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Accepted - 10/28/2022

AECOM

2020 Annual Groundwater Remediation Report
Jal No. 4 Gas Plant, Lea County, New Mexico
Facility ID No. FCS000000000049
NMOCD Abatement Plan Case #AP – 101
Incident ID #nAPP2110635360

Prepared For:
El Paso Natural Gas Company, LLC
Houston, Texas

Prepared By:
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19219 Katy Freeway, Suite 100
Houston, Texas 77094

Project No. 60619406
March 2021

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AECOM Environment

Submitted to:
El Paso Natural Gas Company, LLC
Houston, Texas

Submitted by:
AECOM
Houston, Texas
Project No. 60578159
March 2020

2020 Annual Groundwater Remediation Report
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Facility ID No. FCS00000000049
NMOCD Abatement Plan Case #AP – 101
Incident ID #nAPP2110635360

Prepared By:
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Reviewed By:
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Principle Hydrogeologist

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1.0 Introduction

On behalf of El Paso Natural Gas Company, LLC (EPNG), AECOM has prepared this 2020 Annual Groundwater Monitoring Report for the Jal No. 4 Gas Plant (the Plant or the Site). The Plant is comprised of approximately 181 acres of land located on the west side of State Highway 18, approximately 9 miles north of Jal, New Mexico and occupies portions of Sections 31 and 32 of Township 23 South, Range 37 East (T23S, R37E) and Section 5 of T24S, R37E in Lea County, New Mexico (**Figures 1 and 2**). The Plant is currently owned and operated by Western Refining Inc., a subsidiary of Marathon Petroleum Corporation (Marathon).

1.1 Site Background

The Site is regulated by the New Mexico Oil Conservation Division (NMOCD) under Abatement Plan AP-101.This report provides a description of groundwater monitoring activities and analytical results for Calendar Year 2020, as well as other abatement activities conducted during the year.

The Plant was constructed by EPNG in 1952 to treat, compress, store, and transport natural gas to EPNG's main transmission lines. From 1952 to 1981, brine and wastewater were managed in eight unlined retention ponds associated with creation and operation of natural gas cavern storage wells at the Site (Ponds 1 through 8, **Figure 2**). Beginning in 1981, brine was instead managed in three synthetic-lined ponds (Ponds 9 through 11) and Ponds 1-8 were closed. In 1989, leaks were detected in Ponds 10 and 11 and EPNG elected to close the two ponds and construct a single lined pond in the former location of Ponds 10 and 11. In response to the detected leak, the NMOCD requested EPNG perform a Groundwater Quality Assessment. Two ponds are present on the Site today and are in the locations of Pond 9 (South Pond) and Pond 10/11 (North Pond).

A chronology of Site activities is provided as **Appendix A**.

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2.0 Groundwater Monitoring Program

The quarterly groundwater monitoring and sampling activities are conducted by Hydrologic Monitoring Inc. (HMI) as described below.

2.1 Program Wells and Sampling Schedule

To assess and monitor chloride and hydrocarbon impacts to the uppermost groundwater-bearing groundwater unit, EPNG has installed 34 Program monitoring wells on the Plant property and adjoining properties to the north and east. This total includes two sets of nested monitoring wells (ACW-30S/D and ACW-32-S/D – four wells total) that were installed in June - July 2018 and two sets of paired monitoring wells (ACW-26/ACW-27 and ACW-28/ACW-29) that were installed in December 2019. A total of 31 monitoring wells (ACW-01, ACW-2, ACW-4 through ACW-7, ACW-9 through ACW-29, ACW-30S/D, and ACW-32-S/D) are currently being sampled annually as Program wells. The monitoring well locations are shown on **Figure 2**.

On April 14, 2003, the NMOCD approved a modification to the groundwater sampling program for the Plant. This modification allows for only sampling Program wells ACW- 13, ACW-14, and ACW-15 during the first three quarterly events and sampling all Program wells during the fourth quarter event. Additionally, monitoring wells ACW-32S and ACW-32D were sampled during the third quarter sampling event in 2020.

All collected groundwater samples are analyzed for the following constituents:

- benzene, toluene, ethylbenzene, and total xylenes (collectively referred to as BTEX) by EPA Method 8260B;
- total dissolved solids (TDS) by Standard Method (SM) 2540C;
- specific conductance by EPA Method 120.1;
- chloride by EPA Method 9056; and
- sodium by EPA Method 6010B.

Table 1 provides a summary of the modified groundwater sampling program.

2.2 Non-Program Wells and Sampling Schedule

In addition to the Program wells, EPNG also collects groundwater samples from four Non-Program wells during the annual sample event: one onsite monitoring well (ENSR-1), one upgradient water supply well (EPNG-1), and two down-gradient active water supply wells (Oxy Water Well and Doom Water Well). EPNG-1 is located at the northwest corner of the Plant property operated by Energy Transfer Partners. The Oxy water well is located southeast of the Plant, in the approximate center of Section 5 of T24S, R37E and formerly provided water to Oxy's Myers Langlie Mattix Unit Water Injection Station. The Oxy facility is no longer manned, and the water well currently provides water to the Site's sanitary facilities. The Doom Water Well is a private water well that provides water to a residential property owned by the estate of Jimmie J. Doom, and is located approximately

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1.35 miles south-southeast of the Plant, generally in the center of the northwest quarter of Section 8 of T24S, R37E. The Doom and Oxy water wells are sampled quarterly.

Additionally, recovery wells RW-1, RW-2, RW-3, and RW-4 are located at the Site, along with two monitoring wells that were converted to recovery wells (ACW-03 and ACW-08) during prior groundwater recovery efforts. The recovery wells are not sampled during any of the quarterly events.

2.3 Depth to Groundwater Measurements

During each quarterly sampling event and prior to disturbing the water columns within each well, Program and Non-Program wells were gauged to determine the static water level. Depth to water (DTW) was measured from a surveyed mark located on the top-of-casing (TOC) of each well. This mark was observed as a notch or as a painted mark on the north side of the well casing. DTW was measured to the nearest 0.01 foot using a water level indicator and the results were recorded in the field notes. **Table 2** provides a summary of the potentiometric surface elevation data based on measured depths to groundwater, surveyed TOC elevations, and calculated groundwater elevations.

It is known that the hydraulic head in the water bearing formation is affected by the density of the water in the water column. Higher TDS water depresses the elevation of the water table surface (Post, 2007) giving the appearance of drawdown when compared to wells screened in shallower portions of the water bearing zone. This effect is exaggerated when the well has a discrete screened interval at the base of the aquifer. At this Site, wells with discrete screened intervals at the base of the aquifer within the high TDS areas have observed water table elevations ranging from 0.5 feet to almost 2.0 feet lower than their upper nested pair counterpart. Based on that criteria, monitoring wells can be designated to be in the upper or lower groundwater zone. By contouring the potentiometric surface elevation (PSE) in upper (**Figure 3**) and lower (**Figure 4**) screened wells separately, this discrepancy is largely removed and groundwater flow behavior in each zone can be more accurately evaluated.

As depicted on **Figures 3 and 4**, the groundwater gradient across the Site is to the southeast at approximately 0.001 to 0.002 ft/ft.

2.4 Sampling Procedures

The groundwater samples were collected in accordance with EPA low flow purging and sampling methods and quality assurance/quality control guidance. All Program wells were sampled using dedicated bladder pumps. Low flow purging was conducted at EPA-recommended purge rates of 0.1 - 0.2 liters/minute. Field parameters, including pH, specific conductivity, temperature, dissolved oxygen, oxidation-reduction potential, and water level drawdown, were monitored at 0.5-liter intervals. Turbidity was measured outside of the flow-through cell used for the field parameters. The Oxy and Doom water well samples were obtained from a water spigot after purging the system until field parameters had stabilized. A summary of the groundwater field parameter data collected during purging is provided in **Appendix B**.

After groundwater field parameters had stabilized, samples were collected by pumping groundwater directly into pre-preserved laboratory-supplied containers. The samples were then labeled, placed on ice and shipped to the laboratory with chain of custody

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documentation. For quarters 1, 2, and 3, samples were shipped to TestAmerica Laboratories, Inc. in Houston, Texas. The fourth quarter 2020 groundwater samples were submitted to Eurofins TestAmerica in Pensacola, FL. Groundwater samples were analyzed for the list of parameters described above in *Section 2.1*.

The investigation-derived waste (IDW) generated during the first and second quarterly sampling events was disposed in a water management pond at the Jal No. 4 Plant. As discussed with the NMOCD, the IDW generated during the third and fourth quarter 2020 sampling events was placed in an agency approved, labeled, 55-gallon steel drum with prototyped *ventilated barrel cover* for evaporating liquid IDW as described in the HMI field notes provided in **Appendix B**.

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3.0 2020 Groundwater Monitoring Results

The following sections summarize the field measurement and laboratory analytical results obtained during the 2020 quarterly sampling program. Historical groundwater analytical results are summarized in **Table 3**. Field notes from the quarterly sampling events are provided in **Appendix B** and laboratory analytical reports for 2020 data are included in **Appendix C**.

3.1 Inorganic Constituents

Within New Mexico Administrative Code (NMAC) 20.6.2.3103 (B), the State has established Other Standards for Domestic Water Supply that include a standard of 250 milligrams per liter (mg/L) for chloride and 1,000 mg/L for TDS in groundwater as applicable to the affected groundwater bearing unit present beneath the Site. **Figure 5** and **Figure 6** provide isopleth maps for December 2020 chloride concentrations in upper and lower groundwater, respectively.

Chloride concentrations for upper groundwater ranged from 29 mg/L in ACW-28 to 6,400 mg/L in ENSR-01 during the December 2020 sampling event, as shown on **Figure 5**. Chloride concentrations for lower groundwater ranged from 39 mg/L in ACW-29 to 83,000 mg/L in ACW-24 during the December 2020 sampling event. As shown on **Figure 6,** the highest chloride concentrations continue to be observed in the lower groundwater samples collected from the northeastern portion of the Plant property, in the area of the former brine ponds. Inorganics are migrating both downgradient to the southeast and vertically toward the base of the water bearing unit.

3.2 Organic Constituents

The applicable Human Health Standard for benzene is 0.01 mg/L in groundwater containing a TDS level of 10,000 mg/L or less (20 NMAC 6.2, Water Quality – Ground and Surface Water Protection, filed 10-27-95, effective 12-1-95). **Figure 7** and **Figure 8** show the December 2020 benzene concentrations for the upper and lower groundwater, respectively.

Benzene concentrations exceeding the NMAC benzene standard of 0.01 mg/L were reported for the upper groundwater samples collected from source area wells ACW -01 (0.26 mg/L), ACW-19 (0.069 mg/L) and ACW-21 (0.030 mg/L), and from upgradient well ENSR-1 (0.016 mg/L).

Benzene concentrations exceeding the NMAC benzene standard of 0.01 mg/L were reported for on-site lower groundwater wells ACW-04 (0.028 mg/L), ACW-11 (0.017 mg/L) and ACW-20 (0.054 mg/L), and in downgradient offsite well ACW-25 (0.027 mg/L).

The 2020 results for both upper and lower groundwater are consistent with recent benzene sampling data. Historical groundwater analytical data indicate that natural attenuation mechanisms have effectively mitigated further downgradient migration of benzene impacts in groundwater.

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4.0 2020 Exploratory Soil Borings

In October and November 2020, three exploratory soil borings (BH-1 through BH-3) were advanced to the base of the uppermost groundwater bearing unit using roto-sonic drilling methods to collect soil samples for lithologic inspection and soil grain size analysis to facilitate design of remediation extraction wells. A memorandum describing the drilling activities and grain size analysis results is provided as **Appendix D**.

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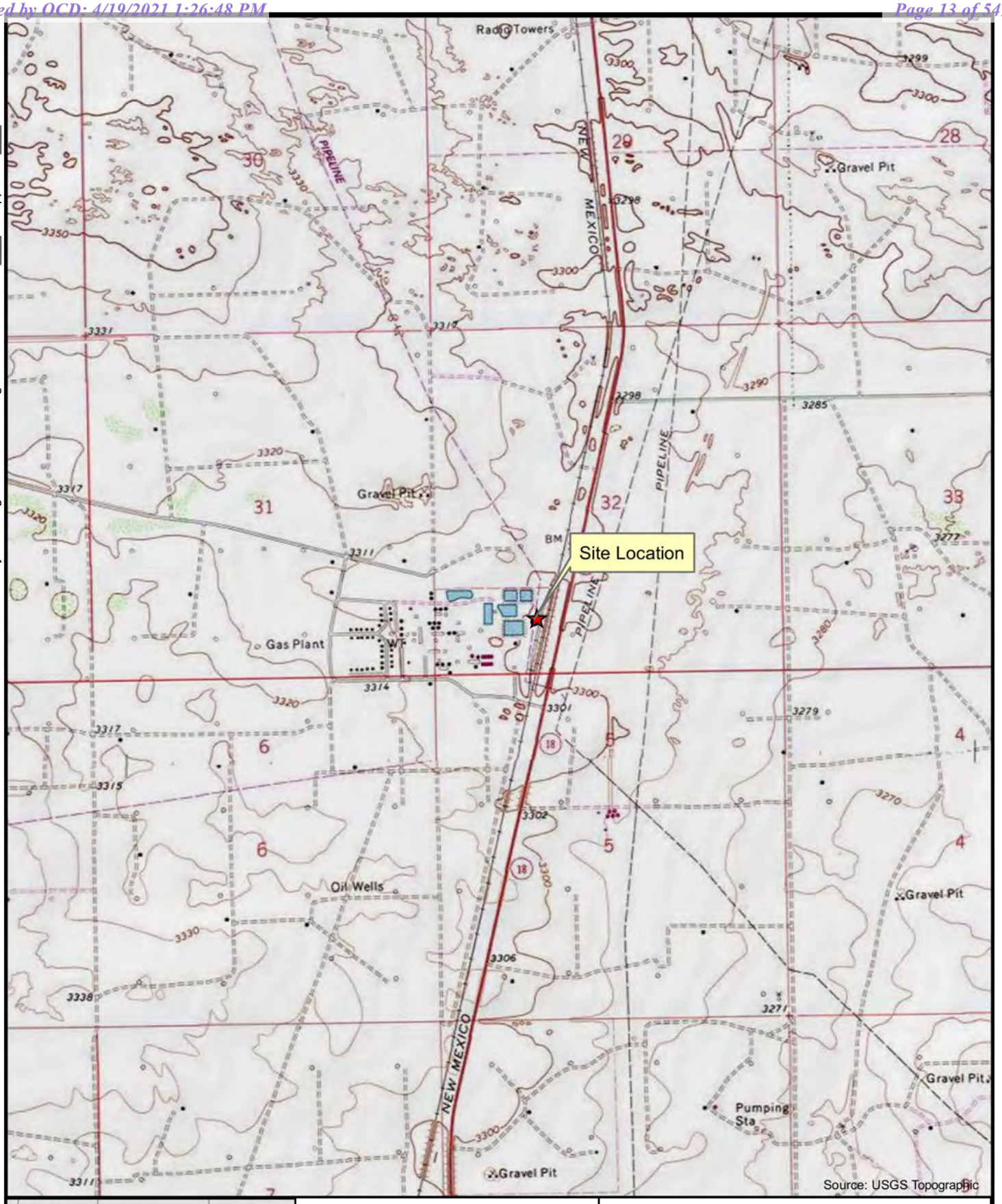
5.0 Conclusions

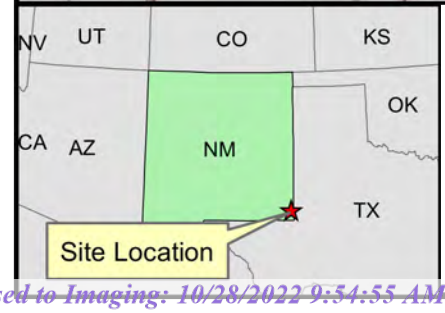
The data presented herein support the following conclusions:

- Groundwater flow direction at the Site is generally to the southeast at hydraulic gradient of approximately 0.001 to 0.002 ft/ft.
- Historical groundwater analytical data indicate that chlorides in groundwater are generally migrating both downgradient to the southeast and vertically toward the base of the water bearing unit. During the 4th Quarter sampling event in December 2020, groundwater samples collected from 11 of 14 upper groundwater wells and from 16 of 21 lower groundwater wells contained chloride concentrations in excess of the EPA's Secondary Drinking Water Standard and New Mexico's Domestic Water Supply Standard of 250 mg/L.
- Benzene concentrations detected in the groundwater samples collected from seven on-site wells exceed the NMAC benzene standard of 0.01 mg/L. With the exception of monitoring well ACW-25, the reported benzene concentrations in all off-site downgradient wells are either below the NMAC benzene standard of 0.01 mg/L or below laboratory detection limits. Groundwater analytical data suggest that natural attenuation mechanisms have effectively mitigated further downgradient migration of the benzene impacts in groundwater.

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Figures





N

Feet
0 1,000 2,000
1 inch = 2,000 feet

AECOM

Title: **Site Location Map**

Project:
EL PASO NATUAL GAS COMPANY
JAL #4 GAS PLANT - LEA COUNTY, NEW MEXICO
2019 ANNUAL GROUNDWATER REMEDIATION REPORT

Date: **2/23/2021** Figure **1**

Project Manager Initials: Designer:BB/BIL Checked:___ Approved:___ ANSI 8.5" x 11"

REFERENCE: Datum; NAD 1983 StatePlane Montana FIPS 2500 (US Feet)



LEGEND

SHELL STATE #13	DISPOSAL WELL
ACW-5	GROUNDWATER MONITOR WELL, SCREENED IN THE UPPER PORTION OF THE AQUIFER
ACW-14	GROUNDWATER MONITOR WELL, SCREENED IN THE LOWER PORTION OF THE AQUIFER
RW-2	GROUNDWATER RECOVERY WELL
EPNG-1	WATER SUPPLY WELL
EPNG-6	PLUGGED/ABANDONED WATER SUPPLY WELL
OXY	WATER SUPPLY WELL
ACW-8	GROUNDWATER MONITOR WELL CONVERTED TO GROUNDWATER RECOVERY WELL
ENSR-2	PLUGGED/ABANDONED MAY 2012
	APPROXIMATE PROPERTY BOUNDARY
	INJECTION WELL (WATER FLOOD)
	OIL WELL
	GAS WELL
	LPG STORAGE WELL
4	FORMER POND LOCATION WITH POND NUMBER

NOTES

1) JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO.
2) SITE BASE AREA DIGITIZED FROM 11/04/76 AERIAL PHOTOGRAPH WITH PLANT PROPERTY BOUNDARY, WELLS INSERTED FROM VARIOUS OTHER SOURCES, AND DRAWING FILES PROVIDED BY SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC OF TULSA, OKLAHOMA.
3) RECOVERY SYSTEM WAS NOT OPERATED IN 2018.
4) AERIAL PHOTO SOURCED FROM GOOGLE PRO, DATED 2/20/2019.
5) SOURCE OF LAND OWNERSHIP IS THE LEA COUNTY APPRAISAL DISTRICT.
6) SOURCE OF INDUSTRY-RELATED WELLS IS NMOCD OIL & GAS MAP.
7) MONITORING WELLS ACW-26, ACW-27, ACW-28, AND ACW-29 WERE INSTALLED IN DECEMBER 2019.

