By Nelson Velez at 2:16 pm, Aug 03, 2022

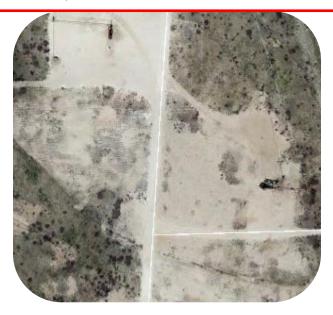
2021 Annual Groundwater

Review of 2021 ANNUAL GROUNDWATER MONITORING REPORT: **Content satisfactory**

Contractor anticipated actions approved by NMOCD and are as follows:

- 1. Continue quarterly monitoring well gauging, groundwater purging, and sampling for BTEX for all monitor wells on-site and in addition, chloride from MW-2
- 2. Conduct monthly manual recovery of PSH from MW-1, if applicable
- 3. Conduct monthly manual recovery of hydrocarbon impacted groundwater from MW-1, MW-3, MW-8, and MW-13
- 4. Continue AFR events on monitoring well MW-1, MW-3, MW-8 and M13 to enhance recovery of hydrocarbon impacted groundwater

 NMOCD Incident No. nAPP2109729126
- 5. Discontinue quarterly MDPE recovery events from MW-1
- 6. Submit annual groundwater report to NMOCD no later than March 31,2023.



Monitoring Report

Plains All American Pipeline, L.P.

14-Inch Vac to Jal Legacy
Plains SRS No. 2009-092
Lea County, New Mexico
NMOCD Reference No. 1R-2162
IMOCD Incident No. nAPP2109729126

Terracon Project No. AR217010 March 25, 2022

Prepared for:



Plains All American Pipeline, L.P. 1106 Griffith Drive Midland, Texas 79706

Prepared by:

Terracon Consultants, Inc. Lubbock, Texas

terracon.com





March 25, 2022

Plains All American Pipeline, LP 1106 Griffith Drive Midland, Texas 79706

Mrs. Camille Bryant Attn: (432) 758-8008 Telephone: Email: CJBryant@paalp.com

Re: 2021 Annual Groundwater Monitoring Report

> 14-Inch Vac to Jal Legacy U/L "F", Sec. 25, T25S, R37E Lea County, New Mexico

NMOCD Reference No. 1R-2162

NMOCD Incident No. nAPP2109729126

Plains All American Pipeline, L.P. SRS No. 2009-092

Terracon Project No. AR217010

Dear Mrs. Bryant:

Terracon is pleased to submit one electronic copy of the 2021 Annual Groundwater Monitoring Report for the above-referenced site.

We appreciate the opportunity to perform these services for Plains All American Pipeline, L.P. Please contact either of the undersigned at (806) 300-0140 if you have questions regarding the information provided in the report.

Sincerely,

llerracon

Prepared by:

Brett Dennis Staff Scientist Lubbock

Reviewed by:

Principal

Office Manager - Lubbock

Terracon Consultants, Inc. 5847 50th Street Lubbock, Texas 79424 P (806) 300 0140 F (806) 797 0947 terracon.com

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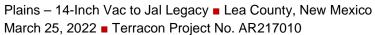




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Plains – 14-Inch Vac to Jal Legacy ■ Lea County, New Mexico March 25, 2022 ■ Terracon Project No. AR217010



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Plains – 14-Inch Vac to Jal Legacy ■ Lea County, New Mexico March 25, 2022 ■ Terracon Project No. AR217010



1.0 INTRODUCTION

1.1 Site Description

The legal description of the 14-Inch Vac to Jal Legacy release site is Unit Letter "F" (SE/NW), Section 25, Township 25 South, Range 37 East, in Lea County, New Mexico. The property affected by the release is owned by Concho Resources, Inc. The geographic coordinates of the release site are 32.102541°North latitude and 103.119411°West longitude. A "Topographic Map" depicting the site's location is provided as Exhibit 1 in Appendix A.

Site Name	14-Inch Vac to Jal Legacy		
Site Location	Latitude 32.102541° North, Longitude 103.119411° West		
General Site Description	The site consists of 14 groundwater monitoring wells located in, and adjacent to, a pipeline right-of-way surrounding land used for oil and gas production.		
Landowner	Concho Resources, Inc.		

1.2 Background Information

Based on information provided by the client, on April 9, 2009, Plains Pipeline, L.P. (Plains) discovered a crude oil release from a 14-inch steel pipeline. During initial response activities, Plains installed a temporary clamp to mitigate the release. Approximately 250 barrels (bbls) of crude oil were released, with no recovery. Plains notified the New Mexico Oil Conservation Division (NMOCD) Hobbs District 1 Office of the release, and a "Release Notification and Corrective Action" (Form C-141) was submitted. The cause of the release was attributed to external corrosion of the pipeline.

Subsequent to initial response activities on April 9, 2009, excavation of the crude oil impacted soil commenced at the site. To facilitate remediation activities, the excavation was divided into two management sections: Main Excavation and West Excavation. Approximately 18,000 cubic yards (cy) of impacted soil were excavated from the two excavation areas, stockpiled on-site up a non-permeable plastic liner to mitigate the potential leaching of contaminants into the vadose zone. Final dimensions of the Main Excavation were approximately 400 feet (ft.) in length, approximately 200 ft. in width, and 5 ft. 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 14-inch diameter pipelines that bisect the release site, Plains requested and received NMOCD approval to leave the soil beneath and adjacent to the pipelines in-situ.

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On July 2 and 3, 2009, three soil borings (SB-1, SB-2, and SB-3) were drilled at the release site to evaluate the vertical extent of soil impact. While advancing the soil borings, groundwater was encountered at approximately 64 ft. below ground surface (bgs). On July 2, 2009, monitoring well MW-1 was constructed and completed using SB-1. For soil borings SB-2 and SB-3, temporary casing was installed on July 2, 2009 to allow a preliminary groundwater sample to be collected for analysis. Following sample collection, the temporary casing was removed, and each boring was plugged with cement and bentonite, pursuant to NMOCD and New Mexico Office of the State Engineer (NMOSE) standards.

On December 10, 2009, two soil borings (SB-4 and SB-5) were drilled up-gradient of the excavation to evaluate the potential groundwater impact from an up-gradient, off-site source. While advancing soil borings SB-4 and SB-5, groundwater was encountered at approximately 64 ft. bgs. Temporary casing was installed in each boring to allow a preliminary groundwater sample to be collected for analysis. Following sample collection, the temporary casing was removed, and each boring was plugged with cement and bentonite, pursuant to NMOCD and NMOSE standards.

From May 6 through May 8, 2013, five additional monitoring wells (MW-2 through MW-6) were installed to evaluate the status of the groundwater at the site. These monitoring wells were advanced to a total depth of approximately 80 ft. bgs. Monitoring well MW-2 is located approximately 380 ft. to the northwest (up-gradient) of monitoring well MW-1. Monitoring well MW-3 is located approximately 200 ft. to the northeast (cross-gradient) of monitoring well MW-1. Monitoring well MW-4 is located approximately 100 ft. Monitoring well MW-5 is located approximately 208 ft. to the west-northwest (cross-gradient) of monitoring well MW-1. Monitoring well MW-6 is located approximately 150 ft. to the southeast (down-gradient) of monitoring well MW-1.

Phase separated hydrocarbons (PSH) were not observed in monitoring wells MW-2 through MW-6. Laboratory analytical results of soil samples collected during the installation of the monitoring 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 samples.

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

Plains – 14-Inch Vac to Jal Legacy ■ Lea County, New Mexico March 25, 2022 ■ Terracon Project No. AR217010



PSH was not observed in monitoring wells MW-7 through MW-9. Laboratory analytical results of 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 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 that elevated BTEX concentrations observed in samples collected from monitor well MW-2 are as a result of its downgradient position of this site. Information regarding this site can be found in the NMOCD imaging system.

Based on laboratory analytical results of groundwater samples collected from monitoring 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 monitoring wells MW-2 through MW-6, Plains requested permission 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 the caveat that a chloride sample would be collected from monitoring well MW-2 on a quarterly basis. Quarterly chloride monitoring of monitoring well MW-2 commenced in November 2014.

On October 18, 2016, Terracon assumed project management responsibilities and oversight of groundwater monitoring activities at the 14-Vac to Jal Legacy project site. At the time, there were a total of nine monitoring wells located at the site. Monitoring wells MW-2 through MW-9 were gauged and sampled on a quarterly schedule and monitoring well MW-1 was not sampled due to the presence of PSH.

On February 20, 2018, five additional monitoring wells MW-10 through MW-14 were installed to evaluate the status of the groundwater at the site. These monitoring wells were advanced to a total depth of approximately 80 ft. bgs. Monitoring well MW-10 is located approximately 210 ft. to the north-northwest (up-gradient) of monitoring well MW-1. Monitoring well MW-11 is located approximately 350 ft. to the north-northeast (up-gradient and cross-gradient) of monitoring well MW-1. Monitoring well MW-12 is located approximately 260 ft. to the east-northeast (cross-gradient) of monitoring well MW-1. Monitoring well MW-13 is located approximately 260 ft. to the east (cross-gradient) of monitoring well MW-1. Monitoring well MW-14 is located approximately 25 ft. to the southeast (down-gradient) of monitoring well MW-1. A "Site Diagram" depicting monitoring well locations is provided as Exhibit 2 in Appendix A.

On November 9, 2018, West Company professionally surveyed all site monitoring wells.

During May of 2020, due to COVID-19, manual recovery events were reduced from a frequency of once per week to once per month. The monthly frequency of manual recovery events persisted in 2021.

Plains – 14-Inch Vac to Jal Legacy ■ Lea County, New Mexico March 25, 2022 ■ Terracon Project No. AR217010



1.3 Scope of Work

Terracon's scope of work includes project management responsibilities, oversight of groundwater monitoring activities, and preparation of an *Annual Groundwater Monitoring Report* in accordance with the NMOCD letter, dated May 1998, requiring submittal of and *Annual Groundwater Monitoring* Report by April 1st of each year. In accordance with the approved scope of work, Terracon conducted quarterly groundwater monitoring events on March 8-9 (1Q21), June 9-10 (2Q21), September 20-21 (3Q20), and December 7-8, 2021 (4Q21).

Quarterly groundwater monitoring events were conducted on January 8-9, June 9-10, September 20-21, and December 7-8, 2021. Monitoring event activities included measuring the static water levels in all the site's monitoring wells, checking for the presence of PSH, and purging and collecting groundwater samples from wells not exhibiting a measurable thickness of PSH.

2.0 GROUNDWATER REMEDIATION PROGRAM

2.1 Groundwater Monitoring

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 cycles of five minutes each. Each collected sample was placed in laboratory-supplied containers appropriate to the analysis requested and placed on ice in a cooler. The sample coolers and completed chain-of-custody forms were delivered to Xenco Laboratories in Lubbock, Texas for analysis of (BTEX) using Environmental Protection Agency (EPA) SW-846 Method 8021. Groundwater samples collected from monitoring well MW-2 were also analyzed for chloride using EPA Method E300. Purged water was placed into a polystyrene aboveground storage tank (AST) and disposed of at an NMOCD-approved disposal facility.

A yearly monitoring event for polycyclic aromatic hydrocarbons (PAH) was conducted December 8th, 2020. Based on the sampling criteria provided by NMOCD, only monitoring well MW-2 which was analyzed for PAHs during 2019 and monitor wells MW-10 through MW-14 were subject to annual PAH monitoring due to their lack of sampling since installation. PAH sample requirements were met on monitoring wells MW-3 through MW-9 in June 2013 and May 2014, respectively. However, all monitor wells sampled during the 4th quarter were inadvertently analyzed for PAHs. The resulting analysis indicated that none of the on-site monitor wells sampled during the 4th quarter 2020 exceeded PAH Action Levels established by New Mexico Administrative Code (NMAC) 20.6.2. In order to adhere to requirements of PAH sampling of two consecutive years of PAH concentrations below action levels set forth by the NMOCD, monitor wells MW-3 through MW-9 were intended to be analyzed for PAHs during the 4th quarter sampling event in 2021. The groundwater samples collected during the 4th quarter monitoring event did not get analyzed for

Plains – 14-Inch Vac to Jal Legacy ■ Lea County, New Mexico March 25, 2022 ■ Terracon Project No. AR217010



PAH. Plains requests NMOCD approval to analyze PAHs during the 1st quarter of 2022. A summary of PAH analysis can be found as Table 5 in Appendix B.

Groundwater elevation gauging data collected during the respective quarterly monitoring events were used to construct groundwater gradient maps, which are included as Exhibits 3 through 6 in Appendix A. The groundwater flow direction was relatively consistent to the southeast for each quarter of 2021. Groundwater elevation and PSH thickness data is summarized in Table 1 in Appendix B.

3.0 LABORATORY ANALYTICAL METHODS

The groundwater samples collected were analyzed for BTEX using EPA SW-846 Method 8021B and chloride using EPA Method 300. Laboratory results from the analysis of groundwater samples collected from the monitoring wells are summarized in Table 2 in Appendix B and presented as Exhibits 7 through 10 in Appendix A. Copies of the certified laboratory reports and chain-of-custody documentation are provided in Appendix C.

4.0 GROUNDWATER DATA EVALUATION

4.1 Groundwater Analytical Results

Laboratory analytical results from each quarterly monitoring event were compared to NMOCD regulatory standards based on New Mexico Water Quality Control Commission (NMWQCC) groundwater standards found in Section 20.6.2.3103 of the New Mexico Administrative Code (NMAC).

4.1.1 Monitoring Well MW-1

Monitoring well MW-1 was not sampled due to the presence of PSH. PSH thicknesses of 0.12 ft. (1Q21), 0.05 ft. (2Q21), 0.32 ft. (3Q21), and 0.07 ft. (4Q21) were observed during the quarterly monitoring events.

4.1.2 Monitoring Well MW-2

- Laboratory analytical results indicated benzene concentrations exceeded the NMOCD regulatory standard during the four quarterly monitoring events. The detected benzene concentrations ranged from 0.0112 milligrams per liter (mg/L) for the 3rd quarter to 0.0276 mg/L for the 4th quarter.
- Laboratory analytical results indicated that toluene (0.00313 mg/L), ethylbenzene (0.000940 J mg/kg), and total xylenes (0.00399 mg/L) were detected above laboratory SDLs during the 1st quarter, but below NMOCD criteria.

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Laboratory analytical results indicated chloride concentrations exceeded the NMOCD regulatory standard during each quarterly monitoring event. The detected chloride concentrations ranged from 9,940 mg/L for the 1st quarter to 10,900 mg/L for the 3rd quarter.

4.1.3 Monitoring Well MW-3

- Laboratory analytical results indicated benzene concentrations exceeded the NMOCD regulatory standard during the 1st, 2nd, and 3rd quarter monitoring events. The detected benzene concentrations ranged from 0.0401 mg/L for the 2nd quarter to 0.190 mg/L for the 3rd quarter.
- Laboratory analytical results indicated the concentrations of ethylbenzene were below the respective laboratory sample detection limit (SDLs) for each of the four quarters.
- Laboratory analytical results indicated that toluene (0.00216 mg/L) and total xylenes (0.00183 J mg/L) were detected above laboratory SDLs during the 1st quarter, but below NMOCD criteria.

4.1.4 Monitoring Well MW-4

- Laboratory analytical results indicated benzene concentrations were below the laboratory SDLs for each monitoring event except for the 4th quarter. The detected concentration of benzene (0.00568 mg/L) exceeded the laboratory SDLs but was below the NMOCD regulatory standard.
- Laboratory analytical results indicated the concentrations of toluene, ethylbenzene and total xylenes were below the respective laboratory SDLs for each of the four quarters.

4.1.5 Monitoring Well MW-5

Laboratory analytical results indicated BTEX concentrations were below the respective laboratory SDLs for each constituent during the four quarterly monitoring events with the exception of the 1st quarter. Benzene (0.000440 J mg/L), toluene (0.000940 J mg/L), ethylbenzene (0.000770 J mg/L), and total xylenes (0.000800 J mg/L) were detected above laboratory SDLs but below NMOCD criteria.

4.1.6 Monitoring Well MW-6

Laboratory analytical results indicated BTEX concentrations were below the respective laboratory SDLs for each constituent during the four quarterly monitoring events with the exception of the 1st quarter. Toluene (0.00105 J mg/L) and total xylenes (0.00110 J mg/L) were detected above laboratory SDLs but below NMOCD criteria.

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4.1.7 Monitoring Wells MW-7, MW-8, MW-9, MW-12, and MW-13

Laboratory analytical results indicated BTEX concentrations were below the respective laboratory SDLs for each constituent during the four quarterly monitoring events.

4.1.8 Monitoring Well MW-10

Laboratory analytical results indicated BTEX concentrations were below the respective laboratory SDLs for each constituent during the four quarterly monitoring events with the exception of the 1st quarter. Benzene (0.00153 J mg/L) was detected above laboratory SDLs but below NMOCD criteria.

4.1.9 Monitoring Well MW-11

Laboratory analytical results indicated BTEX concentrations were below the respective laboratory SDLs for each constituent during the four quarterly monitoring events with the exception of the 1st quarter. Total xylenes (0.00499 mg/L) were detected above laboratory SDLs but below NMOCD criteria.

4.1.10 Monitoring Well MW-14

Laboratory analytical results indicated BTEX concentrations were below the respective laboratory SDLs for each constituent during the four quarterly monitoring events with the exception of the 2nd quarter. Benzene (0.00232 mg/L) and toluene (0.00491 mg/L) were detected above laboratory SDLs but below NMOCD criteria.

5.0 CORRECTIVE ACTION

5.1 Product Recovery

Monthly gauging and manual recovery events were conducted on monitor well MW-1 during the 2021 reporting period. Approximately 0.57 gallons of PSH were recovered from monitoring well MW-1 via quarterly manual recovery and the average PSH thickness was 0.29 ft. PSH recovery data is summarized in Table 3a in Appendix B.

Aggressive Fluid Recovery (AFR) events were performed on monitoring wells MW-1, MW-3, MW-8, and MW-13. The method utilizes a hose which is lowered into a well's fluid column and then connected to a vacuum truck to recover both groundwater impacted with dissolve phase hydrocarbons and PSH. The exact amount of PSH recovered cannot be determined, due to the emulsification of the PSH and groundwater. A calculated amount was determined based on the volume of PSH in the well measured prior to the AFR event and then recorded as minimum recovery. AFR events were performed quarterly. A summary of AFR recovery events is included as Table 4 in Appendix B.

Plains – 14-Inch Vac to Jal Legacy ■ Lea County, New Mexico March 25, 2022 ■ Terracon Project No. AR217010



A recovery event was conducted on monitor well MW-1 using a mobile dual phase extraction (MDPE) unit on March 3, 2021. The MDPE event was conducted over a period of 12 hours resulting in the recovery of 4.17 gallons of PSH in the vapor phase and 7.00 gallons in the liquid phase. Due limited PSH recovery during the MDPE events and the observed effectiveness of AFR events, MDPE recovery events were ceased after March 2021. A summary of MDPE recovery event is included in Appendix D.

5.2 Groundwater Recovery

For monitoring well MW-1, an estimated 5,923 gallons (141.02 bbls) of hydrocarbon impacted groundwater were recovered via combination of manual recovery and AFR events conducted in 2021.

For monitoring well MW-3, an estimated 4,783 gallons (113.88 bbls) of hydrocarbon impacted groundwater were recovered via combination of manual recovery and AFR events conducted in 2021.

For monitoring well MW-4, an estimated 68 gallons (1.62 bbls) of hydrocarbon impacted groundwater were recovered via manual recovery in 2021.

For monitoring well MW-8, an estimated 4,600 gallons (109.52 bbls) of hydrocarbon impacted groundwater were recovered via combination of manual recovery, with a Tornado pump, and AFR events conducted in 2021.

For monitoring well MW-13, an estimated 4,408 gallons (104.95 bbls) of hydrocarbon impacted groundwater were recovered via combination of manual recovery and AFR events conducted in 2021.

For 2021, an approximate total of 19,782 gallons (471 bbls) of hydrocarbon impacted groundwater were recovered from the site via combination of manual recovery and AFR events during 2021. Recovered fluids were disposed at an NMOCD-approved disposal facility.

For a summary of groundwater recovery data see Tables 3b through 3e in Appendix B.

Plains – 14-Inch Vac to Jal Legacy ■ Lea County, New Mexico March 25, 2022 ■ Terracon Project No. AR217010



6.0 SUMMARY OF FINDINGS

The findings of the 2021 Quarterly groundwater monitoring activities are as follows:

- Currently, there are 14 groundwater monitoring wells MW-1 through MW-14 located at the site.
- Quarterly groundwater monitoring events were conducted on March 8-9 (1Q21), June 9-10 (2Q21), September 20-21 (3Q20), and December 7-8, 2021 (4Q21).
- The groundwater flow direction remained relatively consistent to the southeast for the four quarters.
- Monitoring well MW-1 was not sampled due to PSH being gauged in the well during the four quarterly monitoring events.
- Monitoring well MW-2 through MW-14 were sampled during the four quarterly monitoring events.
- The chloride concentrations in monitoring well MW-2 (up-gradient) exceeded the NMOCD regulatory standard during the four quarterly monitoring events.
- The concentrations of BTEX in monitoring wells MW-7, MW-8, MW-9, MW-12, and MW-13 were below the laboratory SDLs during the four quarterly monitoring events.
- The benzene concentrations in monitoring wells MW-2 and MW-3 exceeded the NMOCD regulatory standard during one or more of the monitoring events. Benzene was detected above laboratory SDLs but below NMOCD action levels in monitor wells MW-4, MW-5, MW-10, and MW-14 during one or more of the monitoring events.
- Toluene concentrations were detected above laboratory SDLs but below NMOCD action levels in monitor wells MW-3, MW-5, MW-6 and MW-14 during one or more of the monitoring events.
- Ethylbenzene concentrations were detected above laboratory SDLs but below NMOCD action levels in monitor well MW-2 and MW-5 during the 1st monitoring event.
- Total xylene concentrations were reported above the laboratory SDLs but below the NMOCD action levels in monitor wells MW-2, MW-3, MW-5, MW-6 and MW-11 during one or more of the quarterly monitoring events.
- The average PSH thickness in monitoring well MW-1 for 2021 was 0.29 ft.
- Monitoring well MW-1 had an approximate total of 0.57 gallons of PSH recovered via manual recovery and AFR events.
- An approximate total of 19,782 gallons (471 bbls) of hydrocarbon impacted groundwater were recovered from the site via manual recovery and AFR events.

Plains – 14-Inch Vac to Jal Legacy ■ Lea County, New Mexico March 25, 2022 ■ Terracon Project No. AR217010



7.0 ANTICIPATED ACTIONS

- Conduct quarterly monitoring well gauging, groundwater purging and sampling for BTEX for all on-site monitor wells and chloride from monitoring well MW-2.
- Monitoring wells MW-3 through MW-9 will be analyzed for PAHs during the 1st quarter of 2022.
- Conduct monthly manual recovery of PSH from monitoring well MW-1, if applicable.
- Conduct monthly manual recovery of hydrocarbon impacted groundwater from monitoring wells MW-1, MW-3, MW-8, and MW-13.
- Continue AFR events on monitoring well MW-1, MW-3, MW-8 and M-13 to enhance recovery of hydrocarbon impacted groundwater.
- Discontinue quarterly MDPE recovery events on monitor well MW-1.
- An Annual Groundwater Monitoring Report will be prepared detailing field activities and the results of groundwater monitoring activities conducted during the 2022 reporting period.

Plains – 14-Inch Vac to Jal Legacy ■ Lea County, New Mexico March 25, 2022 ■ Terracon Project No. AR217010



8.0 DISTRIBUTION

Copy 1: Bradford Billings, Hydrologist E Spec. A.

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APPENDIX A

Exhibit 1 – Topographic Map Exhibit 2 – Site Diagram

Exhibit 3 – 1Q21 Groundwater Gradient Map (01/08-09/21)

Exhibit 4 – 2Q21 Groundwater Gradient Map (06/09-10/21)

Exhibit 5 – 3Q21 Groundwater Gradient Map (09/20-21/21)

Exhibit 6 – 4Q21 Groundwater Gradient Map (12/07-08/21)

Exhibit 7 – 1Q21 Groundwater Contaminant Concentration Map (01/08-09/21)

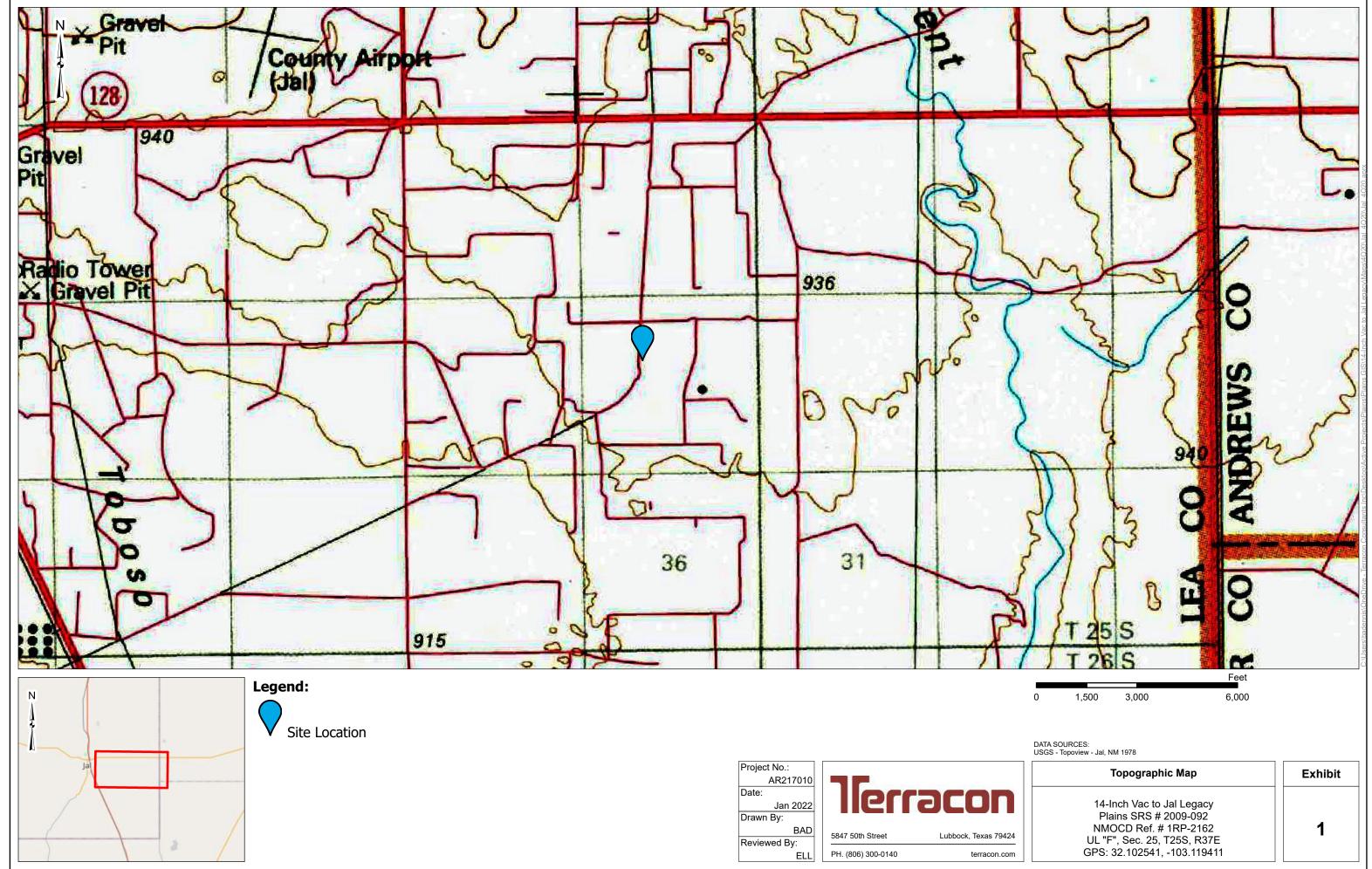
Exhibit 8 – 2Q21 Groundwater Contaminant Concentration Map (06/09-10/21)

Exhibit 9 – 3Q21 Groundwater Contaminant Concentration Map (09/20-21/21)

Exhibit 10 – 4Q21 Groundwater Contaminant Concentration Map (12/07-08/21)

