 130	2	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-47657/3
Matrix: Water
Analysis Batch: 47657

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.346	U	0.500	0.346	mg/L			03/03/23 10:18	1

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-47657/4
Matrix: Water
Analysis Batch: 47657

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			25.0	26.77		mg/L		107	90 - 110		

Lab Sample ID: LCSD 880-47657/5
Matrix: Water
Analysis Batch: 47657

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			25.0	26.84		mg/L		107	90 - 110	0	20

Lab Sample ID: 880-25360-A-1 MS
Matrix: Water
Analysis Batch: 47657

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	22.3		25.0	48.09		mg/L		103	90 - 110		

Lab Sample ID: 880-25360-A-1 MSD
Matrix: Water
Analysis Batch: 47657

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	22.3		25.0	48.21		mg/L		104	90 - 110	0	20

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

GC VOA

Prep Batch: 47338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-47338/5-A	Method Blank	Total/NA	Water	5035	

Analysis Batch: 47605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25366-1	MW-2	Total/NA	Water	8021B	
880-25366-2	MW-3	Total/NA	Water	8021B	
880-25366-3	MW-4	Total/NA	Water	8021B	
880-25366-4	MW-5	Total/NA	Water	8021B	
880-25366-5	MW-6	Total/NA	Water	8021B	
880-25366-6	MW-7	Total/NA	Water	8021B	
880-25366-7	MW-8	Total/NA	Water	8021B	
880-25366-8	MW-9	Total/NA	Water	8021B	
880-25366-9	MW-10	Total/NA	Water	8021B	
880-25366-10	MW-11	Total/NA	Water	8021B	
880-25366-11	MW-12	Total/NA	Water	8021B	
880-25366-12	MW-13	Total/NA	Water	8021B	
880-25366-13	MW-14	Total/NA	Water	8021B	
MB 880-47338/5-A	Method Blank	Total/NA	Water	8021B	47338
MB 880-47605/39	Method Blank	Total/NA	Water	8021B	
LCS 880-47605/34	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-47605/35	Lab Control Sample Dup	Total/NA	Water	8021B	
880-25365-B-1 MS	Matrix Spike	Total/NA	Water	8021B	
880-25365-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

Analysis Batch: 47749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25366-1	MW-2	Total/NA	Water	Total BTEX	
880-25366-2	MW-3	Total/NA	Water	Total BTEX	
880-25366-3	MW-4	Total/NA	Water	Total BTEX	
880-25366-4	MW-5	Total/NA	Water	Total BTEX	
880-25366-5	MW-6	Total/NA	Water	Total BTEX	
880-25366-6	MW-7	Total/NA	Water	Total BTEX	
880-25366-7	MW-8	Total/NA	Water	Total BTEX	
880-25366-8	MW-9	Total/NA	Water	Total BTEX	
880-25366-9	MW-10	Total/NA	Water	Total BTEX	
880-25366-10	MW-11	Total/NA	Water	Total BTEX	
880-25366-11	MW-12	Total/NA	Water	Total BTEX	
880-25366-12	MW-13	Total/NA	Water	Total BTEX	
880-25366-13	MW-14	Total/NA	Water	Total BTEX	

HPLC/IC

Analysis Batch: 47657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25366-1	MW-2	Total/NA	Water	300.0	
MB 880-47657/3	Method Blank	Total/NA	Water	300.0	
LCS 880-47657/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-47657/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-25360-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
880-25360-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Client Sample ID: MW-2
Date Collected: 02/24/23 12:00
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 02:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID
Total/NA	Analysis	300.0		100	50 mL	50 mL	47657	03/03/23 11:36	CH	EET MID

Client Sample ID: MW-3
Date Collected: 02/24/23 10:00
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 02:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Client Sample ID: MW-4
Date Collected: 02/24/23 07:50
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 03:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Client Sample ID: MW-5
Date Collected: 02/24/23 09:50
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 03:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Client Sample ID: MW-6
Date Collected: 02/24/23 10:50
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 03:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Client Sample ID: MW-7
Date Collected: 02/24/23 10:30
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 04:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Client Sample ID: MW-8
Date Collected: 02/24/23 09:30
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 04:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Client Sample ID: MW-9
Date Collected: 02/24/23 08:00
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 04:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Client Sample ID: MW-10
Date Collected: 02/24/23 11:10
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 05:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Client Sample ID: MW-11
Date Collected: 02/24/23 12:30
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 07:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Client Sample ID: MW-12
Date Collected: 02/24/23 09:00
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 07:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Client Sample ID: MW-13
Date Collected: 02/24/23 08:30
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 07:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Client Sample ID: MW-14

Date Collected: 02/24/23 07:30
Date Received: 03/01/23 16:37

Lab Sample ID: 880-25366-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	47605	03/03/23 08:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47749	03/03/23 13:22	SM	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-25366-1
Project/Site: 14" Vac to Jal
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0		Water	Chloride
Total BTEX		Water	Total BTEX

Method Summary

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5030B	Purge and Trap	SW846	EET MID