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SCALE IN FEET

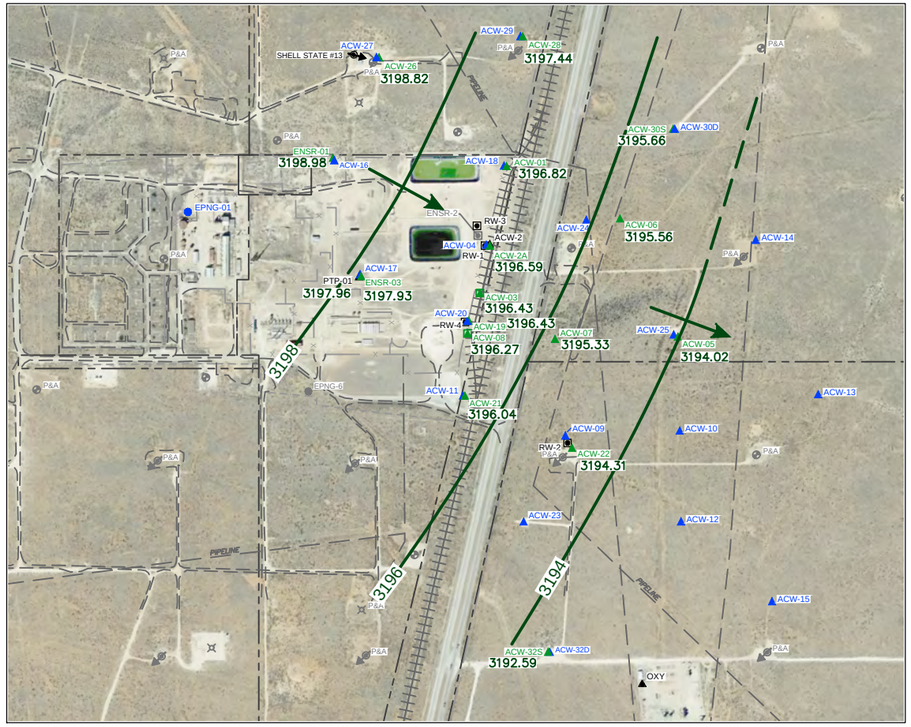
AECOM
19219 KATY FREEWAY SUITE 100
HOUSTON, TEXAS 77094
PH: (281) 646-2400
FAX: (281) 646-2401

Title: **Site Layout**

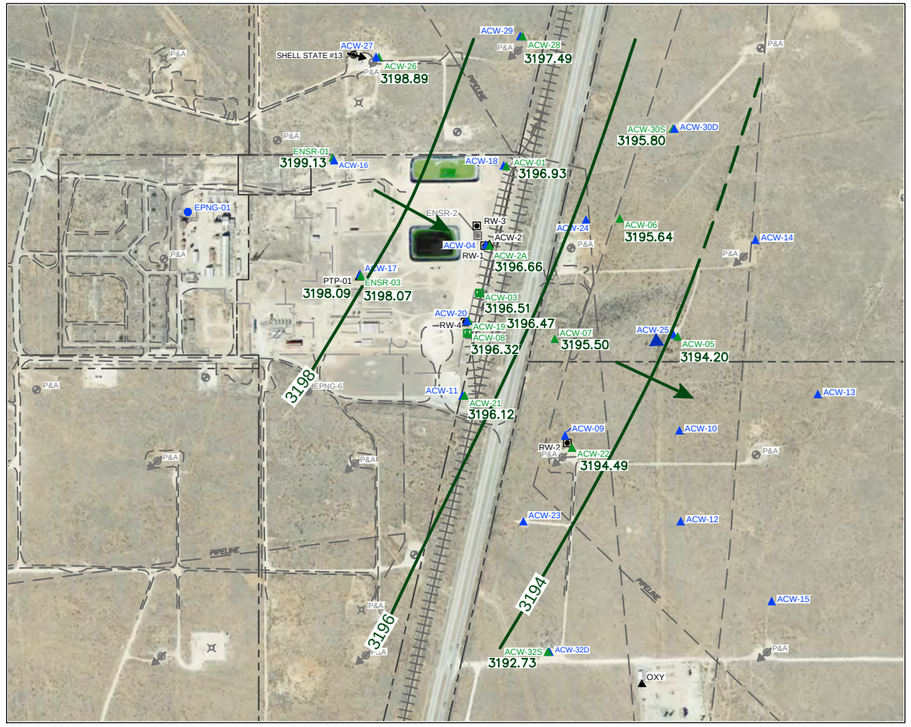
Project:
EL PASO NATUAL GAS COMPANY
JAL #4 GAS PLANT - LEA COUNTY, NEW MEXICO
2020 ANNUAL GROUNDWATER REMEDIATION REPORT

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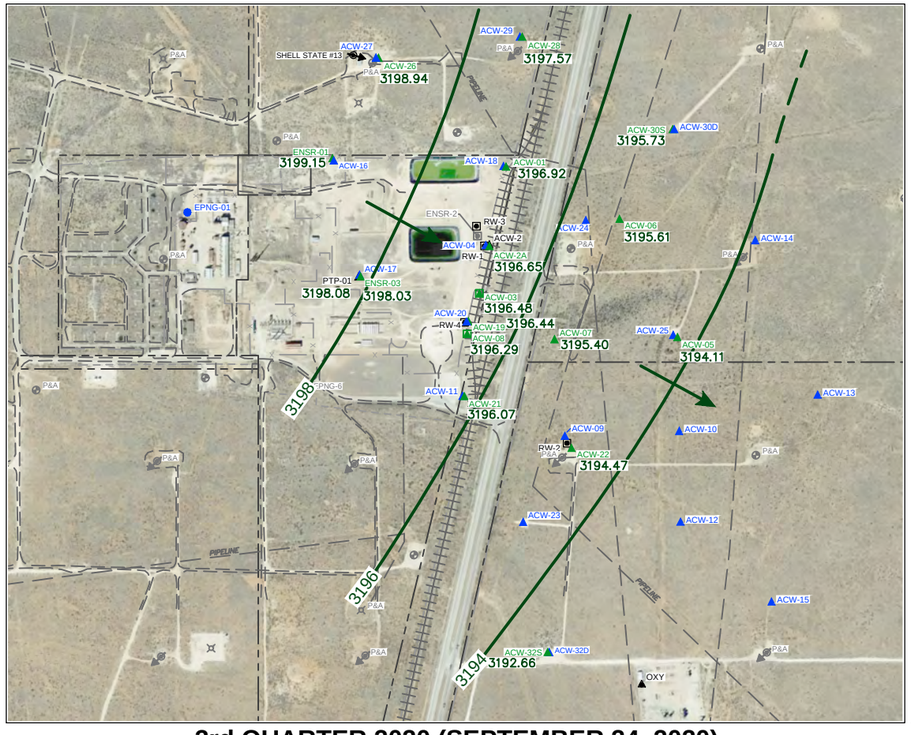
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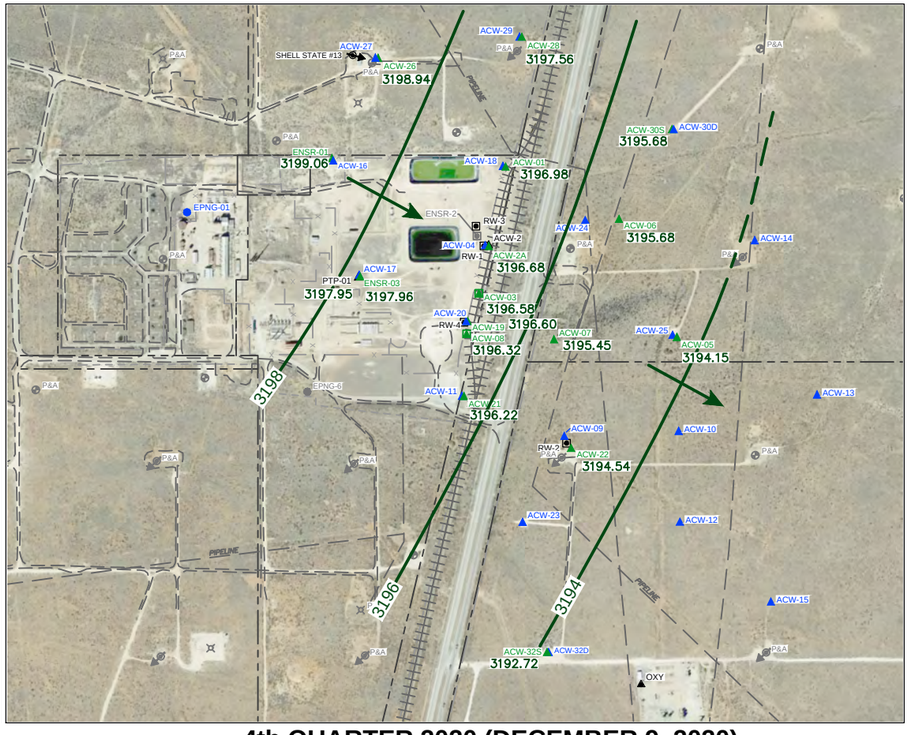
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2nd QUARTER 2020 (JUNE 24, 2020)



3rd QUARTER 2020 (SEPTEMBER 24, 2020)



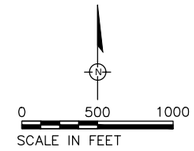
4th QUARTER 2020 (DECEMBER 9, 2020)

LEGEND

- ACW-5 3195.50 — GROUNDWATER MONITOR WELL AND GROUNDWATER ELEVATION - FEET AMSL, WELLS SCREENED IN THE UPPER PORTION OF THE AQUIFER
- ACW-14 — GROUNDWATER MONITOR WELL, SCREENED IN THE LOWER PORTION OF THE AQUIFER
- RW-2 — GROUNDWATER RECOVERY WELL
- EPNG-1 — WATER SUPPLY WELL
- EPNG-6 — PLUGGED/ABANDONED WATER SUPPLY WELL
- OXY — WATER SUPPLY WELL
- ACW-8 — GROUNDWATER MONITOR WELL CONVERTED TO GROUNDWATER RECOVERY WELL
- ENSR-2 — PLUGGED/ABANDONED MAY 2012
- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- SECONDARY ROAD
- RAILROAD TRACK
- PIPELINE
- IMPOUNDMENT
- 3194 — CONTOUR OF GROUNDWATER ELEVATION - FEET AMSL, WELLS SCREENED IN THE UPPER PORTION OF THE AQUIFER)
- GROUNDWATER FLOW DIRECTION

NOTES

1) JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO.
2) SITE BASE AREA DIGITIZED FROM 11/04/76 AERIAL PHOTOGRAPH WITH PLANT PROPERTY BOUNDARY, WELLS INSERTED FROM OTHER SOURCES, AND DRAWING FILES PROVIDED BY SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC OF TULSA, OKLAHOMA.
3) AERIAL PHOTO SOURCED FROM GOOGLE PRO, DATED 2/20/2019.



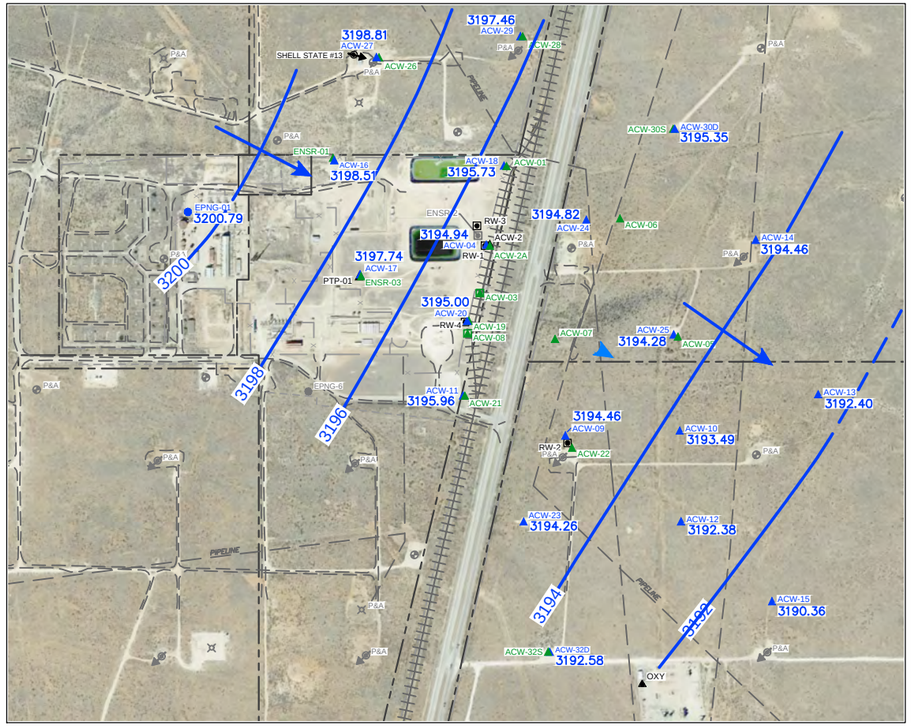
AECOM
19219 KATY FREEWAY SUITE 100
HOUSTON, TEXAS 77094
PH: (281) 646-2400
FAX: (281) 646-2401

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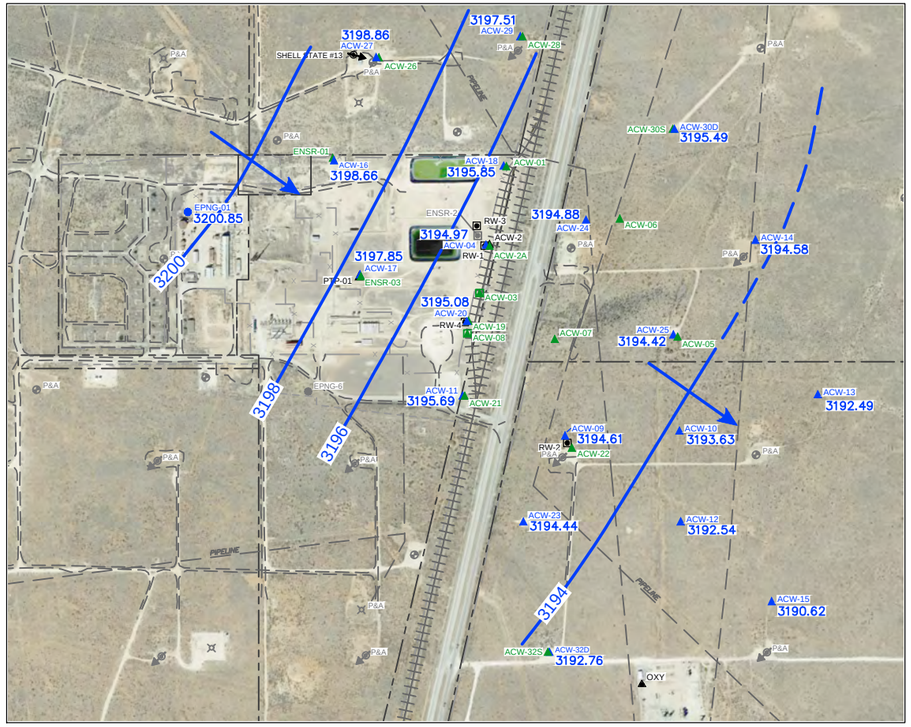
Project: EL PASO NATUAL GAS COMPANY
JAL #4 GAS PLANT - LEA COUNTY, NEW MEXICO
2020 ANNUAL GROUNDWATER REMEDIATION REPORT

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	Chk'd by: EC / WG	Date: 2-23-2021		

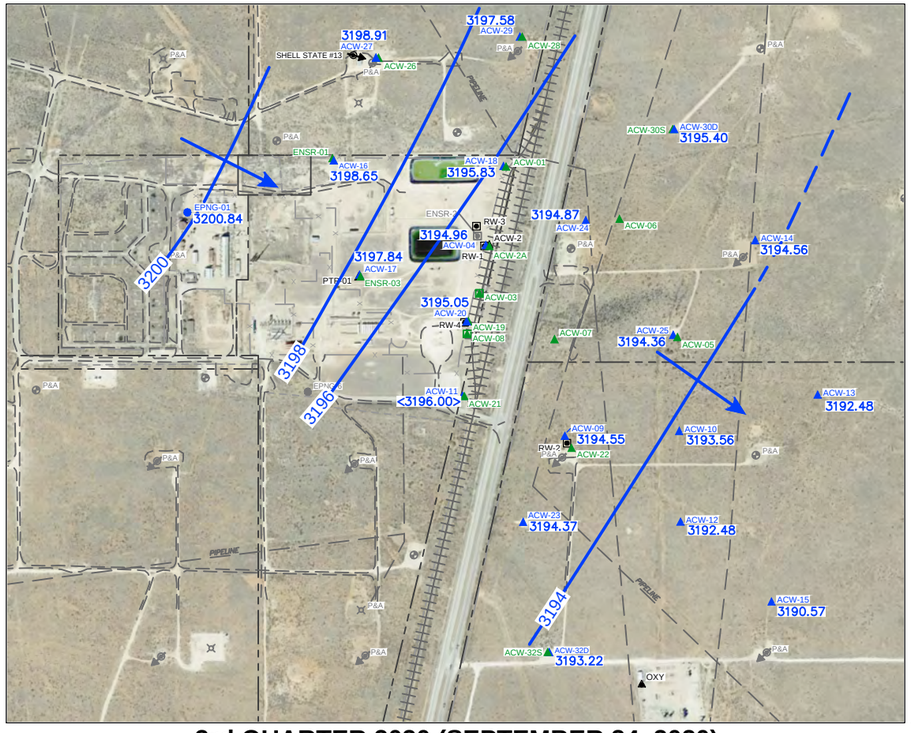
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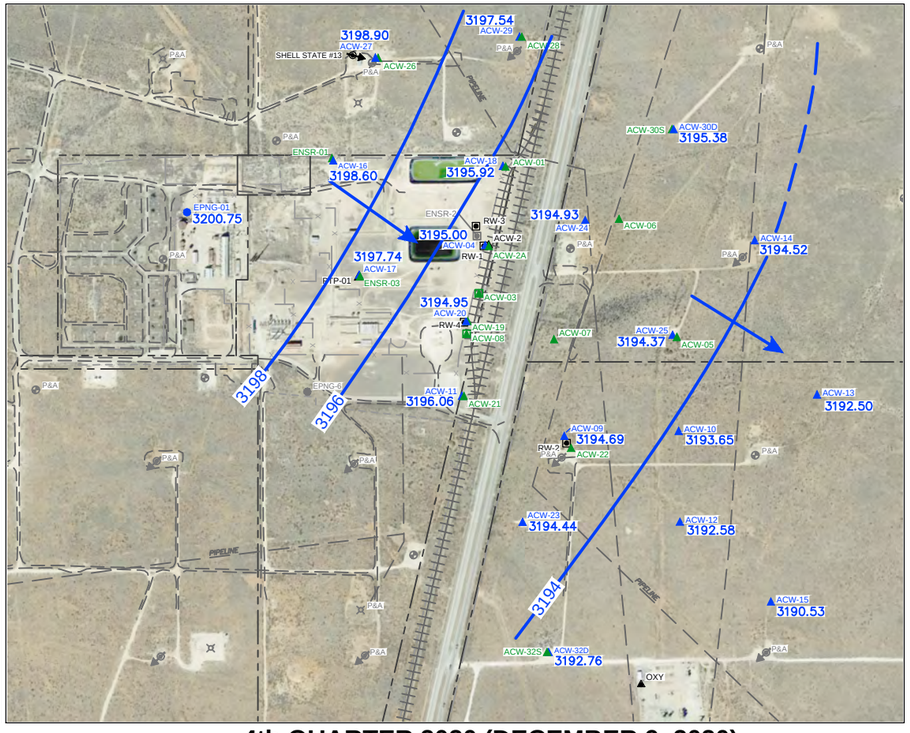
1st QUARTER 2020 (MARCH 19, 2020)



2nd QUARTER 2020 (JUNE 24, 2020)



3rd QUARTER 2020 (SEPTEMBER 24, 2020)



4th QUARTER 2020 (DECEMBER 9, 2020)

LEGEND

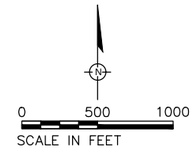
ACW-14 3194.37	GROUNDWATER MONITOR WELL AND GROUNDWATER ELEVATION - FEET AMSL, WELLS SCREENED IN THE LOWER PORTION OF THE AQUIFER
ACW-5	GROUNDWATER MONITOR WELL, SCREENED IN THE UPPER PORTION OF THE AQUIFER
RW-2	GROUNDWATER RECOVERY WELL
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EPNG-6	PLUGGED/ABANDONED WATER SUPPLY WELL
OXY	WATER SUPPLY WELL
ACW-8	GROUNDWATER MONITOR WELL CONVERTED TO GROUNDWATER RECOVERY WELL
ENSR-2	PLUGGED/ABANDONED MAY 2012
	APPROXIMATE PROPERTY BOUNDARY
	FENCE
	SECONDARY ROAD
	RAILROAD TRACK
	PIPELINE
	IMPOUNDMENT
3194	CONTOUR OF GROUNDWATER ELEVATION - FEET AMSL, WELLS SCREENED IN THE LOWER PORTION OF THE AQUIFER)
<3196.00>	THE DATA FROM ACW-11 IS NOT USED TO CONSTRUCT THE POTENTIOMETRIC SURFACE CONTOURS FOR 3RD QUARTER 2020.
	GROUNDWATER FLOW DIRECTION

NOTES

1) JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO.

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3) AERIAL PHOTO SOURCED FROM GOOGLE PRO, DATED 2/20/2019.