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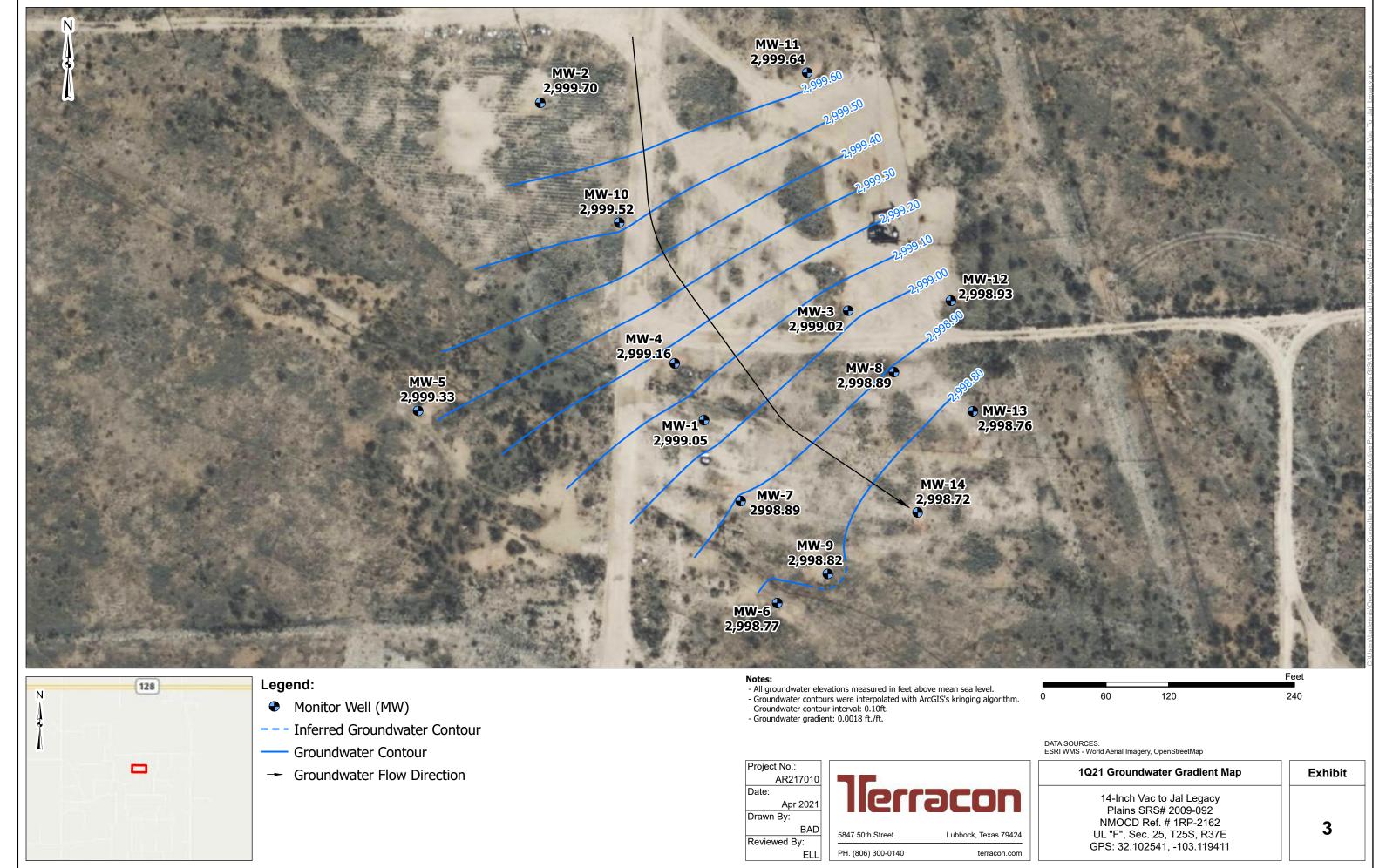
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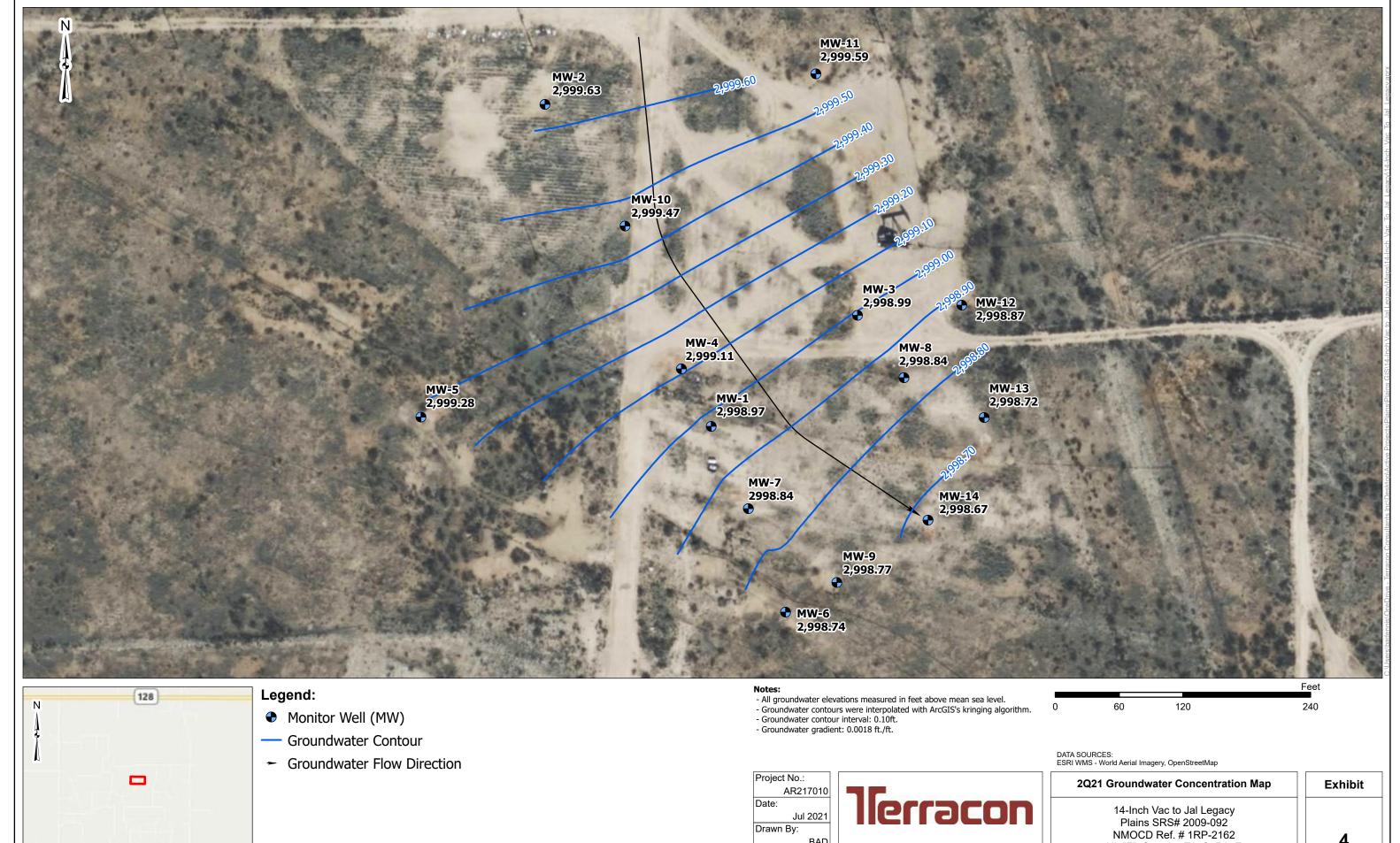


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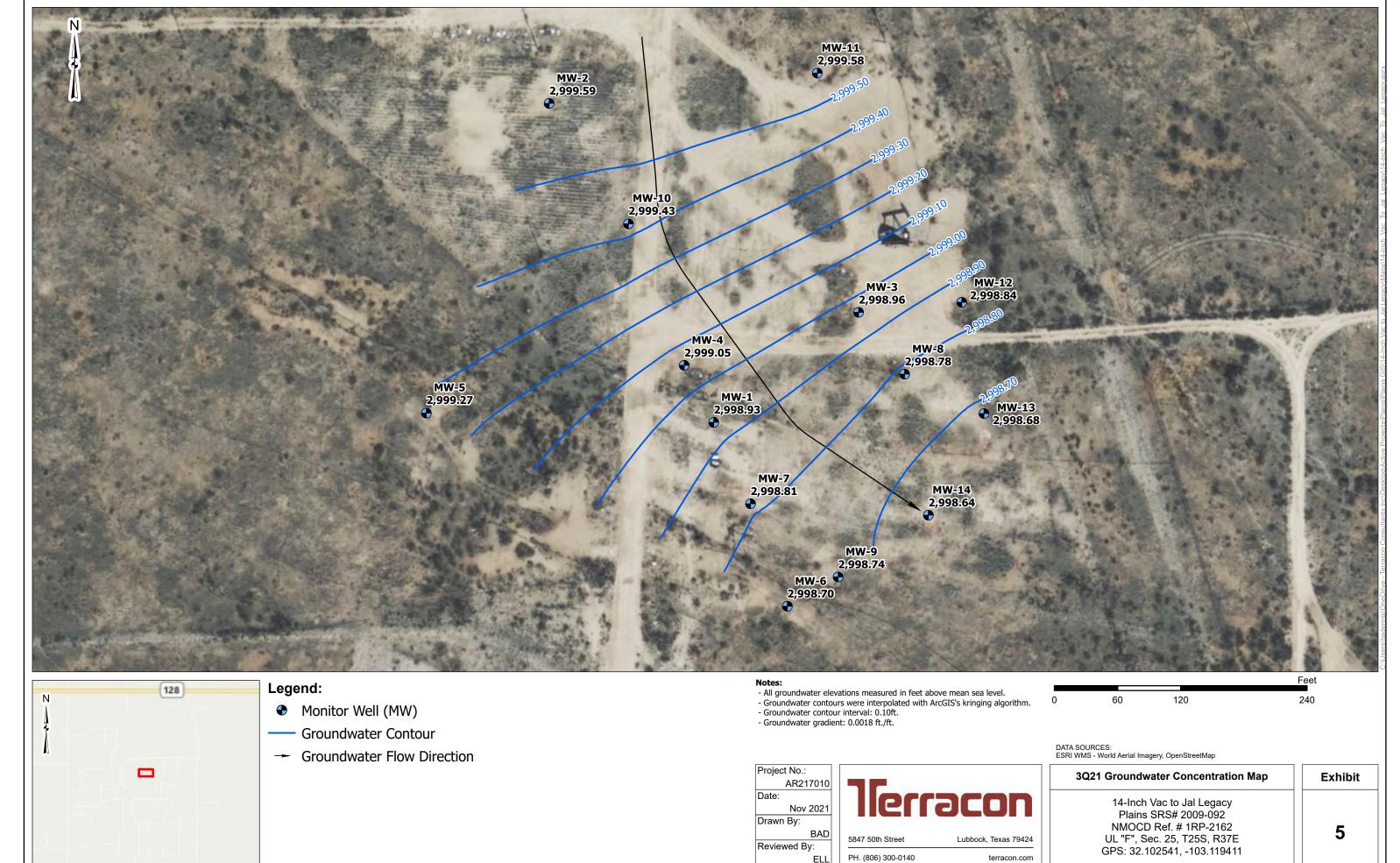
UL "F", Sec. 25, T25S, R37E

GPS: 32.102541, -103.119411

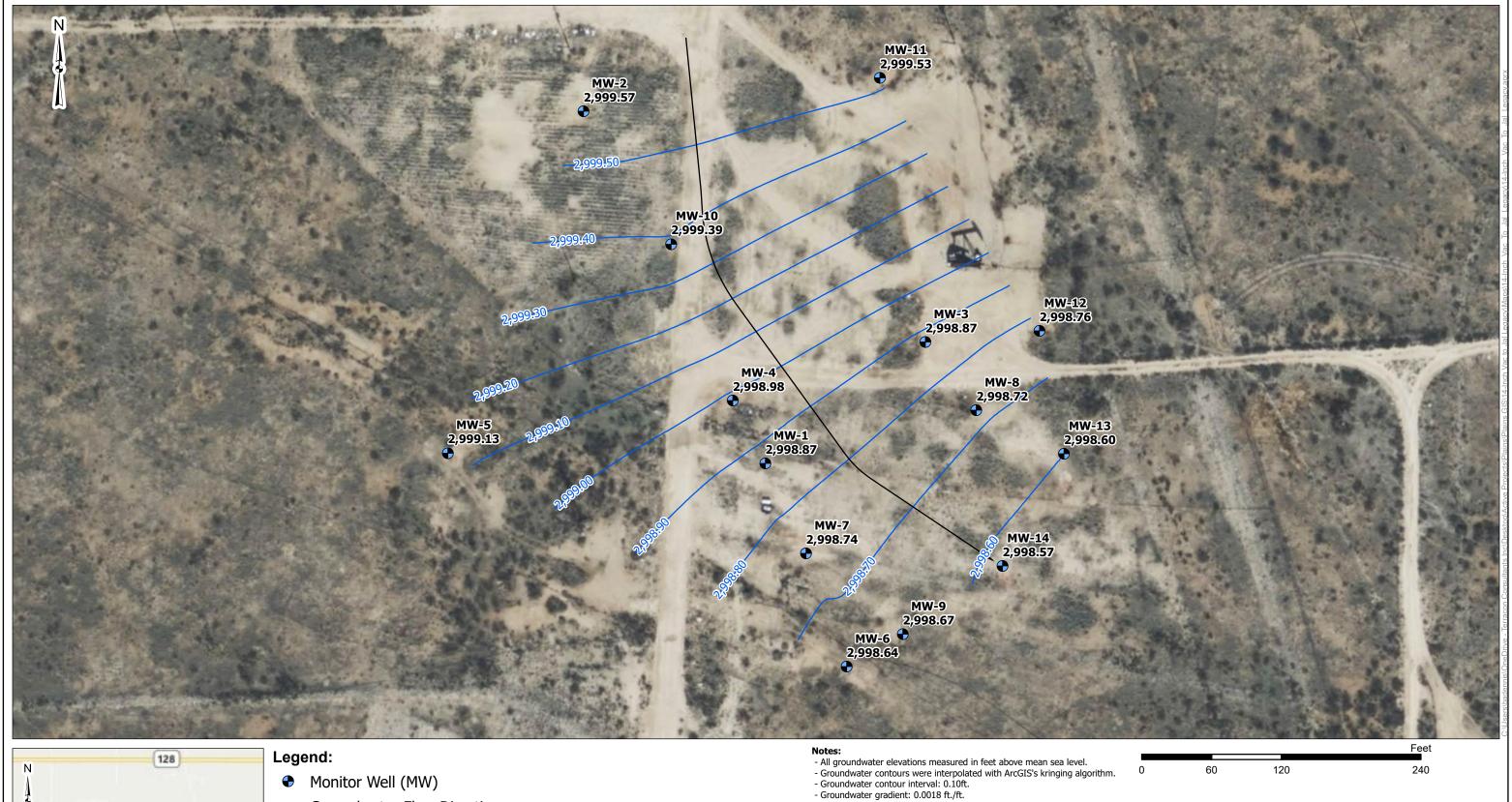
Drawn By:

Reviewed By:

Received by OCD: 3/28/2022 8:13:25 AM



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Project No.:

Drawn By:

Date:



- Groundwater Flow Direction
- **Groundwater Contour**



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PH. (806) 300-0140

DATA SOURCES: ESRI WMS - World Aerial Imagery, OpenStreetMap **4Q21 Groundwater Concentration Map**

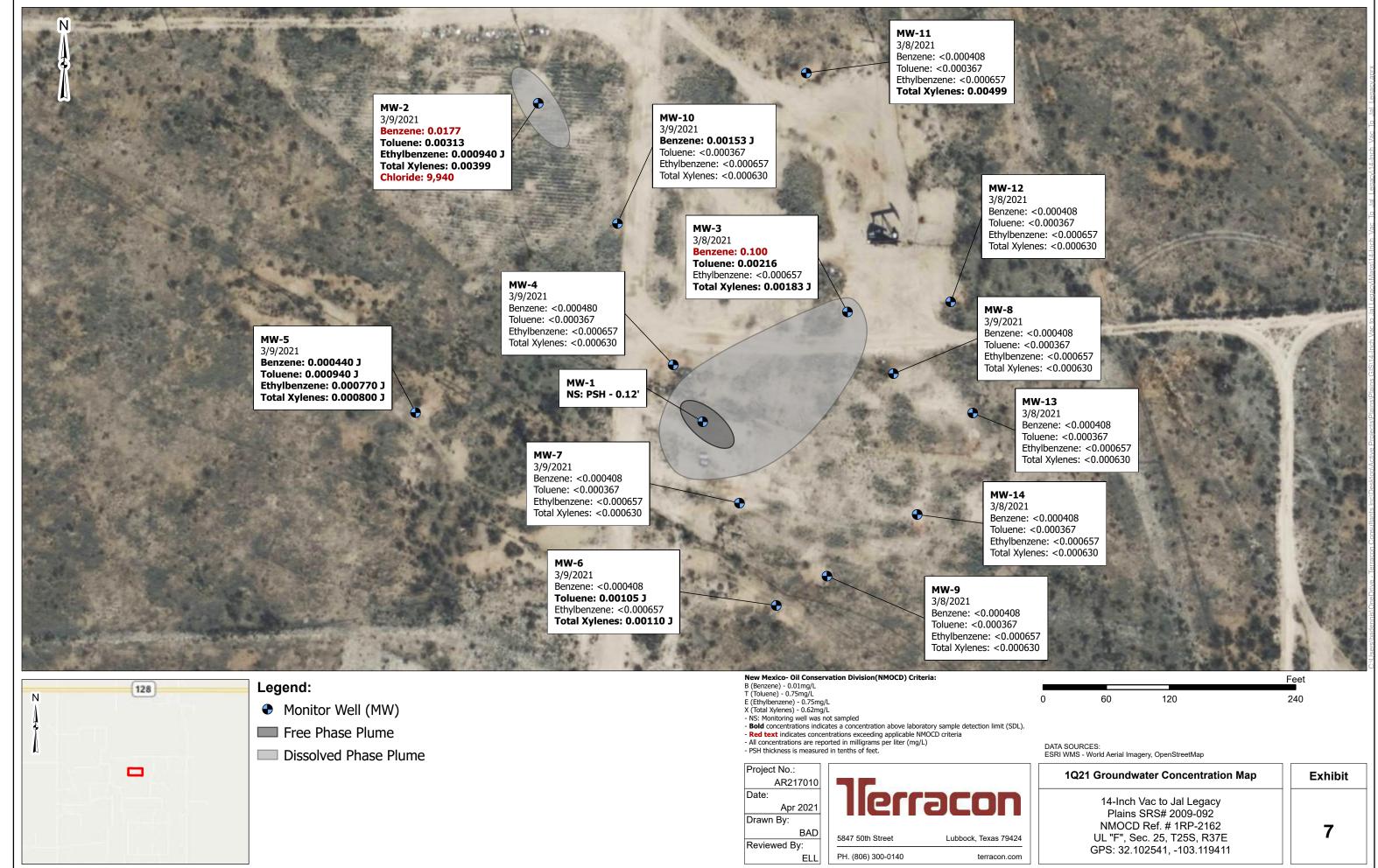
14-Inch Vac to Jal Legacy Plains SRS# 2009-092 NMOCD Ref. # 1RP-2162 UL "F", Sec. 25, T25S, R37E GPS: 32.102541, -103.119411

Exhibit

Released to Imaging: 8/3/2022 2:33:03 PM

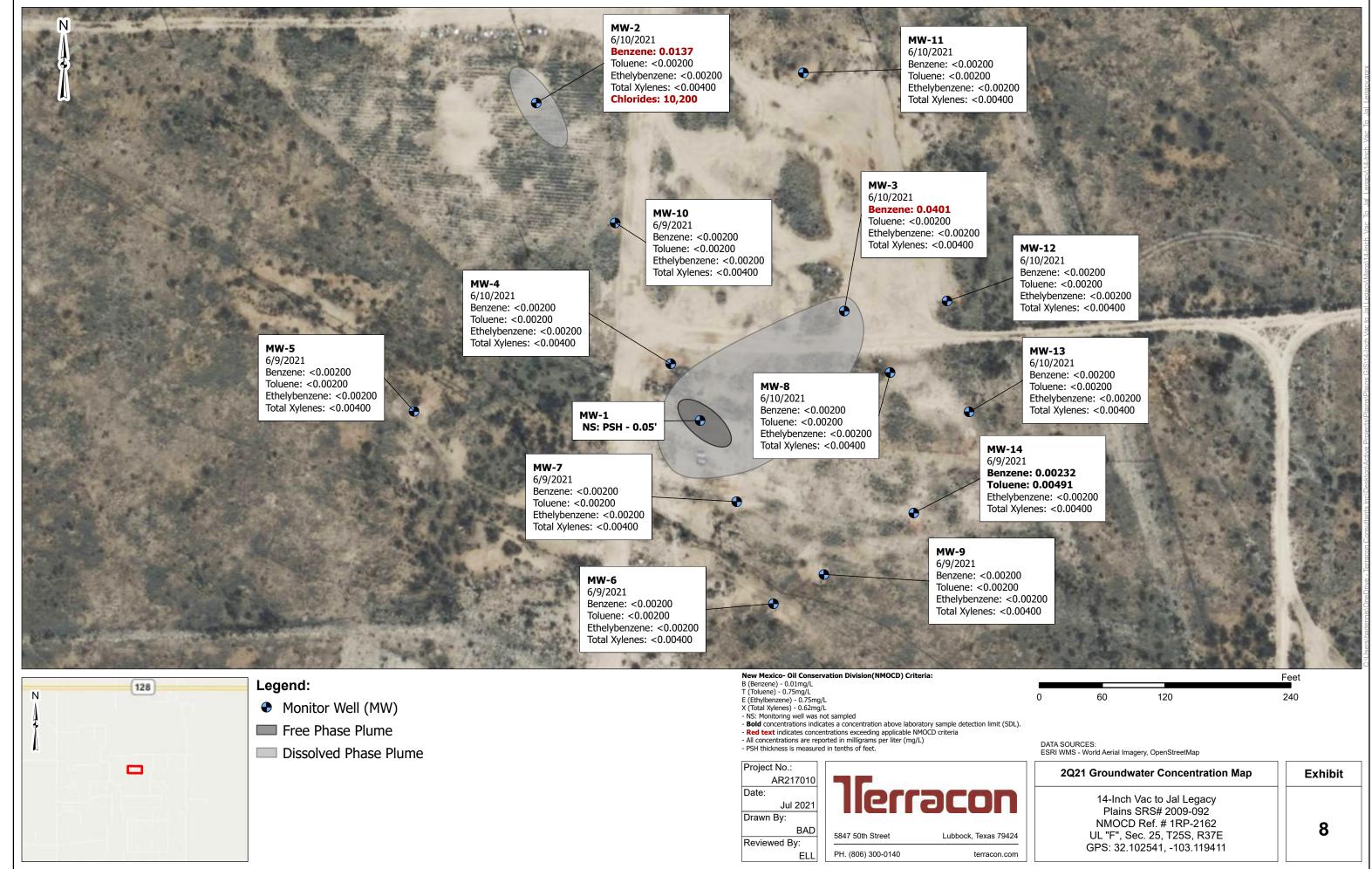
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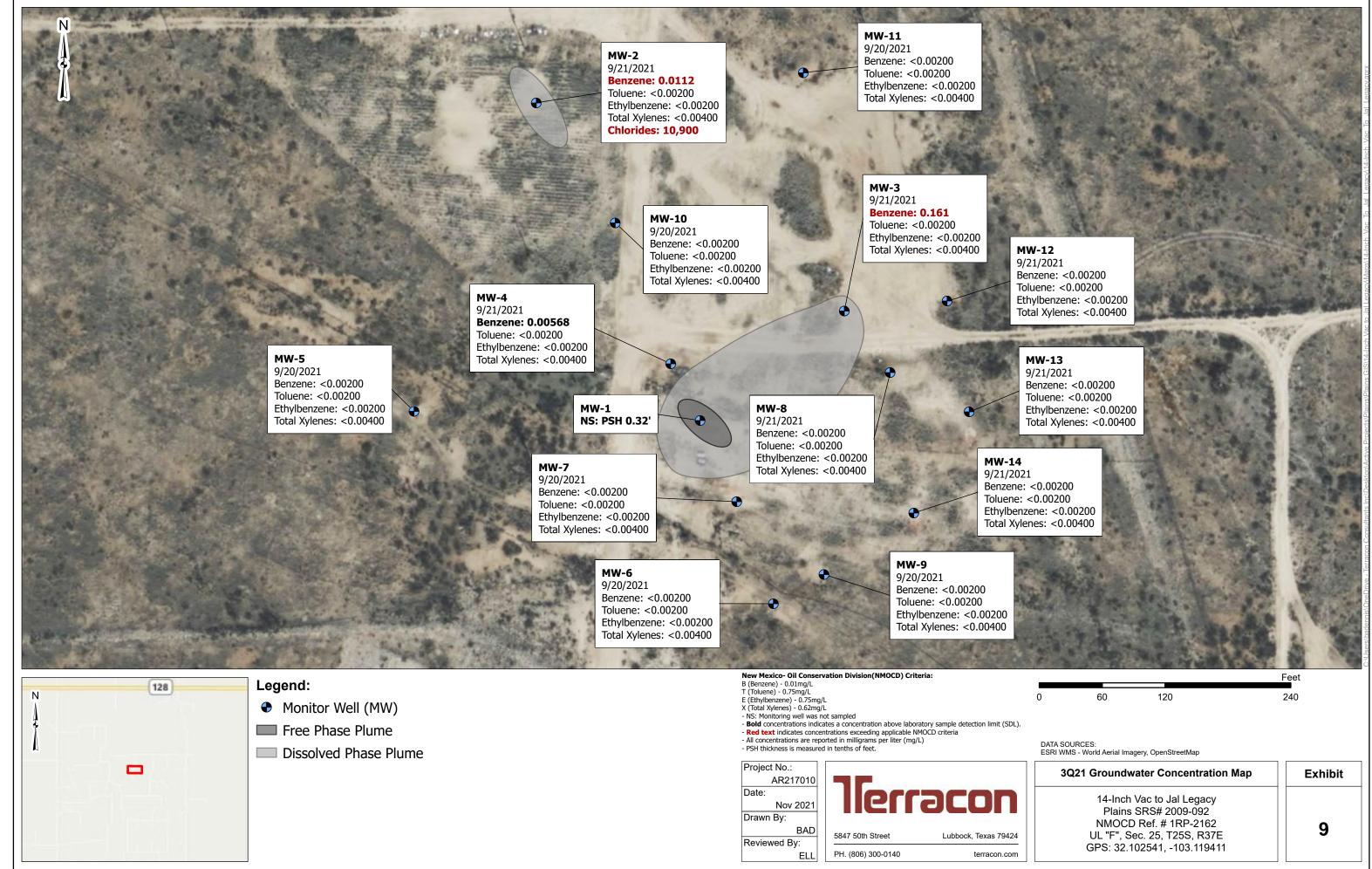
Received by OCD: 3/28/2022 8:13:25 AM

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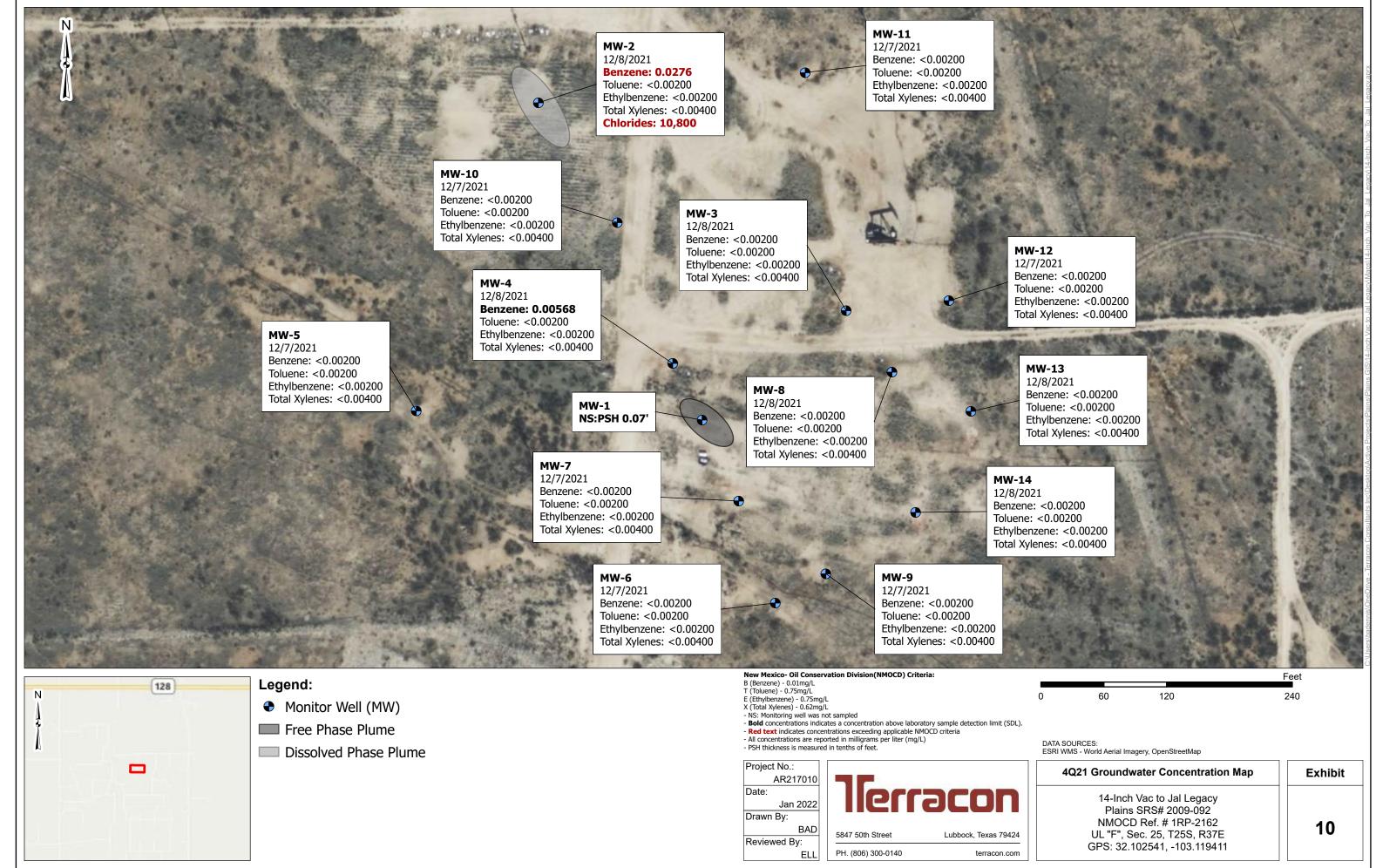
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APPENDIX B