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Etech Environmental & Safety Solutions
Project/Site: 14" Vac to Jal

Job ID: 880-25366-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-25366-1	MW-2	Water	02/24/23 12:00	03/01/23 16:37
880-25366-2	MW-3	Water	02/24/23 10:00	03/01/23 16:37
880-25366-3	MW-4	Water	02/24/23 07:50	03/01/23 16:37
880-25366-4	MW-5	Water	02/24/23 09:50	03/01/23 16:37
880-25366-5	MW-6	Water	02/24/23 10:50	03/01/23 16:37
880-25366-6	MW-7	Water	02/24/23 10:30	03/01/23 16:37
880-25366-7	MW-8	Water	02/24/23 09:30	03/01/23 16:37
880-25366-8	MW-9	Water	02/24/23 08:00	03/01/23 16:37
880-25366-9	MW-10	Water	02/24/23 11:10	03/01/23 16:37
880-25366-10	MW-11	Water	02/24/23 12:30	03/01/23 16:37
880-25366-11	MW-12	Water	02/24/23 09:00	03/01/23 16:37
880-25366-12	MW-13	Water	02/24/23 08:30	03/01/23 16:37
880-25366-13	MW-14	Water	02/24/23 07:30	03/01/23 16:37

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: 253166

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Project Manager:	Joel Lowry	Bill to: (if different)	Camille Bryant
Company Name:	eTech environmental	Company Name:	Plains All American Pipeline, L.P.
Address:		Address:	1106 Griffith Drive
City, State ZIP:		City, State ZIP:	Midland, TX 79706
Phone:	575-396-2378	Email	pm@etechenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other:

Project Name:	14" Vac to Jal	Turn Around	
Project Number:	17474	☑ Routine ☐ Rush	
Project Location:	Lea County, NM	Due Date:	
Sampler's Name:	Zach Corder	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	2009-092		

SAMPLE RECEIPT			
Temp Blank:	Yes / No	Wet Ice:	Yes / No
Samples Received Intact:	Yes / No	Thermometer ID:	IR-4
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.1
Sample Custody Seals:	Yes No N/A	Temperature Reading:	0.8
Total Containers:	40	Corrected Temperature:	0.7

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Parameters: BTEX	Parameters: Chloride	Sample Comments
MW 2	W	2-24-23	12:00	—	—	4	X	X	
MW 3	W		10:00	—	—	3	X		
MW 4	W		7:50	—	—	3	X		
MW 5	W		9:50	—	—	3	X		
MW 6	W		10:50	—	—	3	X		
MW 7	W		10:30	—	—	3	X		
MW 8	W		9:30	—	—	3	X		
MW 9	W		8:00	—	—	5	X		
MW 10	W		11:10	—	—	3	X		
MW 11	W		12:30	—	—	3	X		

880-25366 Chain of Custody

Total 200.7 / 6010 **200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010:** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: 253600

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Project Manager:	Joel Lowry	Bill to: (if different)	Camille Bryant
Company Name:	eTech Environmental	Company Name:	Plains All American Pipeline
Address:		Address:	1106 Griffith Drive
City, State ZIP:		City, State ZIP:	Midland, TX 79706
Phone:	575-396-2378	Email:	pm@etechenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other

Project Name:	19" Vac to Jal	Turn Around	
Project Number:	17479	☑ Routine ☐ Rush	
Project Location:	Lea County, NM	Due Date:	
Sampler's Name:	Zach Gardner	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	2009-092		

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	IR-4	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	0.1	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	0.8	
Total Containers:	40	Corrected Temperature:	0.7	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX
MW 12	W	2-24-23	9:00	—	—	3		X
MW 13	W	1	8:30	—	—	3		X
MW 14	W	1	7:30	—	—	3		X

Preservative Codes

None NO | DI Water H_2O
Cool Cool | MeOH Me
HCL HC | HNO_3. HN
H_2S0_4. H_2 | NaOH Na
H_3PO_4: HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Comments

Total 200.7 / 6010 **200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010:** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245 1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Teddy Randall Lee	3/1/23 6:37			3/2/23 1229
3			4		
5			6		

Revised Date. 08/25/2020 Rev 2020.2

3/3/2023

Loc: 880
25366

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-25366-1
SDG Number: Lea County NM

Login Number: 25366
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 208277

CONDITIONS

Operator:	OGRID:
PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	34053
	Action Number: 208277
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	1. Continue monitor and sampling of wells MW-2 through MW-8 quarterly for concentrations of BTEX. MW-2 to be monitored and sampled quarterly for chloride. 2. Continue to gauge and remove PSH in MW-1 on a monthly basis. 3. Groundwater recovery to continue from monitoring wells: MW-3, MW-4, MW-8 on a monthly schedule. 4. Groundwater monitoring wells: MW-9,MW-5, MW-6, MW-11, MW-12, MW-13, MW-14 may be sampled on a semi-annual basis. 5. Results of the 2023 sampling events to be reported in the 2023 Annual Monitoring Report to OCD no later than April 1, 2024.	5/16/2023