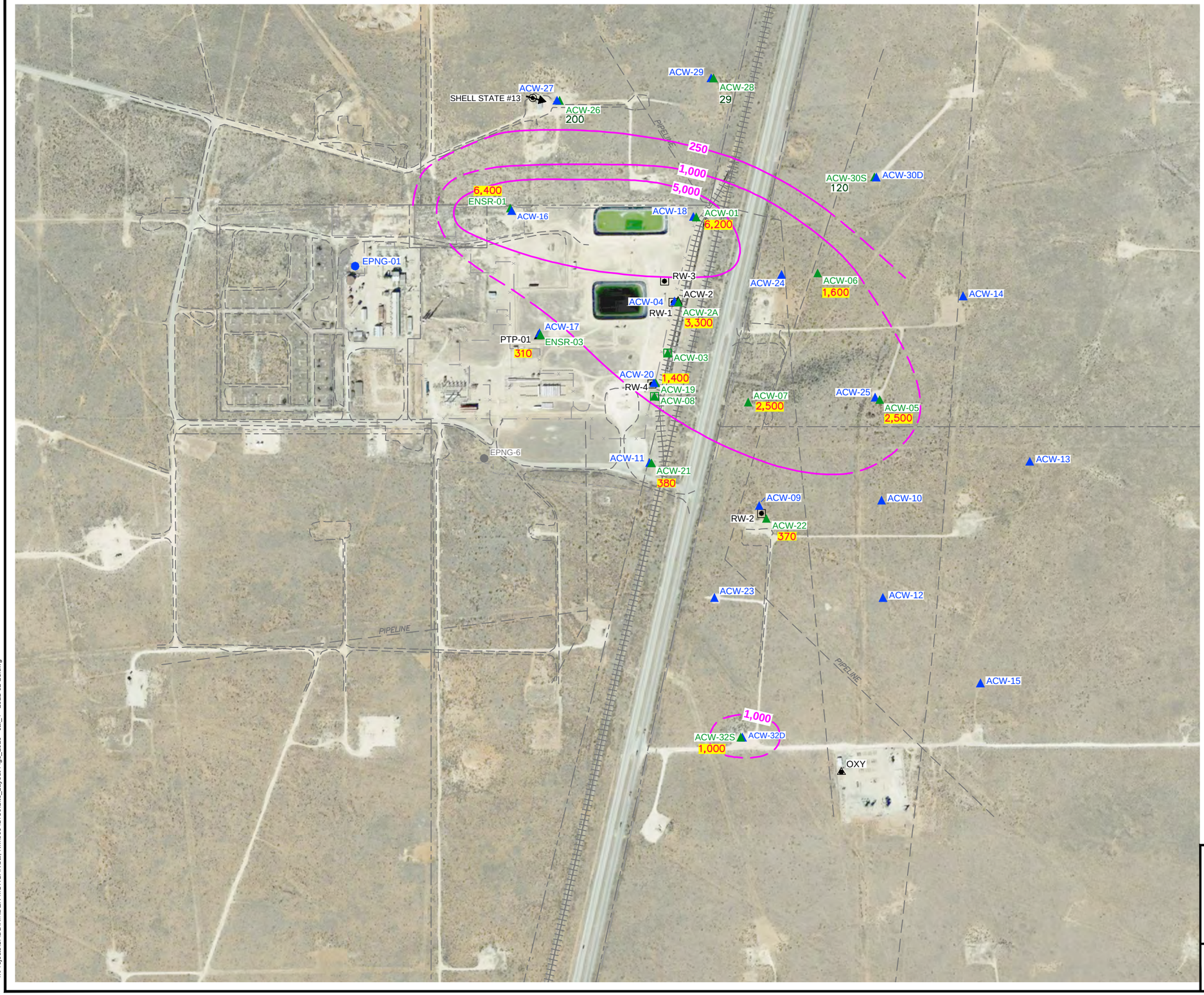
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19219 KATY FREEWAY SUITE 100
HOUSTON, TEXAS 77094
PH: (281) 646-2400
FAX: (281) 646-2401

Title: **Groundwater Potentiometric Surface - Lower Groundwater**

Project: EL PASO NATUAL GAS COMPANY
JAL #4 GAS PLANT - LEA COUNTY, NEW MEXICO
2020 ANNUAL GROUNDWATER REMEDIATION REPORT

Scale:	Drawn by:	Date:	Project No.:	Figure:
AS SHOWN	DB	2-23-2021	60641730	4
	Chk'd by: EC / WG	Date: 2-23-2021		

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LEGEND

SHELL STATE #13	DISPOSAL WELL
ACW-05	GROUNDWATER MONITOR WELL, SCREENED IN THE UPPER PORTION OF THE AQUIFER
ACW-14	GROUNDWATER MONITOR WELL, SCREENED IN THE LOWER PORTION OF THE AQUIFER
1,600	HIGHLIGHTED VALUES (in mg/L) INDICATE AN EXCEEDANCE
RW-2	GROUNDWATER RECOVERY WELL
EPNG-1	WATER SUPPLY WELL
EPNG-6	PLUGGED/ABANDONED WATER SUPPLY WELL
OXY	WATER SUPPLY WELL
ACW-08	GROUNDWATER MONITOR WELL CONVERTED TO GROUNDWATER RECOVERY WELL
ENSR-2	PLUGGED/ABANDONED MAY 2012
	APPROXIMATE PROPERTY BOUNDARY
	FENCE
	SECONDARY ROAD
	RAILROAD TRACK
	PIPELINE
	IMPOUNDMENT
1,000	CONTOUR LINE SHOWING EQUAL CONCENTRATIONS OF CHLORIDE IN GROUNDWATER, mg/L (DASHED WHERE INFERRED)

NOTES

1) EPA's SECONDARY DRINKING WATER STANDARD (SMCL) FOR CHLORIDE IN PUBLIC WATER SUPPLY SYSTEMS IS 250 MILLIGRAMS PER LITER (mg/L).

2) NEW MEXICO ENVIRONMENTAL DIVISION HAS ESTABLISHED OTHER STANDARDS FOR DOMESTIC WATER SUPPLY OF 250 mg/L FOR CHLORIDE IN GROUNDWATER CONTAINING TDS LEVELS OF 10,000 mg/L OR LESS.

3) JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO.

4) SITE BASE AREA DIGITIZED FROM 11/04/76 AERIAL PHOTOGRAPH WITH PLANT PROPERTY BOUNDARY, WELLS INSERTED FROM VARIOUS OTHER SOURCES, AND DRAWING FILES PROVIDED BY SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC OF TULSA, OKLAHOMA.

5) THE GROUNDWATER RECOVERY SYSTEM HAS NOT BEEN OPERATED SINCE 2012.

6) AERIAL PHOTO SOURCED FROM GOOGLE PRO, DATED 2/20/2019.

7) SOURCE OF INDUSTRY-RELATED WELLS IS NMOCD OIL & GAS MAP.

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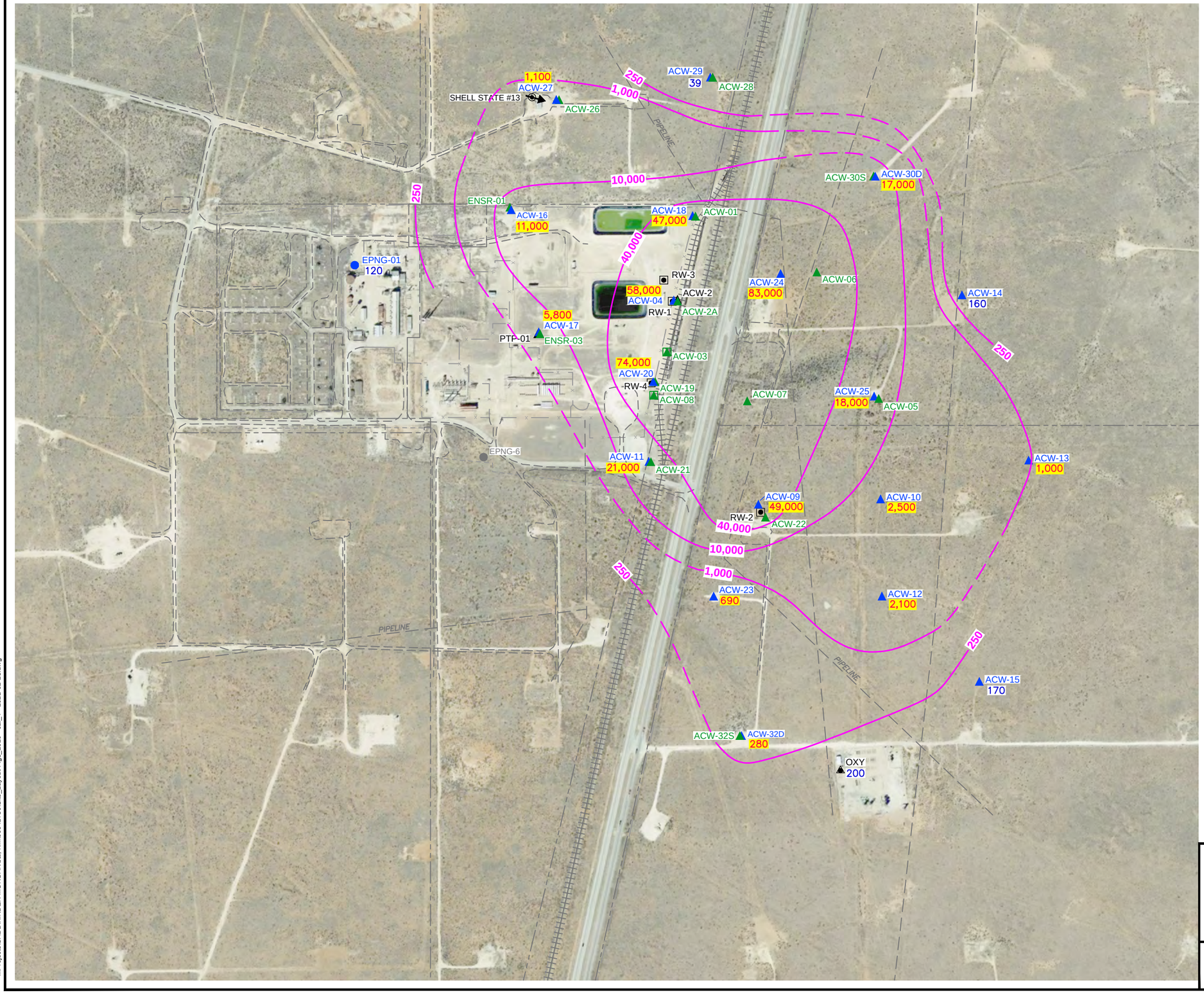
AECOM
19219 KATY FREEWAY SUITE 100
HOUSTON, TEXAS 77094
PH: (281) 646-2400
FAX: (281) 646-2401

Title: **Isopleth of Chloride Concentrations in Upper Groundwater December 2020**

Project:
EL PASO NATUAL GAS COMPANY
JAL #4 GAS PLANT - LEA COUNTY, NEW MEXICO
2020 ANNUAL GROUNDWATER REMEDIATION REPORT

Scale:	Drawn by:	Date:	Project No.:	Figure:
AS SHOWN	DB	3-24-2020	60641730	5
	Chk'd by: WG	Date: 3-24-2020		

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LEGEND

SHELL STATE #13	DISPOSAL WELL
ACW-05	GROUNDWATER MONITOR WELL, SCREENED IN THE UPPER PORTION OF THE AQUIFER
ACW-14	GROUNDWATER MONITOR WELL, SCREENED IN THE LOWER PORTION OF THE AQUIFER
15,800	HIGHLIGHTED VALUES (in mg/L) INDICATE AN EXCEEDANCE
RW-2	GROUNDWATER RECOVERY WELL
EPNG-1	WATER SUPPLY WELL
EPNG-6	PLUGGED/ABANDONED WATER SUPPLY WELL
OXY	WATER SUPPLY WELL
ACW-08	GROUNDWATER MONITOR WELL CONVERTED TO GROUNDWATER RECOVERY WELL
ENSR-2	PLUGGED/ABANDONED MAY 2012
	APPROXIMATE PROPERTY BOUNDARY
	FENCE
	SECONDARY ROAD
	RAILROAD TRACK
	PIPELINE
	IMPOUNDMENT
1,000	CONTOUR LINE SHOWING EQUAL CONCENTRATIONS OF CHLORIDE IN GROUNDWATER, mg/L (DASHED WHERE INFERRED)

NOTES

1) EPA's SECONDARY DRINKING WATER STANDARD (SMCL) FOR CHLORIDE IN PUBLIC WATER SUPPLY SYSTEMS IS 250 MILLIGRAMS PER LITER (mg/L).

2) NEW MEXICO ENVIRONMENTAL DIVISION HAS ESTABLISHED OTHER STANDARDS FOR DOMESTIC WATER SUPPLY OF 250 mg/L FOR CHLORIDE IN GROUNDWATER CONTAINING TDS LEVELS OF 10,000 mg/L OR LESS.

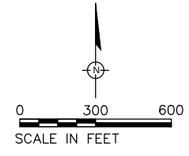
3) JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO.

4) SITE BASE AREA DIGITIZED FROM 11/04/76 AERIAL PHOTOGRAPH WITH PLANT PROPERTY BOUNDARY, WELLS INSERTED FROM VARIOUS OTHER SOURCES, AND DRAWING FILES PROVIDED BY SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC OF TULSA, OKLAHOMA.

5) THE GROUNDWATER RECOVERY SYSTEM HAS NOT BEEN OPERATED SINCE 2012.

6) AERIAL PHOTO SOURCED FROM GOOGLE PRO, DATED 2/20/2019.

7) SOURCE OF INDUSTRY-RELATED WELLS IS NMOCD OIL & GAS MAP.



AECOM
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Title: **Isopleth of Chloride Concentrations in Lower Groundwater December 2020**

Project: EL PASO NATUAL GAS COMPANY
JAL #4 GAS PLANT - LEA COUNTY, NEW MEXICO
2020 ANNUAL GROUNDWATER REMEDIATION REPORT

Scale:	Drawn by:	Date:	Project No.:	Figure:
AS SHOWN	DB	3-2-2020	60641730	6
	Chk'd by: WG	Date: 3-2-2020		

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LEGEND

SHELL STATE #13	DISPOSAL WELL
ACW-05	GROUNDWATER MONITOR WELL, SCREENED IN THE UPPER PORTION OF THE AQUIFER
ACW-14	GROUNDWATER MONITOR WELL, SCREENED IN THE LOWER PORTION OF THE AQUIFER
0.069	HIGHLIGHTED VALUES (in mg/L) INDICATE AN EXCEEDANCE
RW-2	GROUNDWATER RECOVERY WELL
EPNG-1	WATER SUPPLY WELL
EPNG-6	PLUGGED/ABANDONED WATER SUPPLY WELL
OXY	WATER SUPPLY WELL
ACW-08	GROUNDWATER MONITOR WELL CONVERTED TO GROUNDWATER RECOVERY WELL
ENSR-2	PLUGGED/ABANDONED MAY 2012
	APPROXIMATE PROPERTY BOUNDARY
	FENCE
	SECONDARY ROAD
	RAILROAD TRACK
	PIPELINE
	IMPOUNDMENT

NOTES

1) NEW MEXICO ENVIRONMENTAL DIVISION HAS ESTABLISHED A HUMAN HEALTH STANDARD OF 10 µg/L (0.01 mg/L) FOR BENZENE IN GROUNDWATER.

2) EPA's PRIMARY DRINKING WATER STANDARD (MCL) FOR BENZENE IN PUBLIC WATER SUPPLY SYSTEMS IS 5 µg/L (0.005 mg/L).

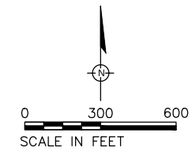
3) JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO.

4) SITE BASE AREA DIGITIZED FROM 11/04/76 AERIAL PHOTOGRAPH WITH PLANT PROPERTY BOUNDARY, WELLS INSERTED FROM VARIOUS OTHER SOURCES, AND DRAWING FILES PROVIDED BY SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC OF TULSA, OKLAHOMA.

5) RECOVERY SYSTEM WAS NOT OPERATED IN 2018.

6) AERIAL PHOTO SOURCED FROM GOOGLE PRO, DATED 2/20/2019.

7) SOURCE OF INDUSTRY-RELATED WELLS IS NMOCD OIL & GAS MAP.



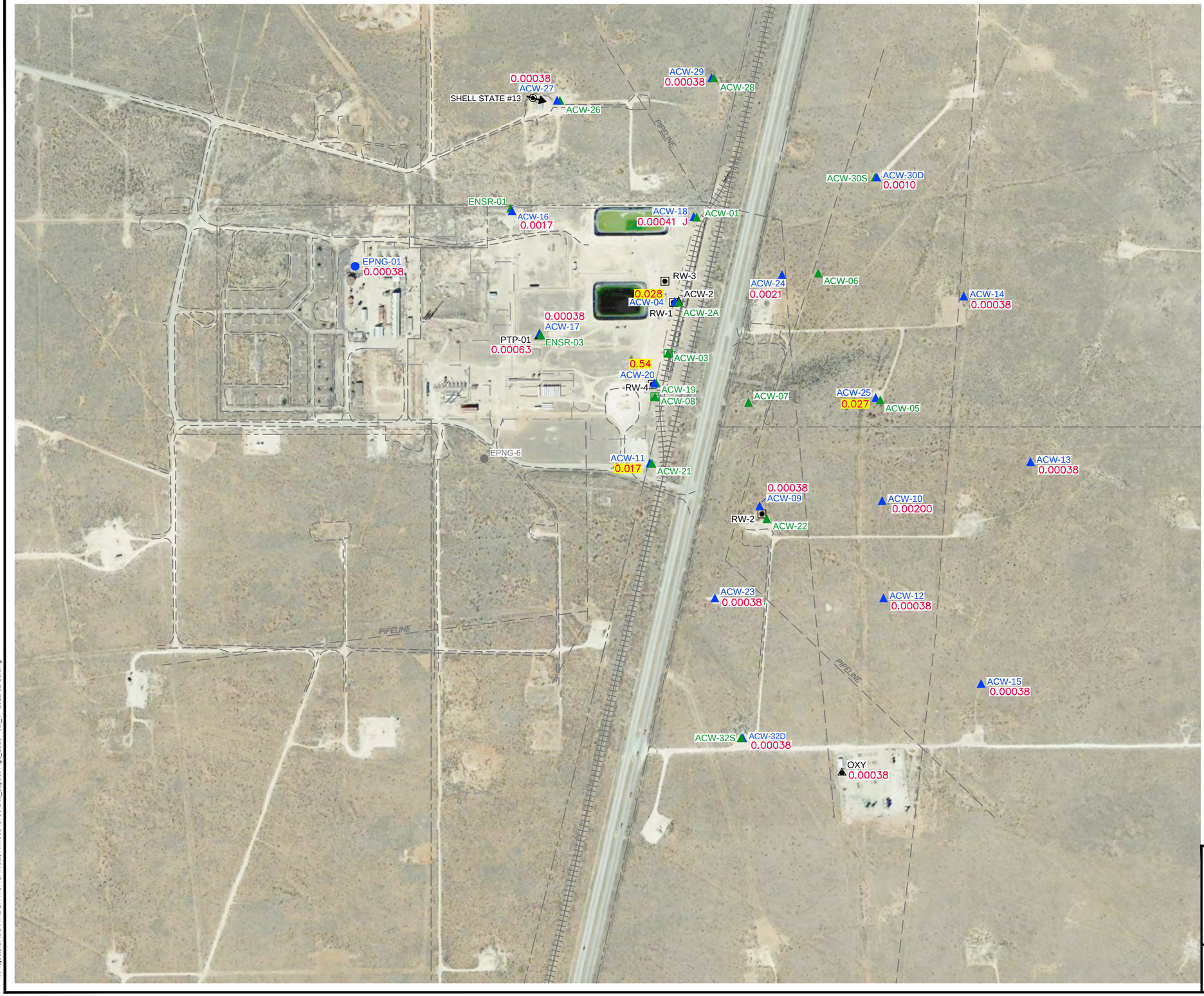
AECOM
19219 KATY FREEWAY SUITE 100
HOUSTON, TEXAS 77094
PH: (281) 646-2400
FAX: (281) 646-2401

Title: **Benzene Concentrations in Upper Groundwater December 2020**

Project:
EL PASO NATUAL GAS COMPANY
JAL #4 GAS PLANT - LEA COUNTY, NEW MEXICO
2020 ANNUAL GROUNDWATER REMEDIATION REPORT

Scale:	Drawn by:	Date:	Project No.:	Figure:
AS SHOWN	DB	2-23-2021	60641730	7
	Chk'd by: WG	Date: 2-23-2021		

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LEGEND

SHELL STATE #13	DISPOSAL WELL
ACW-05	GROUNDWATER MONITOR WELL, SCREENED IN THE UPPER PORTION OF THE AQUIFER
ACW-14	GROUNDWATER MONITOR WELL, SCREENED IN THE LOWER PORTION OF THE AQUIFER
0.028	HIGHLIGHTED VALUES (in mg/L) INDICATE AN EXCEEDANCE
RW-2	GROUNDWATER RECOVERY WELL
EPNG-1	WATER SUPPLY WELL
EPNG-6	PLUGGED/ABANDONED WATER SUPPLY WELL
OXY	WATER SUPPLY WELL
ACW-08	GROUNDWATER MONITOR WELL CONVERTED TO GROUNDWATER RECOVERY WELL
ENSR-2	PLUGGED/ABANDONED MAY 2012
	APPROXIMATE PROPERTY BOUNDARY
	FENCE
	SECONDARY ROAD
	RAILROAD TRACK
	PIPELINE
	IMPOUNDMENT

NOTES

1) NEW MEXICO ENVIRONMENTAL DIVISION HAS ESTABLISHED A HUMAN HEALTH STANDARD OF 10 µg/L (0.01 mg/L) FOR BENZENE IN GROUNDWATER.

2) EPA's PRIMARY DRINKING WATER STANDARD (MCL) FOR BENZENE IN PUBLIC WATER SUPPLY SYSTEMS IS 5 µg/L (0.005 mg/L).

3) JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO.

4) SITE BASE AREA DIGITIZED FROM 11/04/76 AERIAL PHOTOGRAPH WITH PLANT PROPERTY BOUNDARY, WELLS INSERTED FROM VARIOUS OTHER SOURCES, AND DRAWING FILES PROVIDED BY SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC OF TULSA, OKLAHOMA.