Table 1 – Groundwater Elevation and PSH Thickness Summary

Table 2 – Groundwater BTEX and Chloride Analytical Summary

Table 3a – MW-1 PSH Thickness and Recovery Summary

Table 3b – MW-3 Gauging and BTEX Impacted Groundwater Recovery Summary

Table 3c – MW-4 Gauging and BTEX Impacted Groundwater Recovery Summary

Table 3d – MW-8 Gauging and BTEX Impacted Groundwater Recovery Summary

Table 3e – MW-13 Gauging and BTEX Impacted Groundwater Recovery Summary
Table 4- Quarterly AFR Event Results

Table 5 – Concentrations of PAH in Groundwater Summary

Table 1 Groundwater Elevation & PSH1 Thickness Summary

14-Inch Vac to Jal Legacy Lea County, New Mexico Plains Pipeline, L.P. SRS #: 2009-092 Terracon Project #: AR217010 NMOCD² Refernece#: 1RP-2162

All measurements are in feet above mean sea level

		Top of	Depth to	Depth to		
Monitoring Well	Date	Casing	PSH Below	Water	PSH	Corrected
(Well Diameter ")	Gauged	(TOC) ³	TOC	Below TOC	Thickness	Groundwater
(Well Diameter)	Gaugeu	, ,			(feet)	Elevation**
	04/07/0000	Elevation*	(feet)	(feet)	0.07	0.000.04
	01/27/2020		63.28	63.95	0.67	2,999.24
	06/02/2020		63.37	63.96	0.59	2,999.16
	09/14/2020		63.43	64.15	0.72	2,999.08
MW-1 (2")	12/08/2020	3,062.62	63.52	63.95	0.43	2,999.04
(= /	03/08/2021	-,	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
	01/27/2020		-	62.78	-	2,999.78
	06/02/2020		-	62.76	-	2,999.80
	09/14/2020		-	62.83	-	2,999.73
	12/08/2020		-	62.87	_	2,999.69
MW-2 (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
	12/01/2021		<u> </u>	02.99		2,555.51
	01/27/2020			62 45		2 000 20
	01/27/2020			63.45	-	2,999.28
	06/02/2020		-	63.83	-	2,998.90
	09/14/2020		-	63.64	-	2,999.09
MW-3 (2")	12/08/2020	3,062.73	-	63.78	-	2,998.95
5 (2)	03/08/2021	0,002.70	-	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
	01/27/2020	3,062.43	-	63.04	-	2,999.39
	09/14/2020		-	63.21	-	2,999.22
	12/08/2020		-	63.28	_	2,999.15
MW-4 (4")	03/08/2021		-	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
	12/01/2021			00.40		2,330.30
	01/27/2020			63.71	1	2,999.52
					-	
	06/02/2020		-	63.78	-	2,999.45
	09/14/2020			63.83	-	2,999.40
MW-5 (2")	12/08/2020	3,063.23	-	63.87	-	2,999.36
5 (2)	03/08/2021	2,230. 2 0	-	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
	01/27/2020		-	63.62	- 1	2,998.98
	06/02/2020		-	63.67	-	2,998.93
	09/14/2020		-	63.77	-	2,998.83
	12/08/2020		-	63.82	-	2,998.78
MW-6 (4")	03/08/2021	3,062.60		63.83		2,998.77
			-			2,998.74
	06/08/2021 09/20/2021		-	63.86		
			-	63.90		2,998.70
	12/07/2021		-	63.96	-	2,998.64
	01/27/2020		-	63.58	-	2,999.11
	06/02/2020		-	63.64	-	2,999.05
	09/14/2020		-	63.72	-	2,998.97
MW-7 (4")	12/08/2020	3,062.69	-	63.79	-	2,998.90
14144-7 (4-)	03/08/2021	3,002.09	-	63.80	-	2,998.89
	06/08/2021		-	63.85	-	2,998.84
	09/20/2021		-	63.88	-	2,998.81
					1	
	12/07/2021		-	63.95	-	2,998.74

- 1. PSH: Phase Separated Hydrocarbons

- NMOCD: New Mexico Oil Conservation Division
 TOC: Top of Casing
 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

Table 1 Groundwater Elevation & PSH1 Thickness Summary

14-Inch Vac to Jal Legacy Lea County, New Mexico Plains Pipeline, L.P. SRS #: 2009-092 Terracon Project #: AR217010 NMOCD² Refernece#: 1RP-2162

All measurements are in feet above mean sea level

Monitoring Well (Well Diameter ")	Date Gauged	Top of Casing (TOC) ³ Elevation*	Depth to PSH Below TOC (feet)	Depth to Water Below TOC (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation**
	01/27/2020	Lievation	- (1001)	63.31	_	2,999.11
	06/02/2020		-	63.38	-	2,999.04
	09/14/2020		-	63.48	-	2,998.94
MW-8 (2")	12/08/2020	3,062.42	-	63.53	-	2,998.89
10100-0 (2)	03/08/2021	3,002.42	-	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
	01/27/2020		_	63.75		2,999.02
	06/02/2020			63.80	_	2,998.97
	09/14/2020		-	63.88	-	2,998.89
1414/ O (4II)	12/08/2020	2 002 77	-	63.94	-	2,998.83
MW-9 (4")	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
	04/07/0000		ı	00.70	1	0.000.70
	01/27/2020 06/02/2020		-	62.78 62.87	-	2,999.72 2.999.63
	09/14/2020			62.93	-	2,999.57
	12/08/2020			62.97		2,999.53
MW-10 (2")	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
	01/27/2020	3,063.50	-	63.67	-	2,999.83
	06/02/2020		-	63.75	-	2,999.75
	09/14/2020 12/08/2020		-	63.80 63.84	-	2,999.70 2.999.66
MW-11 (2")	03/08/2020			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
	01/27/2020		-	63.02	-	2,999.18
	06/02/2020		-	62.91	-	2,999.29
	09/14/2020		-	63.22	-	2,998.98
MW-12 (2")	12/08/2020 03/08/2021	3,062.20	-	63.27 63.27	-	2,998.93 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
						,
	01/27/2020		-	63.72	-	2,998.99
	06/02/2020		-	63.80	-	2,998.91
	09/14/2020		-	63.89	-	2,998.82
MW-13 (2")	12/08/2020	3,062.71	-	63.93	-	2,998.78
. ,	03/08/2021		-	63.95	-	2,998.76
	06/08/2021 09/20/2021		-	63.99 64.03	-	2,998.72 2,998.68
	12/07/2021			64.11	-	2,998.60
	.2/01/2021			04.11		2,000.00
	01/27/2020		-	63.56	-	2,998.94
	06/02/2020		-	63.63	-	2,998.87
	09/14/2020		-	63.01	-	2,999.49
MW-14 (2")	12/08/2020	3,062.50	-	63.77	-	2,998.73
(= /	03/08/2021	-,	-	63.78	-	2,998.72
	06/08/2021		-	63.83	-	2,998.67
	09/20/2021 12/07/2021		-	63.86 63.93	-	2,998.64 2,998.57
				05.95		۷,550.51

- 1. PSH: Phase Separated Hydrocarbons
- 2. NMOCD: New Mexico Oil Conservation Division
- TOC: Top of Casing
 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 Groundwater BTEX¹ & Chloride Concentration Analytical Summary

14-Inch Vac to Jal Legacy Lea County, New Mexico Plains Pipeline, L.P. SRS #: 2009-092 Terracon Project #: AR217010 NMOCD² Reference #: 1RP-2162

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

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	M,P-	346-8021B O-	Total	Total	Chlorie
				•	Xylenes	Xylenes	Xylenes	BTEX	
NMOCD RRA		0.01	0.75	0.75	тот	AL XYLENE	S 0.62	NE⁴	250
	01/27/2020 06/04/2020	4							
MW-1	09/15/2020	1							
	12/08/2020				Not comple	d due to DCU			
	03/09/2021				NOL Sample	d due to PSH			
	06/09/2021								
	09/20/2021								
	12/07/2021								
	01/27/2020	0.0291	<0.000512	<0.000616	<0.000454	<0.000270	<0.000270	0.0291	8,890
	06/04/2020	0.0262	< 0.000512	<0.000616	< 0.000454	< 0.000270	<0.000270	0.0262	9,770
	DUP-1	0.0246	<0.000512	<0.000616	< 0.000454	<0.000270	<0.000270	0.0246	9,750
MW-2	09/15/2020	0.0223	<0.000367	<0.000657	<0.000630	<0.000642	<0.000630	0.0223	10,30
IVIVV-Z	12/09/2020 03/09/2021	0.0245	<0.000367 0.00313	<0.000657 0.000940 J	<0.000630 0.000910 J	<0.000642 0.00308	<0.0006300 0.00399	0.0245 0.0258	9,400
	06/10/2021	0.0177	<0.00200	<0.00200	< 0.00400	<0.00200	<0.00399	0.0238	10,20
	09/21/2021	0.0112	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.0122	10,90
	12/08/2021	0.0276	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.0276	10,80
	0.1/00/0000								
	01/27/2020	0.452 0.0616	<0.00256 <0.000512	<0.00308 <0.000616	0.00300 J <0.000454	<0.00135 <0.000270	0.00300 J <0.000270	0.455 0.0616	-
	09/15/2020	0.216	< 0.000312	<0.000657	< 0.000630	<0.000270	<0.000270	0.216	
	DUP-1	0.212	< 0.000367	<0.000657	<0.000630	<0.000642	<0.000630	0.212	
	12/09/2020	0.164	<0.000367	<0.000657	<0.000630	<0.000642	<0.0006300	0.164	-
	DUP-2	0.137	< 0.000367	< 0.000657	<0.000630	<0.000642	<0.0006300	0.137	
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 DUP-2	0.0401 0.0471	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.0401 0.0471	
	09/21/2021	0.161	<0.00200	<0.00200 <0.00200	<0.00400 <0.00400	<0.00200 <0.00200	<0.00400 <0.00400	0.161	
	DUP-2	0.190	<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	-
	04/07/0000	0.000400	0.000540	0.000040	0.000454	0.000070	0.000070	0.000070	
	01/27/2020	<0.000480 0.00150	<0.000512	<0.000616	<0.000454 <0.000454	<0.000270	<0.000270	<0.000270 0.00150	
	09/15/2020	0.00150	< 0.000312	<0.000657	<0.000434	<0.000270	<0.000270	0.00150	
	12/09/2020	0.00111 J		<0.000657	< 0.000630	< 0.000642	<0.0006300	0.00111 J	-
MW-4	03/09/2021	<0.000480		< 0.000657	<0.000630	<0.000642	<0.000630	< 0.000367	-
	DUP-2	<0.000480		<0.000657	<0.000630	<0.000642	<0.000630	< 0.000367	-
	06/10/2021	<0.00200	<0.00200	<0.00200 <0.00200	<0.00400 <0.00400	<0.00200	<0.00400	<0.00400 <0.00400	
	12/08/2021	0.00568	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	0.00611	
	11/26/2019	<0.000480		<0.000616	< 0.000454	<0.000270	<0.000270	<0.000270	-
	01/27/2020	<0.000480		<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	
	06/02/2020	<0.000480	<0.000512 <0.000367	<0.000616 <0.000657	<0.000454 <0.000630	<0.000270 <0.000642	<0.000270 <0.000630	<0.000270 <0.000367	
MW-5	12/08/2020	0.000830 J		0.000690 J	0.000710 J	0.000900 J	0.00161 J	0.00396	
	03/09/2021		0.000940 J	0.000770 J	<0.000630	0.000800 J	0.000800 J	0.00295	-
	06/09/2021	<0.00200		< 0.00200	<0.00400	<0.00200	< 0.00400	<0.00400	-
	09/20/2021	<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	
	01/27/2020	<0.000480	<0.000512	<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	-
	06/02/2020	< 0.000480		<0.000616	< 0.000454	<0.000270	<0.000270	<0.000270	-
	09/15/2020	<0.000408		<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	
MW-6	12/08/2020		0.000690 J	< 0.000657	0.000810 J	<0.000642	0.000810 J	0.00227	-
-	03/09/2021	<0.000408		<0.000657	<0.000630	0.00110 J	0.00110 J	0.00215	-
	06/09/2021	<0.00200	<0.00200	<0.00200	<0.00400 <0.00400	<0.00200	<0.00400	<0.00400	
	12/07/2021	<0.00200	<0.00200	<0.00200 <0.00200	<0.00400	<0.00200	<0.00400 <0.00400	<0.00200	÷
	01/27/2020	<0.000480	<0.000512	<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	
	06/03/2020	<0.000480		<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	-
	09/15/2020		<0.000367	<0.000657 <0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
MW-7	12/08/2020 03/09/2021	<0.000408	<0.000367	<0.000657	<0.000630	<0.000642 <0.000642	<0.000630 <0.000630	<0.000367	
	06/09/2021	<0.000408	<0.00200	<0.00200	<0.00400	<0.000042	<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	<0.00400	<0.00200	<0.00400	<0.00400	
	0.1/0=/0.00								
	01/27/2020 DUP-2	0.0692	<0.000512	<0.000616	<0.000454 0.000500 J	<0.000270	<0.000270	0.0692	-
	06/04/2020	0.0678 0.0063	<0.000512 <0.000512	<0.000616 <0.000616	<0.000500 J <0.000454	<0.000270	0.000500 J <0.000270	0.0683 0.0063	
	DUP-3	0.0062	<0.000512	<0.000616	< 0.000454	<0.000270	<0.000270	0.0062	-
	09/15/2020	<0.000408		<0.000657	<0.000630	<0.000642	<0.000630	< 0.000367	
MW-8	12/09/2020	<0.000408	< 0.000367	<0.000657	< 0.000630	< 0.000642	<0.000630	< 0.000367	
	03/09/2021	<0.000408		<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	
	06/10/2021 DUP-1	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00400	-
		< 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	_

- BTEX: Benzene, Toluene, Ethylbenzene, and Total Xylenes

- 1. BTEX: Benzene, Toluene, Ethylbenzene, and Total Xylenes
 2. NMOCD: New Mexico Oil Conservation Division
 3. RRAL Criteria: Recommended Remediation Action Level Criteria
 4. NE: Not Established
 3. The target analyte was positively identified below the quantitation limit and above the detection limit
 Bold text indicates a concentration above the laboratory detection limit.

 Highlighted text indicates a concentration exceeding the NMOCD RRAL Criteria

Table 2 Groundwater BTEX¹ & Chloride Concentration Analytical Summary

14-Inch Vac to Jal Legacy Lea County, New Mexico Plains Pipeline, L.P. SRS #: 2009-092 Terracon Project #: AR217010 NMOCD² Reference #: 1RP-2162

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

Monitoring Date EPA SW 846-8021B						346-8021B			
Well	Sampled	Benzene	Toluene	Ethylbenzene	M,P- Xylenes	O- Xylenes	Total Xylenes	Total BTEX	Chloride
NMOCD RRA	AL CRITERIA ³	0.01	0.75	0.75	тот	AL XYLENES	S 0.62	NE ⁴	250
	01/27/2020	<0.000480		<0.000616	< 0.000454	<0.000270	<0.000270	<0.000270	-
	06/02/2020	<0.000480		<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	-
	09/15/2020	<0.000408		<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
MW-9	12/08/2020 03/08/2021	<0.000408		<0.000657 <0.000657	<0.000630 <0.000630	<0.000642 <0.000642	<0.000630 <0.000630	<0.000367 <0.000367	
	06/09/2021	<0.00200	<0.00200	<0.00200	<0.00400	<0.000042	<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	-
	01/27/2020	<0.000480		<0.000616	< 0.000454	< 0.000270	<0.000270	< 0.000270	-
	06/03/2020	0.00180	<0.000512	<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	-
	09/14/2020 12/08/2020	0.00250 0.00317	<0.000367 0.00145 J	<0.000657 <0.000657	<0.000630 0.00135 J	<0.000642 0.000760 J	<0.000630 0.00211	0.00250 0.00673	-
MW-10	03/09/2021	0.00317 0.00153 J	< 0.00145 5	<0.000657	< 0.00135 3	< 0.000760 3	<0.00211	0.00673 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	-
			_						
	01/27/2020	<0.000480	<0.000512	<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	-
	06/03/2020	<0.000480		<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	-
	09/15/2020 12/08/2020	<0.000408		<0.000657 <0.000657	<0.000630	<0.000642 <0.000642	<0.000630 <0.000630	<0.000367 <0.000367	-
MW-11	03/08/2020	<0.000408		<0.000657	0.00299 J	0.00200 J	0.00499	0.00499	
	06/10/2021	<0.00200	<0.00200	<0.00200	< 0.00233 0	<0.00200	<0.00400	< 0.00433	-
	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	
	01/27/2020	<0.000480		<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	-
	06/03/2020	<0.000480		<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	-
	09/15/2020 12/09/2020	<0.000620 <0.000408	<0.000630 <0.000367	<0.000657 <0.000657	<0.000630	<0.000642 <0.000642	<0.000630	0.00125 <0.000367	-
MW-12	03/08/2020	<0.000408		<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	-
	01/27/2020	0.0625	<0.000512	<0.000616	0.000600 J	<0.000270	0.000600 J	0.0631	-
	DUP-1	0.0629	<0.000512	<0.000616	<0.000454	<0.000270	<0.000270	0.0629	-
	06/04/2020 DUP-2	<0.000480		<0.000616 <0.000616	<0.000454 <0.000454	<0.000270 <0.000270	<0.000270 <0.000270	<0.000270 <0.000270	-
	09/15/2020	<0.000480		<0.000616	< 0.000434	<0.000270	<0.000270	<0.000270	
101/10	12/09/2020	<0.000408		<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
MW-13	DUP-1	<0.000408		<0.000657	< 0.000630	< 0.000642	<0.000630	< 0.000367	-
	03/08/2021	<0.000408	< 0.000367	<0.000657	< 0.000630	< 0.000642	<0.000630	< 0.000367	
	DUP-1	<0.000408		<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	-
	01/27/2020	<0.000480	<0.000512	<0.000616	<0.000454	<0.000270	<0.000270	<0.000270	-
	06/02/2020	<0.000480		<0.000616	< 0.000454	<0.000270	<0.000270	<0.000270	-
	09/15/2020	<0.000408		<0.000657	<0.000630	<0.000642	<0.000630	< 0.000367	-
	12/08/2020	<0.000408		<0.000657	<0.000630	<0.000642	<0.000630	<0.000367	-
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 DUP-1	<0.00200	<0.00200	<0.00200 <0.00200	<0.00400 <0.00400	<0.00200 <0.00200	<0.00400 <0.00400	<0.00400 <0.00400	
	DUP-1	<u.00200< td=""><td><u.uuzuu< td=""><td><u.00200< td=""><td><0.00400</td><td>NU.UU2UU</td><td><0.00400</td><td>NU.00400</td><td></td></u.00200<></td></u.uuzuu<></td></u.00200<>	<u.uuzuu< td=""><td><u.00200< td=""><td><0.00400</td><td>NU.UU2UU</td><td><0.00400</td><td>NU.00400</td><td></td></u.00200<></td></u.uuzuu<>	<u.00200< td=""><td><0.00400</td><td>NU.UU2UU</td><td><0.00400</td><td>NU.00400</td><td></td></u.00200<>	<0.00 4 00	NU.UU2UU	<0.00 4 00	NU.00400	

- Notes:

 1. BTEX: Benzene, Toluene, Ethylbenzene, and Total Xylenes

 2. NMOCD: New Mexico Oil Conservation Division

 3. RRAL Criteria: Recommended Remediation Action Level Criteria

 4. NE: Not Established

 J: The target analyte was positively identified below the quantitation limit and above the detection limit

 Bold text indicates a concentration above the laboratory detection limit.

 Highlighted text indicates a concentration exceeding the NMOCD RRAL Criteria

TABLE 3a MW-1 PSH¹ Thickness and Recovery Summary

14-inch Vac to Jal Legacy Lea County, New Mexico Plains Pipeline, L.P. SRS #2009-092 Terracon Project #: AR217010 NMOCD² REFERENCE #: 1RP-2162

All measurements are in feet above mean sea level

Monitoring Well	Date	Top of Casing (TOC) ³ Elevation*	Depth to PSH Below TOC (feet)	Depth to Water Below TOC (feet)	PSH Thickness (feet)	Total Fluid Recovery (gallons)	PSH Recovered (gallons)	
	01/02/2020		63.28	63.90	0.62	3.0	0.101	
	01/09/2020		63.31	63.90	0.59	1,050.0	0.096	
	01/30/2020		63.31	64.04	0.73	3.0	0.119	
	02/04/2020		63.36	63.98	0.62	3.0	0.101	
	02/13/2020		63.34	63.88	0.54	1,680.0	0.088	
	02/18/2020		63.28	63.49	0.21	5.0	0.034	
	02/26/2020		63.40	63.80	0.40	3.0	0.065	
	03/06/2020		63.25	63.96	0.71	5.0	0.116	
	03/12/2020		63.21	63.94	0.73	5.0	0.119	
	03/17/2020		63.21	63.94	0.73	1,176.0	0.119	
	03/18/2020		63.39	63.95	0.56	5.0	0.091	
	05/15/2020		63.32	64.00	0.68	5.0	0.111	
	05/19/2020		63.39	64.05	0.66	1,176.0	0.108	
	06/29/2020	3,062.62	63.39	63.93	0.54	5.0	0.088	
	07/29/2020		63.42	64.07	0.65	5.0	0.106	
	08/12/2020		63.38	64.28	0.90	1,470.0	0.147	
MW-1	08/17/2020		63.72	64.31	0.59	5.0	0.096	
10100-1	10/28/2020		63.49	64.08	0.59	4.0	0.096	
	11/12/2020		63.52	64.02	0.50	1,176.0	0.081	
	11/23/2020		63.50	64.05	0.55	4.0	0.090	
	12/30/2020		63.35	64.09	0.74	3.5	0.121	
	01/29/2021		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	
	2021 Average PSH Thickness 0.30 5,923.0 0.58							

- 1. PSH: Phase Separated Hydrocarbons
- 2. NMOCD: New Mexico Oil Conservation Division
- 3. TOC: Top Of Casing
- * 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 3b

MW-3 Gauging and BTEX¹ Impacted Groundwater Recovery Summary 14-Inch Vac to Jal Legacy

Lea County, New Mexico

Plains Pipeline, L.P. SRS #2009-092 Terracon Project #: AR217010

NMOCD² REFERENCE #: 1RP-2162

All measurements are in feet above mean sea level

Monitoring Well	Date	Top of Casing (TOC) ³ Elevation*	Groundwater Recovered (gallons)
	01/02/2020		65.0
	01/07/2020		1,470.0
	01/30/2020		5.0
	02/04/2020		3.0
	02/11/2020		1,260.0
	02/18/2020		5.0
	02/26/2020		3.0
	03/06/2020		5.0
	03/12/2020		5.0
	03/18/2020		5.0
	05/15/2020		5.0
	05/20/2020		1,344.0
	06/29/2020		5.0
	07/29/2020		5.0
	08/10/2020		1,260.0
	08/17/2020		5.0
MW-3	10/28/2020	3,062.73	5.0
	11/09/2020		1,596.0
	1123/2020		3.0
	12/30/2020		3.0
	01/29/2021		3.0
	02/24/2021		1,050.0
	03/25/2021		5.0
	04/28/2021		5.0
	05/19/2021		1,260.0
	06/29/2021		5.0
	07/28/2021		5.0
	08/11/2021		1,575.0
	08/24/2021		5.0
	10/26/2021		5.0
	11/10/2021		855.0
	11/30/2021		5.0
	12/21/2021		5.0
	2021 Total GV	V ⁴ Recovered	4,783.0

- 1. BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
- 2. NMOCD: New Mexico Oil Conservation Division
- 3. TOC: Top Of Casing
- 4. GW: Groundwater
- * 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

Table 3c

MW-4 Gauging and BTEX¹ Impacted Groundwater Recovery Summary

14-Inch Vac to Jal Legacy

Lea County, New Mexico

Plains Pipeline, L.P. SRS #2009-092

Terracon Project #: AR217010 NMOCD² REFERENCE #: 1RP-2162

All measurements are in feet above mean sea level

Monitoring Well	Date	Top of Casing (TOC) ³ Elevation*	Groundwater Recovered (gallons)
	01/02/2020		65.0
	01/09/2020		100.0
	01/30/2020		5.0
	02/04/2020		3.0
	02/13/2020		30.0
	02/18/2020		5.0
	02/26/2020		3.0
	03/06/2020		5.0
	03/12/2020		5.0
	03/18/2020		5.0
	05/15/2020		5.0
	05/20/2020	3,062.43	5.0
	06/29/2020		5.0
	07/29/2020		5.0
	08/13/2020		5.0
MW-4	08/17/2020		5.0
10100-4	10/28/2020		5.0
	11/23/2020		3.0
	12/30/2020		3.0
	01/29/2021		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
	2021 Total GV	V ⁴ Recovered	68.0

- 1. BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
- 2. NMOCD: New Mexico Oil Conservation Division
- 3. TOC: Top Of Casing
- 4. GW: Groundwater
- * 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 3d

MW-8 Gauging and BTEX¹ Impacted Groundwater Recovery Summary

14-Inch Vac to Jal Legacy Lea County, New Mexico

Plains Pipeline, L.P. SRS #2009-092

Terracon Project #: AR217010 NMOCD² REFERENCE #: 1RP-2162

All measurements are in feet above mean sea level

Monitoring Well	Date	Top of Casing (TOC) ³ Elevation*	Groundwater Recovered (gallons)
	01/02/2020		65.0
	01/30/2020		5.0
	02/04/2020		3.0
	02/18/2020		5.0
	02/26/2020		3.0
	03/06/2020		5.0
	03/12/2020		5.0
	03/18/2020		5.0
	05/15/2020		5.0
	05/21/2020		1470.0
	06/29/2020		5.0
	07/29/2020		5.0
	08/13/2020		1344.0
	08/17/2020		5.0
	10/28/2020		5.0
MW-8	11/11/2020	3,062.42	840.0
	11/23/2020		3.0
	12/30/2020		3.0
	01/29/2021		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		1125.0
	08/24/2021		5.0
	10/26/2021		5.0
	11/09/2021		1080.0
	11/30/2021		5.0
	12/21/2021		5.0
	2021 Total GV	V⁴ Recovered	4,600.0

- 1. BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
- 2. NMOCD: New Mexico Oil Conservation Division
- 3. TOC: Top Of Casing
- 4. GW: Groundwater
- * 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 3e

MW-13 Gauging and BTEX¹ Impacted Groundwater Recovery Summary

14-Inch Vac to Jal Legacy Lea County, New Mexico

Plains Pipeline, L.P. SRS #2009-092

Terracon Project #: AR217010 NMOCD² REFERENCE #: 1RP-2162

All measurements are in feet above mean sea level

Top of .						
Monitoring Well	Date	Casing (TOC) ³ Elevation*	Groundwater Recovered (gallons)			
	01/02/2020		65.0			
	01/09/2020		100.0			
	01/30/2020		5.0			
	02/04/2020		3.0			
	02/13/2020		60.0			
	02/18/2020		5.0			
	02/26/2020		3.0			
	03/06/2020		5.0			
	03/12/2020		5.0			
	03/18/2020		5.0			
	05/15/2020		5.0			
	05/18/2020		1,260.0			
	06/29/2020		5.0			
	07/29/2020		5.0			
	08/11/2020		1,260.0			
	08/17/2020		5.0			
MW-13	10/28/2020	3,062.71	5.0			
	11/10/2020		1,470.0			
	11/23/2020		3.0			
	12/30/2020		3.0			
	01/29/2021		3.0			
	02/23/2021		1,260.0			
	03/25/2021		5.0			
	04/28/2021		5.0			
	05/17/2021		1,260.0			
	06/29/2021		5.0			
	07/28/2021		5.0			
	08/09/2021		1260.0			
	08/24/2021		5.0			
	10/26/2021		5.0			
	11/08/2021		585.0			
	11/30/2021		5.0			
	12/21/2021		5.0			
	2021 Total GW	I ⁴ Recovered	4,408.0			

Notes:

- 1. BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
- 2. NMOCD: New Mexico Oil Conservation Division
- 3. TOC: Top Of Casing
- 4. GW: Groundwater
- * 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

TABLE 4 Quarterly AFR¹ Event Results

14-inch Vac to Jal Legacy Lea County, New Mexico Plains Pipeline, L.P. SRS #2009-092 Terracon Project #: AR217010 NMOCD² REFERENCE #: 1RP-2162