5) RECOVERY SYSTEM WAS NOT OPERATED IN 2018.

6) AERIAL PHOTO SOURCED FROM GOOGLE PRO, DATED 2/20/2019.

7) SOURCE OF INDUSTRY-RELATED WELLS IS NMOCD OIL & GAS MAP.

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SCALE IN FEET

AECOM
19219 KATY FREEWAY SUITE 100
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Title:
Benzene Concentrations in Lower Groundwater December 2020

Project:
EL PASO NATUAL GAS COMPANY
JAL #4 GAS PLANT - LEA COUNTY, NEW MEXICO
2020 ANNUAL GROUNDWATER REMEDIATION REPORT

Scale:	Drawn by:	Date:	Project No.:	Figure:
AS SHOWN	DB	2-23-2021	60641730	8
	Chk'd by: WG	Date: 2-23-2021		

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Tables

Table 1
Quarterly Monitoring Well Sampling Schedule
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	2019 Quarter 1	2019 Quarter 2	2019 Quarter 3	2019 Quarter 4
Program Wells				
ACW-01	G	G	G	G,S
ACW-02*	G	G	G	G
ACW-02A	G	G	G	G,S
ACW-03	G	G	G	G
ACW-04	G	G	G	G,S
ACW-05	G	G	G	G,S
ACW-06	G	G	G	G,S
ACW-07	G	G	G	G,S
ACW-08	G	G	G	G
ACW-09	G	G	G	G,S
ACW-10	G	G	G	G,S
ACW-11	G	G	G	G,S
ACW-12	G	G	G	G,S
ACW-13	G,S	G,S	G,S	G,S
ACW-14	G,S	G,S	G,S	G,S
ACW-15	G,S	G,S	G,S	G,S
ACW-16	G	G	G	G,S
ACW-17	G	G	G	G,S
ACW-18	G	G	G	G,S
ACW-19	G	G	G	G,S
ACW-20	G	G	G	G,S
ACW-21	G	G	G	G,S
ACW-22	G	G	G	G,S
ACW-23	G	G	G	G,S
ACW-24	G	G	G	G,S
ACW-25	G	G	G	G,S
ACW-26	--	--	--	G,S
ACW-27	--	--	--	G,S
ACW-28	--	--	--	G,S
ACW-29	--	--	--	G,S
ACW-30S	--	--	G	G,S
ACW-30D	--	--	G	G,S
ACW-32S	--	--	G	G,S
ACW-32D	--	--	G	G,S

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Table 1
Quarterly Monitoring Well Sampling Schedule
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	2019 Quarter 1	2019 Quarter 2	2019 Quarter 3	2019 Quarter 4
Non-Program Wells				
ENSR-01	G	G	G	G,S
ENSR-03	G	G	G	G,S
EPNG-01	G	G	G	G,S
OXY Water Well	G,S	G,S	G,S	G,S
Doom Water Well	G,S	G,S	G,S	G,S
PTP-01	G	G	G	G
RW-01	G	G	G	G
RW-02	G	G	G	G
RW-03	G	G	G	G
RW-04	G	G	G	G

Notes:
G - gauge only
G,S - gauge and sample
PA - plugged and abandoned
*Well could not be developed, not included in sampling program

Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-01	110 to 130	3302.15	3/17/2016	105.69	3196.46
			5/10/2016	105.46	3196.69
			8/16/2016	105.53	3196.62
			11/30/2016	105.96	3196.19
			3/14/2017	105.47	3196.68
			6/21/2017	105.38	3196.77
			9/21/2017	105.43	3196.72
			11/28/2017	105.43	3196.72
			2/21/2018	105.45	3196.70
			5/9/2018	105.32	3196.83
			8/7/2018	105.34	3196.81
			11/7/2018	105.39	3196.76
			3/5/2019	105.35	3196.80
			6/18/2019	105.25	3196.90
			9/10/2019	105.30	3196.85
			12/18/2019	105.16	3196.99
			3/19/2020	105.33	3196.82
			6/24/2020	105.22	3196.93
			9/24/2020	105.23	3196.92
			12/9/2020	105.17	3196.98

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-02A	98 to 118	3302.16	3/17/2016	105.81	3196.35
			5/10/2016	105.69	3196.47
			8/16/2016	105.72	3196.44
			11/30/2016	105.59	3196.57
			3/14/2017	105.72	3196.44
			6/21/2017	105.63	3196.53
			9/21/2017	105.68	3196.48
			11/28/2017	105.65	3196.51
			2/21/2018	105.68	3196.48
			5/9/2018	105.51	3196.65
			8/7/2018	105.54	3196.62
			11/7/2018	105.61	3196.55
			3/5/2019	105.58	3196.58
			6/18/2019	105.50	3196.66
			9/10/2019	105.55	3196.61
			12/18/2019	105.45	3196.71
			3/19/2020	105.57	3196.59
			6/24/2020	105.50	3196.66
			9/24/2020	105.51	3196.65
			12/9/2020	105.48	3196.68

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-03	112 to 132	3301.62	3/17/2016	105.62	3196.00
			5/10/2016	105.26	3196.36
			8/16/2016	105.31	3196.31
			11/30/2016	105.33	3196.29
			3/14/2017	105.32	3196.30
			6/21/2017	105.22	3196.40
			9/21/2017	105.30	3196.32
			11/28/2017	105.29	3196.33
			2/21/2018	105.28	3196.34
			5/9/2018	105.12	3196.50
			8/7/2018	105.16	3196.46
			11/7/2018	105.20	3196.42
			3/5/2019	105.20	3196.42
			6/18/2019	105.12	3196.50
			9/10/2019	105.14	3196.48
			12/18/2019	105.10	3196.52
			3/19/2020	105.19	3196.43
			6/24/2020	105.11	3196.51
			9/24/2020	105.14	3196.48
			12/9/2020	105.04	3196.58

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-04	154 to 169	3302.05	3/17/2016	107.61	3194.44
			5/10/2016	107.58	3194.47
			8/16/2016	107.50	3194.55
			11/30/2016	107.44	3194.61
			3/14/2017	107.42	3194.63
			6/21/2017	107.32	3194.73
			9/21/2017	107.38	3194.67
			11/28/2017	107.35	3194.70
			2/21/2018	107.36	3194.69
			5/9/2018	107.17	3194.88
			8/7/2018	107.20	3194.85
			11/7/2018	107.24	3194.81
			3/5/2019	107.23	3194.82
			6/18/2019	107.14	3194.91
			9/10/2019	107.18	3194.87
			12/18/2019	107.02	3195.03
			3/19/2020	107.11	3194.94
			6/24/2020	107.08	3194.97
			9/24/2020	107.09	3194.96
			12/9/2020	107.05	3195.00

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-05	105 to 115	3297.18	3/16/2016	103.42	3193.76
			5/10/2016	103.29	3193.89
			8/16/2016	103.24	3193.94
			11/30/2016	103.28	3193.90
			3/14/2017	103.16	3194.02
			6/21/2017	103.22	3193.96
			9/21/2017	103.16	3194.02
			11/28/2017	103.28	3193.90
			2/21/2018	103.33	3193.85
			5/9/2018	103.17	3194.01
			8/7/2018	103.12	3194.06
			11/7/2018	103.15	3194.03
			3/5/2019	103.16	3194.02
			6/18/2019	103.11	3194.07
			9/10/2019	103.11	3194.07
			12/18/2019	103.07	3194.11
			3/19/2020	103.16	3194.02
			6/24/2020	102.98	3194.20
			9/24/2020	103.07	3194.11
			12/9/2020	103.03	3194.15

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-06	110 to 120	3302.84	3/16/2016	107.61	3195.23
			5/10/2016	107.46	3195.38
			8/16/2016	107.40	3195.44
			11/30/2016	107.44	3195.40
			3/14/2017	107.43	3195.41
			6/21/2017	107.43	3195.41
			9/21/2017	107.34	3195.50
			11/28/2017	107.85	3194.99
			2/21/2018	107.50	3195.34
			5/9/2018	107.34	3195.50
			8/7/2018	107.28	3195.56
			11/7/2018	107.21	3195.63
			3/5/2019	107.33	3195.51
			6/18/2019	107.22	3195.62
			9/10/2019	107.29	3195.55
			12/18/2019	107.22	3195.62
			3/19/2020	107.28	3195.56
			6/24/2020	107.20	3195.64
			9/24/2020	107.23	3195.61
			12/9/2020	107.16	3195.68

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-07	105 to 115	3297.63	3/16/2016	102.44	3195.19
			5/10/2016	102.24	3195.39
			8/16/2016	102.37	3195.26
			11/30/2016	103.45	3194.18
			3/14/2017	102.38	3195.25
			6/21/2017	102.42	3195.21
			9/21/2017	102.34	3195.29
			11/28/2017	102.43	3195.20
			2/21/2018	102.49	3195.14
			5/9/2018	102.33	3195.30
			8/7/2018	102.29	3195.34
			11/7/2018	102.26	3195.37
			3/5/2019	102.34	3195.29
			6/18/2019	102.26	3195.37
			9/10/2019	102.28	3195.35
			12/18/2019	102.20	3195.43
			3/19/2020	102.30	3195.33
			6/24/2020	102.13	3195.50
			9/24/2020	102.23	3195.40
			12/9/2020	102.18	3195.45

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-08	140 to 173	3299.54	3/17/2016	103.58	3195.96
			5/10/2016	103.41	3196.13
			8/16/2016	103.45	3196.09
			11/30/2016	103.45	3196.09
			3/14/2017	103.43	3196.11
			6/21/2017	103.34	3196.20
			9/21/2017	103.43	3196.11
			11/28/2017	103.40	3196.14
			2/21/2018	103.39	3196.15
			5/9/2018	103.21	3196.33
			8/7/2018	103.38	3196.16
			11/7/2018	103.34	3196.20
			3/5/2019	103.32	3196.22
			6/18/2019	103.23	3196.31
			9/10/2019	103.26	3196.28
			12/18/2019	103.20	3196.34
			3/19/2020	103.27	3196.27
			6/24/2020	103.22	3196.32
			9/24/2020	103.25	3196.29
			12/9/2020	103.22	3196.32

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-09	140 to 160	3304.69	3/16/2016	110.57	3194.12
			5/10/2016	110.40	3194.29
			8/17/2016	110.45	3194.24
			11/30/2016	110.45	3194.24
			3/14/2017	110.25	3194.44
			6/21/2017	110.33	3194.36
			9/21/2017	110.28	3194.41
			11/28/2017	110.38	3194.31
			2/21/2018	110.43	3194.26
			5/9/2018	110.28	3194.41
			8/7/2018	110.21	3194.48
			11/7/2018	110.34	3194.35
			3/5/2019	110.28	3194.41
			6/18/2019	110.06	3194.63
			9/10/2019	110.20	3194.49
			12/18/2019	110.14	3194.55
			3/19/2020	110.23	3194.46
			6/24/2020	110.08	3194.61
			9/24/2020	110.14	3194.55
			12/9/2020	110.00	3194.69

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-10	140 to 160	3299.82	3/16/2016	106.65	3193.17
			5/10/2016	106.50	3193.32
			8/17/2016	106.55	3193.27
			11/30/2016	106.52	3193.30
			3/14/2017	106.35	3193.47
			6/21/2017	106.43	3193.39
			9/21/2017	106.40	3193.42
			11/28/2017	106.44	3193.38
			2/21/2018	106.52	3193.30
			5/9/2018	106.40	3193.42
			8/7/2018	106.33	3193.49
			11/7/2018	106.33	3193.49
			3/5/2019	106.38	3193.44
			6/18/2019	106.26	3193.56
			9/10/2019	106.31	3193.51
			12/18/2019	106.24	3193.58
			3/19/2020	106.33	3193.49
			6/24/2020	106.19	3193.63
			9/24/2020	106.26	3193.56
			12/9/2020	106.17	3193.65

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-11	140 to 160	3301.64	3/17/2016	106.09	3195.55
			5/10/2016	105.90	3195.74
			8/17/2016	105.88	3195.76
			11/30/2016	105.97	3195.67
			3/14/2017	105.80	3195.84
			6/21/2017	105.73	3195.91
			9/21/2017	105.84	3195.80
			11/28/2017	105.83	3195.81
			2/21/2018	105.78	3195.86
			5/9/2018	105.64	3196.00
			8/7/2018	105.72	3195.92
			11/7/2018	105.76	3195.88
			3/5/2019	105.69	3195.95
			6/18/2019	105.61	3196.03
			9/10/2019	105.67	3195.97
			12/18/2019	105.55	3196.09
			3/19/2020	105.68	3195.96
			6/24/2020	105.95	3195.69
			9/24/2020	105.64	3196.00
			12/9/2020	105.58	3196.06

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
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Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-12	150 to 170	3301.8	3/16/2016	109.70	3192.10
			5/10/2016	109.56	3192.24
			8/17/2016	109.61	3192.19
			11/30/2016	109.59	3192.21
			3/14/2017	109.40	3192.40
			6/21/2017	109.56	3192.24
			9/21/2017	109.47	3192.33
			11/28/2017	109.49	3192.31
			2/21/2018	109.62	3192.18
			5/9/2018	109.47	3192.33
			8/7/2018	109.36	3192.44
			11/7/2018	109.39	3192.41
			3/5/2019	109.43	3192.37
			6/18/2019	109.33	3192.47
			9/10/2019	109.37	3192.43
			12/18/2019	109.31	3192.49
			3/19/2020	109.42	3192.38
			6/24/2020	109.26	3192.54
			9/24/2020	109.32	3192.48
			12/9/2020	109.22	3192.58

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-13	153 to 173	3291.72	3/16/2016	99.57	3192.15
			5/10/2016	99.44	3192.28
			8/17/2016	99.50	3192.22
			11/30/2016	99.46	3192.26
			3/14/2017	99.34	3192.38
			6/21/2017	99.37	3192.35
			9/21/2017	99.41	3192.31
			11/28/2017	99.39	3192.33
			2/21/2018	99.36	3192.36
			5/9/2018	99.36	3192.36
			8/7/2018	99.35	3192.37
			11/7/2018	99.33	3192.39
			3/5/2019	99.38	3192.34
			6/18/2019	99.29	3192.43
			9/10/2019	99.32	3192.40
			12/18/2019	99.24	3192.48
			3/19/2020	99.32	3192.40
			6/24/2020	99.23	3192.49
			9/24/2020	99.24	3192.48
			12/9/2020	99.22	3192.50

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-14	157 to 177	3294.74	3/16/2016	100.58	3194.16
			5/10/2016	100.46	3194.28
			8/17/2016	100.43	3194.31
			11/30/2016	100.04	3194.70
			3/14/2017	100.34	3194.40
			6/21/2017	100.37	3194.37
			9/21/2017	100.42	3194.32
			11/28/2017	100.44	3194.30
			2/21/2018	100.36	3194.38
			5/9/2018	100.37	3194.37
			8/7/2018	100.34	3194.40
			11/7/2018	100.47	3194.27
			3/5/2019	100.34	3194.40
			6/18/2019	100.26	3194.48
			9/10/2019	100.31	3194.43
			12/18/2019	100.22	3194.52
			3/19/2020	100.28	3194.46
			6/24/2020	100.16	3194.58
			9/24/2020	100.18	3194.56
			12/9/2020	100.22	3194.52

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-15	150 to 170	3292.75	3/16/2016	102.56	3190.19
			5/10/2016	102.42	3190.33
			8/17/2016	102.50	3190.25
			11/30/2016	102.42	3190.33
			3/14/2017	102.28	3190.47
			6/21/2017	102.33	3190.42
			9/21/2017	102.36	3190.39
			11/28/2017	102.36	3190.39
			2/21/2018	102.35	3190.40
			5/9/2018	102.33	3190.42
			8/7/2018	102.32	3190.43
			11/7/2018	102.31	3190.44
			3/5/2019	102.32	3190.43
			6/18/2019	102.25	3190.50
			9/10/2019	102.28	3190.47
			12/18/2019	102.25	3190.50
			3/19/2020	102.39	3190.36
			6/24/2020	102.13	3190.62
			9/24/2020	102.18	3190.57
			12/9/2020	102.22	3190.53

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-16	150 to 170	3307.89	3/17/2016	109.65	3198.24
			5/10/2016	109.49	3198.40
			8/16/2016	109.47	3198.42
			11/30/2016	109.46	3198.43
			3/14/2017	109.48	3198.41
			6/21/2017	109.34	3198.55
			9/21/2017	109.33	3198.56
			11/28/2017	109.40	3198.49
			2/21/2018	109.50	3198.39
			5/9/2018	109.22	3198.67
			8/7/2018	109.30	3198.59
			11/7/2018	109.37	3198.52
			3/5/2019	109.40	3198.49
			6/18/2019	109.27	3198.62
			9/10/2019	109.34	3198.55
			12/18/2019	109.30	3198.59
			3/19/2020	109.38	3198.51
			6/24/2020	109.23	3198.66
			9/24/2020	109.24	3198.65
			12/9/2020	109.29	3198.60

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Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-17	151 to 171	3306.17	3/17/2016	108.54	3197.63
			5/10/2016	108.33	3197.84
			8/16/2016	108.31	3197.86
			11/30/2016	108.28	3197.89
			3/14/2017	108.48	3197.69
			6/21/2017	108.46	3197.71
			9/21/2017	108.43	3197.74
			11/28/2017	108.54	3197.63
			2/21/2018	108.49	3197.68
			5/9/2018	108.32	3197.85
			8/7/2018	108.44	3197.73
			11/7/2018	108.56	3197.61
			3/5/2019	108.45	3197.72
			6/18/2019	108.34	3197.83
			9/10/2019	108.40	3197.77
			12/18/2019	108.36	3197.81
			3/19/2020	108.43	3197.74
			6/24/2020	108.32	3197.85
			9/24/2020	108.33	3197.84
			12/9/2020	108.43	3197.74

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Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
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Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-18	160 to 180	3303.15	3/17/2016	107.68	3195.47
			5/10/2016	107.49	3195.66
			8/16/2016	107.55	3195.60
			11/30/2016	107.47	3195.68
			3/14/2017	107.51	3195.64
			6/21/2017	107.41	3195.74
			9/21/2017	107.43	3195.72
			11/28/2017	107.49	3195.66
			2/21/2018	107.51	3195.64
			5/9/2018	107.39	3195.76
			8/7/2018	107.40	3195.75
			11/7/2018	107.44	3195.71
			3/5/2019	107.40	3195.75
			6/18/2019	107.31	3195.84
			9/10/2019	107.37	3195.78
			12/18/2019	107.25	3195.90
			3/19/2020	107.42	3195.73
			6/24/2020	107.30	3195.85
			9/24/2020	107.32	3195.83
			12/9/2020	107.23	3195.92

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Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-19	98 to 118	3302.68	3/17/2016	106.51	3196.17
			5/10/2016	106.37	3196.31
			8/16/2016	106.42	3196.26
			11/30/2016	106.42	3196.26
			3/14/2017	106.42	3196.26
			6/21/2017	106.31	3196.37
			9/21/2017	106.40	3196.28
			11/28/2017	106.40	3196.28
			2/21/2018	106.38	3196.30
			5/9/2018	106.24	3196.44
			8/7/2018	106.26	3196.42
			11/7/2018	106.32	3196.36
			3/5/2019	106.30	3196.38
			6/18/2019	106.21	3196.47
			9/10/2019	106.24	3196.44
			12/18/2019	106.16	3196.52
			3/19/2020	106.25	3196.43
			6/24/2020	106.21	3196.47
			9/24/2020	106.24	3196.44
			12/9/2020	106.08	3196.60

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Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-20	154 to 174	3303.5	3/17/2016	108.78	3194.72
			5/10/2016	108.61	3194.89
			8/16/2016	108.65	3194.85
			11/30/2016	108.62	3194.88
			3/14/2016	108.62	3194.88
			6/21/2017	108.52	3194.98
			9/21/2017	108.60	3194.90
			11/28/2017	108.59	3194.91
			2/21/2018	108.59	3194.91
			5/9/2018	108.41	3195.09
			8/7/2018	108.46	3195.04
			11/7/2018	108.52	3194.98
			3/5/2019	108.51	3194.99
			6/18/2019	108.42	3195.08
			9/10/2019	108.44	3195.06
			12/18/2019	108.38	3195.12
			3/19/2020	108.50	3195.00
			6/24/2020	108.42	3195.08
			9/24/2020	108.45	3195.05
			12/9/2020	108.55	3194.95

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Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-21	98 to 118	3301.82	3/17/2016	106.20	3195.62
			5/10/2016	106.00	3195.82
			8/16/2016	105.97	3195.85
			11/30/2016	105.92	3195.90
			3/14/2017	105.91	3195.91
			6/21/2017	105.81	3196.01
			9/21/2017	105.82	3196.00
			11/28/2017	105.94	3195.88
			2/21/2018	105.46	3196.36
			5/9/2018	105.74	3196.08
			8/7/2018	105.84	3195.98
			11/7/2018	105.81	3196.01
			3/5/2019	105.78	3196.04
			6/18/2019	105.73	3196.09
			9/10/2019	105.76	3196.06
			12/18/2019	105.76	3196.06
			3/19/2020	105.78	3196.04
			6/24/2020	105.70	3196.12
			9/24/2020	105.75	3196.07
			12/9/2020	105.60	3196.22

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Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-22	102 to 122	3306.24	3/16/2016	112.26	3193.98
			5/10/2016	112.43	3193.81
			8/16/2016	112.15	3194.09
			11/30/2016	112.12	3194.12
			3/14/2017	111.94	3194.30
			6/21/2017	112.04	3194.20
			9/21/2017	112.03	3194.21
			11/28/2017	112.04	3194.20
			2/21/2018	112.15	3194.09
			5/9/2018	111.97	3194.27
			8/7/2018	111.91	3194.33
			11/7/2018	112.05	3194.19
			3/5/2019	111.97	3194.27
			6/18/2019	111.85	3194.39
			9/10/2019	111.87	3194.37
			12/18/2019	111.81	3194.43
			3/19/2020	111.93	3194.31
			6/24/2020	111.75	3194.49
			9/24/2020	111.77	3194.47
			12/9/2020	111.70	3194.54

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Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-23	147 to 167	3306.29	3/16/2016	112.41	3193.88
			5/10/2016	112.28	3194.01
			8/17/2016	112.31	3193.98
			11/30/2016	112.29	3194.00
			3/14/2017	112.11	3194.18
			6/21/2017	112.17	3194.12
			9/21/2017	112.09	3194.20
			11/28/2017	112.15	3194.14
			2/21/2018	112.25	3194.04
			5/9/2018	112.09	3194.20
			8/7/2018	112.08	3194.21
			11/7/2018	112.09	3194.20
			3/5/2019	112.07	3194.22
			6/18/2019	111.95	3194.34
			9/10/2019	111.99	3194.30
			12/18/2019	111.94	3194.35
			3/19/2020	112.03	3194.26
			6/24/2020	111.85	3194.44
			9/24/2020	111.92	3194.37
			12/9/2020	111.85	3194.44

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Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-24	166 to 186	3305.56	3/16/2016	110.74	3194.82
			5/10/2016	110.58	3194.98
			8/16/2016	110.56	3195.00
			11/30/2016	110.64	3194.92
			3/14/2017	110.60	3194.96
			6/21/2017	110.59	3194.97
			9/21/2017	110.49	3195.07
			11/28/2017	110.65	3194.91
			2/21/2018	110.69	3194.87
			5/9/2018	110.54	3195.02
			8/7/2018	110.49	3195.07
			11/7/2018	110.51	3195.05
			3/5/2019	110.54	3195.02
			6/18/2019	110.47	3195.09
			9/10/2019	110.50	3195.06
			12/18/2019	110.64	3194.92
			3/19/2020	110.74	3194.82
			6/24/2020	110.68	3194.88
			9/24/2020	110.69	3194.87
			12/9/2020	110.63	3194.93

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-25	151 to 171	3297.59	3/16/2016	103.61	3193.98
			5/10/2016	103.49	3194.10
			8/16/2016	103.44	3194.15
			11/30/2016	103.47	3194.12
			3/14/2017	103.36	3194.23
			6/21/2017	103.43	3194.16
			9/21/2017	103.37	3194.22
			11/28/2017	103.46	3194.13
			2/21/2018	103.48	3194.11
			5/9/2018	103.37	3194.22
			8/7/2018	103.31	3194.28
			11/7/2018	103.31	3194.28
			3/5/2019	103.34	3194.25
			6/18/2019	103.25	3194.34
			9/10/2019	103.30	3194.29
			12/18/2019	103.21	3194.38
			3/19/2020	103.31	3194.28
			6/24/2020	103.17	3194.42
			9/24/2020	103.23	3194.36
			12/9/2020	103.22	3194.37
ACW-26	103 to 128	3309.27	12/18/2019	110.43	3198.84
			3/19/2020	110.45	3198.82
			6/24/2020	110.38	3198.89
			9/24/2020	110.33	3198.94
			12/9/2020	110.33	3198.94
ACW-27	154 to 174	3309.22	12/18/2019	110.39	3198.83
			3/19/2020	110.41	3198.81
			6/24/2020	110.36	3198.86
			9/24/2020	110.31	3198.91
			12/9/2020	110.32	3198.90
ACW-28	100 to 125	3306.49	12/18/2019	109.05	3197.44
			3/19/2020	109.05	3197.44
			6/24/2020	109.00	3197.49
			9/24/2020	108.92	3197.57
			12/9/2020	108.93	3197.56

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-29	153 to 173	3306.35	12/18/2019	108.88	3197.47
			3/19/2020	108.89	3197.46
			6/24/2020	108.84	3197.51
			9/24/2020	108.77	3197.58
			12/9/2020	108.81	3197.54
ACW-30S	95 to120	3300.17	11/7/2018	104.55	3195.62
			3/5/2019	104.51	3195.66
			6/18/2019	104.46	3195.71
			9/10/2019	104.49	3195.68
			12/18/2019	104.52	3195.65
			3/19/2020	104.51	3195.66
			6/24/2020	104.37	3195.80
			9/24/2020	104.44	3195.73
			12/9/2020	104.49	3195.68
ACW-30D	165 to 185	3300.15	11/7/2018	104.83	3195.32
			3/5/2019	104.81	3195.34
			6/18/2019	104.77	3195.38
			9/10/2019	104.80	3195.35
			12/18/2019	104.76	3195.39
			3/19/2020	104.80	3195.35
			6/24/2020	104.66	3195.49
			9/24/2020	104.75	3195.40
			12/9/2020	104.77	3195.38
ACW-32S	95 to120	3299.60	11/7/2018	107.12	3192.48
			3/5/2019	107.08	3192.52
			6/18/2019	106.99	3192.61
			9/10/2019	107.00	3192.60
			12/18/2019	107.04	3192.56
			3/19/2020	107.01	3192.59
			6/24/2020	106.87	3192.73
			9/24/2020	106.94	3192.66
			12/9/2020	106.88	3192.72

Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ACW-32D	150 to 170	3299.61	11/7/2018	107.13	3192.48
			3/5/2019	107.06	3192.55
			6/18/2019	106.96	3192.65
			9/10/2019	107.01	3192.60
			12/18/2019	106.97	3192.64
			3/19/2020	107.03	3192.58
			6/24/2020	106.85	3192.76
			9/24/2020	106.39	3193.22
			12/9/2020	106.85	3192.76
ENSR-01	123 to 148	3306.71	3/17/2016	108.05	3198.66
			5/10/2016	107.84	3198.87
			8/17/2016	107.81	3198.90
			11/30/2016	107.81	3198.90
			3/14/2017	107.83	3198.88
			6/21/2017	107.68	3199.03
			9/21/2017	107.78	3198.93
			11/28/2017	107.74	3198.97
			2/21/2018	107.79	3198.92
			5/9/2018	107.63	3199.08
			8/7/2018	107.64	3199.07
			11/7/2018	107.65	3199.06
			3/5/2019	107.73	3198.98
			6/18/2019	107.63	3199.08
			9/10/2019	107.67	3199.04
			12/18/2019	107.63	3199.08
			3/19/2020	107.73	3198.98
			6/24/2020	107.58	3199.13
			9/24/2020	107.56	3199.15
			12/9/2020	107.65	3199.06

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
ENSR-03	123 to 148	3305.05	3/17/2016	107.52	3197.53
			5/10/2016	107.28	3197.77
			8/16/2016	107.25	3197.80
			11/30/2016	107.27	3197.78
			3/14/2017	107.20	3197.85
			6/21/2017	107.15	3197.90
			9/21/2017	107.25	3197.80
			11/28/2017	107.25	3197.80
			2/21/2018	107.17	3197.88
			5/9/2018	107.04	3198.01
			8/7/2018	107.13	3197.92
			11/7/2018	107.20	3197.85
			3/5/2019	107.13	3197.92
			6/18/2019	107.04	3198.01
			9/10/2019	107.10	3197.95
			12/18/2019	107.00	3198.05
			3/19/2020	107.12	3197.93
			6/24/2020	106.98	3198.07
			9/24/2020	107.02	3198.03
			12/9/2020	107.09	3197.96

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
EPNG-01	120 to 160	3310.03	3/16/2016	109.46	3200.57
			5/10/2016	109.30	3200.73
			8/16/2016	109.29	3200.74
			11/30/2016	109.31	3200.72
			3/14/2017	109.21	3200.82
			6/21/2017	109.14	3200.89
			9/21/2017	109.18	3200.85
			11/28/2017	109.22	3200.81
			2/21/2018	109.19	3200.84
			5/9/2018	109.12	3200.91
			8/7/2018	109.22	3200.81
			11/7/2018	109.18	3200.85
			3/5/2019	109.16	3200.87
			6/18/2019	109.12	3200.91
			9/10/2019	109.27	3200.76
			12/18/2019	109.16	3200.87
			3/19/2020	109.24	3200.79
			6/24/2020	109.18	3200.85
			9/24/2020	109.19	3200.84
			12/9/2020	109.28	3200.75

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Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
PTP-01	110 to 130	3305.67	3/17/2016	NM	NM
			5/10/2016	NM	NM
			8/16/2016	NM	NM
			11/30/2016	NM	NM
			3/14/2017	NM	NM
			6/21/2017	107.73	3197.94
			9/21/2017	107.83	3197.84
			11/28/2017	107.84	3197.83
			2/21/2018	107.74	3197.93
			5/9/2018	107.66	3198.01
			8/7/2018	107.73	3197.94
			11/7/2018	107.77	3197.90
			3/5/2019	107.72	3197.95
			6/18/2019	107.61	3198.06
			9/10/2019	107.68	3197.99
			12/18/2019	107.59	3198.08
			3/19/2020	107.71	3197.96
			6/24/2020	107.58	3198.09
			9/24/2020	107.59	3198.08
			12/9/2020	107.72	3197.95

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
RW-01	109 to179	3302.16	3/17/2016	106.00	3196.16
			5/10/2016	105.87	3196.29
			8/16/2016	105.71	3196.45
			11/30/2016	105.51	3196.65
			3/14/2017	105.63	3196.53
			6/21/2017	105.61	3196.55
			9/21/2017	105.69	3196.47
			11/28/2017	105.63	3196.53
			2/21/2018	105.64	3196.52
			5/9/2018	105.49	3196.67
			8/7/2018	105.58	3196.58
			11/7/2018	105.80	3196.36
			3/5/2019	105.80	3196.36
			6/18/2019	105.51	3196.65
			9/10/2019	105.55	3196.61
			12/18/2019	105.42	3196.74
			3/19/2020	105.55	3196.61
			6/24/2020	105.48	3196.68
			9/24/2020	105.50	3196.66
			12/9/2020	105.50	3196.66

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
RW-02	155 to 175	3303.71	3/16/2016	109.64	3194.07
			5/10/2016	109.49	3194.22
			8/17/2016	109.52	3194.19
			11/30/2016	109.51	3194.20
			3/14/2017	109.27	3194.44
			6/21/2017	109.38	3194.33
			9/21/2017	109.34	3194.37
			11/28/2017	110.42	3193.29
			2/21/2018	109.51	3194.20
			5/9/2018	109.29	3194.42
			8/7/2018	109.29	3194.42
			11/7/2018	109.25	3194.46
			3/5/2019	109.28	3194.43
			6/18/2019	109.25	3194.46
			9/10/2019	109.27	3194.44
			12/18/2019	109.19	3194.52
			3/19/2020	109.30	3194.41
			6/24/2020	109.15	3194.56
			9/24/2020	109.15	3194.56
			12/9/2020	109.08	3194.63

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
RW-03	136.7 to 176.7	3302.65	3/17/2016	106.60	3196.05
			5/10/2016	106.40	3196.25
			8/16/2016	106.45	3196.20
			11/30/2016	106.41	3196.24
			3/14/2017	106.38	3196.27
			6/21/2017	106.29	3196.36
			9/21/2017	106.40	3196.25
			11/28/2017	106.39	3196.26
			2/21/2018	106.40	3196.25
			5/9/2018	106.20	3196.45
			8/7/2018	106.31	3196.34
			11/7/2018	106.29	3196.36
			3/5/2019	106.29	3196.36
			6/18/2019	106.20	3196.45
			9/10/2019	106.25	3196.40
			12/18/2019	106.16	3196.49
			3/19/2020	106.28	3196.37
			6/24/2020	106.20	3196.45
			9/24/2020	106.22	3196.43
			12/9/2020	106.13	3196.52

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Table 2
Potentiometric Surface Elevation
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	Screened Interval (ft bgl)	Top of Casing Elevation (ft-amsl)	Date Measured	Depth to Groundwater (ft-TOC)	Groundwater Elevation (ft-amsl)
RW-04	154 to 174	3303.26	5/10/2016	108.36	3194.90
			8/16/2016	109.00	3194.26
			11/30/2016	108.89	3194.37
			3/14/2016	108.80	3194.46
			6/21/2017	108.72	3194.54
			9/21/2017	108.75	3194.51
			11/28/2017	108.80	3194.46
			2/21/2018	108.71	3194.55
			5/9/2018	108.51	3194.75
			8/7/2018	108.56	3194.70
			11/7/2018	108.63	3194.63
			3/5/2019	108.62	3194.64
			6/18/2019	108.50	3194.76
			9/10/2019	108.51	3194.75
			12/18/2019	108.46	3194.80
			3/19/2020	108.54	3194.72
			6/24/2020	108.46	3194.80
			9/24/2020	108.49	3194.77
			12/9/2020	108.49	3194.77

Notes:
TOC : Measured from top of casing
ft-amsl : feet above mean sea level
NM : No measurement taken
ft bgl: feet below ground level

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-01		3/5/1993	---	---	---	---	14,350	8,505	4,045	---
		9/15/1993	---	---	---	---	10,360	6,016	2,915	---
		11/10/1993	---	---	---	---	11,780	7,340	3,683	---
		4/20/1994	---	---	---	---	16,520	8,430	5,400	---
		10/27/1994	---	---	---	---	14,630	8,440	3,700	---
		5/16/1995	< 0.00500	< 0.01000	< 0.00500	< 0.01500	14,000	8,200	4,100	2,600
		6/27/1995	**0.00460**	**0.00460**	< 0.00250	**0.14000**	1,400	8,400	6,700	3,200
		8/29/1995	**0.00600**	< 0.01000	< 0.00500	< 0.01500	21,000	12,000	3,300	2,400
		2/6/1996	**0.00610**	**0.00300**	**0.00190**	**0.00280**	16,000	9,700	5,200	4,300
		2/6/1996	**0.00560**	**0.00270**	**0.00300**	< 0.00750	16,170	9,440	5,770	3,900
		5/8/1996	**0.00630**	**0.00203**	< 0.00100	< 0.00300	14,620	8,190	4,130	3,070
		8/13/1996	**0.00350**	**0.00120**	< 0.00100	< 0.00200	12,000	7,400	3,500	2,400
		11/5/1996	**0.00560**	**0.00250**	< 0.00100	**0.00130**	11,000	7,200	3,700	3,000
		5/6/1997	**0.01400**	**0.01500**	< 0.00500	**0.00570**	14,800	8,800	5,200	---
		11/21/1997	**0.00610**	**0.00480**	< 0.00050	**0.00240**	20,800	12,000	7,800	3,900
	D	11/21/1997	**0.00670**	**0.00570**	< 0.00050	**0.00210**	20,700	12,000	7,500	4,000
		5/12/1998	**0.00680**	**0.01100**	**0.00440**	**0.00340**	16,000	9,600	5,200	---
		10/20/1998	**0.00700**	**0.00400**	< 0.00200 Jm	< 0.00200 Jm	20,300	12,900	6,100	3,800
		5/11/1999	---	---	---	---	16,900	8,500	5,400	---
		10/19/1999	**0.00750**	**0.00360**	< 0.00200	< 0.00400	14,800	7,800	5,500	3,100
		5/9/2000	---	---	---	---	19,300	11,300	7,000	---
		10/26/2000	< 0.00200	< 0.00200	< 0.00200	**0.00830**	15,500	9,900	5,500	2,600
		5/1/2001	---	---	---	---	14,200	7,640	5,300	---
		10/22/2001	< 0.00200	< 0.00200	< 0.00200	**0.01100**	12,400	6,580	4,400	3,000
		4/29/2002	---	---	---	---	12,400	6,730	4,800	---
		11/3/2002	< 0.00500	< 0.00500	< 0.00500	< 0.01500	6,400	4,000	1,900	1,500
		11/4/2003	**0.00220**	< 0.00200	< 0.00200	< 0.00600	5,530	1,510	2,480	958
		11/9/2004	< 0.00100	**0.00170**	< 0.00100	< 0.00200	5,780	5,140	2,570	696

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-01 (cont'd)		12/12/2005	< 0.01000	< 0.01000	< 0.01000	< 0.03000	7,650	3,500	1,770	1,240
		3/5/2007	**0.00110**	< 0.00100	< 0.00100	< 0.00100	5,860	5,340	2,780	569
		11/12/2007	**0.00120**	< 0.00100	< 0.00100	< 0.00100	5,850	4,500	2,040	563
		11/17/2008	**0.00420**	**0.00180**	< 0.00100	< 0.00100	7,600	4,150	2,010	597
		2/24/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	8,540	3,980	1,480	577
		12/7/2010	**0.00036** J	**0.00026** J	< 0.00100	< 0.00100	4,900	4,620	1,770	676
		11/10/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	5,810	3,820	1,630	632
		11/8/2012	**0.00350**	**0.00062** J	< 0.00100	< 0.00300	8,820	5,600	2,790	1,200
		1/13/2014	**0.00300**	**0.00046** J	**0.00028** J	**0.00044** J	9,900	4,560	2,980	1,450
		1/6/2015	**0.00911**	**0.00166**	**0.00053** J	**0.00085** J	11,700	5,800	4,490	1,620
		12/3/2015	**0.01370**	**0.00264** J	**0.00121** J	**0.00213** J	17,700	11,600 H	6,720	3,620
		12/28/2016	**0.00753**	**0.00112**	**0.00056** J	**0.00061** J	14,000	6,970	4,570	2,510 B
		11/28/2017	**0.11500**	**0.00316**	**0.00079** J	**0.00115** J	16,200	16,000	6,020	3,340 B
		11/7/2018	**0.11800**	< **0.00500**	< 0.005	< 0.0100	21,700	8,700 H	8,450	3,710
		12/18/2019	**0.16000**	**0.0021**	**0.00060** J	**0.00091** J	17,000	9,300	6,100 B	4,000 B
		12/9/2020	**0.26**	**0.0022**	**0.00086** J	< 0.0016	20,000	10,000	6,200	3,900
ACW-02A		5/6/1997	**0.14000**	**0.10000**	< **0.05000**	< **0.10000**	26,800	17,000	11,000	
		10/20/1997	**0.08900**	**0.10000**	**0.01300**	**0.02600**	24,400	16,000	8,600	6,000
		5/11/1998	**0.12000**	**0.21000**	**0.02000**	**0.03300**	26,000	16,000	8,200	---
		10/19/1998	**0.18000**	**0.34000**	**0.03800**	**0.07200**	25,200	20,200	7,800	6,400
		5/12/1999	---	---	---	---	24,400	12,000	7,400	---
		10/18/1999	**0.01700** PM	**0.04200** PM	**0.00810** P	**0.01400** PM	24,000	13,000	7,600	6,100
		5/8/2000	---	---	---	---	21,500	13,600	7,200	---
		10/26/2000	**0.03500**	**0.07800**	**0.01600**	**0.03200**	19,100	12,800	6,500	3,600
		5/2/2001	---	---	---	---	18,500	10,900	5,400	---
		10/22/2001	**0.03900**	**0.03400**	**0.03000**	**0.05700**	19,900	12,100	4,600	5,200
		4/30/2002	---	---	---	---	22,300	14,000	6,300	---
		11/3/2002	**0.06100**	**0.03200**	**0.03500**	**0.04700**	19,000	8,800	8,900	5,800