NMOCD ² REFERENCE #: 1RP-2162									
Monitoring Well	Date	Targeted Constituent	Fluid Volume (gallons)	Notes					
MW-1	01/09/2020	PSH/BTEX	1,050	Vac Truck, 285 gallons removed from buffalo tank					
MW-3	01/07/2020	BTEX	1,470	Vac Truck					
MW-4	01/09/2020	BTEX	100	Tornado pump					
MW-8	01/08/2020	BTEX	1,470	Vac Truck					
MW-13	01/09/2020	BTEX	100	Tornado pump					
MW-1	02/13/2020	PSH/BTEX	1,680	Vac Truck, 120 gallons removed from buffalo tank					
MW-3	02/11/2020	BTEX	1,260	Vac Truck					
MW-4	02/13/2020	BTEX	30	Tornado pump					
MW-8	02/12/2020	BTEX	1,260	Vac Truck					
MW-13	02/13/2020	BTEX	60	Tornado pump					
MW-1	03/17/2020	PSH/BTEX	1,176	Vac Truck					
MW-3	03/18/2020	BTEX	N/A	Vac truck broke down, then could not reschedule due to COVID-19					
MW-4	03/17/2020	BTEX	0	Tornado pump not performed this month					
MW-8	03/19/2020	BTEX	N/A	Vac truck broke down, then could not reschedule due to COVID-19					
MW-13	03/17/2020	BTEX	0	Tornado pump not performed this month					
	1Q20	Total Recovered	9,656						
MW-1	05/19/2020	PSH/BTEX	1,176	Vac Truck					
MW-3	05/20/2020	BTEX	1,344	Vac Truck					
MW-8	05/21/2020	BTEX	1,470	Vac Truck					
MW-13	05/18/2020	BTEX	1,260	Vac Truck					
	2Q20	Total Recovered	5,250						
MW-1	08/12/2020	PSH/BTEX	1,470	Vac Truck					
MW-3	08/10/2020	BTEX	1,260	Vac Truck					
MW-8	08/13/2020	BTEX	1,344	Vac Truck					
MW-13	08/11/2020	BTEX	1,260	Vac Truck					
	3Q20	Total Recovered	5,334						
MW-1	11/12/2020	PSH/BTEX	1,176	Vac Truck					
MW-3	11/09/2020	BTEX	1,596	Vac Truck					
MW-8	11/11/2020	BTEX	840	Vac Truck					
MW-13	11/10/2020	BTEX	1,470	Vac Truck					
	4Q20	Total Recovered	5,082						
	2020	Total Recovered	25,322						
MW-1	02/25/2021	PSH/BTEX	1,260	Vac Truck					
MW-3	02/24/2021	BTEX	1,050	Vac Truck					
MW-8	02/22/2021	BTEX	1,176	Vac Truck					
MW-13	02/23/2021	BTEX	1,260	Vac Truck					
	1Q21	Total Recovered	4,746						
MW-1	02/25/2021	PSH/BTEX	1,470	Vac Truck					
MW-3	02/24/2021	BTEX	1,260	Vac Truck					
MW-8	02/22/2021	BTEX	1,176	Vac Truck					
MW-13	02/23/2021	BTEX	1,260	Vac Truck					
		Total Recovered	5,166						
MW-1	08/12/2021	PSH/BTEX	1,470	Vac Truck					
MW-3	08/11/2021	BTEX	1,470	Vac Truck					
MW-8	08/10/2021	BTEX	1,050	Vac Truck					
MW-13	08/09/2021	BTEX	1,176	Vac Truck					
		Total Recovered	5,166						
MW-1	11/11/2021	PSH/BTEX	1,470	Vac Truck					
MW-3	11/10/2021	BTEX	798	Vac Truck					
MW-8	11/09/2021	BTEX	1,008	Vac Truck					
MW-13	11/08/2021	BTEX	546	Vac Truck					
		Total Recovered	3,822						
	2021	Total Recovered	18,900						

Notes:

- 1. AFR: Aggressive Fluid Recovery
- 2. NMOCD: New Mexico Oil Conservation Division
- 3. PSH: Phase Separated Hydrocarbons
- 4. BTEX: Benzene, Toluene, Ethylbenzene, and Total Xylenes

Table 6 Concentrations of PAH1 in Groundwater Summary

14-Inch Vac to Jal Legacy Lea County, New Mexico Plains Pipeline, L.P. SRS #: 2009-092 Terracon Project #: AR217011

NMOCD2 Reference#: 1RP-2162

All concentrations are in milligrams per liter (mg/L)³

							All concen	trations are	n milligrams	per liter (mg/ EPA 8310	/L) ·							
Monitoring Well	Date Sampled	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 Gr Criter		0.03	0.0007								NE ⁵							
MW-1	11/25/2019 12/8/2020								Well Not San	npled due to PS	H Presence							
MW-2	6/7/2013 5/12/2014 11/25/2019 12/9/2020	N/A N/A N/A 0.000242 J	<0.00021 <0.000053 <0.000053 <0.0000588	<0.005 <0.000053 <0.000053 <0.000103	<0.005 <0.000053 <0.000053 <0.0000868	<0.00017 <0.000053 <0.000053 <0.0000893	<0.005 <0.000053 <0.000053 <0.000139	<0.00039 <0.000053 <0.000053 <0.0000733	<0.005 <0.000053 <0.000053 <0.000117	<0.00053 <0.000053 <0.000053 <0.000120	<0.005 <0.000053 <0.000053 <0.000161	<0.005 <0.000053 <0.0000784	N/A N/A N/A NA	<0.00026 <0.000053 <0.000053 <0.000162	<0.00032 <0.000053 <0.000053 <0.000104	<0.005 <0.000053 <0.000053 <0.0000942	<0.00029 <0.000053 <0.000053 <0.0000877	<0.00029 <0.000053 <0.000053 <0.000134
MW-3	6/7/2013 5/12/2014 11/25/2019	N/A N/A	<0.00021 <0.000051	<0.005 <0.000051	<0.005 <0.000051	<0.00017 <0.000051	<0.005 <0.000051	<0.00039 <0.000051	<0.005 <0.000051 W	<0.00054 <0.000051 ell Not Sampleo	<0.005 <0.000051	<0.005 <0.000051	N/A N/A	<0.00026 <0.000051	<0.00032 <0.000051	<0.005 <0.000051	<0.00029 <0.000051	<0.00029 <0.000051
MW-4	12/9/2020 6/7/2013 5/12/2014	<0.000101 N/A N/A	<0.0000594 <0.000053 <0.00021	<0.000104 <0.000053 <0.005	<0.0000877 <0.000053 <0.005	<0.0000902 <0.000053 <0.00017	<0.000140 <0.000053 <0.005	<0.0000741 <0.000053 <0.00040	<0.000118 <0.000053 <0.005	<0.000121 <0.000053 <0.00054 ell Not Sampleo	<0.000163 <0.000053 <0.005	<0.0000792 <0.000053 <0.005	NA N/A N/A	<0.000164 <0.000053 <0.00027	<0.000105 <0.000053 <0.00032	<0.0000951 <0.000053 <0.005	<0.0000886 <0.000053 <0.00029	<0.000136 <0.000053 <0.00030
	11/25/2019 12/9/2020	<0.000103	<0.0000604	<0.000106	<0.0000892	<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
MW-5	6/7/2013 5/12/2014 11/25/2019 12/8/2020	N/A N/A <0.000100	<0.00021 <0.000052 <0.0000589	<0.005 <0.000052 <0.000103	<0.005 <0.000052 <0.0000869	<0.00017 <0.000052 <0.0000894	<0.005 <0.000052 <0.000139	<0.00039 <0.000052 <0.0000734		<0.00054 <0.000052 ell Not Samples <0.000120	<0.005 <0.000052 i <0.000161	<0.005 <0.000052 <0.0000785	N/A N/A	<0.00026 <0.000052 <0.000162	<0.00032 <0.000052 <0.000104	<0.005 <0.000052 <0.0000943	<0.00029 <0.000052 <0.0000878	<0.00029 <0.000052 <0.000135
MW-6	6/7/2013 5/12/2014 11/25/2019	N/A N/A	<0.00021 <0.000052	<0.005 <0.000052	<0.005 <0.000052	<0.00017 <0.000052	<0.005 <0.000052	<0.00040 <0.000052	<0.005 <0.000052 W	<0.00055 <0.000052 ell Not Sampleo	<0.005 <0.000052	<0.005 <0.00052	N/A N/A	<0.00027 <0.000052	<0.00033 <0.000052	<0.005 <0.000052	<0.00030 <0.000052	<0.00030 <0.000052
MW-7	12/8/2020 7/2/2014	<0.000117 N/A	<0.0000689	<0.000121	<0.000102	<0.000105	<0.000162	<0.0000858	<0.000137	<0.000140	<0.000189	<0.0000918	N/A N/A	<0.000190	<0.000122	<0.000110	<0.000103	<0.000157
MVV-7	11/25/2019 12/8/2020	<0.000133	<0.0000778	<0.000136	<0.000115	<0.000118	<0.000183	<0.0000969	<0.000154	ell Not Sampled <0.000158	<0.000213	<0.000104	N/A	<0.000214	<0.000137	<0.000124	<0.000116	<0.000178
MW-8	7/2/2014 11/25/2019 12/9/2020	N/A <0.000114	<0.000050	<0.000050	<0.000050	<0.000050	<0.00050	<0.000050	<0.000050 W <0.000132	<0.000050 ell Not Sampleo <0.000136	<0.000050 i <0.000183	<0.000050	N/A N/A	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
MW-9	7/2/2014 11/25/2019 12/8/2020	N/A <0.000116	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050 <0.000160	<0.000050 <0.0000846	<0.000050 W <0.000135	<0.000050 ell Not Sampled <0.000138	<0.000050 i <0.000186	<0.000050 <0.0000904	N/A N/A	<0.000050 <0.000187	<0.000050	<0.000050	<0.000050	<0.000050 <0.000155
MW-10	11/25/2019 12/8/2020	<1.16 <0.000110	N/A <0.0000646	<2.09 <0.000113	<1.12 <0.0000954	<0.811 <0.0000981	N/A <0.000152	N/A <0.0000805	N/A <0.000128	N/A <0.000132	<1.38 <0.000177	N/A <0.0000861	N/A N/A	<0.740 <0.000178	<1.09 <0.000114	N/A <0.000103	<0.771 <0.0000963	<1.38 <0.000148
MW-11	11/25/2019 12/8/2020	<1.16 <0.000100	N/A <0.0000587	<2.09 <0.000103	<1.12 <0.0000866	<0.811 <0.0000891	N/A <0.000138	N/A <0.0000731	N/A <0.000116	N/A <0.000119	<1.38 <0.000161	N/A <0.0000781	N/A N/A	<0.740 <0.000162	<1.09 <0.000104	N/A <0.0000939	<0.771 <0.0000874	<1.38 <0.000134
MW-12	11/25/2019 12/9/2020	<1.16 <0.0000997	N/A <0.0000585	<2.09 <0.000102	<1.12 <0.0000863	<0.811 <0.0000888	N/A <0.000138	N/A <0.0000729	N/A <0.000116	N/A <0.000119	<1.38 <0.000160	N/A <0.0000779	N/A N/A	<0.740 <0.000161	<1.09 <0.000103	N/A <0.0000936	<0.771 <0.0000872	<1.38 <0.000134
MW-13	11/25/2019 12/9/2020	<1.16 <0.000115	N/A <0.0000674	<2.09 <0.000118	<1.12 <0.000994	<0.811 <0.000102	N/A <0.000159	N/A <0.000840	N/A <0.000134	N/A <0.000137	<1.38 <0.000184	N/A <0.0000898	N/A N/A	<0.740 <0.000186	<1.09 <0.000119	N/A <0.000108	<0.771 <0.000100	<1.38 <0.000154
MW-14	11/25/2019 12/8/2020	<1.16 <0.000107	N/A <0.0000627	<2.09 <0.000110	<1.12 <0.0000925	<0.811 <0.0000952	N/A <0.000148	N/A <0.0000781	N/A <0.000124	N/A <0.000128	<1.38 <0.000172	N/A <0.0000835	N/A N/A	<0.740 <0.000173	<1.09 <0.000111	N/A <0.000100	<0.771 <0.0000935	<1.38 <0.000143

Notes:

- PAH: Polycyclic Aromatic Hydrocarbons
 NMOCD: New Mexico Oil Conservation Division
- New Metal Control value of Division
 New Metal Control value of Division
 New Metal Control value of Division
 New Metal Control value of Division of Division Action Level Criteria
 Ne: Not Established
- 3. N.E. NOC Establishmu
 J. The target analyte was positively identified below the quantitation limit and above the detection limit
 Bold text indicates a concentration above the laboratory detection limit.

 Highlighted text indicates a concentration exceeding the NMOCD RRAL Criteria

APPENDIX C

Certified Laboratory Analytical Reports



Analytical Report 691132

for

Terracon-Midland

Project Manager: Brett Dennis

14" Vac to Jal Legacy (SRS#2009-0921)
AR217010
03.23.2021

Collected By: Client



1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



03.23.2021

Project Manager: Brett Dennis

Terracon-Midland 10400 State Hwy 191 Midland, TX 79707

Reference: Eurofins Xenco, LLC Report No(s): 691132

14" Vac to Jal Legacy (SRS#2009-0921)

Project Address:

Brett Dennis:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 691132. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 691132 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Sample Cross Reference 691132

Terracon-Midland, Midland, TX

14" Vac to Jal Legacy (SRS#2009-0921)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	03.09.2021 14:20		691132-001
MW-3	W	03.08.2021 11:45		691132-002
MW-4	W	03.09.2021 10:40		691132-003
MW-5	W	03.09.2021 11:45		691132-004
MW-6	W	03.09.2021 08:30		691132-005
MW-7	W	03.09.2021 09:40		691132-006
MW-8	W	03.08.2021 13:55		691132-007
MW-9	W	03.08.2021 17:05		691132-008
MW-10	W	03.09.2021 12:45		691132-009
MW-11	W	03.08.2021 10:45		691132-010
MW-12	W	03.08.2021 13:00		691132-011
MW-13	W	03.08.2021 14:50		691132-012
MW-14	W	03.08.2021 15:45		691132-013
DUP-1	W	03.08.2021 14:51		691132-014
DUP-2	W	03.09.2021 10:41		691132-015

Xenco

Environment Testing

💸 eurofins

CASE NARRATIVE

Client Name: Terracon-Midland

Project Name: 14" Vac to Jal Legacy (SRS#2009-0921)

Project ID: AR217010 Report Date: 03.23.2021 Work Order Number(s): 691132 Date Received: 03.10.2021

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3153573 BTEX by EPA 8021

Surrogate 4-Bromofluorobenzene recovered below QC limits. Samples affected are: 7723268-1-BLK.



Terracon-Midland, Midland, TX

14" Vac to Jal Legacy (SRS#2009-0921)

Sample Id: **MW-2** Matrix:

Ground Water

Sample Depth:

Lab Sample Id: 691132-001

Date Collected: 03.09.2021 14:20

Date Received: 03.10.2021 09:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst:

CHE

% Moist:

Seq Number: 3153274

Date Prep: 03.10.2021 17:00

Tech:

CHE

Prep seq: 7723019

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	9940	50.0	2.10	mg/L	03.10.2021 18:06		100

Analytical Method: BTEX by EPA 8021

Prep Method:

5030B

Analyst:

KTL

Seq Number: 3153573

% Moist:

Date Prep: 03.13.2021 09:00

Tech:

KTL

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.0177	0.00200	0.000408	mg/L	03.14.2021 13:15		1
Toluene	108-88-3	0.00313	0.00200	0.000367	mg/L	03.14.2021 13:15		1
Ethylbenzene	100-41-4	0.000940	0.00200	0.000657	mg/L	03.14.2021 13:15	J	1
m,p-Xylenes	179601-23-1	0.000910	0.00400	0.000630	mg/L	03.14.2021 13:15	J	1
o-Xylene	95-47-6	0.00308	0.00200	0.000642	mg/L	03.14.2021 13:15		1
Total Xylenes	1330-20-7	0.00399		0.000630	mg/L	03.14.2021 13:15		
Total BTEX		0.0258		0.000367	mg/L	03.14.2021 13:15		
Surrogate		% Recovery		Limits	Units	Analysis Date	e	Flag
1,4-Difluorobenzene		87		70 - 130	%			
4-Bromofluorobenzene		119		70 - 130	%			

Flag

Certificate of Analytical Results 691132

Terracon-Midland, Midland, TX

14" Vac to Jal Legacy (SRS#2009-0921)

Sample Id: **MW-3** Matrix:

Ground Water

Sample Depth:

Lab Sample Id: 691132-002

Seq Number: 3153573

Date Collected: 03.08.2021 11:45

Date Received: 03.10.2021 09:00

KTL

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst:

KTL

% Moist:

Date Prep: 03.13.2021 09:00

Tech:

Prep seq: 7723268

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.100	0.00200	0.000408	mg/L	03.14.2021 13:40		1
Toluene	108-88-3	0.00216	0.00200	0.000367	mg/L	03.14.2021 13:40		1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.14.2021 13:40	U	1
m,p-Xylenes	179601-23-1	0.000690	0.00400	0.000630	mg/L	03.14.2021 13:40	J	1
o-Xylene	95-47-6	0.00114	0.00200	0.000642	mg/L	03.14.2021 13:40	J	1
Total Xylenes	1330-20-7	0.00183		0.000630	mg/L	03.14.2021 13:40	J	
Total BTEX		0.104		0.000367	mg/L	03.14.2021 13:40		

Surrogate	% Recovery	Limits	Units	Analysis Date
1,4-Difluorobenzene	93	70 - 130	%	
4-Bromofluorobenzene	112	70 - 130	%	

Sample Id: MW-4 Matrix:

Ground Water

Sample Depth:

Lab Sample Id: 691132-003

Date Collected: 03.09.2021 10:40

Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021

5030B Prep Method:

Analyst: KTL

% Moist:

Seq Number: 3153573

Date Prep: 03.13.2021 09:00

Tech:

KTL

Prep seq: 7723268

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.21.2021 22:06	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.21.2021 22:06	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.21.2021 22:06	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.21.2021 22:06	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.21.2021 22:06	U	1
Total Xylenes	1330-20-7	< 0.000630		0.000630	mg/L	03.21.2021 22:06	U	
Total BTEX		< 0.000367		0.000367	mg/L	03.21.2021 22:06	U	
Surrogate		% Recovery		Limits	Units	Analysis Dat	e	Flag
1,4-Difluorobenzene		107		70 - 130	%			

104

70 - 130

4-Bromofluorobenzene

Flag

Certificate of Analytical Results 691132

Terracon-Midland, Midland, TX

14" Vac to Jal Legacy (SRS#2009-0921)

Sample Id: MW-5 Matrix:

: Ground Water

Sample Depth:

Lab Sample Id: 691132-004

Date Collected: 03.09.2021 11:45

Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: K

Seq Number: 3153573

KTL

% Moist:

Date Prep: 03.13.2021 09:00

Tech: KTL

Prep seq: 7723268

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.000440	0.00200	0.000408	mg/L	03.14.2021 14:44	J	1
Toluene	108-88-3	0.000940	0.00200	0.000367	mg/L	03.14.2021 14:44	J	1
Ethylbenzene	100-41-4	0.000770	0.00200	0.000657	mg/L	03.14.2021 14:44	J	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.14.2021 14:44	U	1
o-Xylene	95-47-6	0.000800	0.00200	0.000642	mg/L	03.14.2021 14:44	J	1
Total Xylenes	1330-20-7	0.000800		0.000630	mg/L	03.14.2021 14:44	J	
Total BTEX		0.00295		0.000367	mg/L	03.14.2021 14:44		

Surrogate	% Recovery	Limits	Units	Analysis Date]
1,4-Difluorobenzene	92	70 - 130	%		
4-Bromofluorobenzene	114	70 - 130	%		

Sample Id: MW-6 Matrix:

Ground Water

Sample Depth:

Lab Sample Id: 691132-005

Date Collected: 03.09.2021 08:30

Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3153573

Date Prep: 03.13.2021 09:00

Tech:

KTL

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.14.2021 15:09	U	1
Toluene	108-88-3	0.00105	0.00200	0.000367	mg/L	03.14.2021 15:09	J	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.14.2021 15:09	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.14.2021 15:09	U	1
o-Xylene	95-47-6	0.00110	0.00200	0.000642	mg/L	03.14.2021 15:09	J	1
Total Xylenes	1330-20-7	0.00110		0.000630	mg/L	03.14.2021 15:09	J	
Total BTEX		0.00215		0.000367	mg/L	03.14.2021 15:09		
Surrogate		% Recovery		Limits	Units	Analysis Date	9	Flag
1,4-Difluorobenzene		91		70 - 130	%			
4-Bromofluorobenzene		110		70 - 130	%			

Terracon-Midland, Midland, TX

14" Vac to Jal Legacy (SRS#2009-0921)

Sample Depth:

Sample Id: MW-7 Matrix: Ground Water

Lab Sample Id: 691132-006 Date Collected: 03.09.2021 09:40 Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: KTL % Moist:

Seq Number: 3153881 Date Prep: 03.16.2021 10:45 Tech: KTL

Prep seq: 7723436

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.16.2021 18:39	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.16.2021 18:39	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.16.2021 18:39	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.16.2021 18:39	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.16.2021 18:39	U	1
Total Xylenes	1330-20-7	< 0.000630		0.000630	mg/L	03.16.2021 18:39	U	
Total BTEX		< 0.000367		0.000367	mg/L	03.16.2021 18:39	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	70 - 130	%		
4-Bromofluorobenzene	99	70 - 130	%		

Sample Id: MW-8 Matrix: Ground Water Sample Depth:

Lab Sample Id: 691132-007 Date Collected: 03.08.2021 13:55 Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: KTL % Moist:

Seq Number: 3153881 Date Prep: 03.16.2021 10:45 Tech: KTL

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.16.2021 18:59	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.16.2021 18:59	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.16.2021 18:59	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.16.2021 18:59	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.16.2021 18:59	U	1
Total Xylenes	1330-20-7	< 0.000630		0.000630	mg/L	03.16.2021 18:59	U	
Total BTEX		< 0.000367		0.000367	mg/L	03.16.2021 18:59	U	
Surrogate		% Recovery		Limits	Units	Analysis Dat	te	Flag
1,4-Difluorobenzene		111		70 - 130	%			
4-Bromofluorobenzene		105		70 - 130	%			

Terracon-Midland, Midland, TX

14" Vac to Jal Legacy (SRS#2009-0921)

Sample Id: **MW-9** Matrix: Ground Water Sample Depth:

Lab Sample Id: 691132-008

Date Collected: 03.08.2021 17:05

Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst:

Seq Number: 3153881

KTL

% Moist:

Date Prep: 03.16.2021 10:45

Tech: KTL

Prep seq: 7723436

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.16.2021 19:20	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.16.2021 19:20	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.16.2021 19:20	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.16.2021 19:20	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.16.2021 19:20	U	1
Total Xylenes	1330-20-7	< 0.000630		0.000630	mg/L	03.16.2021 19:20	U	
Total BTEX		< 0.000367		0.000367	mg/L	03.16.2021 19:20	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	107	70 - 130	%		
4-Bromofluorobenzene	104	70 - 130	%		

Sample Id: MW-10 Matrix:

Ground Water

Sample Depth:

Lab Sample Id: 691132-009

Date Collected: 03.09.2021 12:45

Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021

5030B Prep Method:

Analyst: KTL % Moist:

Seq Number: 3153881

Date Prep: 03.16.2021 10:45

Tech:

KTL

Prep seq: 7723436

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00153	0.00200	0.000408	mg/L	03.16.2021 19:41	J	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.16.2021 19:41	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.16.2021 19:41	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.16.2021 19:41	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.16.2021 19:41	U	1
Total Xylenes	1330-20-7	< 0.000630		0.000630	mg/L	03.16.2021 19:41	U	
Total BTEX		0.00153		0.000367	mg/L	03.16.2021 19:41	J	
Surrogate		% Recovery		Limits	Units	Analysis Dat	e	Flag
1,4-Difluorobenzene		104		70 - 130	%			

100

70 - 130

4-Bromofluorobenzene



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14" Vac to Jal Legacy (SRS#2009-0921)

Sample Depth:

Sample Id: MW-11 Matrix: Ground Water

Lab Sample Id: 691132-010 Date Collected: 03.08.2021 10:45 Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: KTL % Moist:

Seq Number: 3153881 Date Prep: 03.16.2021 10:45 Tech: KTL

Prep seq: 7723436

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.16.2021 20:01	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.16.2021 20:01	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.16.2021 20:01	U	1
m,p-Xylenes	179601-23-1	0.00299	0.00400	0.000630	mg/L	03.16.2021 20:01	J	1
o-Xylene	95-47-6	0.00200	0.00200	0.000642	mg/L	03.16.2021 20:01	J	1
Total Xylenes	1330-20-7	0.00499		0.000630	mg/L	03.16.2021 20:01		
Total BTEX		0.00499		0.000367	mg/L	03.16.2021 20:01		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	100	70 - 130	%		
4-Bromofluorobenzene	104	70 - 130	%		

Sample Id: MW-12 Matrix: Ground Water Sample Depth:

Lab Sample Id: 691132-011 Date Collected: 03.08.2021 13:00 Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: KTL % Moist:

Seq Number: 3153881 Date Prep: 03.16.2021 10:45 Tech: KTL

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.16.2021 20:22	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.16.2021 20:22	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.16.2021 20:22	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.16.2021 20:22	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.16.2021 20:22	U	1
Total Xylenes	1330-20-7	< 0.000630		0.000630	mg/L	03.16.2021 20:22	U	
Total BTEX		< 0.000367		0.000367	mg/L	03.16.2021 20:22	U	
Surrogate		% Recovery		Limits	Units	Analysis Dat	e	Flag
1,4-Difluorobenzene		100		70 - 130	%			
4-Bromofluorobenzene		104		70 - 130	%			



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14" Vac to Jal Legacy (SRS#2009-0921)

Sample Id: MW-13 Matrix: Ground Water

Sample Depth:

Lab Sample Id: 691132-012 Date Collected: 03.08.2021 14:50

Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL

% Moist:

Seq Number: 3153881 Date Prep: 03.16.2021 10:45

Tech: KTL

Prep seq: 7723436

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.16.2021 20:43	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.16.2021 20:43	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.16.2021 20:43	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.16.2021 20:43	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.16.2021 20:43	U	1
Total Xylenes	1330-20-7	< 0.000630		0.000630	mg/L	03.16.2021 20:43	U	
Total BTEX		< 0.000367		0.000367	mg/L	03.16.2021 20:43	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	103	70 - 130	%		
4-Bromofluorobenzene	104	70 - 130	%		

Sample Id: MW-14 Matrix: Ground Water Sample Depth:

Lab Sample Id: 691132-013 Date Collected: 03.08.2021 15:45 Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: KTL % Moist:

Seq Number: 3154054 Date Prep: 03.16.2021 14:05 Tech: KTL

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.17.2021 12:12	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.17.2021 12:12	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.17.2021 12:12	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.17.2021 12:12	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.17.2021 12:12	U	1
Total Xylenes	1330-20-7	< 0.000630		0.000630	mg/L	03.17.2021 12:12	U	
Total BTEX		< 0.000367		0.000367	mg/L	03.17.2021 12:12	U	
Surrogate		% Recovery		Limits	Units	Analysis Dat	te	Flag
1,4-Difluorobenzene		103		70 - 130	%			
4-Bromofluorobenzene		105		70 - 130	%			



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14" Vac to Jal Legacy (SRS#2009-0921)

Sample Depth:

Sample Id: DUP-1 Matrix: Ground Water

Lab Sample Id: 691132-014 Date Collected: 03.08.2021 14:51 Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: KTL % Moist:

Seq Number: 3154054 Date Prep: 03.16.2021 14:05 Tech: KTL

Prep seq: 7723439

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.17.2021 12:33	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.17.2021 12:33	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.17.2021 12:33	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.17.2021 12:33	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.17.2021 12:33	U	1
Total Xylenes	1330-20-7	< 0.000630		0.000630	mg/L	03.17.2021 12:33	U	
Total BTEX		< 0.000367		0.000367	mg/L	03.17.2021 12:33	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	103	70 - 130	%		
4-Bromofluorobenzene	105	70 - 130	%		

Sample Id: DUP-2 Matrix: Ground Water Sample Depth:

Lab Sample Id: 691132-015 Date Collected: 03.09.2021 10:41 Date Received: 03.10.2021 09:00

Analytical Method: BTEX by EPA 8021 Prep Method: 5030B

Analyst: KTL % Moist:

Seq Number: 3154054 Date Prep: 03.16.2021 14:05 Tech: KTL

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.17.2021 12:53	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.17.2021 12:53	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.17.2021 12:53	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.17.2021 12:53	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.17.2021 12:53	U	1
Total Xylenes	1330-20-7	< 0.000630		0.000630	mg/L	03.17.2021 12:53	U	
Total BTEX		< 0.000367		0.000367	mg/L	03.17.2021 12:53	U	
Surrogate		% Recovery		Limits	Units	Analysis Dat	e	Flag
1,4-Difluorobenzene		104		70 - 130	%			
4-Bromofluorobenzene		103		70 - 130	%			



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14" Vac to Jal Legacy (SRS#2009-0921)

Sample Id: 7723019-1-BLK Matrix:

Water

Sample Depth:

Lab Sample Id: 7723019-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method:

Analyst:

CHE

% Moist:

Seq Number: 3153274

Date Prep: 03.10.2021 17:00

Tech:

CHE

E300P

Prep seq: 7723019

Dil Factor CAS Analysis SDL **Parameter** Result MQL Units Number Date mg/L 16887-00-6 < 0.0210 0.0210 03.10.2021 16:58 Chloride 0.500 U

Sample Id:

Matrix:

Water

Sample Depth:

7723268-1-BLK

Date Received:

Lab Sample Id: 7723268-1-BLK

Date Collected:

Prep Method:

5030B

Analyst:

KTL

Analytical Method: BTEX by EPA 8021

% Moist:

Seq Number: 3153573

Date Prep: 03.13.2021 09:00

Tech:

KTL

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.14.2021 05:27	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.14.2021 05:27	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.14.2021 05:27	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.14.2021 05:27	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.14.2021 05:27	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	59	70 - 130	%		**



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14" Vac to Jal Legacy (SRS#2009-0921)

Water

Sample Id: 7723436-1-BLK Matrix:

Sample Depth:

Lab Sample Id: 7723436-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst:

Seq Number: 3153881

KTL

% Moist:

Date Prep: 03.16.2021 10:45

Tech:

KTL

Prep seq: 7723436

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.16.2021 13:48	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.16.2021 13:48	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.16.2021 13:48	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.16.2021 13:48	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.16.2021 13:48	U	1

Surrogate	% Recovery	Limits	Units
1,4-Difluorobenzene	91	70 - 130	%
4-Bromofluorobenzene	109	70 - 130	%

Sample Id: Matrix: Water Sample Depth: 7723439-1-BLK Lab Sample Id: 7723439-1-BLK Date Collected: Date Received:

Analytical Method: BTEX by EPA 8021

Prep Method: 5030B

Analyst: KTL % Moist:

0/ December

Seq Number: 3154054

Date Prep: 03.16.2021 14:05

Tech:

T imita

KTL

Analysis Date

Analysis Date

Flag

Flag

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000408	0.00200	0.000408	mg/L	03.17.2021 11:50	U	1
Toluene	108-88-3	< 0.000367	0.00200	0.000367	mg/L	03.17.2021 11:50	U	1
Ethylbenzene	100-41-4	< 0.000657	0.00200	0.000657	mg/L	03.17.2021 11:50	U	1
m,p-Xylenes	179601-23-1	< 0.000630	0.00400	0.000630	mg/L	03.17.2021 11:50	U	1
o-Xylene	95-47-6	< 0.000642	0.00200	0.000642	mg/L	03.17.2021 11:50	U	1

Surrogate	% Recovery	Limits	Units	
1,4-Difluorobenzene	89	70 - 130	%	
4-Bromofluorobenzene	114	70 - 130	%	



Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample BKSD/LCSD Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate MS Matrix Spike MSD: Matrix Spike Duplicate

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

^{**} Surrogate recovered outside laboratory control limit.