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Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-02A (cont'd)		11/4/2003	0.04560 P	0.01790 P	0.02480 P	0.04130 P	18,530	9,050	4,740	4,160
	D	11/4/2003	0.04460 P	0.01850 P	0.02340 P	0.03770 P	---	9,280	4,560	4,280
		11/9/2004	0.04790	0.01710	0.01500	0.02840	13,730	11,300	4,290	3,950
		12/12/2005	0.02290	0.01220 J	< 0.02000	< 0.06000	23,500	13,200	5,520	5,570
		3/5/2007	0.04400	0.01400	0.03000	0.04200	18,650	11,900	5,760	4,270
		11/12/2007	0.12000	0.00390	0.06600	0.06100	19,420	11,900	5,950	4,570
		11/17/2008	0.01600	0.00240	0.00610	0.00870	21,100	12,700	7,400	4,040
		2/24/2010	0.03500	0.01100	0.01800	0.01750	17,600	9,640	6,700	3,780
		12/7/2010	0.03000	0.01400	0.01800	0.02130	27,500	10,600	6,280	3,660
		11/9/2011	0.01680	0.00110	0.00320	0.00350	15,300	9,420	4,560	3,070
		11/8/2012	0.00580	0.00060 J	0.00230	0.00200 J	11,400	6,920	4,160	2,740
		1/10/2014	0.00376	0.00074 J	0.00114	0.00116 J	12,600	7,380	3,390	2,890
		1/7/2015	0.00318	0.00100 J	0.00128	0.00097 J	11,800	5,680	3,660	2,540
		12/3/2015	0.00537	0.00308	0.00259	0.00311	10,600	6,750 H	3,140	2,430
		12/1/2016	0.00614 J	< 0.00396	< 0.00424	< 0.00732	10,100	6,390	2,560	2,260 B
		11/28/2017	0.00481	0.00191	0.00202	0.00212	11,100	7,030	3,210	2,590 B
		11/7/2018	0.00445	0.00119	< 0.00100	< 0.00200	16,000	7,290 H	3,660	3,050
	D	11/7/2018	0.00563	0.00157	0.00107	< 0.00200	16,500	6,620 H	3,540	2,920
		12/18/2019	0.00550	0.00160 J	0.00170 J	< 0.01000	12,000	6,100	740 B	2,600 B
		12/9/2020	0.0064	0.0017	0.0016	< 0.0016	13,000	7,000	3,300	2,700
ACW-03		5/6/1997	0.35000	0.02200	0.11000	0.04300	18,500	11,000	6,900	---
		10/20/1997	0.16000	0.00820	0.06900	0.03200	23,000	13,000	7,800	---
		5/11/1998	0.13000	0.02100	0.04100	0.01900	24,000	15,000	8,500	---
		10/19/1998	---	---	---	---	20,800	12,400	7,700	---
		5/12/1999	---	---	---	---	19,600	10,100	6,600	---
		10/19/1999	---	---	---	---	18,900	9,120	6,900	---
		5/8/2000	---	---	---	---	19,400	11,900	7,600	---
		10/26/2000	---	---	---	---	17,500	11,900	7,400	---

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Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-03 (cont'd)		5/1/2001	---	---	---	---	19,200	9,900	9,500	---
		10/23/2001	---	---	---	---	18,800	10,600	7,100	---
		4/30/2002	---	---	---	---	18,500	10,600	6,000	---
		11/3/2002	0.03700	< 0.01000	0.02800	< 0.03000	13,000	13,000	4,700	4,200
		11/3/2003	0.00770	0.00400	0.00830	0.00290 J	11,080	8,310	4,070	2,830
		11/9/2004	0.01370	0.00540	0.00700	0.00660	12,290	8,580	4,980	2,800
		5/23/2005	0.00550	0.00110 J	0.00360	0.00290 J	16,570	11,567	5,600	4,331
		12/14/2005	0.10300	0.03420	0.02370	0.01930	21,100	12,600	6,500	4,720
		3/5/2007	0.06100	0.03400	0.01700	0.01560	18,800	11,600	6,970	3,840
		11/12/2007	0.03400	0.01700	0.00350	0.00640	18,620	11,200	6,210	3,970
		11/18/2008	0.04100	0.03200	0.01600	0.01680	16,980	10,500	6,150	3,400
		2/24/2010	0.04600	0.02500	0.02100	0.02630	1,000	10,600	5,940	4,140
		12/7/2010	0.10000	0.13000	0.02000	0.03230	2,750	13,000	7,950	4,250
ACW-04		5/6/1997	0.02900	0.01200	< 0.00500	< 0.01000	48,500	25,000	21,000	---
		10/20/1997	0.17000	0.15000	< 0.00500	0.11000	172,000	94,000	58,000	33,000
		5/12/1998	0.19000	0.17000	0.06000	0.10000	160,000	99,000	74,000	---
		10/19/1998	0.19000	0.14000	0.04900	0.09000	121,000	83,100	56,000	37,000
		5/12/1999	---	---	---	---	131,000	84,800	45,000	---
		10/19/1999	0.24000	0.16000	0.04400	0.08100	95,000	46,300	44,000	42,000
		5/8/2000	---	---	---	---	106,000	72,300	47,000	---
		10/26/2000	0.06300	0.01700	0.04100	0.19000	25,600	16,300	10,000	3,600
		5/2/2001	---	---	---	---	29,600	17,400	12,000	---
		10/22/2001	0.01200	0.00300	0.03200	0.10000	35,300	21,400	13,000	7,300
		4/30/2002	---	---	---	---	35,600	24,500	15,000	---
		11/3/2002	0.08400	0.01700	0.02700	0.04500	33,000	24,000	11,000	8,400
		11/4/2003	0.04480	0.00550	0.01500	0.02650	22,400	20,900	14,200	7,300
		11/9/2004	0.18900 R	0.04290	0.06980	0.10100	54,400	19,700	10,800	22,000
		12/12/2005	0.09660	0.05570	0.07610	0.13600	25,100	13,900	5,520	5,490

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-04 (cont'd)		3/5/2007	0.11000	0.00640	0.06100	0.09700	21,100	14,200	8,600	5,030
	D	3/5/2007	0.08800	0.00640	0.04700	0.07400		13,200	7,730	4,750
		11/12/2007	0.07100	0.01200	0.03400	0.06000	30,700	15,000	8,670	5,420
		11/17/2008	0.01900	0.00250	0.01200	0.02110	25,200	12,200	8,120	3,870
		2/24/2010	0.01800	0.00240	0.00670	0.01130	69,700	16,500	9,730	6,160
		12/7/2010	0.08600	0.00790	0.02400	0.04000	27,000	36,400	28,000	12,500
		11/10/2011	0.01410	0.00170	0.00770	0.01310	35,000	21,300	14,200	7,710
		11/8/2012	0.19100	0.01670	0.06150	0.09780	98,500	84,800	66,400	29,800
		1/10/2014	0.09910	0.00276	0.03480	0.05400	123,000	88,600	58,000	31,400
		1/7/2015	0.02900	0.00155	0.01660	0.01040	136,000	83,300	63,000	36,200
		12/3/2015	0.03240	0.00114	0.00550	0.00878	115,000	111,000	56,200	39,700
		12/1/2016	0.02570	0.00096 J	0.00495	0.00810	131,000	124,000	64,800	36,900 B
		11/28/2017	0.02680	0.00090 J	0.00395	0.00600	32,800	138,000	67,000	36,400 B
		11/7/2018	0.02360	< 0.00100	0.00369	0.00538	173,000	92,800 H	69,600	28,900
		12/18/2019	0.03000	0.00069 J	0.00360	0.00520	130,000	77,000	72,000 B	27,000 B
		12/9/2020	0.028	0.00070 J	0.0037	0.0056 J	160,000	110,000 J	58,000	38,000
ACW-05		3/10/1993	---	---	---	---	10,400	6,110	2,544	---
		6/17/1993	---	---	---	---	4,480	323	1,228	---
		9/16/1993	---	---	---	---	4,140	3,064	650	---
		11/9/1993	---	---	---	---	4,390	3,202	720	---
		4/21/1994	---	---	---	---	4,131	3,300	800	---
		10/28/1994	---	---	---	---	4,500	3,112	550	---
		1/31/1995	---	---	---	---	4,050	2,848	499	---
		5/16/1995	< 0.00500	< 0.01000	< 0.00500	< 0.01500	3,900	2,800	530	540
		6/27/1995	< 0.00250	< 0.00250	< 0.00250	< 0.00500	3,800	2,800	460	530
		8/30/1995	< 0.00500	< 0.01000	< 0.00500	< 0.01500	3,900	2,700	510	550
		2/6/1996	< 0.00100	< 0.00100	< 0.00100	< 0.00200	3,800	2,200	510	580
		2/6/1996	< 0.00250	< 0.00250	< 0.00250	< 0.00750	3,090	2,745	506	580

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-05 (cont'd)		5/8/1996	< 0.00100	< 0.00100	< 0.00100	< 0.00300	3,650	2,460	519	506
		8/13/1996	< 0.00100	**0.00120**	< 0.00100	< 0.00200	3,400	2,500	500	520
		11/6/1996	**0.00110**	**0.00140**	**0.00120**	< 0.00200	3,300	2,300	500	520
		5/7/1997	**0.00084**	**0.00120**	**0.00093**	< 0.00100	3,020	2,000	430	---
		10/22/1997	**0.00090**	**0.00160**	**0.00080**	**0.00190**	3,160	2,000	470	480
		5/13/1998	**0.00079**	**0.00150**	* **0.00077**	* **0.01200**	3,100	2,800	570	---
		10/21/1998	---	---	---	---	2,930	1,910	440	---
		5/13/1999	---	---	---	---	3,190	1,960	450	---
		10/21/1999	< 0.00200	**0.00270**	< 0.00200	< 0.00400	3,250	1,890	1,000	540
		5/10/2000	---	---	---	---	3,180	1,960	750	---
		11/2/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	2,650	1,920	860	450
		5/6/2001	---	---	---	---	3,030	1,920	540	---
		10/24/2001	---	---	---	---	3,120	1,860	590	---
		4/30/2002	---	---	---	---	3,110	1,900	570	---
		11/6/2002	< 0.00100	< 0.00100	< 0.00100	< 0.00300	3,000	2,200	560	490
		11/5/2003	**0.00120** J	**0.00110** J	**0.00130** J	< 0.00600	3,000	1,040	613	421
		11/12/2004	**0.00042** J	< 0.00100	**0.00051** J	< 0.00200	3,450	2,540	708	411
		12/13/2005	< 0.00200	< 0.00200	**0.00110** J	< 0.00600	3,820	2,640	771	394
	D	12/13/2005	< 0.00200	< 0.00200	**0.00120** J	< 0.00600	---	2,510	675	388
		3/7/2007	< 0.00100	< 0.00100	< 0.00100	**0.00120**	4,170	3,440	978	376
		11/14/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	4,260	3,240	1,070	422
		11/18/2008	< 0.00100	< 0.00100	**0.00100**	< 0.00100	4,930	3,530	1,340	432
		2/18/2010	**0.00000**	---	---	---	5,430	3,120	1,070	381
		12/7/2010	**0.00014** J	< 0.00100	< 0.00100	< 0.00100	5,632	6,200	1,400	542
		11/9/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	4,860	3,400	1,070	399
		11/7/2012	**0.00100**	< 0.00100	< 0.00100	< 0.00300	6,360	4,400	1,710	741
		1/8/2014	**0.00180**	< 0.00030	< 0.00020	**0.00029** J	7,320	4,730	2,080	894
		12/30/2014	**0.00076** J	< 0.00030	< 0.00020	< 0.00023	6,190	4,470	1,930	741

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
ACW-05 (cont'd)		12/1/2015	**0.00287**	**0.00171**	**0.00021** J	< 0.00037	7,340	**4,890**	**2,270**	1,130
		12/2/2016	**0.00133**	< 0.00020	< 0.00021	< 0.00037	6,250	**4,220**	**2,240**	760 B
		11/28/2017	**0.00470**	**0.00030** J	**0.00028** J	< 0.00037 U	1,810	**5,360**	**2,660**	1,260 B
		11/7/2018	**0.00508**	< 0.00100	< 0.00100	< 0.00200	10,500	**5,260** H	**2,480**	1,360
		12/18/2019	**0.00590**	**0.00073** J	**0.00032** J	**0.00044** J	7,900	**4,800**	**660** B	1,200 B
		12/9/2020	**0.0098**	**0.00150**	**0.00063** J	< 0.0016	9,600	**6,200**	**2,500**	1,300
ACW-06		6/18/1993	---	---	---	---	8,220	**5,027**	**2,108**	---
		9/16/1993	---	---	---	---	11,130	**6,656**	**2,737**	---
		11/8/1993	---	---	---	---	8,540	**5,646**	**2,154**	---
		4/21/1994	---	---	---	---	11,080	**6,930**	**3,600**	---
		10/28/1994	---	---	---	---	11,988	**6,910**	**2,100**	---
		1/31/1995	---	---	---	---	11,530	**6,755**	**2,873**	---
		5/16/1995	< 0.00500	< 0.01000	< 0.00500	< 0.01500	10,000	**6,400**	**2,800**	2,200
		6/27/1995	**0.01400**	< 0.00250	< 0.00250	< 0.00500	10,000	**8,600**	**3,500**	3,000
		8/29/1995	**0.00700**	< 0.01000	< 0.00500	< 0.01500	12,000	**7,100**	**3,000**	2,500
		2/6/1996	**0.00660**	**0.00320**	< 0.00100	< 0.00200	11,000	**6,600**	**2,600**	2,700
		2/6/1996	< 0.00250	< 0.00250	< 0.00250	< 0.00750	10,320	**5,630**	**3,180**	2,400
		5/8/1996	**0.00408**	**0.00158**	< 0.00100	< 0.00300	10,620	**6,460**	**2,880**	2,380
		8/14/1996	**0.00420**	**0.00260**	< 0.00200	< 0.00200	11,000	**7,100**	**2,900**	2,900
		11/6/1996	**0.00450**	**0.00150**	< 0.00100	< 0.00200	12,000	**7,700**	**3,400**	2,800
		11/6/1996	**0.00460**	**0.00150**	< 0.00100	< 0.00200	12,000	**7,700**	**3,600**	2,400
		5/8/1997	**0.00820**	**0.00280**	**0.00260**	**0.00270**	8,450	**5,500**	**2,300**	---
		10/22/1997	**0.01000**	**0.00380**	**0.00140**	**0.00120**	10,200	**6,500**	**2,900**	2,200
	D	10/22/1997	**0.00950**	**0.00310**	**0.00120**	**0.00120**	10,700	**6,200**	**2,900**	2,200
		5/13/1998	**0.01500**	**0.01200**	< 0.00050	**0.00380**	12,000	**10,000**	**3,300**	---
		10/21/1998	**0.01100**	**0.00600**	**0.00300**	**0.00300**	11,600	**6,530**	**3,000**	2,640
		5/13/1999	---	---	---	---	11,200	**6,620**	**2,900**	---
		10/21/1999	< **0.02000**	< 0.02000	< 0.02000	< 0.04000	11,500	**6,170**	**2,800**	2,900

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
ACW-06 (cont'd)		5/10/2000	---	---	---	---	10,300	6,290	3,600	---
		11/2/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	8,520	4,350	3,100	710
		5/6/2001	---	---	---	---	9,020	5,240	2,600	---
		10/24/2001	**0.00560**	< **0.00200**	< **0.00200**	**0.01800**	8,350	4,730	2,400	1,900
		4/29/2002	---	---	---	---	8,910	4,800	2,400	---
		11/5/2002	**0.01800**	< 0.01000	< 0.01000	< 0.03000	7,300	4,400	1,800	2,100
		11/5/2003	**0.00890**	**0.00290**	**0.00220**	**0.00300** J	6,960	2,180	1,490	1,440
		11/12/2004	< 0.01000	< 0.01000	< 0.01000	< 0.02000	5,970	3,430	1,060	1,190
	D	11/12/2004	< 0.01000	< 0.01000	< 0.01000	< 0.02000	---	3,490	1,230	1,260
		12/13/2005	< **0.02000**	< 0.02000	< 0.02000	< 0.06000	5,910	3,340	1,160	1,420
		3/7/2007	**0.00700**	< 0.00100	**0.00150**	**0.00200**	4,860	3,160	1,120	1,140
		11/13/2007	**0.00760**	< 0.00100	**0.00210**	**0.00220**	4,530	3,060	1,080	1,130
		11/18/2008	**0.00450**	< 0.00100	**0.00140**	**0.00140**	5,300	2,950	1,380	1,070
		2/18/2010	**0.00410**	< 0.00100	< **0.00100**	< 0.00100	4,880	2,560	1,090	933
		12/6/2010	**0.00370**	**0.00059** J	**0.00033** J	< 0.00100	4,863	2,780	1,500	1,100
		11/9/2011	**0.00220**	**0.00040** J	**0.00032** J	< 0.00300	4,190	2,490	864	801
		11/7/2012	**0.00076** J	< 0.00100	< 0.00100	< 0.00300	4,920	2,860	1,100	1,080
		1/9/2014	**0.00059** J	< 0.00030	< 0.00020	< 0.00023	5,060	2,820	1,130	1,090
		12/30/2014	< 0.00030	< 0.00030	< 0.00020	< 0.00023	3,730	563	1,130	837
		12/1/2015	**0.00019** J	< 0.00020	< 0.00021	< 0.00037	4,930	2,960 H	1,370	1,020
		12/2/2016	**0.00019** J	< 0.00020	< 0.00021	< 0.00037	4,270	2,470	1,000	923 B
		11/28/2017	**0.00032** J	< 0.00020	< 0.00021	< 0.00037	5,760	3,460	2,140	1,230
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	7,680	792 H	2,280	1,340
		12/18/2019	**0.00025** J	< 0.00100	< 0.00100	< 0.00200	6,200	3,000 H	1,200 B	1,400 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	6,800	3,500	1,600	1,300
ACW-07		5/7/1997	**0.00730**	**0.00250**	**0.00310**	**0.00170**	13,200	8,100	3,600	---
		10/22/1997	**0.00640**	**0.00340**	**0.00300**	**0.00300**	13,800	7,500	4,400	2,500
		5/13/1998	**0.00700**	**0.00320**	**0.00210**	* **0.00170**	14,000	11,000	4,300	---

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-07 (cont'd)		10/21/1998	**0.00800**	**0.00300**	* **0.00200**	< 0.00200	14,000	8,290	4,400	3,100
		5/12/1999	---	---	---	---	14,300	7,420	4,900	---
		10/21/1999	**0.00720**	**0.00530**	**0.00240**	< 0.00400	14,700	8,010	4,800	3,300
		5/10/2000	---	---	---	---	14,900	8,900	7,100	---
		11/2/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	12,500	8,400	5,100	710
		5/6/2001	---	---	---	---	16,400	8,980	6,800	---
	D	5/6/2001	---	---	---	---	16,300	9,640	6,500	---
		10/24/2001	**0.00740**	< **0.00200**	< 0.00200	**0.00240**	17,400	9,180	8,500	3,600
		4/30/2002	---	---	---	---	17,400	9,120	6,400	---
		11/5/2002	0.01200	**0.00110**	**0.00240**	< 0.00300	14,000	8,900	5,200	3,600
		11/5/2003	0.01930	**0.00130** J	**0.00470**	**0.00240** J	13,750	2,050	5,650	3,180
		11/12/2004	0.01400	**0.00054** J	**0.00320**	**0.00130**	14,290	10,400	5,610	3,140
		5/24/2005	0.01780	< 0.00200	**0.00370**	**0.00310** J	16,460	11,667	5,515	3,707
		12/13/2005	0.01640	< 0.01000	**0.00510** J	< 0.03000	16,690	9,900	4,940	3,600
		5/9/2006	0.01810	< 0.00200	**0.00470**	< 0.00600	16,220	5,300	6,030	2,720
		8/23/2006	0.01460	< 0.00200	**0.00430**	< 0.00600	16,020	< 9,940 R H	5,890	3,170
		3/7/2007	0.01700	< 0.00100	**0.00610**	**0.00150**	15,580	9,980	5,810	3,450
		11/13/2007	0.02100	< 0.00100	**0.00700**	**0.00130**	15,080	9,620	5,660	3,410
		11/18/2008	0.01600	< 0.00100	**0.00790**	**0.00100**	15,390	9,380	5,820	3,180
		2/19/2010	**0.00470**	< 0.00100	**0.00760**	**0.00110**	1,570	7,720	5,090	2,350
		12/6/2010	0.01500	**0.01100**	**0.00028** J	< 0.00100	1,632	9,610	6,470	3,230
		12/6/2010	0.01500	**0.01100**	**0.00029** J	< 0.00100	---	10,300	7,190	3,210
		11/7/2012	0.03630	< 0.00100	**0.01420**	< 0.00300	13,900	8,580	4,990	2,070
		11/7/2012	0.03630	< 0.00100	**0.01420**	< 0.00300	13,900	8,580	4,990	2,070
		1/9/2014	0.03130	< 0.00030	**0.00574**	**0.00030** J	14,800	8,490	4,470	3,220
		1/9/2015	< 0.00030	< 0.00030	**0.00728**	**0.00053** J	10,000	4,940	3,420	2,380
		12/1/2015	**0.00549**	**0.00081** J	**0.01560**	**0.00129** J	10,700	6,430 H	3,490	2,390
		12/2/2016	< 0.00018	< 0.00020	**0.01240**	< 0.00037	10,500	6,140	3,290	2,160