Form 2 - Surrogate Recoveries

Project Name: 14" Vac to Jal Legacy (SRS#2009-0921)

Report Date: 03232021

Work Orders: 691132

Sample: 7723268-1-BKS / BKS

Batch:

Project ID: AR217010 Matrix: Water

Lab Batch #: 3153573 **Units:**

mg/L**Date Analyzed:** 03.14.2021 03:18 SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	70-130	
4-Bromofluorobenzene	0.0226	0.0300	75	70-130	

Lab Batch #: 3153573

Sample: 7723268-1-BSD / BSD

Batch: 1

Matrix: Water

Units:

mg/L

Date Analyzed: 03.14.2021 03:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	70-130	
4-Bromofluorobenzene	0.0264	0.0300	88	70-130	

Lab Batch #: 3153573

Sample: 690996-006 S / MS

Batch:

Matrix: Ground Water

Units:

mg/L

Date Analyzed: 03.14.2021 04:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0338	0.0300	113	70-130	
4-Bromofluorobenzene	0.0254	0.0300	85	70-130	

Lab Batch #: 3153573

Sample: 690996-006 SD / MSD

Batch:

Matrix: Ground Water

Units:

mg/L

Date Analyzed: 03.14.2021 04:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
1,4-Difluorobenzene	0.0355	0.0300	118	70-130	
4-Bromofluorobenzene	0.0271	0.0300	90	70-130	

Lab Batch #: 3153573

Sample: 7723268-1-BLK / BLK

Batch: 1 Matrix: Water

Units:

mg/L

Date Analyzed: 03.14.2021 05:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	70-130	
4-Bromofluorobenzene	0.0176	0.0300	59	70-130	**

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Form 2 - Surrogate Recoveries

Project Name: 14" Vac to Jal Legacy (SRS#2009-0921)

Report Date: 03232021

Work Orders: 691132

Sample: 7723436-1-BKS / BKS

Batch:

Project ID: AR217010 Matrix: Water SURROGATE RECOVERY STUDY

Lab Batch #: 3153881 **Units:** mg/L

Date Analyzed: 03.16.2021 11:47

True Control Amount BTEX by EPA 8021 Recovery **Found** Amount Limits Flags [A] [B] %R %R [D] **Analytes** 1,4-Difluorobenzene 0.0310 0.0300 103 70-130 4-Bromofluorobenzene 0.0304 0.0300 101 70-130

Lab Batch #: 3153881

Sample: 7723436-1-BSD / BSD

Batch: Matrix: Water

Units:

mg/L

Date Analyzed: 03.16.2021 12:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	70-130	
4-Bromofluorobenzene	0.0299	0.0300	100	70-130	

Lab Batch #: 3153881

Sample: 690671-001 S / MS

Batch:

Matrix: Water

Units:

mg/L

Date Analyzed: 03.16.2021 12:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	70-130	
4-Bromofluorobenzene	0.0310	0.0300	103	70-130	

Lab Batch #: 3153881

Sample: 690671-001 SD / MSD

Batch:

Matrix: Water

Units:

mg/L

Date Analyzed: 03.16.2021 12:49

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	70-130	
4-Bromofluorobenzene	0.0305	0.0300	102	70-130	

Lab Batch #: 3153881

Sample: 7723436-1-BLK / BLK

Batch: 1

Matrix: Water

Units:

mg/L

Date Analyzed: 03.16.2021 13:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	70-130	
4-Bromofluorobenzene	0.0326	0.0300	109	70-130	

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Form 2 - Surrogate Recoveries

Project Name: 14" Vac to Jal Legacy (SRS#2009-0921)

Report Date: 03232021

Work Orders: 691132

Sample: 7723439-1-BKS / BKS

Batch:

Project ID: AR217010 Matrix: Water SURROGATE RECOVERY STUDY

Lab Batch #: 3154054 **Units:** mg/L

Date Analyzed: 03.17.2021 09:49

1

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	70-130	
4-Bromofluorobenzene	0.0291	0.0300	97	70-130	

Lab Batch #: 3154054

Sample: 7723439-1-BSD / BSD

Batch: 1

Matrix: Water

Units:

mg/L

Date Analyzed: 03.17.2021 10:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	70-130	
4-Bromofluorobenzene	0.0305	0.0300	102	70-130	

Lab Batch #: 3154054

Sample: 691132-013 S / MS

Batch: Matrix: Ground Water

Units: mg/L

Date Analyzed: 03.17.2021 10:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	70-130	
4-Bromofluorobenzene	0.0307	0.0300	102	70-130	

Lab Batch #: 3154054

Sample: 691132-013 SD / MSD

Batch: 1

Matrix: Ground Water

Units:

mg/L

Date Analyzed: 03.17.2021 10:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	70-130	
4-Bromofluorobenzene	0.0296	0.0300	99	70-130	

Lab Batch #: 3154054

Sample: 7723439-1-BLK / BLK

Batch: 1

Matrix: Water

Units:

mg/L

Date Analyzed: 03.17.2021 11:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	70-130	
4-Bromofluorobenzene	0.0343	0.0300	114	70-130	

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution

Received by OCD: 3/28/2022 8:13:25 AM

Environment Testing

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BS / BSD Recoveries

DS / DSD Recoverie

Project Name: 14" Vac to Jal Legacy (SRS#2009-0921)

Work Order #: 691132 Project ID: AR217010

Analyst: KTL Date Prepared: 03.13.2021 Date Analyzed: 03.14.2021

Lab Batch ID: 3153573 **Sample:** 7723268-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.0941	94	0.100	0.103	103	9	70-130	25	
Toluene	< 0.000367	0.100	0.0900	90	0.100	0.0981	98	9	70-130	25	
Ethylbenzene	< 0.000657	0.100	0.0879	88	0.100	0.0965	97	9	70-130	25	
m,p-Xylenes	< 0.000630	0.200	0.180	90	0.200	0.199	100	10	70-130	25	
o-Xylene	< 0.000642	0.100	0.0873	87	0.100	0.0985	99	12	70-130	25	

Analyst: KTL Date Prepared: 03.16.2021 Date Analyzed: 03.16.2021

Lab Batch ID: 3153881 **Sample:** 7723436-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	< 0.000408	0.100	0.103	103	0.100	0.0997	100	3	70-130	25	
Toluene	< 0.000367	0.100	0.101	101	0.100	0.0960	96	5	70-130	25	
Ethylbenzene	< 0.000657	0.100	0.0986	99	0.100	0.0947	95	4	70-130	25	
m,p-Xylenes	< 0.000630	0.200	0.198	99	0.200	0.190	95	4	70-130	25	
o-Xylene	< 0.000642	0.100	0.0975	98	0.100	0.0941	94	4	70-130	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|Blank Spike Recovery [D] = 100*(C)/[B]Blank Spike Duplicate Recovery [G] = 100*(F)/[E]All results are based on MDL and Validated for QC Purposes

Received by OCD: 3/28/2022 8:13:25 AM

BS / BSD Recoveries



Project Name: 14" Vac to Jal Legacy (SRS#2009-0921)

Work Order #: 691132 Project ID: AR217010

Analyst: KTL Date Prepared: 03.16.2021 Date Analyzed: 03.17.2021

Lab Batch ID: 3154054 **Sample:** 7723439-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.105	105	0.100	0.0997	100	5	70-130	25	
Toluene	< 0.000367	0.100	0.0964	96	0.100	0.0959	96	1	70-130	25	
Ethylbenzene	< 0.000657	0.100	0.0920	92	0.100	0.0933	93	1	70-130	25	
m,p-Xylenes	< 0.000630	0.200	0.181	91	0.200	0.187	94	3	70-130	25	
o-Xylene	< 0.000642	0.100	0.0904	90	0.100	0.0938	94	4	70-130	25	

Analyst: CHE Date Prepared: 03.10.2021 Date Analyzed: 03.10.2021

Units: mg/L BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Chloride	< 0.0210	25.0	25.1	100	25.0	25.1	100	0	90-110	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|Blank Spike Recovery [D] = 100*(C)/[B]Blank Spike Duplicate Recovery [G] = 100*(F)/[E]All results are based on MDL and Validated for QC Purposes mg/L

Form 3 - MS / MSD Recoveries

eurofins Environment Testing

Reporting Units:

Project Name: 14" Vac to Jal Legacy (SRS#2009-0921)

Report Date: 03232021

Work Order #: 691132 **Project ID:** AR217010

Lab Batch ID: 3153573 QC- Sample ID: 690996-006 S Batch #: 1 Matrix: Ground Water

Date Analyzed:03.14.2021Date Prepared:03.13.2021Analyst:KTL

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	0.00131	0.100	0.0998	98	0.100	0.107	106	7	70-130	25	
Toluene	< 0.000367	0.100	0.0976	98	0.100	0.103	103	5	70-130	25	
Ethylbenzene	0.00156	0.100	0.0952	94	0.100	0.101	99	6	70-130	25	
m,p-Xylenes	0.00146	0.200	0.195	97	0.200	0.207	103	6	70-130	25	
o-Xylene	0.000850	0.100	0.0954	95	0.100	0.101	100	6	70-130	25	

Lab Batch ID: 3153881 **QC- Sample ID:** 690671-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03.16.2021 **Date Prepared:** 03.16.2021 **Analyst:** KTL

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	< 0.000408	0.100	0.00465	5	0.100	0.0821	82	179	70-130	25	XF
Toluene	< 0.000367	0.100	0.00382	4	0.100	0.0702	70	179	70-130	25	XF
Ethylbenzene	< 0.000657	0.100	0.00335	3	0.100	0.0536	54	176	70-130	25	XF
m,p-Xylenes	< 0.000630	0.200	0.00702	4	0.200	0.104	52	175	70-130	25	XF
o-Xylene	< 0.000642	0.100	0.00389	4	0.100	0.0548	55	173	70-130	25	XF

Matrix Spike Percent Recovery [D] = 100*(C-A) / BRelative Percent Difference RPD = 200*[(C-F) / (C+F)] Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A) / E

Form 3 - MS / MSD Recoveries

eurofins Environment Testing

Project Name: 14" Vac to Jal Legacy (SRS#2009-0921)

Report Date: 03232021

Work Order #: 691132 **Project ID:** AR217010

Lab Batch ID: 3154054 QC- Sample ID: 691132-013 S Batch #: 1 Matrix: Ground Water

Date Analyzed: 03.17.2021 Date Prepared: 03.16.2021 Analyst: KTL

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	< 0.000408	0.100	0.0949	95	0.100	0.100	100	5	70-130	25	
Toluene	< 0.000367	0.100	0.0951	95	0.100	0.0959	96	1	70-130	25	
Ethylbenzene	< 0.000657	0.100	0.0923	92	0.100	0.0938	94	2	70-130	25	
m,p-Xylenes	< 0.000630	0.200	0.183	92	0.200	0.185	93	1	70-130	25	
o-Xylene	< 0.000642	0.100	0.0917	92	0.100	0.0912	91	1	70-130	25	

Lab Batch ID: 3153274 **QC- Sample ID:** 691110-009 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03.10.2021 Date Prepared: 03.10.2021 Analyst: CHE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Parent Sample	Spike	Spiked Sample Result	Sample		Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride	233	500	770	107	500	770	107	0	90-110	20	

Matrix Spike Percent Recovery [D] = 100*(C-A) / BRelative Percent Difference RPD = 200*[(C-F) / (C+F)] Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A) / E

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Lab Sample ID				_	Chloride (BTEX (EP/		500 ml Poly	40 ml V	End Depth	Start Depth	e(s)	dentifying Marks of Sample(s)	Identifying P	<u> </u>	Grab	Comp	Time	Date	Matrix
						. Me			DA.				RS # 2009-092	14" Vac to Jal Legacy (SRS # 2009-092)	14" Vac	1_	°	AR217010		Τ
						<u>"</u>	No. Type of Containers	Pe of C	No.		1			Name	Project Name			mber	Project Number	3
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ļ						3						PO/SO #:				ennis	rett D	nager: I	Project Manager: Brett Dennis	7
Page 7 of 2									1800	Jessica Kramer	jes (43	Phone: Contact:					Lubback		Office Location	9
WHEN RECEIVED ("C)								F	rendered to a second			!								2
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LAB USE ONLY				1	ANALYSIS	P		g	Xenco Laboratories	CoLab	žě	Laboratory:					í	7		
	CHAIN OF CUSTODY RECORD		Ç	ş	l	$\ $										İ				7

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Terracon-Midland

Acceptable Temperature Range: 0 - 6 degC

Temperature Measuring device used: IR8

Date/ Time Received: 03.10.2021 09.00.00 AM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 691132

:	Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.7	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping contain	er/ cooler? N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6*Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished	ed/ received? Yes	
#10 Chain of Custody agrees with sample lab	pels/matrix? Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated to	est(s)? Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	N/A	
#18 Water VOC samples have zero headspa	ce? Yes	

^{*} Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst: JKR PH Device/Lot#: 10BDH1991

> Checklist completed by:
>
> Brianna Teel Date: 03.10.2021

Checklist reviewed by: Date: 03.12.2021

Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Lubbock 6701 Aberdeen Ave. Suite 8

Lubbock, TX 79424 Tel: (806)794-1296

Laboratory Job ID: 820-998-1

Client Project/Site: 14" Vac to Jal Legacy

For:

Terracon Consulting Eng & Scientists 5827 50th St Suite 1 Lubbock, Texas 79424

Attn: Brett Dennis

CLAMER

Authorized for release by: 6/16/2021 3:09:15 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

·····LINKS ······

Review your project results through

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Released to Imaging: 8/3/2022 2:33:03 PM

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.

Laboratory Job ID: 820-998-1

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

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,

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.

NPDES) must comply with the associated agency requirements/permits.

- · 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 Zachary Smith (Water Microbiology).

Jessica Kramer

Project Manager

6/16/2021 3:09:15 PM

NEAMER

Client: Terracon Consulting Eng & Scientists Project/Site: 14" Vac to Jal Legacy Laboratory Job ID: 820-998-1

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists

Job ID: 820-998-1

Project/Site: 14" Vac to Jal Legacy

Qualifiers

Qualifier Qualifier Description

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

GC VOA

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.

Example 2 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

Eurofins Xenco, Lubbock

Case Narrative

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Job ID: 820-998-1

Job ID: 820-998-1

Laboratory: Eurofins Xenco, Lubbock

Narrative

Job Narrative 820-998-1

Receipt

The samples were received on 6/11/2021 10:04 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 2.1°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.

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Client Sample Results

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Lab Sample ID: 820-998-1

Matrix: Water

Job ID: 820-998-1

Client Sample ID: MW-5 Date Collected: 06/09/21 09:55

Date Received: 06/11/21 10:04

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/14/21 19:22	1
Toluene	<0.00200	U	0.00200		mg/L			06/14/21 19:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/14/21 19:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/14/21 19:22	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/14/21 19:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/14/21 19:22	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/14/21 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			=		06/14/21 19:22	1
1,4-Difluorobenzene (Surr)	103		70 - 130					06/14/21 19:22	1

Client Sample ID: MW-6 Lab Sample ID: 820-998-2

Date Collected: 06/09/21 10:39 **Matrix: Water**

Date Received: 06/11/21 10:04

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/14/21 19:47	1
Toluene	<0.00200	U	0.00200		mg/L			06/14/21 19:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/14/21 19:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/14/21 19:47	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/14/21 19:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/14/21 19:47	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/14/21 19:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			_		06/14/21 19:47	1
1,4-Difluorobenzene (Surr)	104		70 - 130					06/14/21 19:47	1

Client Sample ID: MW-14 Lab Sample ID: 820-998-3 Date Collected: 06/09/21 11:23 **Matrix: Water**

Date Received: 06/11/21 10:04

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00232		0.00200		mg/L			06/14/21 20:12	1
Toluene	0.00491		0.00200		mg/L			06/14/21 20:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/14/21 20:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/14/21 20:12	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/14/21 20:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/14/21 20:12	1
Total BTEX	0.00723		0.00400		mg/L			06/14/21 20:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			-		06/14/21 20:12	1
1,4-Difluorobenzene (Surr)	102		70 ₋ 130					06/14/21 20:12	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Lab Sample ID: 820-998-4

Matrix: Water

Job ID: 820-998-1

Date Collected: 06/09/21 12:05 Date Received: 06/11/21 10:04

Client Sample ID: MW-9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/14/21 20:37	1
Toluene	<0.00200	U	0.00200		mg/L			06/14/21 20:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/14/21 20:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/14/21 20:37	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/14/21 20:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/14/21 20:37	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/14/21 20:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			·		06/14/21 20:37	1
1,4-Difluorobenzene (Surr)	106		70 - 130					06/14/21 20:37	1

Lab Sample ID: 820-998-5 **Client Sample ID: MW-7**

Date Collected: 06/09/21 12:45 **Matrix: Water**

Date Received: 06/11/21 10:04

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/14/21 21:02	1
Toluene	<0.00200	U	0.00200		mg/L			06/14/21 21:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/14/21 21:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/14/21 21:02	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/14/21 21:02	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/14/21 21:02	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/14/21 21:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			-		06/14/21 21:02	1
1,4-Difluorobenzene (Surr)	104		70 ₋ 130					06/14/21 21:02	1

Lab Sample ID: 820-998-6 **Client Sample ID: MW-10 Matrix: Water**

Date Collected: 06/09/21 13:20

	Date Received: 00	6/11/21 10:04	
ſ	Mathada 0004D	Valatila Ormania	O

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/14/21 21:28	1
Toluene	<0.00200	U	0.00200		mg/L			06/14/21 21:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/14/21 21:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/14/21 21:28	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/14/21 21:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/14/21 21:28	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/14/21 21:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			-		06/14/21 21:28	1
1.4-Difluorobenzene (Surr)	105		70 ₋ 130					06/14/21 21:28	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Lab Sample ID: 820-998-7

Matrix: Water

Job ID: 820-998-1

Client Sample ID: MW-11 Date Collected: 06/10/21 08:57 Date Received: 06/11/21 10:04

Compounds ((GC)							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200		mg/L			06/14/21 21:53	1
<0.00200	U	0.00200		mg/L			06/14/21 21:53	1
<0.00200	U	0.00200		mg/L			06/14/21 21:53	1
<0.00400	U	0.00400		mg/L			06/14/21 21:53	1
<0.00200	U	0.00200		mg/L			06/14/21 21:53	1
<0.00400	U	0.00400		mg/L			06/14/21 21:53	1
<0.00400	U	0.00400		mg/L			06/14/21 21:53	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
110		70 - 130			-		06/14/21 21:53	1
106		70 - 130					06/14/21 21:53	1
	Result <0.00200 <0.00200 <0.00200 <0.00400 <0.00200 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400 <0.00400		Result Qualifier RL <0.00200	Result Qualifier RL MDL <0.00200	Result Qualifier RL MDL Unit <0.00200	Result Qualifier RL MDL Unit D <0.00200	Result Qualifier RL MDL Unit D Prepared <0.00200	Result Qualifier RL MDL Unit D Prepared Analyzed <0.00200

Client Sample ID: MW-12 Lab Sample ID: 820-998-8

Date Collected: 06/10/21 09:39 **Matrix: Water**

Date Received: 06/11/21 10:04

Method: 8021B - Volatile Orga	nic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/14/21 22:18	1
Toluene	<0.00200	U	0.00200		mg/L			06/14/21 22:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/14/21 22:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/14/21 22:18	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/14/21 22:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/14/21 22:18	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/14/21 22:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			-		06/14/21 22:18	1

4-Bromofluorobenzene (Surr)	109	70 - 130	06/14/21 22:18	1
1,4-Difluorobenzene (Surr)	103	70 - 130	06/14/21 22:18	1
_				

Client Sample ID: MW-2

Date Collected: 06/10/21 10:39

Date Received: 06/11/21 10:04

Lab Sample ID: 820-998-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0137		0.00200		mg/L			06/14/21 22:43	1
Toluene	<0.00200	U	0.00200		mg/L			06/14/21 22:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/14/21 22:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/14/21 22:43	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/14/21 22:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/14/21 22:43	1
Total BTEX	0.0137		0.00400		mg/L			06/14/21 22:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			-		06/14/21 22:43	1
1,4-Difluorobenzene (Surr)	106		70 - 130					06/14/21 22:43	1

Eurofins Xenco, Lubbock

Analyzed

06/15/21 17:44

RL

MDL Unit

mg/L

D

Prepared

Result Qualifier

10200

6/16/2021

Dil Fac

Analyte

Chloride

Client Sample Results

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Lab Sample ID: 820-998-10

Matrix: Water

Job ID: 820-998-1

Client Sample ID: MW-4 Date Collected: 06/10/21 11:17

Date Received: 06/11/21 10:04

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/15/21 13:45	1
Toluene	<0.00200	U	0.00200		mg/L			06/15/21 13:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/15/21 13:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/15/21 13:45	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/15/21 13:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/15/21 13:45	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/15/21 13:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130			-		06/15/21 13:45	1
1,4-Difluorobenzene (Surr)	92		70 - 130					06/15/21 13:45	1

Client Sample ID: MW-13 Lab Sample ID: 820-998-11

Date Collected: 06/10/21 11:58 **Matrix: Water**

Date Received: 06/11/21 10:04

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/15/21 14:10	1
Toluene	<0.00200	U	0.00200		mg/L			06/15/21 14:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/15/21 14:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/15/21 14:10	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/15/21 14:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/15/21 14:10	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/15/21 14:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			-		06/15/21 14:10	1
1,4-Difluorobenzene (Surr)	104		70 - 130					06/15/21 14:10	1

Client Sample ID: MW-8 Lab Sample ID: 820-998-12

Date Collected: 06/10/21 12:29 **Matrix: Water** Date Received: 06/11/21 10:04

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/15/21 14:35	1
Toluene	<0.00200	U	0.00200		mg/L			06/15/21 14:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/15/21 14:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/15/21 14:35	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/15/21 14:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/15/21 14:35	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/15/21 14:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			_		06/15/21 14:35	1
1,4-Difluorobenzene (Surr)	100		70 - 130					06/15/21 14:35	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Lab Sample ID: 820-998-13

06/15/21 15:01

Matrix: Water

Job ID: 820-998-1

Client Sample ID: MW-3 Date Collected: 06/10/21 13:05 Date Received: 06/11/21 10:04

Method: 8021B - Volatile Organic Compounds (GC)

wethod: 8021B - volatile Orga	mic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0401		0.00200		mg/L			06/15/21 15:01	1
Toluene	<0.00200	U	0.00200		mg/L			06/15/21 15:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/15/21 15:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/15/21 15:01	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/15/21 15:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/15/21 15:01	1
Total BTEX	0.0401		0.00400		mg/L			06/15/21 15:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			_		06/15/21 15:01	

Client Sample ID: DUP-1 Lab Sample ID: 820-998-14

70 - 130

100

Date Collected: 06/10/21 00:00 **Matrix: Water**

Date Received: 06/11/21 10:04

1,4-Difluorobenzene (Surr)

Method: 8021B - Volatile Orga		•							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/15/21 15:25	1
Toluene	<0.00200	U	0.00200		mg/L			06/15/21 15:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/15/21 15:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/15/21 15:25	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/15/21 15:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/15/21 15:25	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/15/21 15:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			-		06/15/21 15:25	1
1,4-Difluorobenzene (Surr)	104		70 - 130					06/15/21 15:25	1

Client Sample ID: DUP-2 Lab Sample ID: 820-998-15

Date Received: 06/11/21

•	·
te Collected: 06/10/21 00:00	Matrix: Water
to Received: 06/11/21 10:04	

Method: 8021B - Volatile Orga									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0471		0.00200		mg/L			06/15/21 15:51	1
Toluene	<0.00200	U	0.00200		mg/L			06/15/21 15:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/15/21 15:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/15/21 15:51	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/15/21 15:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/15/21 15:51	1
Total BTEX	0.0471		0.00400		mg/L			06/15/21 15:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130			-		06/15/21 15:51	1
1.4-Difluorobenzene (Surr)	112		70 - 130					06/15/21 15:51	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Job ID: 820-998-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water Prep Type: Total/NA

_				Perce
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
820-998-1	MW-5	110	103	
820-998-2	MW-6	111	104	
820-998-3	MW-14	108	102	
820-998-4	MW-9	111	106	
820-998-5	MW-7	106	104	
820-998-6	MW-10	113	105	
820-998-7	MW-11	110	106	
820-998-8	MW-12	109	103	
820-998-9	MW-2	116	106	
820-998-10	MW-4	127	92	
820-998-10 MS	MW-4	99	104	
820-998-10 MSD	MW-4	107	107	
820-998-11	MW-13	109	104	
820-998-12	MW-8	108	100	
820-998-13	MW-3	97	100	
820-998-14	DUP-1	110	104	
820-998-15	DUP-2	124	112	
LCS 880-4074/3	Lab Control Sample	104	104	
LCS 880-4105/3	Lab Control Sample	115	98	
LCSD 880-4074/4	Lab Control Sample Dup	99	107	
LCSD 880-4105/4	Lab Control Sample Dup	107	110	
MB 880-4074/8	Method Blank	71	84	
MB 880-4105/8	Method Blank	73	86	
Surrogate Legend				

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Job ID: 820-998-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4074/8

Matrix: Water Analysis Batch: 4074 Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			06/14/21 12:59	1
Toluene	<0.00200	U	0.00200		mg/L			06/14/21 12:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/14/21 12:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/14/21 12:59	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/14/21 12:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/14/21 12:59	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/14/21 12:59	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71	70 - 130		06/14/21 12:59	1
1,4-Difluorobenzene (Surr)	84	70 - 130		06/14/21 12:59	1

Lab Sample ID: LCS 880-4074/3 **Client Sample ID: Lab Control Sample Matrix: Water**

Analysis Batch: 4074

Prep Type: Total/NA 0/ Doo Cnika 100 100

	Opine	LUG	LUU				/orvec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09419		mg/L		94	70 - 130	
Toluene	0.100	0.1038		mg/L		104	70 - 130	
Ethylbenzene	0.100	0.1078		mg/L		108	70 - 130	
m-Xylene & p-Xylene	0.200	0.1914		mg/L		96	70 - 130	
o-Xylene	0.100	0.09672		mg/L		97	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	104	70 - 130
1.4-Difluorobenzene (Surr)	104	70 - 130

Lab Sample ID: LCSD 880-4074/4

Matrix: Water

Analysis Batch: 4074

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09313		mg/L		93	70 - 130	1	20	
Toluene	0.100	0.1006		mg/L		101	70 - 130	3	20	
Ethylbenzene	0.100	0.1055		mg/L		106	70 - 130	2	20	
m-Xylene & p-Xylene	0.200	0.1875		mg/L		94	70 - 130	2	20	
o-Xylene	0.100	0.09438		mg/L		94	70 - 130	2	20	
	Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	Analyte Added Benzene 0.100 Toluene 0.100 Ethylbenzene 0.100 m-Xylene & p-Xylene 0.200	Analyte Added Result Benzene 0.100 0.09313 Toluene 0.100 0.1006 Ethylbenzene 0.100 0.1055 m-Xylene & p-Xylene 0.200 0.1875	Analyte Added Result Qualifier Benzene 0.100 0.09313 Toluene 0.100 0.1006 Ethylbenzene 0.100 0.1055 m-Xylene & p-Xylene 0.200 0.1875	Analyte Added Result Qualifier Unit Benzene 0.100 0.09313 mg/L Toluene 0.100 0.1006 mg/L Ethylbenzene 0.100 0.1055 mg/L m-Xylene & p-Xylene 0.200 0.1875 mg/L	Analyte Added Result Qualifier Unit D Benzene 0.100 0.09313 mg/L Toluene 0.100 0.1006 mg/L Ethylbenzene 0.100 0.1055 mg/L m-Xylene & p-Xylene 0.200 0.1875 mg/L	Analyte Added Result Qualifier Unit Unit D %Rec Benzene 0.100 0.09313 mg/L 93 Toluene 0.100 0.1006 mg/L 101 Ethylbenzene 0.100 0.1055 mg/L 106 m-Xylene & p-Xylene 0.200 0.1875 mg/L 94	Analyte Added Result Qualifier Unit D %Rec Limits Benzene 0.100 0.09313 mg/L 93 70 - 130 Toluene 0.100 0.1006 mg/L 101 70 - 130 Ethylbenzene 0.100 0.1055 mg/L 106 70 - 130 m-Xylene & p-Xylene 0.200 0.1875 mg/L 94 70 - 130	Analyte Added Result Qualifier Unit D %Rec Limits RPD Benzene 0.100 0.09313 mg/L 93 70 - 130 1 Toluene 0.100 0.1006 mg/L 101 70 - 130 3 Ethylbenzene 0.100 0.1055 mg/L 106 70 - 130 2 m-Xylene & p-Xylene 0.200 0.1875 mg/L 94 70 - 130 2	Analyte Added Result Qualifier Unit D %Rec Limits RPD Limits Benzene 0.100 0.09313 mg/L 93 70 - 130 1 20 Toluene 0.100 0.1006 mg/L 101 70 - 130 3 20 Ethylbenzene 0.100 0.1055 mg/L 106 70 - 130 2 20 m-Xylene & p-Xylene 0.200 0.1875 mg/L 94 70 - 130 2 20