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
ACW-07 (cont'd)		11/28/2017	< 0.00018	< 0.00020	**0.00036** J	< 0.00037	8,940	**5,940**	**2,810**	1,840
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	13,100	**5,820** H	**7,760**	2,250
		12/18/2019	< 0.00100	< 0.00100	**0.00300**	< 0.00200	10,000	**5,200**	**760** B	2,300 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	9,800	**5,600**	**2,500**	1,900
ACW-08		5/6/1997	**0.09900**	**0.01000**	**0.00410**	**0.00390**	89,200	**50,000**	**29,000**	---
		11/21/1997	**0.03600**	**0.00390**	**0.00200**	**0.01400**	49,200	**29,000**	**17,000**	9,300
		5/12/1998	**0.03700**	**0.00450**	**0.00290**	**0.00160**	48,000	**28,000**	**34,000**	---
		10/20/1998	**0.14000**	**0.01300**	**0.00600**	**0.00600**	44,200	**28,700**	**24,000**	11,000
		5/11/1999	---	---	---	---	52,500	**29,800**	**21,000**	---
		10/19/1999	**0.03200**	**0.00620**	**0.00370**	< **0.00400**	36,400	**17,700**	**15,000**	12,000
		5/9/2000	---	---	---	---	62,900	**41,800**	**32,000**	---
		10/26/2000	**0.01500**	< 0.00200	**0.00210**	**0.01000**	36,300	**26,000**	**17,000**	3,600
		5/1/2001	---	---	---	---	51,300	**28,200**	**25,000**	---
		10/23/2001	**0.04100**	**0.00500**	**0.00310**	< 0.00200	33,400	**20,000**	**11,000**	11,000
		4/29/2002	---	---	---	---	69,400	**53,400**	**30,000**	---
		11/4/2002	**0.01000**	**0.00150**	**0.00120**	< 0.00300	11,000	**6,200**	**3,900**	3,000
		11/3/2003	**0.00700**	< 0.00200	< 0.00200	< 0.00600	12,330	**8,670**	**5,350**	2,850
		11/9/2004	**0.02530**	**0.00210**	**0.00160**	**0.00120** J	16,200	**10,100**	**6,280**	2,420
		5/23/2005	**0.08000**	**0.01300**	< 0.00500	< 0.00500	61,480	---	---	---
		5/23/2005	**0.08190**	**0.01300**	**0.00400**	**0.00600**	61,480	**41,700**	**22,100**	14,600
		12/14/2005	**0.09840**	**0.01110**	**0.01940**	**0.00820**	50,100	**29,000**	**14,200**	12,400
		3/6/2007	**0.10000**	**0.11000**	**0.87000**	**0.10200**	32,800	**19,400**	**11,300**	7,080
		11/12/2007	**0.08600**	**0.03600**	**0.20000**	**0.06500**	34,500	**21,700**	**12,700**	7,610
	D	11/12/2007	**0.08500**	**0.03600**	**0.20000**	**0.06300**	---	**22,000**	**12,700**	7,580
		11/18/2008	**0.06700**	**0.02800**	**0.29000**	**0.06500**	32,700	**21,100**	**16,300**	6,510
		2/24/2010	**0.06600**	**0.02600**	**0.18000**	**0.05470**	24,700	**28,600**	**17,400**	9,890
		12/7/2010	**0.08200**	**0.03700**	**0.53000**	**0.11700**	28,000	**20,500**	**14,400**	7,850
		11/10/2011	**0.05520**	**0.01540**	**0.23900**	**0.04320**	47,300	**30,700**	**17,100**	9,300

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Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-09		6/17/1993	---	---	---	---	5,900	4,435	2,288	---
		9/14/1993	---	---	---	---	3,100	2,119	915	---
		11/9/1993	---	---	---	---	3,670	2,300	1,184	---
		4/22/1994	---	---	---	---	3,900	2,508	1,150	---
		12/1/1994	---	---	---	---	5,450	3,510	1,650	---
		1/31/1995	---	---	---	---	7,110	4,240	2,083	---
		5/17/1995	< 0.00500	**0.02200**	< 0.00500	< 0.01500	11,000	6,800	5,600	910
		6/28/1995	< 0.00250	< 0.00250	< 0.00250	< 0.00500	9,100	6,200	3,500	1,000
		8/30/1995	< 0.00500	< 0.01000	< 0.00500	< 0.01500	7,150	4,500	2,500	880
		2/7/1996	**0.00180**	< 0.00100	< 0.00100	< 0.00200	7,500	5,400	2,400	810
		2/7/1996	< 0.00250	< 0.00250	< 0.00250	< 0.00750	7,450	4,620	2,300	810
		5/8/1996	< 0.00100	< 0.00100	< 0.00100	< 0.00300	7,530	4,210	2,210	687
		8/14/1996	**0.00140**	**0.00160**	< 0.00100	< 0.00200	4,400	3,600	1,200	730
		11/7/1996	**0.00230**	**0.00220**	< 0.00100	< 0.00200	4,200	3,100	1,200	510
		2/19/1997	**0.00130**	**0.00400**	**0.01000**	**0.00420**	4,110	2,500	1,260	---
		5/8/1997	**0.00260**	**0.00260**	**0.00140**	**0.00170**	2,800	2,100	830	---
		10/23/1997	< 0.00050	< 0.00050	< 0.00050	< 0.00100	3,380	1,600	880	320
		5/13/1998	< 0.00050	< 0.00050	< 0.00050	< 0.00100	5,100	4,500	1,600	---
		10/21/1998	**0.00600**	< 0.00200	< 0.00200	< 0.00200	13,200	8,980	4,100	1,400
		5/13/1999	---	---	---	---	11,100	6,400	3,400	---
		10/22/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00200	8,580	5,950	2,900	990
		5/12/2000	---	---	---	---	7,830	4,810	2,500	---
	D	5/12/2000	---	---	---	---	7,960	4,930	3,100	---
		11/3/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	7,630	5,860	3,000	670
	D	11/3/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	7,620	11,200	2,900	630
		5/6/2001	---	---	---	---	8,300	4,640	2,800	---
		10/25/2001	< 0.00200	< 0.00200	< 0.00200	**0.00200**	7,820	4,390	4,000	1,200
	D	10/25/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00600	7,700	4,400	3,700	1,300

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
ACW-09 (cont'd)		5/1/2002	---	---	---	---	8,160	3,800	2,900	---
	D	5/1/2002	---	---	---	---	7,070	3,760	2,500	---
		11/6/2002	**0.00110**	< 0.00100	< 0.00100	< 0.00300	7,800	3,700	1,800	1,400
		11/6/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	5,280	3,830	1,820	1,430
		11/10/2004	**0.00082** J	< 0.00100	< 0.00100	< 0.00200	8,540	4,680	2,150	1,220
		12/14/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	5,970	3,100	1,350	941
		3/7/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	6,060	4,420	2,210	935
		11/15/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	5,900	2,870	1,290	796
		11/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	5,540	2,990	1,480	751
		2/24/2010	**0.00100**	< 0.00100	< 0.00100	< 0.00100	14,300	8,340	4,190	2,800
		12/9/2010	**0.00017** J	**0.00029** J	< 0.00100	< 0.00100	15,730	48,000	3,050	1,710
		11/9/2011	**0.00032** J	< 0.00100	< 0.00100	< 0.00300	14,600	8,880	4,110	2,660
		11/7/2012	**0.00750**	< 0.00100	< 0.00100	< 0.00300	16,100	11,200	5,480	3,120
		1/13/2014	**0.00386**	< 0.00030	< 0.00020	< 0.00023	18,600	8,480	5,960	3,300
		1/5/2015	< 0.00030	< 0.00030	< 0.00020	< 0.00023	18,500	10,300	6,310	3,040
		12/1/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	21,400	15,900 H	9,130 F1	4,130
		12/2/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	20,200	13,000	7,270	3,820 B
		11/28/2017	< 0.00018	< 0.00020	< 0.00021	< 0.00037	26,000	20,000	10,600	3,090 B
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	34,000	22,700 H	9,940	3,460
		12/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	27,000	24,000	12,000 B	3,300 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	30,000	26,000	49,000	3,200
ACW-10		6/18/1993	---	---	---	---	1,061	701	1,027	---
		9/14/1993	---	---	---	---	1,349	1,190	421	---
		11/9/1993	---	---	---	---	1,800	1,238	420	---
		4/22/1994	---	---	---	---	2,440	1,638	700	---
		10/28/1994	---	---	---	---	2,592	1,694	600	---
		2/1/1995	---	---	---	---	2,660	1,426	619	---
		5/17/1995	---	---	---	---	3,900	2,300	1,600	170

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Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-10 (cont'd)		6/28/1995	< 0.00250	< 0.00250	< 0.00250	< 0.00500	3,100	2,300	1,900	160
		8/30/1995	< 0.00500	< 0.01000	< 0.00500	< 0.01500	3,100	2,200	790	150
		2/7/1996	**0.00390**	< 0.00100	< 0.00100	< 0.00200	3,200	2,300	850	190
		2/7/1996	**0.00430**	< 0.00250	< 0.00250	< 0.00750	3,100	2,100	829	190
		5/8/1996	**0.00122**	< 0.00100	< 0.00100	< 0.00300	2,322	1,290	603	127
		8/14/1996	< 0.00100	< 0.00100	< 0.00100	< 0.00200	2,400	1,900	560	140
		11/7/1996	**0.00120**	**0.00150**	< 0.00100	< 0.00200	250	1,800	610	150
		5/8/1997	**0.00130**	**0.00100**	< 0.00050	< 0.00100	1,880	1,500	480	---
		10/23/1997	**0.00114**	**0.00117**	< 0.00050	**0.00058**	2,870	1,500	670	140
		5/14/1998	---	---	---	---	2,400	1,200	540	---
		10/22/1998	< 0.00200	< 0.00200	< 0.00200	< 0.00600	2,900	1,960	800	180
		5/13/1999	---	---	---	---	2,810	1,660	730	---
		10/22/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00600	2,470	1,720	660	170
		5/11/2000	---	---	---	---	3,620	2,430	1,400	---
		11/6/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	3,100	2,840	980	330
		5/6/2001	---	---	---	---	3,660	2,360	1,000	---
		10/25/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00600	3,350	2,270	930	180
		5/1/2002	---	---	---	---	3,440	1,970	1,000	---
		11/8/2002	< 0.00100	< 0.00100	< 0.00100	< 0.00300	2,600	2,000	740	270
		11/6/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	2,580	2,160	795	182
		11/11/2004	**0.00051** J	< 0.00100	< 0.00100	< 0.00200	2,670	1,990	720	176
		12/14/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	3,000	1,640	638	162
		3/8/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	2,860	2,240	793	202
		11/14/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	2,810	2,070	802	187
		11/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	2,890	2,090	767	175
		2/19/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	5,780	2,360	1,020	180
	D	2/19/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	2,380	1,030	176
		12/8/2010	**0.00089** J	< 0.00100	< 0.00100	< 0.00100	6,517	5,400	1,200	264

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
ACW-10 (cont'd)		11/9/2011	**0.00039** J	< 0.00100	< 0.00100	< 0.00300	4,700	**3,250**	**1,270**	215
		11/6/2012	**0.00180**	< 0.00100	< 0.00100	< 0.00300	4,760	**3,370**	**1,490**	331
		1/10/2014	**0.00298**	< 0.00030	< 0.00020	< 0.00023	6,800	**4,290**	**2,020**	490
		1/5/2015	< 0.00030	< 0.00030	< 0.00020	< 0.00023	4,020	**2,770**	**1,610**	268
		12/1/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	5,050	**4,200** H	**1,730**	294
		12/1/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	5,350	**4,260**	**1,760**	293
		11/28/2017	**0.00025** J	< 0.00020	< 0.00021	< 0.00020	4,640	**2,320**	**2,350**	303 B
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	8,690	**4,640** H	**3,300**	374
		12/18/2019	**0.00290**	< 0.00100	< 0.00100	< 0.00200	7,600	**6,400**	**1,800** B F1	410 B
		12/9/2020	**0.0025**	< 0.00041	< 0.00050	< 0.0016	8,500	**7,100**	**2,500**	390
ACW-11		6/19/1993	---	---	---	---	25,000	**18,670**	**9,737**	---
		9/15/1993	---	---	---	---	10,570	**6,820**	**3,437**	---
		11/9/1993	---	---	---	---	10,160	**6,592**	**3,620**	---
		4/21/1994	---	---	---	---	16,290	**9,520**	**6,400**	---
		10/27/1994	---	---	---	---	20,060	**13,280**	**6,200**	---
		10/27/1994	---	---	---	---	20,550	**12,900**	**6,600**	---
		2/1/1995	---	---	---	---	32,200	**19,880**	**11,582**	---
		5/17/1995	< 0.00500	< 0.01000	< 0.00500	< 0.01500	12,000	**7,200**	**4,400**	1,200
		6/27/1995	**0.00510**	< 0.00250	< 0.00250	< 0.00500	11,000	**7,000**	**6,500**	980
		8/29/1995	**0.00800**	< 0.01000	< 0.00500	< 0.01500	10,000	**6,000**	**3,400**	880
		2/7/1996	**0.00690**	< 0.00100	< 0.00100	< 0.00200	11,000	**7,400**	**3,400**	1,500
		2/7/1996	**0.00760**	< 0.00250	< 0.00250	< 0.00750	11,030	**6,740**	**3,770**	1,400
		5/8/1996	**0.00676**	< 0.00100	< 0.00100	< 0.00300	9,840	**5,080**	**3,120**	1,160
		8/13/1996	**0.00790**	**0.00220**	< 0.00100	< 0.00200	12,000	**10,000**	**4,200**	1,700
		11/5/1996	**0.03200**	**0.00170**	< 0.00100	**0.00120**	29	**25,000**	**13,000**	5,100
		5/6/1997	**0.02100**	**0.00530**	**0.00310**	**0.00350**	10,200	**6,700**	**3,600**	---
		11/21/1997	**0.02800**	**0.00310**	< **0.00050**	**0.00280**	27,900	**16,000**	**9,800**	2,700
		5/12/1998	**0.07000**	**0.00820**	**0.00130**	**0.00430**	36,000	**22,000**	**13,000**	---

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Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-11 (cont'd)		10/20/1998	0.05100	< 0.00200	< 0.00200	< 0.00200	42,500	29,600	17,000	5,100
		5/12/1999	---	---	---	---	19,800	11,100	7,200	---
		10/20/1999	0.01400	**0.00450**	< 0.00200	< 0.00400	19,300	13,600	7,800	2,300
		5/9/2000	---	---	---	---	31,500	21,000	18,000	---
		11/1/2000	0.01600	< 0.00200	< 0.00200	< 0.00400	25,700	21,900	10,000	4,440
		5/1/2001	---	---	---	---	32,800	20,000	15,000	---
		10/23/2001	0.05900	< 0.00200	< 0.00200	< 0.00200	47,800	32,900	17,000	9,500
		4/29/2002	---	---	---	---	34,200	25,500	15,000	---
		11/6/2002	0.01300	< 0.00100	< 0.00100	< 0.00300	11,000	9,700	4,600	3,000
		11/4/2003	**0.00270**	< 0.00200	< 0.00200	< 0.00600	7,950	3,470	4,520	1,740
		11/10/2004	0.01930	< 0.00100	**0.00053** J	< 0.00200	21,200	18,300	7,950	2,270
		5/23/2005	0.02220	< 0.00200	< 0.00200	< 0.00600	22,200	17,700	8,339	4,022
		12/13/2005	0.01870	< 0.00200	< 0.00200	< 0.00600	27,000	10,400	4,580	2,240
		3/6/2007	0.01100	< 0.00100	< 0.00100	< 0.00100	18,500	14,500	8,880	1,930
		11/13/2007	**0.00320**	< 0.00100	< 0.00100	< 0.00100	13,260	11,300	6,540	1,860
		11/18/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	12,540	10,100	5,570	1,950
		2/25/2010	**0.00150**	< 0.00100	< 0.00100	< 0.00100	50,300	11,700	6,450	2,120
		12/9/2010	< 0.00100	**0.00290**	< 0.00100	< 0.00100	22,500	48,300	21,000	8,430
		11/10/2011	**0.00089** J	< 0.00100	< 0.00100	< 0.00300	13,000	10,100	4,070	1,290
		11/7/2012	**0.00550**	< 0.00100	< 0.00100	< 0.00300	45,600	39,600	21,200	9,160
		1/13/2014	**0.00446**	< 0.00030	< 0.00020	< 0.00023	52,200	29,700	22,500	9,880
		1/5/2015	0.01490	< 0.00030	< 0.00020	< 0.00023	36,900	23,800	17,700	6,160
		12/4/2015	0.02760	< 0.00020	< 0.00021	< 0.00037	56,200	70,900 H	23,000	7,240 B
		12/1/2016	**0.00228**	< 0.00020	< 0.00021	< 0.00037	45,800	40,400	20,000	5,810 B
		11/28/2017	0.01260	< 0.00020	< 0.00021	< 0.00037	65,600	39,900 H	30,500	10,700 B
		11/7/2018	0.02030	< 0.00100	< 0.00100	< 0.00200	58,400	40,000 H	19,400	5,930
		12/18/2019	0.02200	< 0.00100	< 0.00100	< 0.00200	49,000	37,000 H	23,000 B	6,700 B
		12/9/2020	0.017	< 0.00041	< 0.00050	< 0.0016	55,000	48,000 E	21,000	6,700

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Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-12		2/19/1997	< 0.00050	< 0.00050	0.00150	< 0.00100	1,610	950	380	---
	D	2/19/1997	**0.00290**	< 0.00050	< 0.00050	< 0.00100	1,630	960	390	---
		5/8/1997	**0.00300**	**0.00089**	< 0.00050	< 0.00100	1,240	900	290	---
		8/20/1997	**0.00120**	< 0.00050	< 0.00050	< 0.00100	1,120	740	260	100
	D	8/20/1997	**0.00140**	< 0.00050	< 0.00050	< 0.00100	1,150	740	280	100
		10/23/1997	**0.00140**	**0.00058**	< 0.00050	< 0.00100	1,810	850	380	120
		2/24/1998	**0.00730**	< 0.00050	< 0.00050	< 0.00100	2,050	1,200	470	120
	D	2/24/1998	**0.00670**	< 0.00050	< 0.00050	< 0.00100	2,090	1,220	490	120
		6/1/1998	< 0.00050	**0.00120**	< 0.00050	< 0.00100	2,000	1,500	---	130
	D	6/1/1998	**0.00440**	**0.00250**	**0.00610**	**0.00250**	2,300	1,700	540	130
		8/11/1998	**0.00200**	< 0.00200	< 0.00200	< 0.00600	1,790	1,240	440	130
	D	8/11/1998	**0.00200**	< 0.00200	< 0.00200	< 0.00600	2,020	1,300	520	130
		10/22/1998	**0.00600**	< 0.00200	< 0.00200	< 0.00600	2,280	1,520	610	140
	D	10/22/1998	**0.00600**	< 0.00200	< 0.00200	< 0.00600	2,310	1,690	600	130
		2/23/1999	**0.00600**	< 0.00200	< 0.00200	< 0.00600	2,020	1,240	500	160
	D	2/23/1999	**0.00500**	< 0.00200	< 0.00200	< 0.00600	2,050	1,280	480	160
		5/14/1999	**0.00400**	< 0.00200	< 0.00200	< 0.00600	2,390	1,440	500	150
	D	5/14/1999	**0.00400**	< 0.00200	< 0.00200	< 0.00600	2,350	1,410	590	140
		8/11/1999	**0.00530**	< 0.00200	< 0.00200	< 0.00600	2,650	1,750	750	160
	D	8/11/1999	**0.00240**	< 0.00200	< 0.00200	< 0.00600	2,630	1,880	810	160
		10/22/1999	**0.00470**	< 0.00200	< 0.00200	< 0.00600	2,180	1,620	650	140
	D	10/22/1999	**0.00440**	< 0.00200	< 0.00200	< 0.00600	2,170	1,390	560	140
		2/22/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00200	1,950	1,260	680	130
		5/11/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	1,590	989	470	120
		8/7/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	1,800	1,270	460	110
		11/3/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	2,520	1,780	890	280
		2/20/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00400	2,230	1,210	670	170
		5/3/2001	**0.00240**	< 0.00200	< 0.00200	< 0.00200	2,100	1,060	570	150

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
ACW-12 (cont'd)	D	5/3/2001	**0.00210**	< 0.00200	< 0.00200	< 0.00200	2,120	1,150	510	150
		8/1/2001	< 0.00200	< 0.00200	< 0.00200 Jc	< 0.00200	2,080	1,290	490	140
		10/25/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00600	1,890	1,220	1,400	120
		2/20/2002	---	---	---	---	2,200	1,370	720	140
	R	2/20/2002	< 0.00200 H	< 0.00200 H	< 0.00200 H	< 0.00200 H	---	---	---	---
		5/1/2002	**0.00260**	< 0.00200	< 0.00200	< 0.00200	2,030	1,180	490	130
	D	5/1/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00200	1,900	1,100	440	110
		11/7/2002	**0.00370**	< 0.00100	< 0.00100	< 0.00300	1,800	1,300	450	150
		11/6/2003	**0.00100** J	< 0.00200	< 0.00200	< 0.00600	1,605	1,220	410	126
		11/11/2004	**0.00180**	< 0.00100	< 0.00100	< 0.00200	2,270	1,300	449	137
		12/14/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	2,090	1,130	393	131
		3/8/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,980	1,650	529	134
		11/14/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,920	1,460	451	134
		11/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	2,300	1,570	460	126
		2/24/2010	**0.00260**	< 0.00100	< 0.00100	< 0.00100	4,760	3,680	1,130	244
		12/8/2010	**0.00160**	< 0.00100	< 0.00100	< 0.00100	4,953	5,420	1,270	263
		11/9/2011	**0.00250**	< 0.00100	< 0.00100	< 0.00300	4,500	3,300	1,210	236
		11/6/2012	**0.00440**	< 0.00100	< 0.00100	< 0.00300	4,650	3,340	1,380	198
		1/10/2014	**0.00363**	< 0.00030	< 0.00020	< 0.00023	5,170	3,430	1,290	266
		1/5/2015	**0.00062**	< 0.00030	< 0.00020	< 0.00023	4,610	3,350	1,610	277
		12/1/2015	**0.00023** J	**0.00041**	< 0.00021	< 0.00037	5,000	3,190 H	1,610	274 B
		12/1/2016	< 0.00018	< 0.00021	< 0.00021	< 0.00037	5,070	4,000	1,560	258 B
		11/28/2017	< 0.00018	< 0.00020	< 0.00021	< 0.00037	5,820	2,430	1,840	348 B
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	8,100	5,260 H	2,690	417
		12/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	6,300	4,700	1,100 B	400 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	7,100	5,900	2,100	390
ACW-13		2/20/1997	< 0.00050	< 0.00050	**0.00150**	< 0.00100	681	440	53	---
		5/8/1997	**0.00061**	**0.00058**	< 0.00050	< 0.00100	643	460	57	---