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	99	70 - 130
1.4-Difluorobenzene (Surr)	107	70 - 130

Lab Sample ID: MB 880-4105/8

Matrix: Water

Analysis Batch: 4105

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB

Analyte Result Qualifier MDL Unit Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 mg/L 06/15/21 13:19

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Job ID: 820-998-1

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

Lab Sample ID: MB 880-4105/8 **Matrix: Water**

Analysis Batch: 4105

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200		mg/L			06/15/21 13:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			06/15/21 13:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			06/15/21 13:19	1
o-Xylene	<0.00200	U	0.00200		mg/L			06/15/21 13:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			06/15/21 13:19	1
Total BTEX	<0.00400	U	0.00400		mg/L			06/15/21 13:19	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Dil Fac Analyzed 4-Bromofluorobenzene (Surr) 70 - 130 06/15/21 13:19 73 1,4-Difluorobenzene (Surr) 86 70 - 130 06/15/21 13:19

Lab Sample ID: LCS 880-4105/3

Matrix: Water

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 4105

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

Spike LCS LCS %Rec. Added Result Qualifier Unit %Rec Limits 0.100 97 70 - 130 0.09731 mg/L 0.100 0.1083 70 - 130 mg/L 108 0.100 0.1111 mg/L 111 70 - 130 0.200 0.1945 70 - 130 mg/L 97 0.100 0.09867 mg/L 70 - 130

LCS LCS %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 115 1,4-Difluorobenzene (Surr) 98 70 - 130

Lab Sample ID: LCSD 880-4105/4

Matrix: Water

Analysis Batch: 4105

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

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09988		mg/L		100	70 - 130	3	20
Toluene	0.100	0.09359		mg/L		94	70 - 130	15	20
Ethylbenzene	0.100	0.1096		mg/L		110	70 - 130	1	20
m-Xylene & p-Xylene	0.200	0.1957		mg/L		98	70 - 130	1	20
o-Xylene	0.100	0.09940		mg/L		99	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 820-998-10 MS

Matrix: Water

Analysis Batch: 4105

•	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.100	0.09835		mg/L		98	70 - 130	
Toluene	<0.00200	U	0.100	0.09233		mg/L		92	70 - 130	

Eurofins Xenco, Lubbock

Client Sample ID: MW-4

Prep Type: Total/NA

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Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Job ID: 820-998-1

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

Lab Sample ID: 820-998-10 MS **Matrix: Water**

Analysis Batch: 4105

Client Sample ID: MW-4 Prep Type: Total/NA

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00200 U 0.100 0.1092 109 70 - 130 mg/L m-Xylene & p-Xylene <0.00400 U 0.200 0.1946 mg/L 97 70 - 130 0.100 o-Xylene <0.00200 U 0.09741 97 70 - 130 mg/L

MS MS

Surrogate	%Recovery Quality	fier Limits
4-Bromofluorobenzene (Surr)	99	70 - 130
1,4-Difluorobenzene (Surr)	104	70 - 130

Lab Sample ID: 820-998-10 MSD

Matrix: Water

Analysis Batch: 4105

Client Sample ID: MW-4 Prep Type: Total/NA

Sample Sample Spike MSD MSD %Rec. RPD %Rec Result Qualifier Added Limits RPD Limit Analyte Result Qualifier Unit 0.100 Benzene <0.00200 U 0.09646 mg/L 96 70 - 130 2 25 Toluene <0.00200 U 0.100 0.1048 mg/L 104 70 - 130 13 25 Ethylbenzene <0.00200 U 0.100 0.1097 110 70 - 130 0 25 mg/L 0.200 70 - 130 25 m-Xylene & p-Xylene <0.00400 U 0.1956 mg/L 98 0.100 <0.00200 U 0.09835 98 70 - 130 o-Xylene mg/L

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	107	70 - 130
1.4-Difluorobenzene (Surr)	107	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4120/3

Matrix: Water

Analysis Batch: 4120

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			06/15/21 14:49	1

Lab Sample ID: LCS 880-4120/4 **Matrix: Water**

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analysis Batch: 4120

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	23.77		mg/L		95	90 - 110	

Lab Sample ID: LCSD 880-4120/5

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 4120

Matrix: Water

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	25.0	23.31		mg/L		93	90 - 110	2	20

QC Association Summary

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

Job ID: 820-998-1

2

GC VOA

Analysis Batch: 4074

Prep Bato	Method	Matrix	Prep Type	Client Sample ID	Lab Sample ID
	8021B	Water	Total/NA	MW-5	820-998-1
	8021B	Water	Total/NA	MW-6	820-998-2
	8021B	Water	Total/NA	MW-14	820-998-3
	8021B	Water	Total/NA	MW-9	820-998-4
	8021B	Water	Total/NA	MW-7	820-998-5
	8021B	Water	Total/NA	MW-10	820-998-6
	8021B	Water	Total/NA	MW-11	820-998-7
	8021B	Water	Total/NA	MW-12	820-998-8
	8021B	Water	Total/NA	MW-2	820-998-9
	8021B	Water	Total/NA	Method Blank	MB 880-4074/8
	8021B	Water	Total/NA	Lab Control Sample	LCS 880-4074/3
	8021B	Water	Total/NA	Lab Control Sample Dup	LCSD 880-4074/4

Analysis Batch: 4105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-998-10	MW-4	Total/NA	Water	8021B	
820-998-11	MW-13	Total/NA	Water	8021B	
820-998-12	MW-8	Total/NA	Water	8021B	
820-998-13	MW-3	Total/NA	Water	8021B	
820-998-14	DUP-1	Total/NA	Water	8021B	
820-998-15	DUP-2	Total/NA	Water	8021B	
MB 880-4105/8	Method Blank	Total/NA	Water	8021B	
LCS 880-4105/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-4105/4	Lab Control Sample Dup	Total/NA	Water	8021B	
820-998-10 MS	MW-4	Total/NA	Water	8021B	
820-998-10 MSD	MW-4	Total/NA	Water	8021B	

HPLC/IC

Analysis Batch: 4120

Lab Sample ID 820-998-9	Client Sample ID MW-2	Prep Type Total/NA	Matrix Water	Method 300.0	Prep Batch
MB 880-4120/3	Method Blank	Total/NA	Water	300.0	
LCS 880-4120/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-4120/5	Lab Control Sample Dup	Total/NA	Water	300.0	

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Client Sample ID: MW-5 Lab Sample ID: 820-998-1 Date Collected: 06/09/21 09:55

Matrix: Water

Date Received: 06/11/21 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4074	06/14/21 19:22	MR	XEN MID

Client Sample ID: MW-6

Lab Sample ID: 820-998-2

Matrix: Water

Date Collected: 06/09/21 10:39 Date Received: 06/11/21 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4074	06/14/21 19:47	MR	XEN MID

Client Sample ID: MW-14

Lab Sample ID: 820-998-3

Matrix: Water

Date Collected: 06/09/21 11:23 Date Received: 06/11/21 10:04

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4074	06/14/21 20:12	MR	XEN MID

Client Sample ID: MW-9

Lab Sample ID: 820-998-4

06/14/21 20:37 MR

Matrix: Water

Date Collected: 06/09/21 12:05 Date Received: 06/11/21 10:04

8021B

Dil Initial Final Batch Batch Batch Prepared Method Number or Analyzed Prep Type Type Run Factor Amount Amount Analyst Lab

Client Sample ID: MW-7

Date Received: 06/11/21 10:04

Analysis

Total/NA

Lab Sample ID: 820-998-5 Date Collected: 06/09/21 12:45 **Matrix: Water**

5 mL

4074

5 mL

XEN MID

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4074	06/14/21 21:02	MR	XEN MID

Client Sample ID: MW-10 Date Collected: 06/09/21 13:20 Lab Sample ID: 820-998-6 **Matrix: Water**

Date Received: 06/11/21 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4074	06/14/21 21:28	MR	XEN MID

Client Sample ID: MW-11

Lab Sample ID: 820-998-7

Matrix: Water

Date Collected: 06/10/21 08:57 Date Received: 06/11/21 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B			5 mL	5 mL	4074	06/14/21 21:53	MR	XEN MID

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Client Sample ID: MW-12 Lab Sample ID: 820-998-8 Date Collected: 06/10/21 09:39

Matrix: Water

Matrix: Water

Matrix: Water

Date Received: 06/11/21 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4074	06/14/21 22:18	MR	XEN MID

Client Sample ID: MW-2 Lab Sample ID: 820-998-9

Date Collected: 06/10/21 10:39 **Matrix: Water**

Date Received: 06/11/21 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4074	06/14/21 22:43	MR	XEN MID
Total/NA	Analysis	300.0		100	0 mL	1.0 mL	4120	06/15/21 17:44	CH	XEN MID

Client Sample ID: MW-4 Lab Sample ID: 820-998-10 Date Collected: 06/10/21 11:17 **Matrix: Water**

Date Received: 06/11/21 10:04

Batch Batch Dil Initial Final Batch Prepared Prep Type Type Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8021B 4105 06/15/21 13:45 MR XEN MID Analysis 5 mL 5 mL

Client Sample ID: MW-13 Lab Sample ID: 820-998-11

Date Collected: 06/10/21 11:58 Date Received: 06/11/21 10:04

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Analysis 8021B 5 mL 4105 06/15/21 14:10 MR XEN MID 5 mL

Lab Sample ID: 820-998-12 Client Sample ID: MW-8 **Matrix: Water**

Date Collected: 06/10/21 12:29

Date Received: 06/11/21 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 14:35	MR	XEN MID

Client Sample ID: MW-3 Lab Sample ID: 820-998-13

Date Collected: 06/10/21 13:05 Date Received: 06/11/21 10:04

Dil Batch Batch Initial Final Batch Prepared Method Amount Number or Analyzed **Prep Type** Type Run Factor Amount Analyst Lab

Total/NA Analysis 8021B 5 mL 5 mL 4105 06/15/21 15:01 MR XEN MID

Lab Sample ID: 820-998-14 **Client Sample ID: DUP-1** Date Collected: 06/10/21 00:00 **Matrix: Water**

Date Received: 06/11/21 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 15:25	MR	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Client Sample ID: DUP-2

Job ID: 820-998-1

Lab Sample ID: 820-998-15

Matrix: Water

Date Collected: 06/10/21 00:00 Date Received: 06/11/21 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	4105	06/15/21 15:51	MR	XEN MID

Laboratory References:

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

Eurofins Xenco, Lubbock

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Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Job ID: 820-998-1

Laboratory: Eurofins Xenco, Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-20-21	06-30-21
The following analytes	are included in this report by	it the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytee for a
ind idiaming analyted	a. c		iou by the governing duthenty. The not me	ay include analytes for
the agency does not of	•	it are laberatory to thet eet an	iou zy mo govorimig addionij. Tino not mo	ay include analytes for t
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Method Summary

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Job ID: 820-998-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	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.

Laboratory References:

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

Eurofins Xenco, Lubbock

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Sample Summary

Client: Terracon Consulting Eng & Scientists

Project/Site: 14" Vac to Jal Legacy

Job ID: 820-998-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-998-1	MW-5	Water	06/09/21 09:55	06/11/21 10:04
820-998-2	MW-6	Water	06/09/21 10:39	06/11/21 10:04
320-998-3	MW-14	Water	06/09/21 11:23	06/11/21 10:04
320-998-4	MW-9	Water	06/09/21 12:05	06/11/21 10:04
320-998-5	MW-7	Water	06/09/21 12:45	06/11/21 10:04
320-998-6	MW-10	Water	06/09/21 13:20	06/11/21 10:04
320-998-7	MW-11	Water	06/10/21 08:57	06/11/21 10:04
320-998-8	MW-12	Water	06/10/21 09:39	06/11/21 10:04
20-998-9	MW-2	Water	06/10/21 10:39	06/11/21 10:04
20-998-10	MW-4	Water	06/10/21 11:17	06/11/21 10:04
20-998-11	MW-13	Water	06/10/21 11:58	06/11/21 10:04
320-998-12	MW-8	Water	06/10/21 12:29	06/11/21 10:04
820-998-13	MW-3	Water	06/10/21 13:05	06/11/21 10:04
20-998-14	DUP-1	Water	06/10/21 00:00	06/11/21 10:04
820-998-15	DUP-2	Water	06/10/21 00:00	06/11/21 10:04

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WHEN RECEIVED (°C) 2//2,66 Page_1_ of 2 Lab Sample ID 7 9 u ø -86-028 TEMP OF COOLER LAB USE ONLY DUE DATE: E-MAIL RESULTS TO: RECORD ဍ Loc: 820 **998** O Yes REQUESTED Chloride (Total) (EPA 300) 10:04 TRRP Laboratory Review Checklist 820-998 Chain of Custody BTEX (EPA Method 80218) × × × C/11/2/ 6701 Aberdeen Avenue, Suite 9 Poly Im 022 Lubbock, TX 79424 Xenco Labo, ____ (806) 794-1296 Brett Dennis AOV Im 04 ო က ന ന ന ന ന ന End Depth Sampler's Signature Start Depth eceived by (Signature) Laboratory: 24-Hour Rush Address: PO/SO #: Contact: Phone: Identifying Marks of Sample(s) 14" Vac to Jal Legacy (SRS # 2009-092) 48-Hour Rush ij. Project Name MW-12 MW-14 MW-10 X MW-11 MW-6 6-WM MW-7 MW-2 MW-4 MW-5 Project Manager: Brett Dennis × × × Grab × × × × × Comp Office Location Lubbock AR217010 Time 10:39 12:45 13:20 10:39 11:17 VOA - 40 ml via 11:23 12:05 9:55 8:57 9:39 **TURNAROUND TIME** Sampler's Name: Project Number Relinquished by (Signature) Relinquished by (Signature) **Aaron Adams** 06/10/21 06/09/21 06/09/21 06/09/21 06/10/21 06/09/21 06/10/21 06/09/21 06/09/21 06/10/21 Date QΝ ĕ 8 8 8 8 <u>≽</u> <u>≽</u> 38 8 Matrix Matrix

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		Laboratory:	Xenco La	Xenco Laboratories	:	ANALYSIS		<u> </u>	LAB USE ONLY DUE DATE:	
		Address:	6701 Ab Lubbock,	6701 Aberdeen Avenue, Suite 9 Lubbock, TX 79424	iue, Suite 9	REQUESTED		157 42	TEMP OF COOLER WHEN RECEIVED (°C) 2. 12.0C	200
Office Location Lubbock		Phone:	(806) 794-1296	1-1296						
		Contact: Brett							Page2_ of _2_	
Project Manager: Brett Dennis		PO/SO #:								
Sampler's Name:		Sampler's Signature	nature	2111	100/6			•		
Aaron Adams			3	Jean C	dentil					-
Project Number	Project Name			No. Type o	No. Type of Containers					
AR217010	14" Vac to Jal Legacy (SRS # 2009-092)	2009-092)		AC						
Date Time Time Time Time Gene	Identifying Marks of Sample(s)	of Sample(s)	fitqəQ fist	V lm 04 lm 022	Vloq	RTEX (EPA			Lab Sample ID	
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Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-998-1

Login Number: 998 List Source: Eurofins Xenco, Lubbock

List Number: 1

Creator: Turner, Michael

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	
s 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	

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Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists Job Number: 820-998-1

Login Number: 998 List Source: Eurofins Xenco, Midland List Number: 2 List Creation: 06/14/21 10:19 AM

Creator: Copeland, Tatiana

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?	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	True	

<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Lubbock 6701 Aberdeen Ave. Suite 8

Lubbock, TX 79424 Tel: (806)794-1296

Laboratory Job ID: 820-2838-1

Laboratory Sample Delivery Group: AR217010 Client Project/Site: 14-Inch Vac to Jal Legacy

For:

Terracon Consulting Eng & Scientists 5827 50th St Suite 1 Lubbock, Texas 79424

Attn: Brett Dennis

MRAMER

Authorized for release by: 12/16/2021 3:03:40 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 8/3/2022 2:33:03 PM

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.

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

Laboratory Job ID: 820-2838-1

SDG: AR217010

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

NEAMER

Project Manager

12/16/2021 3:03:40 PM

Page 2 of 28

12/16/2021

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

Laboratory Job ID: 820-2838-1 SDG: AR217010

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Definitions/Glossary

Job ID: 820-2838-1 Client: Terracon Consulting Eng & Scientists Project/Site: 14-Inch Vac to Jal Legacy SDG: AR217010

Qualifiers

GC VOA

Qualifier **Qualifier Description** S1+ Surrogate recovery exceeds control limits, high biased. 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 Colony Forming Unit CFU **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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE) LOQ

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

Not Calculated NC

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)

RLReporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) **TEQ**

TNTC Too Numerous To Count

Case Narrative

Client: Terracon Consulting Eng & Scientists Job ID: 820-2838-1 SDG: AR217010 Project/Site: 14-Inch Vac to Jal Legacy

Job ID: 820-2838-1

Laboratory: Eurofins Xenco, Lubbock

Narrative

Job Narrative 820-2838-1

Receipt

The samples were received on 12/9/2021 11:38 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 4.5°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

Client Sample ID: MW-10

Date Collected: 12/07/21 10:08

Job ID: 820-2838-1 SDG: AR217010

Lab Sample ID: 820-2838-1

Analyzed

Matrix: Water

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 13:39	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 13:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 13:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 13:39	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 13:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 13:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	179	S1+	70 - 130			-		12/10/21 13:39	1
1,4-Difluorobenzene (Surr)	146	S1+	70 - 130					12/10/21 13:39	1

Total BTEX <0.00400 U 0.00400 mg/L 12/14/21 10:16 Client Sample ID: MW-5 Lab Sample ID: 820-2838-2

Date Collected: 12/07/21 10:54 **Matrix: Water**

RL

MDL Unit

D

Prepared

Date Received: 12/09/21 11:38

Analyte

Method: 8021B - Volatile Organic Compounds (GC)

Result Qualifier

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 14:06	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 14:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 14:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 14:06	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 14:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 14:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	160	S1+	70 - 130					12/10/21 14:06	1
1,4-Difluorobenzene (Surr)	132	S1+	70 - 130					12/10/21 14:06	1
	Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr)	Benzene <0.00200	Benzene	Benzene	Benzene	Benzene <0.00200	Benzene	Benzene	Benzene <0.00200 U 0.00200 mg/L 12/10/21 14:06 Toluene <0.00200

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			12/14/21 10:16	1

Client Sample ID: MW-6 Lab Sample ID: 820-2838-3 Date Collected: 12/07/21 11:30 **Matrix: Water**

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 14:32	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 14:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 14:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 14:32	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 14:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 14:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	160	S1+	70 - 130			-		12/10/21 14:32	1
1,4-Difluorobenzene (Surr)	135	S1+	70 - 130					12/10/21 14:32	1

Eurofins Xenco, Lubbock

Dil Fac

12/16/2021

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

Job ID: 820-2838-1

SDG: AR217010

Client Sample ID: MW-6

Lab Sample ID: 820-2838-3

Matrix: Water

Date Collected: 12/07/21 11:30 Date Received: 12/09/21 11:38

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			12/14/21 10:16	1

Client Sample ID: MW-7 Lab Sample ID: 820-2838-4

Date Collected: 12/07/21 12:21 Date Received: 12/09/21 11:38 **Matrix: Water**

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Dil Fac Unit D Prepared Analyzed U Benzene <0.00200 0.00200 12/10/21 14:58 mg/L Toluene <0.00200 U 0.00200 12/10/21 14:58 mg/L Ethylbenzene 0.00200 < 0.00200 mg/L 12/10/21 14:58 m-Xylene & p-Xylene <0.00400 U 0.00400 12/10/21 14:58 mg/L o-Xylene <0.00200 U 0.00200 mg/L 12/10/21 14:58 Xylenes, Total <0.00400 U 0.00400 mg/L 12/10/21 14:58 Qualifier Limits Dil Fac Surrogate %Recovery Prepared Analyzed 4-Bromofluorobenzene (Surr) 173 S1+ 70 - 130 12/10/21 14:58 1,4-Difluorobenzene (Surr) 138 S1+ 70 - 130 12/10/21 14:58

Method: Total BTEX - Total BTEX Calculation Result Qualifier Analyte RL MDL Unit D Prepared Analyzed Dil Fac <0.00400 Total BTEX 0.00400 mg/L 12/14/21 10:16

Client Sample ID: MW-9 Lab Sample ID: 820-2838-5 Date Collected: 12/07/21 13:43 **Matrix: Water**

Date Received: 12/09/21 11:38

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared Benzene <0.00200 U 0.00200 12/10/21 15:25 mg/L Toluene <0.00200 U 0.00200 12/10/21 15:25 mg/L Ethylbenzene <0.00200 0.00200 mg/L 12/10/21 15:25 m-Xylene & p-Xylene <0.00400 U 0.00400 12/10/21 15:25 mg/L 12/10/21 15:25 o-Xylene <0.00200 U 0.00200 mg/L Xylenes, Total <0.00400 U 0.00400 mg/L 12/10/21 15:25 Surrogate %Recovery Qualifier Limits Analyzed Dil Fac Prepared S1+ 70 - 130 4-Bromofluorobenzene (Surr) 179 12/10/21 15:25 1,4-Difluorobenzene (Surr) 137 S1+ 70 - 130 12/10/21 15:25 **Method: Total BTEX - Total BTEX Calculation** Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared Total BTEX <0.00400 U 0.00400 12/14/21 10:16

Client Sample ID: MW-11 Lab Sample ID: 820-2838-6

mg/L

Date Collected: 12/07/21 14:26

Date Received: 12/09/21 11:38

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			12/10/21 15:51	1	
	Toluene	<0.00200	U	0.00200	mg/L			12/10/21 15:51	1	

Eurofins Xenco, Lubbock

Matrix: Water

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

Lab Sample ID: 820-2838-6

Matrix: Water

Client	Sample	ID:	MW	-11
D-4- 0		0/07	104.4	4.00

Date Collected: 12/07/21 14:26 Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 15:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 15:51	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 15:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 15:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130			-		12/10/21 15:51	1
1,4-Difluorobenzene (Surr)	125		70 - 130					12/10/21 15:51	1
- Method: Total BTEX - Total B	ΓEX Calculation								
Method. Total DTEX - Total D									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: MW-12 Lab Sample ID: 820-2838-7

Date Collected: 12/07/21 15:08 Date Received: 12/09/21 11:38

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 17:36	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 17:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 17:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 17:36	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 17:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 17:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	183	S1+	70 - 130			-		12/10/21 17:36	1
1,4-Difluorobenzene (Surr)	105		70 - 130					12/10/21 17:36	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			12/14/21 10:16	1

Client Sample ID: MW-13 Lab Sample ID: 820-2838-8 Date Collected: 12/08/21 09:49 **Matrix: Water**

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 18:03	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 18:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 18:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 18:03	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 18:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 18:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130			=		12/10/21 18:03	1
1,4-Difluorobenzene (Surr)	131	S1+	70 - 130					12/10/21 18:03	1

Client: Terracon Consulting Eng & Scientists

Job ID: 820-2838-1

SDG: AR217010

Project/Site: 14-Inch Vac to Jal Legacy

Lab Sample ID: 820-2838-8

Matrix: Water

Client Sample ID: MW-13 Date Collected: 12/08/21 09:49 Date Received: 12/09/21 11:38

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			12/14/21 10:16	1

Lab Sample ID: 820-2838-9 Client Sample ID: MW-8

Date Collected: 12/08/21 10:26 **Matrix: Water** Date Received: 12/09/21 11:38

Method: 8021B - Volatile Orga	nic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 18:29	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 18:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 18:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 18:29	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 18:29	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	175	S1+	70 - 130			-		12/10/21 18:29	1
1,4-Difluorobenzene (Surr)	145	S1+	70 - 130					12/10/21 18:29	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			12/14/21 10:16	1	

Client Sample ID: MW-2 Lab Sample ID: 820-2838-10 Date Collected: 12/08/21 11:02 **Matrix: Water**

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0276		0.00200		mg/L			12/10/21 18:56	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 18:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 18:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 18:56	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 18:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	188	S1+	70 - 130			-		12/10/21 18:56	1
1,4-Difluorobenzene (Surr)	151	S1+	70 - 130					12/10/21 18:56	1
Method: Total BTEX - Total B1	ΓEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0276		0.00400		mg/L			12/14/21 10:16	1

50.0

mg/L

Eurofins Xenco, Lubbock

12/15/21 20:52

10800

100

Chloride

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

Job ID: 820-2838-1 SDG: AR217010

3DG. ANZ 17010

Lab Sample ID: 820-2838-11

. Matrix: Water

Client Sample ID: MW-14
Date Collected: 12/08/21 11:48

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 19:22	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 19:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 19:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 19:22	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 19:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	163	S1+	70 - 130			_		12/10/21 19:22	1
1,4-Difluorobenzene (Surr)	135	S1+	70 - 130					12/10/21 19:22	1
Method: Total BTEX - Total BT	TEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	П	0.00400		mg/L			12/14/21 10:16	

Client Sample ID: MW-3

Date Collected: 12/08/21 13:17

Lab Sample ID: 820-2838-12

Matrix: Water

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 19:48	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 19:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 19:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 19:48	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 19:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 19:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	189	S1+	70 - 130			-		12/10/21 19:48	1
1,4-Difluorobenzene (Surr)	150	S1+	70 - 130					12/10/21 19:48	1
Method: Total BTEX - Total B1	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	П	0.00400		mg/L			12/14/21 10:16	

Client Sample ID: MW-4

Date Collected: 12/08/21 13:55

Matrix: Water

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 20:15	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 20:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 20:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 20:15	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 20:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 20:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	178	S1+	70 - 130			_		12/10/21 20:15	1
1,4-Difluorobenzene (Surr)	143	S1+	70 - 130					12/10/21 20:15	1

Eurofins Xenco, Lubbock

Released to Imaging: 8/3/2022 2:33:03 PM

3

5

7

9

10

12

1 /

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

Lab Sample ID: 820-2838-13

Matrix: Water

Date Collected: 12/08/21 13:55 Date Received: 12/09/21 11:38

Client Sample ID: MW-4

	Method: Total BTEX - Total BTEX (Calculation								
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Total BTEX	<0.00400	U	0.00400		mg/L			12/14/21 10:16	1

Client Sample ID: DUP 1

Date Collected: 12/08/21 00:00

Lab Sample ID: 820-2838-14

Matrix: Water

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 20:41	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 20:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 20:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 20:41	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 20:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 20:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	169	S1+	70 - 130			-		12/10/21 20:41	1
1,4-Difluorobenzene (Surr)	140	S1+	70 - 130					12/10/21 20:41	1

 Method: Total BTEX - Total BTEX Calculation

 Analyte
 Result Total BTEX
 Qualifier
 RL Qualifier
 MDL mg/L
 D Prepared
 Analyzed
 Dil Fac

 Total BTEX
 <0.00400</td>
 0.00400
 mg/L
 12/14/21 10:16
 1

Client Sample ID: DUP 2

Lab Sample ID: 820-2838-15

Date Collected: 12/08/21 00:00

Matrix: Water

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 21:07	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 21:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 21:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 21:07	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 21:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 21:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	171	S1+	70 - 130			-		12/10/21 21:07	1
1,4-Difluorobenzene (Surr)	143	S1+	70 - 130					12/10/21 21:07	1
Method: Total BTEX - Total B1	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			12/14/21 10:16	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists Job ID: 820-2838-1 Project/Site: 14-Inch Vac to Jal Legacy SDG: AR217010

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)	
820-2838-1	MW-10	179 S1+	146 S1+	
820-2838-2	MW-5	160 S1+	132 S1+	
820-2838-3	MW-6	160 S1+	135 S1+	
820-2838-4	MW-7	173 S1+	138 S1+	
820-2838-5	MW-9	179 S1+	137 S1+	
820-2838-6	MW-11	144 S1+	125	
820-2838-7	MW-12	183 S1+	105	
820-2838-8	MW-13	159 S1+	131 S1+	
820-2838-9	MW-8	175 S1+	145 S1+	
820-2838-10	MW-2	188 S1+	151 S1+	
820-2838-11	MW-14	163 S1+	135 S1+	
820-2838-12	MW-3	189 S1+	150 S1+	
820-2838-13	MW-4	178 S1+	143 S1+	
820-2838-14	DUP 1	169 S1+	140 S1+	
820-2838-15	DUP 2	171 S1+	143 S1+	
890-1683-B-2 MS	Matrix Spike	147 S1+	116	
890-1683-B-2 MSD	Matrix Spike Duplicate	130	138 S1+	
LCS 880-14446/3	Lab Control Sample	143 S1+	115	
LCSD 880-14446/4	Lab Control Sample Dup	126	107	
MB 880-14446/8	Method Blank	87	123	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Client: Terracon Consulting Eng & Scientists

Job ID: 820-2838-1

Project/Site: 14-Inch Vac to Jal Legacy

SDG: AR217010

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-14446/8

Matrix: Water

Analysis Batch: 14446

Client Sam	ple ID: N	letho	d Blank
	Prep T	ype: 1	otal/NA

		MB	MB							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Benzene	<0.00200	U	0.00200		mg/L			12/10/21 11:28	1
I	Toluene	<0.00200	U	0.00200		mg/L			12/10/21 11:28	1
ı	Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 11:28	1
I	m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 11:28	1
ı	o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 11:28	1
	Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 11:28	1
ı										

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	d Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130		12/10/21 11:28	1
1,4-Difluorobenzene (Surr)	123		70 - 130		12/10/21 11:28	1

Lab Sample ID: LCS 880-14446/3

Matrix: Water

Analysis Batch: 14446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
1 2

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1117 mg/L 112 70 - 130 0.1084 Toluene 0.100 mg/L 108 70 - 130 0.100 Ethylbenzene 0.1102 mg/L 110 70 - 130 121 70 - 130 0.200 m-Xylene & p-Xylene 0.2419 mg/L 0.100 0.1124 70 - 130 o-Xylene mg/L 112

Spike

Added

0.100

0.100

0.100

0.200

0.100

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: LCSD 880-14446/4

Matrix: Water

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 14446

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

RPD LCSD LCSD %Rec. Result Qualifier Unit %Rec Limits RPD Limit 0.1041 mg/L 104 70 - 130 20 0.09888 mg/L 99 70 - 130 20 0.1002 mg/L 100 70 - 130 9 20 0.2195 mg/L 110 70 - 130 10 20 0.1040 mg/L 104 70 - 130 20

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 126
 70 - 130

 1,4-Difluorobenzene (Surr)
 107
 70 - 130

Lab Sample ID: 890-1683-B-2 MS

Matrix: Water

Analysis Batch: 14446

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

_	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00200	U	0.100	0.1150		mg/L		115	70 - 130
Toluene	<0.00200	U	0.100	0.1050		mg/L		105	70 - 130

Eurofins Xenco, Lubbock

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Job ID: 820-2838-1

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

SDG: AR217010

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

Lab Sample ID: 890-1683-B-2 MS

Matrix: Water

Analysis Batch: 14446

Client Sample ID: Matrix Spike

Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U	0.100	0.1075		mg/L		107	70 - 130	
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2374		mg/L		119	70 - 130	
o-Xylene	<0.00200	U	0.100	0.1158		mg/L		116	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130
1,4-Difluorobenzene (Surr)	116		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analysis Batch: 14446

Matrix: Water

Lab Sample ID: 890-1683-B-2 MSD

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U	0.100	0.1091		mg/L		109	70 - 130	5	25
Toluene	<0.00200	U	0.100	0.1051		mg/L		105	70 - 130	0	25
Ethylbenzene	<0.00200	U	0.100	0.1087		mg/L		109	70 - 130	1	25
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2361		mg/L		118	70 - 130	1	25
o-Xylene	<0.00200	U	0.100	0.1127		mg/L		113	70 - 130	3	25

MSD MSD

Surrogate	%Recovery Qualifie	er Limits
4-Bromofluorobenzene (Surr)	130	70 - 130
1.4-Difluorobenzene (Surr)	138 S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-14928/3 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 14928

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			12/15/21 17:32	1

Lab Sample ID: LCS 880-14928/4 Client Sample ID: Lab Control Sample **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 14928

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	25.00		mg/L		100	90 - 110	

Lab Sample ID: LCSD 880-14928/5 Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 14928

,,								
	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier Un	it D	%Rec	Limits	RPD	Limit
Chloride	25.0	25.22	mg		101	90 - 110	1	20

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Prep Type: Total/NA

Client: Terracon Consulting Eng & Scientists Job ID: 820-2838-1 Project/Site: 14-Inch Vac to Jal Legacy SDG: AR217010

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-9212-A-10 MS Client Sample ID: Matrix Spike **Matrix: Water Prep Type: Total/NA**

Analysis Batch: 14928

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	169		125	298.4		mg/L		104	90 - 110	

Lab Sample ID: 880-9212-A-10 MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Water Prep Type: Total/NA

Analysis Batch: 14928

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	169		125	300.5		mg/L		106	90 - 110	1	20

QC Association Summary

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

Job ID: 820-2838-1 SDG: AR217010

GC VOA

Analysis Batch: 14446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2838-1	MW-10	Total/NA	Water	8021B	
820-2838-2	MW-5	Total/NA	Water	8021B	
820-2838-3	MW-6	Total/NA	Water	8021B	
820-2838-4	MW-7	Total/NA	Water	8021B	
820-2838-5	MW-9	Total/NA	Water	8021B	
820-2838-6	MW-11	Total/NA	Water	8021B	
820-2838-7	MW-12	Total/NA	Water	8021B	
820-2838-8	MW-13	Total/NA	Water	8021B	
820-2838-9	MW-8	Total/NA	Water	8021B	
820-2838-10	MW-2	Total/NA	Water	8021B	
820-2838-11	MW-14	Total/NA	Water	8021B	
820-2838-12	MW-3	Total/NA	Water	8021B	
820-2838-13	MW-4	Total/NA	Water	8021B	
820-2838-14	DUP 1	Total/NA	Water	8021B	
820-2838-15	DUP 2	Total/NA	Water	8021B	
MB 880-14446/8	Method Blank	Total/NA	Water	8021B	
LCS 880-14446/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-14446/4	Lab Control Sample Dup	Total/NA	Water	8021B	
890-1683-B-2 MS	Matrix Spike	Total/NA	Water	8021B	
890-1683-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

Analysis Batch: 14761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2838-1	MW-10	Total/NA	Water	Total BTEX	
820-2838-2	MW-5	Total/NA	Water	Total BTEX	
820-2838-3	MW-6	Total/NA	Water	Total BTEX	
820-2838-4	MW-7	Total/NA	Water	Total BTEX	
820-2838-5	MW-9	Total/NA	Water	Total BTEX	
820-2838-6	MW-11	Total/NA	Water	Total BTEX	
820-2838-7	MW-12	Total/NA	Water	Total BTEX	
820-2838-8	MW-13	Total/NA	Water	Total BTEX	
820-2838-9	MW-8	Total/NA	Water	Total BTEX	
820-2838-10	MW-2	Total/NA	Water	Total BTEX	
820-2838-11	MW-14	Total/NA	Water	Total BTEX	
820-2838-12	MW-3	Total/NA	Water	Total BTEX	
820-2838-13	MW-4	Total/NA	Water	Total BTEX	
820-2838-14	DUP 1	Total/NA	Water	Total BTEX	
820-2838-15	DUP 2	Total/NA	Water	Total BTEX	

HPLC/IC

Analysis Batch: 14928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2838-10	MW-2	Total/NA	Water	300.0	
MB 880-14928/3	Method Blank	Total/NA	Water	300.0	
LCS 880-14928/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-14928/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-9212-A-10 MS	Matrix Spike	Total/NA	Water	300.0	
880-9212-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Matrix: Water

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

Lab Sample ID: 820-2838-1

Client Sample ID: MW-10

Matrix: Water

Date Collected: 12/07/21 10:08 Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 13:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-5 Lab Sample ID: 820-2838-2

Date Collected: 12/07/21 10:54 **Matrix: Water**

Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 14:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-6 Lab Sample ID: 820-2838-3

Date Collected: 12/07/21 11:30

Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 14:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Lab Sample ID: 820-2838-4 **Client Sample ID: MW-7**

Date Collected: 12/07/21 12:21 **Matrix: Water** Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 14:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-9 Lab Sample ID: 820-2838-5

Date Collected: 12/07/21 13:43 **Matrix: Water** Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 15:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-11 Lab Sample ID: 820-2838-6

Matrix: Water Date Collected: 12/07/21 14:26 Date Received: 12/09/21 11:38

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 15:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Job ID: 820-2838-1

SDG: AR217010

Client Sample ID: MW-12

Date Collected: 12/07/21 15:08 Date Received: 12/09/21 11:38

Lab Sample ID: 820-2838-7

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 17:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-13 Lab Sample ID: 820-2838-8

Date Collected: 12/08/21 09:49 Date Received: 12/09/21 11:38

Matrix: Water

Batch Dil Initial Final Batch Prepared Batch Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8021B 12/10/21 18:03 Analysis 5 mL 5 mL 14446 KL XEN MID Total/NA Analysis Total BTEX 1 14761 12/14/21 10:16 XEN MID

Client Sample ID: MW-8 Lab Sample ID: 820-2838-9

Date Collected: 12/08/21 10:26

Date Received: 12/09/21 11:38

Matrix: Water

Batch Dil Final Batch Initial Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 8021B Total/NA Analysis 5 mL 5 mL 14446 12/10/21 18:29 KL XEN MID Total BTEX Total/NA Analysis 1 14761 12/14/21 10:16 AJ XEN MID

Client Sample ID: MW-2 Lab Sample ID: 820-2838-10

Date Collected: 12/08/21 11:02 **Matrix: Water** Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 18:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID
Total/NA	Analysis	300.0		100			14928	12/15/21 20:52	CH	XEN MID

Client Sample ID: MW-14 Lab Sample ID: 820-2838-11

Date Collected: 12/08/21 11:48 Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 19:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-3 Lab Sample ID: 820-2838-12

Date Collected: 12/08/21 13:17 Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 19:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Eurofins Xenco, Lubbock

Matrix: Water

Matrix: Water

Lab Chronicle

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

Job ID: 820-2838-1

SDG: AR217010

Client Sample ID: MW-4

Date Collected: 12/08/21 13:55 Date Received: 12/09/21 11:38

Lab Sample ID: 820-2838-13

Matrix: Water

Matrix: Water

Matrix: Water

	В	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep T	ype T	уре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/N	IA A	nalysis	8021B		1	5 mL	5 mL	14446	12/10/21 20:15	KL	XEN MID
Total/N	NA A	nalysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: DUP 1 Lab Sample ID: 820-2838-14

Date Collected: 12/08/21 00:00

Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 20:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: DUP 2 Lab Sample ID: 820-2838-15

Date Collected: 12/08/21 00:00

Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 21:07	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists

Job ID: 820-2838-1

Project/Site: 14-Inch Vac to Jal Legacy

SDG: AR217010

Laboratory: Eurofins Xenco, Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NI	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, but	ut the laboratory is not certifi	ied by the governing authority. This list ma	av include analytes for w
the agency does not of	fer certification.	•	ied by the governing authority. This list ma	ay include analytes for w
• •	•	ut the laboratory is not certifi Matrix	ied by the governing authority. This list ma	ay include analytes for w

Eurofins Xenco, Lubbock

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13

Method Summary

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

Job ID: 820-2838-1

SDG: AR217010

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 Xenco, 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: 820-2838-1 SDG: AR217010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-2838-1	MW-10	Water	12/07/21 10:08	12/09/21 11:38
820-2838-2	MW-5	Water	12/07/21 10:54	12/09/21 11:38
820-2838-3	MW-6	Water	12/07/21 11:30	12/09/21 11:38
820-2838-4	MW-7	Water	12/07/21 12:21	12/09/21 11:38
820-2838-5	MW-9	Water	12/07/21 13:43	12/09/21 11:38
820-2838-6	MW-11	Water	12/07/21 14:26	12/09/21 11:38
820-2838-7	MW-12	Water	12/07/21 15:08	12/09/21 11:38
820-2838-8	MW-13	Water	12/08/21 09:49	12/09/21 11:38
820-2838-9	MW-8	Water	12/08/21 10:26	12/09/21 11:38
820-2838-10	MW-2	Water	12/08/21 11:02	12/09/21 11:38
820-2838-11	MW-14	Water	12/08/21 11:48	12/09/21 11:38
820-2838-12	MW-3	Water	12/08/21 13:17	12/09/21 11:38
820-2838-13	MW-4	Water	12/08/21 13:55	12/09/21 11:38
820-2838-14	DUP 1	Water	12/08/21 00:00	12/09/21 11:38
820-2838-15	DUP 2	Water	12/08/21 00:00	12/09/21 11:38

3

4

5

10

44

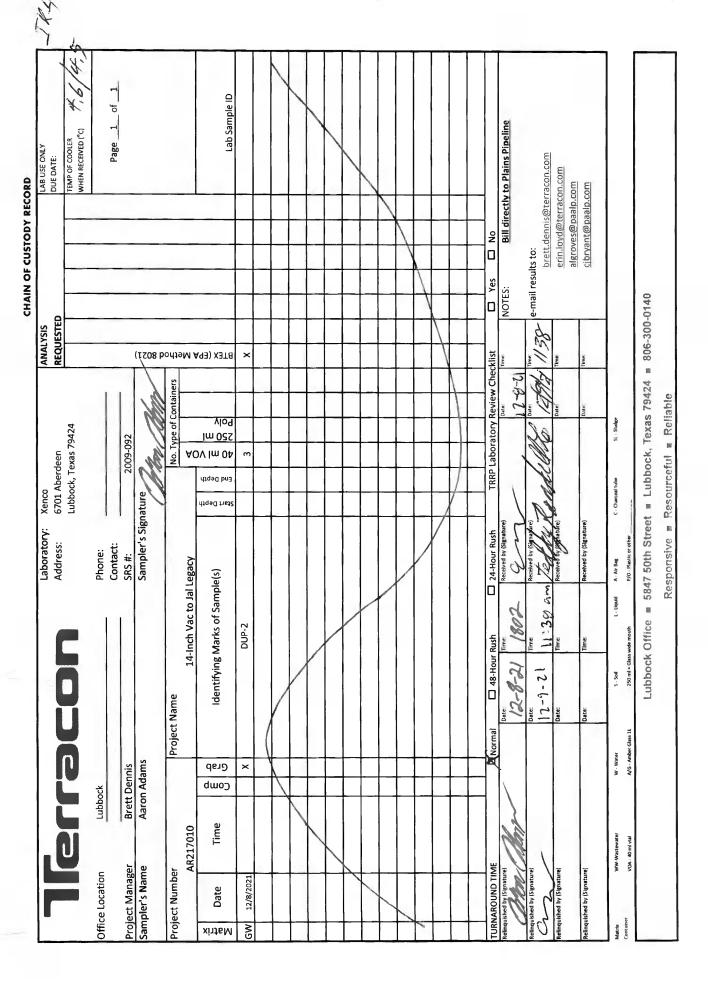
12

13

Stock Contact Contac	Cubbook Figure	930										
Electropenis	Contect Cont	1	L				Laboratory:	Xenco	820-2	338 Chain of Custody	Y	
Universe Project Name	Elect Demis Storiet				IA		Address:	6701 Aberdeen Lubbock, Texas 7942	<u>-</u>) IEU	4.6/14	17
Project Name	First Dennis	Office Location		bock			Phone:					
Sample Signature May Signature Signatu	Pacific Dennis Signature						Contact:				1 of	
March Adams Sampler's Signature More	Nation Adams Project Name	roject Mana		밿	ennis		SRS #:	-		(00		
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Date	Date Time Date MW-10	roject Numb)er			Project Name		No. Type	ethoo	Wei		
11/17/2013 11/2026 1	1377/2021 150-56		AR217010			14-Incl	h Vac to Jal Legacy	AC	_	¥43		
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12/8/2021 X DUP-1	12/8/2021 X			_	×		V-4	3	×			
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Ared by (Signature) Date: Time: Received by (Signature) Date: Time: Ared by (Signature) W. Wasternamer V. Water S. Sed 1. Liquid A. Are Bag C. Charcoal tube St. Studge VOA. 40 milvial A/G - Anther Class 11 220 mil - Glass wide mouth P/O Pleate or other St. Studge St. Studge	hed by Signature) Date: Time: Received by Signature) Date: Time: hed by Signature) www.westermenter w Water 5 - Seal 1 - Lapid A - Are Bag C - Charcol tube SL - Skudges vob 40 milval A/G - Anther Glass 11 250 ml - Slass wide mouth P/O - Pleatic or other SL - Skudges SL - Skudges Lubboock Office m 5847 50th Street m Lubboock, Texas 79424 m 806-300-0140 Slass of the Street m Lubboock, Texas 79424 m 806-300-0140	Senquished by (Signati	ture)			12.6.		Rud Wa	8 1 8/12 and	e-mail resul	terracon.com	
hed by (Signature) Date: Time: Received by (Signature) Date: Time: WWW Wastewater W. Water S. Soil L. Liquid A. Att Bug C. Charcoal tube St. Shidge VGA. 40 m1val A/G - Anther Glass 11 250 m1 - Glass vide mouth P/O - Planic or other St. Shidge	hed by [Signature] www.wastewater w.w.water w.w.wate	elinquished by (Signati	ture)		Ŋ.		Received by (Suhatura		Date:	erin.lovd@teri	racon.com	
WWW Wastewater W. Water 5 - Sell Libquid AAr Bag C - Charcoal tube Si. VOA - 40 mitval A/G - Anther Gas 11, 250 mi - Glass wide mouth P/O - Plastic or other	www wastewares W. Water S. Soft L. Leguid A. A. N. Bag C. Charcoal tube St. Skidge Vol. 40 minuted AG - Amber Glass 11 250 mil - Glass wide mouth Pro - Plantic or other Lubbock Office = 5847 50th Street = Lubbock, Texas 79424 =	elinquished by (Signatu	ture)					(6	Date: Time:	cibryant@paa	lp.com	
	Lubbock Office = 5847 50th Street = Lubbock, Texas 79424 =	atrix ontainer	WW Wastewater VOA - 40 ml vial		* . » A	r Glass 11	L - Liquid A - Air Bag P/O - Plastic	ઝ	ndge			



4.0



EURITINS AGRICO, LUBBOCK

6701 Aberdeen Ave Suite 8 Lubbock, TX 79424 Phone 806-794-1296 **Chain of Custody Record**

Priorie 805-794-1286												
Cilent Information (Sub Contract Lab)	Seanger		25	Kramer Jessica	•		্ব	Camer Tracking Mo(s)	No(s)		COC No.	
Cherit Cantaet: Shipping/Receiving	Phone		\$ T	E-Nai			# E	State of Origin:		-	Page.	
Company Eurofins Xenco				Accreditations Requ	Accreditations Required (See note)	See note)				Ì	John S	
Address. 1211 W Florida Ave,	Dus Date Requested 12/15/2021					Anakal		<u> </u>		ł	Preservation Codes	%des
Cityr Midland	TAT Requested (days).	۳					many sea coupling		4	×1 2	₹	M - Hexane N - Nove
State, 247 TX, 79701										ellege 1.787	C Zn Aceteria D- Nitro Aceteria	P - Na2045
Phone 432-704-5440(Tel)	PO#			\$1731 Qent West				······································		gerang O	Amchior	R - Na/S203 S H2504
Engi.	MO P:			(733) (2003)							•	d T - TSP Dodecahydneto U - Acetone
Project Name	Project #:			45	lp					194,539 244,53	'	W pH4-S
General Waters	82000284				oridi					e Vigo		7 other (specify)
	S8OW#:			waren.						ereta. Sector	Other	
			Sample Metrix Type (w-war	6. Ca.2 Usosos (n	BTEX_GC							
Sample Identification - Client ID (Leb ID)	Sample Date	Tame G			300						Special	Special Instructions/Note:
MW-10 (820-2838-1)	12/7/21		Water	×	×	3,000	2					
MW-5 (820-2838-2)	12/7/21	10 54 Central	Water	×	×							
MW-6 (820-2838-3)	12/7/21	Central	Water	×	×		_	_				
MW-7 (820-2838-4)	1211121	12 21 Central	Water	×	×			-			į	j
MW-9 (820-2838-5)	12 <i>1</i> 121	13 43 Central	Water	×	×			_				
MW-11 (820-2838-6)	12/7/21	Central	Water	×	×							
MW-12 (820-2638-7)	127721	Central	Water	×	×							
MW-13 (820-2838-8)	12/8/21	Central	Water	×	×					angua s		
MW-8 (820-2838-9)	12/8/21	10.26 Central	Water	×	×							
INOR. Since informing accordations are subject to change currents Xanco LLC places the conventity of method analysis & accordation on the State of Origin infect shows for analysis/testationation being analysis/testationated be surplied back to the Europea Dack to th	laces the ownership of thing analyzed the sam signed Chain of Cusk	method analyte 8 pales must be ship ody attesting to sai	accreditation constituted back to the Europe of Completeness to Europe	ance upon oud su na Xeogo LLC la na Xeogo LLC la	contract lab	omborige. This her histore(kom	sampla ship s will be pron	menilistan ided Anyo	randed unde hanges to a	s chain-oil- caredilation	odel ad III Apolen:	valory does not cumpnily brought to Eurotino Xenco ELC
Poesible Hazard Identification Unconfirmed				Samp	Sample Disposal (A	(A fee ma	y be 4839	558d If 52	mpkas e]	fee may be assessed if samples are retained forger than f month,	of month)
Deliverable Requested 1 II, III IV Other (specify)	Primary Deliverable Rank. 2	te Rank. 2		Special	Special Instructions/Q		20 Requirements	assal By L	ě	Arci	ive For	Months
Empty Kit Relinquished by		Date						Methodol	Mathed of Shinners			
Rainquetred by Tacky Taylor	Date/Time*	7700	Conspany	<u></u>	2	5	3	4		֓֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֟֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	3	Company
Parliamination by V O	Date/Time:		Company	Rec	Recaived by				Dale/Tang		:	Company
Cushoda Cook Islanda Castada Castada	Date/Fune		Company	Rec	Received by				Deter/Tarres			Company
				- 00	Cooler Temperature(s		To and Other Romania.	5.	2	2	10	BAI

Lubbock, TX 79424 Phone 8NS-784-1996	_	nain or L	Chain of Custody Record	ecord				A. C.	Environment Testing
									America
Client Information (Sub Contract Lab)	Sampler		Kramer,	ver Jesskoa		Carrier Tracking No(s)	ng No(s)	COC No.	
Shipping/Receiving	-HOXes		E-Mad.	essca kramer@eurofinset.co	Woo'lesugoins	State of Origin	,	Page:	
Eurofins Xenco				Avareditations Required (See NELAP - Texas	Required (See note)			100 #:	
1211 W Florida Ave	Duo Data Requested 12/15/2021							Pratervation Codes:	deg:
City:	TAT Requested (days)	Ag.			- Calaiyaio	- Addressed		A A A A A A A A A A A A A A A A A A A	M Hexano
State 2p. TX, 79701								D Nithic Acid	O - AsNaO2 P - NaZO4S
Prince 432-704-5440(Tel)	PO#							F - MeOH G - Amaller	R - Na25203 S - H2504
Email	WC#							H Ascarbic Acid	(- TSP Doderatydrene U - Acetone
Project Name: General Waters	Project #:				de				
Sitte	SSOW#:				Chion		· · · ·	Other	1
		Sample	Metrix	OM) 606	EX_GCV				
Reverte Grantification - Client III Cl. 15 IIV	,	Sample	To sold	219/8					
	South Section	Tagrap	Di-Trails, A-48	80	30				Special instructions/Note:
MW-2 (820-2838-10)	12/8/21	Central Central	Water	×	×		Total Market		
MW-14 (820-2838-11)	12/8/21	Central	Water	×	×				
MW-3 (820-2838-12)	12/8/21	13 17 Central	Water	×	×	-			
MW-4 (820-2838-13)	12/8/21	13 55 Cepting)	Water	×	×				
DUP 1 (820-2838-14)	12/8/21	Central	Water	×	×				
DUP 2 (820-2838-15)	12/8/21	Central	Water	×	×				
White Sinds bibriotory accreditations are subject to drange. Eurofins Xendo LLC places the ownership of method analytic 8 accreditation compliance upon out subcontract laboration in the State of Citylin field above for analysis/hestatheetic being analyzed the sumples must be entiqued back to the Eurofine Xendo LLC laboratory or other extending intercelled in requested accreditations are current to date, return the signed Chain of Custody attacking to said complicance to Eurofine Xendo LLC.	2 places the ownership of Cus when considered the sa the signed Chain of Cus	of method lanalyte & a mples must be shipped tody attasting to said o	scrediation complians d back to the Eurofina camplicance to Eurofin	a upon out subc Xenco LLC labo	orapet lacoratories. The ratory or other instruction	s sample shipmers is to s will be provided. Any	y changes to accredit	of-custody. If the letters and the letters are the letters and the letters are the letters and the letters are	coise. This sample shipment is forwarded under chair-of-cussudy. If the laboratory does not sumently instructions will be provided. Any changes to accreditation status should be brought to Eurofina Xenco LLC
Possible Hazard identification				Sample L	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	y be assessed if	samples are ret	lined langer then	1 manth)
Deliverable Requested 11 III, IV, Other (specify)	Primary Deliverable Rank 2	ble Rank 2		Special In	Return To Client Special Instructions/QC Requ	nt Disposel By 2C Requirements	1.80	Irchive For	Months
Empty Kit Relinquished by		Date.		Time		Hamod	Method of Shipment		
Relinquished by Ray Early	(2/9/2/ Date/free	1700	Company	Regen	State of the state	B	Date/Time	21 11.2	Company
Reimquished by	DateTune		Cumpany	Received by	ed by		Date/Times		Сопразу
Custody Seals Intact: Custody Seal No A Yes A No				Cooler	Cooler Temperature(s) °C and Other Remarks.		5/ /2	riC	HAR

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-2838-1 SDG Number: AR217010

List Source: Eurofins Xenco, Lubbock

Login Number: 2838 List Number: 1 Creator: Taylor, Holly

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	True	

1

Eurofins Xenco, Lubbock

<6mm (1/4").

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-2838-1

SDG Number: AR217010

List Source: Eurofins Xenco, Midland

List Creation: 12/10/21 11:30 AM

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 2838

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	Received 3 days after it was sampled
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	

1

Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Lubbock 6701 Aberdeen Ave. Suite 8

Lubbock, TX 79424 Tel: (806)794-1296

Laboratory Job ID: 820-2838-1

Laboratory Sample Delivery Group: AR217010 Client Project/Site: 14-Inch Vac to Jal Legacy

For:

Terracon Consulting Eng & Scientists 5827 50th St Suite 1 Lubbock, Texas 79424

Attn: Brett Dennis

MRAMER

Authorized for release by: 12/16/2021 3:03:40 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

Review your project

results through
Total Access

------ LINKS -----

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 8/3/2022 2:33:03 PM

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.

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

Laboratory Job ID: 820-2838-1

SDG: AR217010

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

NEAMER

Project Manager

12/16/2021 3:03:40 PM

Page 2 of 28

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

Laboratory Job ID: 820-2838-1 SDG: AR217010

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists

Project/Site: 14-Inch Vac to Jal Legacy

SDG: AR217010

Qualifiers

-		1/	$\overline{}$	Α.
G	U	v	U	A

 Qualifier
 Qualifier Description

 S1+
 Surrogate recovery exceeds control limits, high biased.

 U
 Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier Description

U Indicates the analyte was analyzed for but not detected.

Glossary

MDC

MDL

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)

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)

Minimum Detectable Concentration (Radiochemistry)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

Method Detection Limit

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 Job ID: 820-2838-1 SDG: AR217010 Project/Site: 14-Inch Vac to Jal Legacy

Job ID: 820-2838-1

Laboratory: Eurofins Xenco, Lubbock

Narrative

Job Narrative 820-2838-1

Receipt

The samples were received on 12/9/2021 11:38 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 4.5°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

Date Received: 12/09/21 11:38

Job ID: 820-2838-1 SDG: AR217010

Client Sample ID: MW-10 Lab Sample ID: 820-2838-1 Date Collected: 12/07/21 10:08

Matrix: Water

Method: 8021B - Volatile Orga	nic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 13:39	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 13:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 13:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 13:39	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 13:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 13:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	179	S1+	70 - 130			-		12/10/21 13:39	1
1,4-Difluorobenzene (Surr)	146	S1+	70 - 130					12/10/21 13:39	1

Method: Total BTEX - Total BTEX Calculation MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac Total BTEX <0.00400 U 0.00400 mg/L 12/14/21 10:16

Client Sample ID: MW-5 Lab Sample ID: 820-2838-2

Date Collected: 12/07/21 10:54 **Matrix: Water**

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 14:06	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 14:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 14:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 14:06	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 14:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 14:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	160	S1+	70 - 130			_		12/10/21 14:06	1
1,4-Difluorobenzene (Surr)	132	S1+	70 - 130					12/10/21 14:06	1
Method: Total BTEX - Total B1	TEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			12/14/21 10:16	1

Client Sample ID: MW-6 Lab Sample ID: 820-2838-3 Date Collected: 12/07/21 11:30 **Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 14:32	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 14:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 14:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 14:32	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 14:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 14:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	160	S1+	70 - 130			-		12/10/21 14:32	1
1,4-Difluorobenzene (Surr)	135	S1+	70 - 130					12/10/21 14:32	1

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Released to Imaging: 8/3/2022 2:33:03 PM

Date Received: 12/09/21 11:38

SDG: AR217010

Client Sample ID: MW-6

Date Collected: 12/07/21 11:30 Date Received: 12/09/21 11:38

Lab Sample ID: 820-2838-3

Matrix: Water

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			12/14/21 10:16	1

Client Sample ID: MW-7 Lab Sample ID: 820-2838-4 Date Collected: 12/07/21 12:21

Date Received: 12/09/21 11:38

Matrix: Water

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			12/10/21 14:58	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 14:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 14:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 14:58	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 14:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 14:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	173	S1+	70 - 130			_		12/10/21 14:58	1
1,4-Difluorobenzene (Surr)	138	S1+	70 - 130					12/10/21 14:58	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			12/14/21 10:16	1

Client Sample ID: MW-9 Lab Sample ID: 820-2838-5

Date Collected: 12/07/21 13:43

Date Received: 12/09/21 11:38

12/10/21 15:25

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Welliou. 002 ID - Volatile Organic	Compounds	(60)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 15:25	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 15:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 15:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 15:25	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 15:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 15:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	179	S1+	70 - 130					12/10/21 15:25	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			12/14/21 10:16	1

70 - 130

137 S1+

Client Sample ID: MW-11 Lab Sample ID: 820-2838-6

Date Collected: 12/07/21 14:26

1,4-Difluorobenzene (Surr)

Matrix: Water Date Received: 12/09/21 11:38

Method: 8021B - Volatile Organic Compounds (GC)

Metriod. 002 1D - Volatile Organic O	ompounds (00)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 15:51	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 15:51	1

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Job ID: 820-2838-1

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

SDG: AR217010

Lab Sample ID: 820-2838-6

Matrix: Water

Client Sample ID: MW-11
Date Collected: 12/07/21 14:26

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 15:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 15:51	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 15:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 15:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130			_		12/10/21 15:51	1
1,4-Difluorobenzene (Surr)	125		70 - 130					12/10/21 15:51	1
- Method: Total BTEX - Total B1	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400		0.00400		mg/L			12/14/21 10:16	

Client Sample ID: MW-12
Date Collected: 12/07/21 15:08
Lab Sample ID: 820-2838-7
Matrix: Water

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 17:36	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 17:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 17:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 17:36	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 17:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 17:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	183	S1+	70 - 130			_		12/10/21 17:36	1
1,4-Difluorobenzene (Surr)	105		70 - 130					12/10/21 17:36	1
- Method: Total BTEX - Total BT	TEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	11	0.00400		mg/L			12/14/21 10:16	

Client Sample ID: MW-13

Date Collected: 12/08/21 09:49

Date Received: 12/09/21 11:38

Lab Sample ID: 820-2838-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 18:03	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 18:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 18:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 18:03	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 18:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 18:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130			-		12/10/21 18:03	1
1,4-Difluorobenzene (Surr)	131	S1+	70 - 130					12/10/21 18:03	1

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Client Sample Results

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

Job ID: 820-2838-1

SDG: AR217010

Client Sample ID: MW-13 Date Collected: 12/08/21 09:49 Lab Sample ID: 820-2838-8

Matrix: Water

Date Received: 12/09/21 11:38

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			12/14/21 10:16	1

Client Sample ID: MW-8 Lab Sample ID: 820-2838-9 Date Collected: 12/08/21 10:26 **Matrix: Water**

Date Received: 12/09/21 11:38

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared Benzene <0.00200 U 0.00200 12/10/21 18:29 mg/L mg/L Toluene <0.00200 U 0.00200 12/10/21 18:29 Ethylbenzene <0.00200 U 0.00200 12/10/21 18:29 mg/L m-Xylene & p-Xylene <0.00400 U 0.00400 12/10/21 18:29 mg/L o-Xylene <0.00200 U 0.00200 mg/L 12/10/21 18:29 Xylenes, Total <0.00400 U 0.00400 mg/L 12/10/21 18:29 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 175 S1+ 4-Bromofluorobenzene (Surr) 70 - 130 12/10/21 18:29 1,4-Difluorobenzene (Surr) 145 S1+ 12/10/21 18:29 70 - 130

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			12/14/21 10:16	1		

Client Sample ID: MW-2 Lab Sample ID: 820-2838-10

Date Collected: 12/08/21 11:02 **Matrix: Water** Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0276		0.00200		mg/L			12/10/21 18:56	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 18:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 18:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 18:56	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 18:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	188	S1+	70 - 130			-		12/10/21 18:56	1
1,4-Difluorobenzene (Surr)	151	S1+	70 - 130					12/10/21 18:56	1
Method: Total BTEX - Total B1	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0276		0.00400		mg/L			12/14/21 10:16	1
Method: 300.0 - Anions, Ion C	hromatography								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			50.0		mg/L			12/15/21 20:52	100

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

Date Received: 12/09/21 11:38

Job ID: 820-2838-1

SDG: AR217010

Client Sample ID: MW-14 Lab Sample ID: 820-2838-11 Date Collected: 12/08/21 11:48

Matrix: Water

Method: 8021B - Volatile	Organi	ic (Compounds (GC)
Analyte			Result	Qualif

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 19:22	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 19:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 19:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 19:22	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 19:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	163	S1+	70 - 130			_		12/10/21 19:22	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	163	S1+	70 - 130		12/10/21 19:22	1
1,4-Difluorobenzene (Surr)	135	S1+	70 - 130		12/10/21 19:22	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	ı	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L				12/14/21 10:16	1

Client Sample ID: MW-3 Lab Sample ID: 820-2838-12 Date Collected: 12/08/21 13:17 **Matrix: Water**

Date Received: 12/09/21 11:38

Method: 8021B - Volatile Orga	nic Compounds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 19:48	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 19:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 19:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 19:48	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 19:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 19:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	189	S1+	70 - 130			_		12/10/21 19:48	1
1,4-Difluorobenzene (Surr)	150	S1+	70 - 130					12/10/21 19:48	1

Method: Total BTEX - Total BTEX C	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			12/14/21 10:16	1

Client Sample ID: MW-4 Lab Sample ID: 820-2838-13 Date Collected: 12/08/21 13:55 **Matrix: Water**

Date Received: 12/09/21 11:38

Method: 8021B - Volatile Organic Compounds (GC	Method: 8021B	 Volatile Organic 	Compounds	(GC)
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Wethou. 602 fb - Volatile Orga	nic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 20:15	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 20:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 20:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 20:15	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 20:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 20:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	178	S1+	70 - 130			_		12/10/21 20:15	1
1,4-Difluorobenzene (Surr)	143	S1+	70 - 130					12/10/21 20:15	1

Client Sample Results

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

Job ID: 820-2838-1

SDG: AR217010

Client Sample ID: MW-4

Lab Sample ID: 820-2838-13

Matrix: Water

Date Collected: 12/08/21 13:55 Date Received: 12/09/21 11:38

	Method: Total BTEX - Total BTEX C	alculation								
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Total BTEX	<0.00400	U	0.00400		mg/L			12/14/21 10:16	1

Lab Sample ID: 820-2838-14

Date Collected: 12/08/21 00:00

Matrix: Water

Date Received: 12/09/21 11:38

Client Sample ID: DUP 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 20:41	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 20:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 20:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 20:41	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 20:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 20:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	169	S1+	70 - 130			-		12/10/21 20:41	1
1,4-Difluorobenzene (Surr)	140	S1+	70 - 130					12/10/21 20:41	1

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Total BTEX <0.00400 U 0.00400 mg/L 12/14/21 10:16

Client Sample ID: DUP 2 Lab Sample ID: 820-2838-15 Date Collected: 12/08/21 00:00 **Matrix: Water**

Date Received: 12/09/21 11:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 21:07	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 21:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 21:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 21:07	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 21:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 21:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	171	S1+	70 - 130			-		12/10/21 21:07	1
1,4-Difluorobenzene (Surr)	143	S1+	70 - 130					12/10/21 21:07	1
- Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	П	0.00400		mg/L			12/14/21 10:16	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists Job ID: 820-2838-1 Project/Site: 14-Inch Vac to Jal Legacy SDG: AR217010

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)	
820-2838-1	MW-10	179 S1+	146 S1+	
820-2838-2	MW-5	160 S1+	132 S1+	
820-2838-3	MW-6	160 S1+	135 S1+	
820-2838-4	MW-7	173 S1+	138 S1+	
820-2838-5	MW-9	179 S1+	137 S1+	
820-2838-6	MW-11	144 S1+	125	
820-2838-7	MW-12	183 S1+	105	
820-2838-8	MW-13	159 S1+	131 S1+	
820-2838-9	MW-8	175 S1+	145 S1+	
820-2838-10	MW-2	188 S1+	151 S1+	
820-2838-11	MW-14	163 S1+	135 S1+	
820-2838-12	MW-3	189 S1+	150 S1+	
820-2838-13	MW-4	178 S1+	143 S1+	
820-2838-14	DUP 1	169 S1+	140 S1+	
820-2838-15	DUP 2	171 S1+	143 S1+	
890-1683-B-2 MS	Matrix Spike	147 S1+	116	
890-1683-B-2 MSD	Matrix Spike Duplicate	130	138 S1+	
LCS 880-14446/3	Lab Control Sample	143 S1+	115	
LCSD 880-14446/4	Lab Control Sample Dup	126	107	
MB 880-14446/8	Method Blank	87	123	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Client Sample ID: Method Blank

Prep Type: Total/NA

QC Sample Results

Client: Terracon Consulting Eng & Scientists Job ID: 820-2838-1 Project/Site: 14-Inch Vac to Jal Legacy SDG: AR217010

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-14446/8

Matrix: Water

Analysis Batch: 14446

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/10/21 11:28	1
Toluene	<0.00200	U	0.00200		mg/L			12/10/21 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/10/21 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			12/10/21 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/10/21 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/10/21 11:28	1

MB MB %Recovery Qualifier Surrogate Limits Prepared Analyzed 70 - 130 4-Bromofluorobenzene (Surr) 87 12/10/21 11:28 123 70 - 130 12/10/21 11:28 1,4-Difluorobenzene (Surr)

Lab Sample ID: LCS 880-14446/3			Client Sample	ID: Lab Control Sample
Matrix: Water				Prep Type: Total/NA
Analysis Batch: 14446				
	Spike	LCS LCS		%Rec.

	Spike	LC3	LUS				MREC.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1117		mg/L		112	70 - 130	
Toluene	0.100	0.1084		mg/L		108	70 - 130	
Ethylbenzene	0.100	0.1102		mg/L		110	70 - 130	
m-Xylene & p-Xylene	0.200	0.2419		mg/L		121	70 - 130	
o-Xylene	0.100	0.1124		mg/L		112	70 - 130	

LCS LCS %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 143 S1+ 115 70 - 130 1,4-Difluorobenzene (Surr)

Lab Sample ID: LCSD 880-14446/4

Matr

Anal

b Sample ID: LCSD 880-14446/4	Client Sample ID: Lab Control Sample Dup
trix: Water	Prep Type: Total/NA
alysis Batch: 14446	

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1041		mg/L		104	70 - 130	7	20	
Toluene	0.100	0.09888		mg/L		99	70 - 130	9	20	
Ethylbenzene	0.100	0.1002		mg/L		100	70 - 130	9	20	
m-Xylene & p-Xylene	0.200	0.2195		mg/L		110	70 - 130	10	20	
o-Xylene	0.100	0.1040		mg/L		104	70 - 130	8	20	

	LCSD L	.CSD	
Surrogate	%Recovery 0	Qualifier	Limits
4-Bromofluorobenzene (Surr)	126		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-1683-B-2 MS

Matrix: Water

Analysis Batch: 14446

•	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00200	U	0.100	0.1150		mg/L		115	70 - 130
Toluene	<0.00200	U	0.100	0.1050		mg/L		105	70 - 130

Eurofins Xenco, Lubbock

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Page 13 of 28

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12/16/2021

QC Sample Results

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

Job ID: 820-2838-1 SDG: AR217010

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

Lab S

Matrix: Water

Analysis Batch: 14446

Sample ID: 890-1683-B-2 MS	Client Sample ID: Matrix Spike
rix: Water	Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U	0.100	0.1075		mg/L		107	70 - 130	
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2374		mg/L		119	70 - 130	
o-Xylene	<0.00200	U	0.100	0.1158		mg/L		116	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130
1,4-Difluorobenzene (Surr)	116		70 - 130

Lab Sample ID: 890-1683-B-2 MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Analysis Batch: 14446

Matrix: Water

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Result Qualifier %Rec Limits RPD Limit Analyte Unit 0.100 Benzene <0.00200 U 0.1091 mg/L 109 70 - 130 5 25 Toluene <0.00200 U 0.100 0.1051 mg/L 105 70 - 130 25 Ethylbenzene <0.00200 U 0.100 0.1087 109 70 - 130 25 mg/L <0.00400 U 0.200 25 m-Xylene & p-Xylene 0.2361 mg/L 118 70 - 130 <0.00200 U 0.100 0.1127 70 - 130 o-Xylene mg/L 113 3

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-14928/3 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 14928

· ····································									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			12/15/21 17:32	1

Lab Sample ID: LCS 880-14928/4 Client Sample ID: Lab Control Sample **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 14928

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	25.00		mg/L		100	90 - 110	

Lab Sample ID: LCSD 880-14928/5 Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 14928

7 maryolo Batom 1 1020									
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	25.0	25.22		mg/L		101	90 - 110	1	20

QC Sample Results

Client: Terracon Consulting Eng & Scientists Job ID: 820-2838-1 Project/Site: 14-Inch Vac to Jal Legacy SDG: AR217010

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-9212-A-10 MS Client Sample ID: Matrix Spike **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 14928

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	169		125	298.4		mg/L		104	90 - 110	

Lab Sample ID: 880-9212-A-10 MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 14928

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec 125 Chloride 169 300.5 mg/L 106 90 - 110

QC Association Summary

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

Job ID: 820-2838-1 SDG: AR217010

GC VOA

Analysis Batch: 14446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2838-1	MW-10	Total/NA	Water	8021B	_
820-2838-2	MW-5	Total/NA	Water	8021B	
820-2838-3	MW-6	Total/NA	Water	8021B	
820-2838-4	MW-7	Total/NA	Water	8021B	
820-2838-5	MW-9	Total/NA	Water	8021B	
820-2838-6	MW-11	Total/NA	Water	8021B	
820-2838-7	MW-12	Total/NA	Water	8021B	
820-2838-8	MW-13	Total/NA	Water	8021B	
820-2838-9	MW-8	Total/NA	Water	8021B	
820-2838-10	MW-2	Total/NA	Water	8021B	
820-2838-11	MW-14	Total/NA	Water	8021B	
820-2838-12	MW-3	Total/NA	Water	8021B	
820-2838-13	MW-4	Total/NA	Water	8021B	
820-2838-14	DUP 1	Total/NA	Water	8021B	
820-2838-15	DUP 2	Total/NA	Water	8021B	
MB 880-14446/8	Method Blank	Total/NA	Water	8021B	
LCS 880-14446/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-14446/4	Lab Control Sample Dup	Total/NA	Water	8021B	
890-1683-B-2 MS	Matrix Spike	Total/NA	Water	8021B	
890-1683-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

Analysis Batch: 14761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
820-2838-1	MW-10	Total/NA	Water	Total BTEX	
820-2838-2	MW-5	Total/NA	Water	Total BTEX	
820-2838-3	MW-6	Total/NA	Water	Total BTEX	
820-2838-4	MW-7	Total/NA	Water	Total BTEX	
820-2838-5	MW-9	Total/NA	Water	Total BTEX	
820-2838-6	MW-11	Total/NA	Water	Total BTEX	
820-2838-7	MW-12	Total/NA	Water	Total BTEX	
820-2838-8	MW-13	Total/NA	Water	Total BTEX	
820-2838-9	MW-8	Total/NA	Water	Total BTEX	
820-2838-10	MW-2	Total/NA	Water	Total BTEX	
820-2838-11	MW-14	Total/NA	Water	Total BTEX	
820-2838-12	MW-3	Total/NA	Water	Total BTEX	
820-2838-13	MW-4	Total/NA	Water	Total BTEX	
820-2838-14	DUP 1	Total/NA	Water	Total BTEX	
820-2838-15	DUP 2	Total/NA	Water	Total BTEX	

HPLC/IC

Analysis Batch: 14928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
820-2838-10	MW-2	Total/NA	Water	300.0	
MB 880-14928/3	Method Blank	Total/NA	Water	300.0	
LCS 880-14928/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-14928/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-9212-A-10 MS	Matrix Spike	Total/NA	Water	300.0	
880-9212-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Client Sample ID: MW-10

Date Collected: 12/07/21 10:08

Date Received: 12/09/21 11:38

SDG: AR217010

Lab Sample ID: 820-2838-1

Matrix: Water

Job ID: 820-2838-1

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 13:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-5

Date Collected: 12/07/21 10:54 Date Received: 12/09/21 11:38

Lab	Sample	D: 820-2838-2	
		Matrix: Water	

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8021B 12/10/21 14:06 Analysis 5 mL 5 mL 14446 KL XEN MID Total/NA Analysis Total BTEX 1 14761 12/14/21 10:16 AJ XEN MID

Client Sample ID: MW-6 Lab Sample ID: 820-2838-3

Date Collected: 12/07/21 11:30 Date Received: 12/09/21 11:38

Batch Dil Initial Final Batch Batch Prepared Method Prep Type Туре Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8021B 12/10/21 14:32 Analysis 5 mL 5 mL 14446 KL XEN MID Total/NA Total BTEX Analysis 1 14761 12/14/21 10:16 AJ XEN MID

Client Sample ID: MW-7 Lab Sample ID: 820-2838-4 Date Collected: 12/07/21 12:21

Date Received: 12/09/21 11:38

Matrix: Water

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 14:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-9 Lab Sample ID: 820-2838-5

Date Collected: 12/07/21 13:43 Date Received: 12/09/21 11:38

_	
	Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 15:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-11 Lab Sample ID: 820-2838-6

Date Collected: 12/07/21 14:26 **Matrix: Water** Date Received: 12/09/21 11:38

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 15:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

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

Client Sample ID: MW-12

Total/NA

Lab Sample ID: 820-2838-7

XEN MID

Matrix: Water

Date Collected: 12/07/21 15:08 Date Received: 12/09/21 11:38

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 14446 Total/NA Analysis 8021B 5 mL 5 mL 12/10/21 17:36 KL XEN MID

1

Lab Sample ID: 820-2838-8 Client Sample ID: MW-13

Date Collected: 12/08/21 09:49 Date Received: 12/09/21 11:38

Analysis

Total BTEX

Matrix: Water

AJ

12/14/21 10:16

14761

Batch Dil Initial Final Batch Prepared Batch Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8021B 12/10/21 18:03 Analysis 5 mL 5 mL 14446 KL XEN MID Total/NA Analysis Total BTEX 1 14761 12/14/21 10:16 ΑJ XEN MID

Client Sample ID: MW-8 Lab Sample ID: 820-2838-9

Date Collected: 12/08/21 10:26 **Matrix: Water**

Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 18:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-2 Lab Sample ID: 820-2838-10

Date Collected: 12/08/21 11:02 **Matrix: Water** Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 18:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID
Total/NA	Analysis	300.0		100			14928	12/15/21 20:52	СН	XEN MID

Client Sample ID: MW-14 Lab Sample ID: 820-2838-11

Date Collected: 12/08/21 11:48 Matrix: Water Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 19:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Client Sample ID: MW-3 Lab Sample ID: 820-2838-12

Date Collected: 12/08/21 13:17 **Matrix: Water** Date Received: 12/09/21 11:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	14446	12/10/21 19:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			14761	12/14/21 10:16	AJ	XEN MID

Project/Site: 14-Inch Vac to Jal Legacy

Analysis

Total BTEX

Lab Sample ID: 820-2838-13

Matrix: Water

Client Sample ID: MW-4 Date Collected: 12/08/21 13:55 Date Received: 12/09/21 11:38

Total/NA

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 14446 Total/NA Analysis 8021B 5 mL 5 mL 12/10/21 20:15 KL XEN MID

1

12/14/21 10:16 AJ XEN MID

14761

Client Sample ID: DUP 1 Lab Sample ID: 820-2838-14

Date Collected: 12/08/21 00:00 **Matrix: Water** Date Received: 12/09/21 11:38

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Analysis 8021B 12/10/21 20:41 XEN MID 5 mL 5 mL 14446 KL Total/NA Analysis Total BTEX 1 14761 12/14/21 10:16 XEN MID

Client Sample ID: DUP 2 Lab Sample ID: 820-2838-15

Date Collected: 12/08/21 00:00 **Matrix: Water**

Date Received: 12/09/21 11:38

Dil Batch Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 8021B Total/NA Analysis 5 mL 5 mL 14446 12/10/21 21:07 KL XEN MID Total/NA Analysis Total BTEX 14761 12/14/21 10:16 XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists

Job ID: 820-2838-1

Project/Site: 14-Inch Vac to Jal Legacy

SDG: AR217010

Laboratory: Eurofins Xenco, Midland

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

Texas NELAP T104704400-21-22 06-30-22	Authority	Pr	ogram	Identification Number	Expiration Date
	Texas	Ni	ELAP	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 to	The following analytes	are included in this report, but	ut the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes the governing authority and for contribution.	0 ,	. ,	ut the laboratory is not certific	ed by the governing authority. This list ma	ay include analytes for
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes the agency does not offer certification.	0 ,	. ,	ut the laboratory is not certific	ed by the governing authority. This list ma	ay include analytes for
	the agency does not of	fer certification.	•	, , ,	ay include analytes for

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Method Summary

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

Job ID: 820-2838-1

SDG: AR217010

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 Xenco, 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: 820-2838-1 SDG: AR217010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-2838-1	MW-10	Water	12/07/21 10:08	12/09/21 11:38
820-2838-2	MW-5	Water	12/07/21 10:54	12/09/21 11:38
820-2838-3	MW-6	Water	12/07/21 11:30	12/09/21 11:38
820-2838-4	MW-7	Water	12/07/21 12:21	12/09/21 11:38
820-2838-5	MW-9	Water	12/07/21 13:43	12/09/21 11:38
820-2838-6	MW-11	Water	12/07/21 14:26	12/09/21 11:38
820-2838-7	MW-12	Water	12/07/21 15:08	12/09/21 11:38
820-2838-8	MW-13	Water	12/08/21 09:49	12/09/21 11:38
820-2838-9	MW-8	Water	12/08/21 10:26	12/09/21 11:38
820-2838-10	MW-2	Water	12/08/21 11:02	12/09/21 11:38
820-2838-11	MW-14	Water	12/08/21 11:48	12/09/21 11:38
820-2838-12	MW-3	Water	12/08/21 13:17	12/09/21 11:38
820-2838-13	MW-4	Water	12/08/21 13:55	12/09/21 11:38
820-2838-14	DUP 1	Water	12/08/21 00:00	12/09/21 11:38
820-2838-15	DUP 2	Water	12/08/21 00:00	12/09/21 11:38

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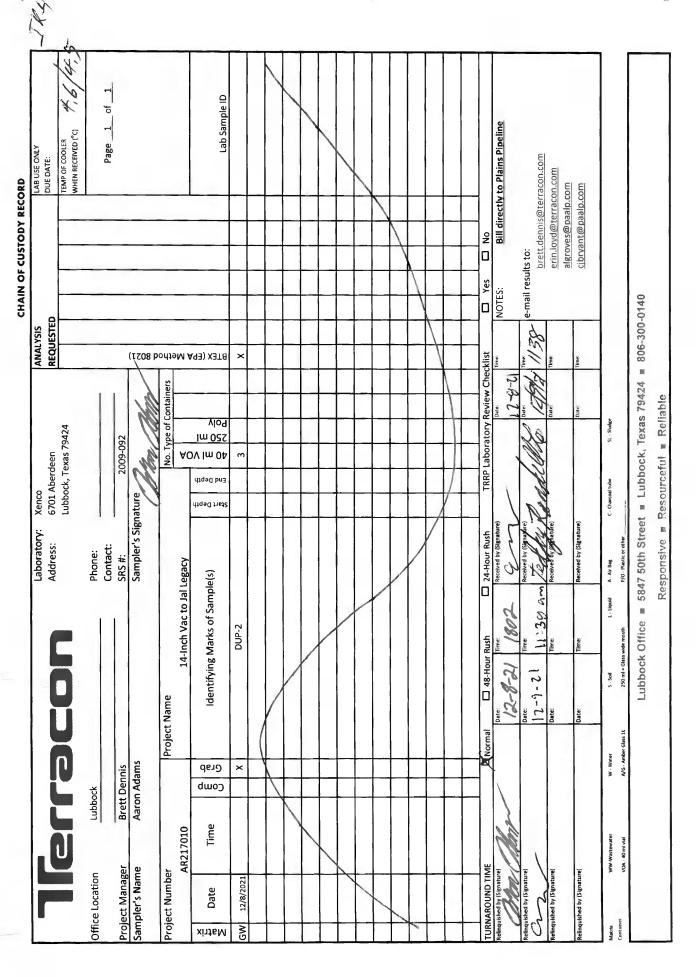
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6701 Aberdeen Ave Suite 8 Lubbock, TX 79424 Phone 806-794-1296 EURITINS AGRICO, LUBBOCK

Chain of Custody Record



LINE SOCIETIES								i
Cilent Information (Sub Contract Lab)	Sempler		Krame	Kramer, Jessica	Canser Tracking No(s)	ng No(s)	COC No.	
Cherit Contact: Shipping/Receiving	Phone		E-Mail				Page.	
Company Company Eurofine Xenco			, ,	Accretisations Required (See note)	CAME		Jobs.	
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Phone 432-704-5440(Tel)	PO#					godine Godine		R - NB/25203
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Project Name General Winters	Project #:			3			7	W pH4.5
Sin Paris a Marcia	82000284			TP.			L-EDA	7 other (specify)
	SSOW#		!	(100) (CV		archine Section	Other	
		Sample	Matrix (Western	OSOB (N TEX_GC				
Sample Identification - Client ID (Lab ID)		-	S-sold.	0218/ otal_!		551 / F		
							Special ins	Special instructions/Note:
WW-10 (820-2838-1)			Water	×				
MW-5 (820-2838-2)	12/7/21	10 54	Water	×				
MW-6 (820-2838-3)	12/7/21	1130	Water	-				
MW-7 (820-2838-4)	12/1/21	12 21	Water	-				
MW-9 (820-2838-5)	12/1/21	1343	Water	×				
MW-11 (820-2838-6)	12/7/21	14 26 Central	Water	×				
MW-12 (820-2638-7)	12/7/21	15 08 Central	Water	×				
MW-13 (820-2838-8)	12/8/21	08 49	Water	×		70 (D) a 50 30 (D) a 50 30 (D) a 50		
MV-8 (820-2838-9)	12/8/21	10 28 Central	Water	×				
Note, Since laboratory accordinators are subject to change Eurotins Xance LLC places the ownership of method analyse & accordination compliance upon out subcombed laborator methods in accordination of the State of Origin inted above for analyse/teat/metric being analysed the surrouse must be subpred back to the Eurotins Accordination or other affects of the Eurotins Accordinate to the State of Origin inted above for analyse/teat/metric being analysed must be surprise must be subpred back to the Eurotins Accordinate to other accordinate to the Eurotins Acco	places the ownership of a being analyzed the same	method analyte & ac	creditation considers back to the Eurobra	a upon out subcontract aboundaries. Kenco LLC laboratory or other hashu	before. This sample shipment is torwarded under chain-of-custody. If the taboratory does not currently best uniformation will be provided. Any changes to accreditation status should be brought to Eurofinis Xenco LLC.	rvarded under chain of a	status at the laborators	y does not currently ht to Eurotins Xenco LLC
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6701 Aberdeen Ave. Suite 8)		•	,		•											%	is curofins	-	
Lubbock, TX 79424 Phone, 806-794-1296	c	Chain of Custody Record	r Cust	oay K	ÇO	Ω														Environment Testing Amorica
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Company Eurofins Xenco					Accreditations Required (See note) NELAP - Texas		barn.	OF JOY	٦	L		ľ	-	- 1		ŀ	9	Job #:		
Address. 1211 W Florida Ave	Duo Data Raquested 12/15/2021							<u> </u>				١.	-		ı	- 1	31	Pratervation Codes:	<u></u>	
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Possible Hazard identification					8	Sample Disposal (A f	Book	14 %	300] 2	Š	\$			ו <u>ة</u> ן		₫	fee may be assessed if samples are retained longer than 1 month)	1	neb)
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Custody Seals Intact: Custody Seal No A Yes A No						Cooler Temperature(s)	mperate.	8	C and Other Remarks.	3	and is	٦	₫ -		4	J.	}	ā	⊢┤┟	
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Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-2838-1 SDG Number: AR217010

List Source: Eurofins Xenco, Lubbock

Login Number: 2838 List Number: 1 Creator: Taylor, Holly

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	True	

1

Eurofins Xenco, Lubbock

<6mm (1/4").

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-2838-1

SDG Number: AR217010

List Source: Eurofins Xenco, Midland

List Creation: 12/10/21 11:30 AM

Creator: Rodriguez, Leticia

Login Number: 2838

List Number: 2

<6mm (1/4").

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	Received 3 days after it was sampled
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	True	

APPENDIX D

Terracon Standard of Care, Limitation, and Reliance

Standard of Care

Terracon's services will be performed in a manner consistent with generally-accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, our client, as set forth in our proposal and were not intended to be in strict conformance with ASTM E1903-11.

Additional Scope Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable or not present during these services, and we cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this confirmation sampling. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

Reliance

This report has been prepared for the exclusive use of Plains Pipeline LP; and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Plains Pipeline LP and Terracon. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Master Services Agreement (026450-04810-PMLP.2.17), dated August 3, 2011, between Terracon and Plains All American Pipeline LP. The limitation of liability defined in the Terms and Conditions is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

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Phone: (575) 393-6161 Fax: (575) 393-0720

District II

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Phone:(505) 334-6178 Fax:(505) 334-6170

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 93365

CONDITIONS

Operator:	OGRID:
PLAINS MARKETING L.P.	34053
333 Clay Street Suite 1900	Action Number:
Houston, TX 77002	93365
	Action Type:
	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2021 ANNUAL GROUNDWATER MONITORING REPORT: Content satisfactory Contractor anticipated actions approved by NMOCD and are as follows; 1. Continue quarterly monitoring well gauging, groundwater purging, and sampling for BTEX for all monitor wells on-site and in addition, chloride from MW-2 2. Conduct monthly manual recovery of PSH from MW-1, if applicable 3. Conduct monthly manual recovery of hydrocarbon impacted groundwater from MW-1, MW-3, MW-8, and MW-13 4. Continue AFR events on monitoring well MW-1, MW-3, MW-8 and M13 to enhance recovery of hydrocarbon impacted groundwater 5. Discontinue quarterly MDPE recovery events from MW-1 6. Submit annual report to NMOCD no later than March 31,2023.	8/3/2022