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-13 (cont'd)	D	5/8/1997	**0.00065**	**0.00062**	< 0.00050	< 0.00100	630	460	52	---
		8/20/1997	< 0.00050	< 0.00050	< 0.00050	< 0.00100	654	440	55	79
		10/23/1997	**0.00059**	**0.00076**	< 0.00050	< 0.00100	728	400	50	84
		2/24/1998	< 0.00050	< 0.00050	< 0.00050	< 0.00100	727	450	59	87
		6/1/1998	< 0.00050	< 0.00050	< 0.00050	< 0.00100	700	450	---	85
		8/11/1998	< 0.00200	< 0.00200	< 0.00200	< 0.00600	679	467	48	85
		10/22/1998	< 0.00200	< 0.00200	< 0.00200	< 0.00600	686	439	47	87
		2/23/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00600	792	493	74	110
		5/14/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00600	693	403	45	86
		8/11/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00600	676	359	41	86
		10/22/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00600	674	436	48	89
		2/23/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00200	697	479	53	82
		5/11/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	697	459	47	88
		8/8/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	676	363	41	82
	D	8/8/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	662	381	44	84
		11/6/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	1,330	947	360	210
		2/20/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00400	893	518	110	130
		5/7/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00200	685	444	57	88
		8/1/2001	< 0.00200	< 0.00200	< 0.00200 Jc	< 0.00200	694	402	42	86
	D	8/1/2001	< 0.00200	< 0.00200	< 0.00200 Jc	< 0.00200	690	439	45	80
		10/25/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00600	690	422	42	78
		2/20/2002	< 0.00200	**0.00210**	< 0.00200	< 0.00200	680	389	44	78
	R	2/20/2002	< 0.00200 H	< 0.00200 H	< 0.00200 H	< 0.00200 H	---	---	---	---
		5/1/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00200	760	407	54	78
		9/25/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00400	807	643	50	80
	D	9/25/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00400	789	603	130	83
		11/7/2002	< 0.00100	< 0.00100	< 0.00100	< 0.00300	740	450	45	96
		3/28/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	772	502	47	57

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-13 (cont'd)		5/19/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	747	502	47	70
		8/19/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	661	460	42	79
		11/6/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	759	490	44	77
		2/26/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	724	476	43	81
		5/12/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	759	492	42	77
		8/24/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	660	496	45	78
		11/11/2004	**0.00050** J	< 0.00100	< 0.00100	< 0.00200	987	558	50	79
		2/14/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	1,036	520	61	78
		5/24/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	811	447	32	70
		8/22/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	884	513	71	85
		12/15/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	917	551	172	83
	D	12/15/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	548	88	79
		2/13/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	906	551	93	81
		5/8/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	922	508	98	63
	D	5/8/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	505	94	70
		8/22/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	967	568	100	80
		3/8/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	971	586	119	92
		5/15/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,025	651	127	84
		8/22/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,085	690	121	81
		11/15/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,012	855	130	87
		2/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,070	691	123	84
		6/9/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,100	639	122	89
	D	6/9/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	631	122	87
		8/13/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,110	688	131	75
		11/20/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,155	1,290	135	89
		3/3/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,109	666	98	90
	D	3/3/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	631	98	89
		5/19/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,088	668	134	88

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-13 (cont'd)		8/27/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,115	706	126	87
		2/19/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,000	662	169	89
		6/28/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	949	1,050	148	98
	D	6/28/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	1,060	145	92
		9/20/2010	< 0.00100	**0.00041** J	< 0.00100	< 0.00100	1,062	783	158	95
	D	9/21/2010	< 0.00200	**0.00027** J	< 0.00100	< 0.00100	---	732	166	94
		12/7/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,019	880	161	99
		2/16/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,020	888	194	100
		5/10/2011	< 0.00100	< 0.00200	< 0.00200	< 0.00600	1,019	682	192	99
	D	5/10/2011	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	714	198	101
		8/17/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,020	707	200	99
		11/9/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,140	709	200	90
		2/13/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,170	663	189	96
		5/8/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,150	663	186	98
		8/13/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,250	714	234	102
		11/6/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,230	760	228	111
		3/1/2013	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,100	713	191	116
		6/28/2013	< 0.00014	< 0.00030	< 0.00020	< 0.00030	796	767	216	108
		10/2/2013	< 0.00014	< 0.00030	< 0.00014	< 0.00030	739	789	202	105
		1/9/2014	< 0.00014	< 0.00030	< 0.00014	< 0.00030	1,230	715	215	104
		3/31/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	1,530	904	302	103
		5/29/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	1,200	805	237	104
		9/10/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	1,270	904	271	111
		1/5/2015	< 0.00030	< 0.00030	< 0.00020	< 0.00023	1,340	449	272	105
		3/4/2015	< 0.00033	< 0.00033	< 0.00020	< 0.00023	1,250	804	276	102
		6/2/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,340	1,020	313	110
		9/30/2015	< 0.00018	< 0.00021	< 0.00020	< 0.00037	1,310	930	268	102
		12/2/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,320	966 H	301	109 B

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-13 (cont'd)		3/16/2016	< 0.00056	< 0.00055	< 0.00013	< 0.00020	1,310	1,140	249 F1	105
		5/18/2016	< 0.00056	< 0.00055	< 0.00013	< 0.00020	1,340	1,260	284	103
		8/17/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,300	1,090	293	107
		12/1/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,330	944	299	112
		3/14/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	1,350	1,010	246 B	116
		6/21/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	1,350	1,190	327	116
		9/21/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	1,430	1,100	329	121
		11/28/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	1,550	1,160	363	137 B
		2/21/2018	< 0.00018	< 0.00021	< 0.00198	< 0.00037	1,650	1,650	389	121 B
		5/9/2018	< 0.00018	< 0.00021	< 0.00020	< 0.00037	1,630	1,300	355	134 B
		8/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,760	1,460	362	135
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	2,460	1,410 H	519	135
		3/5/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,790	1,900	575	154
		6/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	2,300	1,500	590	150
		9/10/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	2,400	2,000	660	150
		12/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	2,600	2,000	700 B	160 B
		3/19/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	2,700	3,100	740	150
		6/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	2,600	3,300	570	170
		9/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	2,900	3,200	770	190
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	3,900	3,300	1,000	190
ACW-14		2/20/1997	< 0.00050	< 0.00050	< 0.00050	< 0.00100	830	570	86	---
		5/7/1997	**0.00088**	**0.00110**	**0.00052**	< 0.00100	746	480	72	---
		8/20/1997	< 0.00050	< 0.00050	< 0.00050	< 0.00100	691	460	80	81
		10/22/1997	< 0.00050	**0.00120**	< 0.00050	**0.00150**	747	440	71	81
		2/24/1998	< 0.00050	< 0.00050	< 0.00050	**0.00058** J	755	470	40	87
		5/13/1998	**0.00075**	< 0.00050	< 0.00050	< 0.00100	880	530	58	97
		8/11/1998	< 0.00200	< 0.00200	< 0.00200	< 0.00600	730	496	160	90
		10/21/1998	< 0.00200	< 0.00200	< 0.00200	< 0.00600	771	466	71	97

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Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-14 (cont'd)		2/23/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00600	859	524	88	110
		5/13/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00600	764	500	62	95
		8/9/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00600	791	471	58	91
		10/21/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00600	753	469	68	98
		2/22/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00200	738	499	53	97
		5/10/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	761	485	61	110
		8/7/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	750	439	65	95
		11/1/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	1,630	1,090	420	300
		2/21/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00400	883	517	100	110
		5/3/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00200	809	499	89	100
		8/2/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00200	771	476	70	89
		10/24/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00600	761	449	71	82
		2/19/2002	< 0.00200	**0.00310**	< 0.00200	**0.00710**	759	427	65	82
	R	2/19/2002	< 0.00200 H	< 0.00200 H	< 0.00200 H	< 0.00200 H	---	---	---	---
		4/30/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00400	844	505	74	90
		9/25/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00400	749	482	58	81
		11/4/2002	**0.00200**	< 0.00100	< 0.00100	< 0.00300	840	670	76	97
	D	11/4/2002	**0.00180**	< 0.00100	< 0.00100	< 0.00300	830	550	73	99
		3/26/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	768	508	55	62
		5/20/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	822	570	67	78
	D	5/20/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	822	534	71	76
		8/20/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	746	494	59	88
	D	8/20/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	494	62	89
		11/5/2003	**0.00180** J	< 0.00200	< 0.00200	< 0.00600	825	550	67	88
		2/26/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	752	512	52	90
	D	2/26/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	500	51	89
		5/12/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	786	490	57	87
		8/24/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	747	520	54	86

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-14 (cont'd)		11/12/2004	< 0.00100	< 0.00100	< 0.00100	< 0.00200	926	572	55	89
		2/14/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	1,081	520	54	88
	D	2/14/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	528	60	83
		5/24/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	820	508	64	82
		8/22/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	846	526	58	87
		12/14/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	869	539	53	92
		2/13/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	854	512	59	81
	D	2/13/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	512	60	81
		5/9/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	826	474	64	75
		8/22/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	846	988 R H	50	80
	D	8/22/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	492	52	83
		3/7/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	807	531	56	86
	D	3/7/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	513	54	89
		5/15/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	868	558	62	87
		8/22/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	886	549	62	80
	D	8/22/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	598	64	77
		11/14/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	865	547	60	88
	D	11/14/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	526	61	86
		2/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	866	543	57	77
	D	2/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	574	56	84
		6/9/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	890	590	63	86
		8/13/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	900	611	69	76
	D	8/13/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	505	69	70
		11/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	910	546	71	83
	D	11/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	537	69	81
		3/3/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	922	519	52	87
		5/19/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,100	561	64	98
		8/27/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	988	603	62	86

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		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-14 (cont'd)		2/18/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,030	524	82	92
		6/29/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	794	< 10	63	93
		9/21/2010	< 0.00100	**0.00026** J	< 0.00100	< 0.00100	1,000	705	98	95
		12/7/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,070	600	83	99
		2/16/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00100	987	853	162	105
		5/11/2011	< 0.00200	< 0.00200	< 0.00200	< 0.00600	1,033	605	145	105
		8/17/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	925	663	154	101
		11/9/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	840	544	74	90
		2/14/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,000	589	119	98
	D	2/14/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	994	601	120	97
		5/8/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,140	646	168	112
	D	5/8/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,140	665	166	108
		8/13/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,100	674	161	110
	D	8/13/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,060	615	143	111
		11/7/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,190	723	185	117
	D	11/7/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,220	748	198	115
		3/1/2013	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,070	623	159	102
		6/28/2013	< 0.00014	< 0.00030	< 0.00020	< 0.00300	426	416	31	72
		10/5/2013	< 0.00014	< 0.00030	< 0.00020	< 0.00300	804	815	221	117
		1/9/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00020	1,110	660	154	116
		3/31/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00020	908	539	89	96
		5/29/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00020	984	615	139	103
		9/10/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	803	595	82	110
		12/30/2014	< 0.00030	< 0.00030	< 0.00020	< 0.00023	817	480	62	70
		3/4/2015	< 0.00033	< 0.00033	< 0.00020	< 0.00023	772	494	7	103
		6/2/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	840	490	76	101
		9/30/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	817	543	83	97
		12/2/2015	< 0.00018 H	< 0.00020 H	< 0.00021 H	< 0.00037 H	836	838 H	94	101 B

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Disssolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-14 (cont'd)		3/16/2016	< 0.00056	< 0.00055	< 0.00129	< 0.00129	834	569	86	100
		5/18/2016	< 0.00056	< 0.00055	< 0.00129	< 0.00129	861	742	262	98
		8/17/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	842	558	121	102
		12/2/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	871	577	98	107
		3/14/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	875	583	96 B	108
		6/21/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	867	748	128	101
		9/21/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	877	598	121	107
		11/28/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	905	613	120	104 B
		2/21/2018	< 0.00018	< 0.00021	< 0.00020	< 0.00037	927	561	129	96 B
	D	2/21/2018	< 0.00018	< 0.00021	< 0.00020	< 0.00037	920	570	132	98 B
		5/9/2018	< 0.00018	< 0.00021	< 0.00020	< 0.00037	905	614	94	104 B
	D	5/9/2018	< 0.00018	< 0.00021	< 0.00020	< 0.00037	921	648	118	102 B
		8/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	933	592	130	99
	D	8/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	941	613	118	100
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,220	624 H	146	111
		3/5/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	889	692	134	107
	D	3/5/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	923	570	134	108
		6/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	990	510	130	100
	D	6/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	990	560	130	100
		9/10/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,000	480 J	130	110
	D	9/10/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,000	660 J	140 B	100
		12/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,000	570	170 B	110 B
		3/19/2020	< 0.0010	**0.00038** J	< 0.0010	< 0.0020	880	600	160	100
	D	3/19/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	1,000	600	160	100
		6/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	860	620	220	110
	D	6/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	930	620	220	110
		9/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	1,000	570	140	110
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	1,100	650	160	110

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-15		10/23/1999	**0.00320**	**0.00530**	< 0.00200	< 0.00400	1,010	587	180	130
		2/23/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00200	665	402	42	81
	D	2/23/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00200	660	394	42	82
		5/11/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	654	431	49	76
		8/8/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	605	340	35	77
		11/2/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	1,380	876	360	250
		2/20/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00400	725	423	64	100
	D	2/20/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00400	727	413	65	96
		5/7/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00600	629	416	52	80
	D	5/7/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00600	628	396	46	81
		8/2/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00200	627	397	82	76
		10/25/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00600	627	393	56	72
		2/19/2002	< 0.00200	**0.00340**	**0.00200**	**0.01100**	629	369	27	74
	R	2/19/2002	< 0.00200 H	< 0.00200 H	< 0.00200 H	< 0.00200 H	---	---	---	---
	D	2/19/2002	< 0.00200	< 0.00200	< 0.00200	**0.00700**	628	355	31	49
	R	2/19/2002	< 0.00200 H	< 0.00200 H	< 0.00200 H	< 0.00200 H	---	---	---	---
		5/2/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00200	670	404	30	77
		9/25/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00400	777	552	130	72
		11/8/2002	< 0.00100	< 0.00100	< 0.00100	< 0.00300	640	380	30	85
	D	11/8/2002	< 0.00100	< 0.00100	< 0.00100	< 0.00300	620	410	29	81
		3/28/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	700	472	31	55
		5/19/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	651	442	30	66
		8/19/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	650	438	29	77
		11/7/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	644	436	26	71
		2/26/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	600	410	27	75
		5/12/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	655	436	27	71
		8/24/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	587	382	26	74
		11/11/2004	< 0.00100	< 0.00100	< 0.00100	< 0.00200	760	468	29	74

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-15 (cont'd)		2/14/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	937	444	30	71
		5/24/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	655	513	61	79
	D	5/24/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	458	34	72
		8/22/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	743	456	31	75
		12/14/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	754	452	32	74
		2/13/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	730	444	39	71
		5/8/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	721	377	33	68
		8/22/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	708	414	41	72
		3/8/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	716	457	44	77
		5/15/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	794	514	43	77
		8/22/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	799	47	1	< 1
		11/15/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	752	520	50	78
		2/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	844	542	62	70
		6/9/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	840	538	56	76
		8/13/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	848	588	62	65
		11/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	828	481	47	72
		3/3/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	857	491	50	82
		5/19/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	825	493	56	82
	D	5/19/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	482	65	80
		8/27/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	840	515	60	78
	D	8/27/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	502	46	79
		2/17/2010	---	---	---	---	839	337	31	47
		6/28/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	837	671	49	85
		9/20/2010	< 0.00100	**0.00033** J	< 0.00100	< 0.00100	878	476	30	81
		12/9/2010	< 0.00100	**0.00060** J	< 0.00100	< 0.00100	9,300	**5,500**	72	79
		2/16/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00100	857	710	135	87
	D	2/16/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00100	849	679	134	87
		5/10/2011	< 0.00200	< 0.00200	< 0.00200	< 0.00600	897	571	124	86

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-15 (cont'd)		8/17/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	589	440	37	81
	D	8/17/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	595	428	40	81
		11/9/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	711	462	49	76
		2/13/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	939	539	124	87
		5/8/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	718	386	47	88
		8/14/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	999	531	146	96
		11/5/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,010	615	154	103
		3/1/2013	< 0.00100	< 0.00100	< 0.00100	< 0.00300	992	649	160	90
		6/28/2013	< 0.00014	< 0.00030	< 0.00020	< 0.00023	675	613	160	94
		10/3/2013	< 0.00014	< 0.00030	< 0.00020	< 0.00023	691	720	189	93
		1/10/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	1,080	613	170	100
		3/31/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	792	487	67	82
		5/29/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	573	477	89	87
		9/10/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	755	469	75	88
		1/9/2015	< 0.00014	< 0.00030	< 0.00020	< 0.00023	782	449	56	86
		3/4/2015	< 0.00033	< 0.00033	< 0.00020	< 0.00023	724	454	67	101
		6/2/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	785	500	72	91
		9/30/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	763	475	74	85
		12/2/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	599	407 H	68	67
		3/16/2016	< 0.00056	< 0.00055	< 0.00129	< 0.00198	774	565	86	89
		5/18/2016	< 0.00056	< 0.00055	< 0.00129	< 0.00198	865	770	116	86
		8/17/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	815	588	123	90
		12/1/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	876	582	122	92
		3/14/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	864	575	84 B	95
		6/21/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	880	771	126	90
		9/21/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	898	635	133	92
		11/28/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	940	640	168	94 B
		2/21/2018	< 0.00018	< 0.00021	< 0.00020	< 0.00037	981	598	157	91 B

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Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
ACW-15 (cont'd)		5/9/2018	< 0.00018	< 0.00021	< 0.00020	< 0.00037	981	673	175	91 B
		8/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,020	605	154	92
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,360	668 H	171	100
		3/5/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,040	652	190	99.5
		6/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,100	610	180	96
		9/10/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,100	780	190	99
		12/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,100	570	170 B	100 B
		3/19/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	1,000	620	170	92
		6/24/2020	**0.00026** J	< 0.0010	< 0.0010	< 0.0020	950	670	210	96
		9/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	1,000	650	160	99
		12/9/2020	< 0.00038	< 0.00041	< 0.00500	< 0.0016	1,200	670	170	93
ACW-16		1/6/2015	**0.00220**	< 0.00030	< 0.00020	< 0.00023	24,400	**15,100**	**10,700**	4,010
		12/3/2015	**0.00185**	**0.00033** J	< 0.00021	**0.00055** J	26,700	**20,600** H	**13,400**	4,460
		12/1/2016	**0.00224**	**0.00030** J	< 0.00021	< 0.00037	27,400	**21,200**	**11,200**	4,480 B
		11/28/2017	**0.00243**	**0.00023** J	< 0.00021	< 0.00037	27,700	**21,700**	**11,700**	4,260 B
		11/7/2018	**0.00161**	< 0.00100	< 0.00100	< 0.00200	35,700	**18,300** H	**10,700**	4,410
		12/18/2019	**0.00230**	0.00032 J	< 0.00100	< 0.00200	28,000	**21,000**	**12,000** B	4,600 B
		12/9/2020	**0.0017**	< 0.00041	< 0.00050	< 0.0016	30,000	**22,000**	**11,000**	4,500
ACW-17		1/6/2015	< 0.00033	< 0.00030	< 0.00020	< 0.00023	609	**7,960**	**5,500**	1,680
		12/3/2015	**0.00026** J	< 0.00020	< 0.00021	< 0.00037	14,000	**10,800** H	**5,950**	1,760
		12/1/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	14,400	**11,100**	**5,520**	1,670
		11/28/2017	< 0.00018	< 0.00020	< 0.00021	< 0.00037	15,100	**11,600**	**6,420**	1,700 B
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	20,300	**10,800** H	**5,580**	1,780
		12/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	16,000	**12,000**	**5,900** B	1,900 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	18,000	**14,000**	**5,800**	1,700
ACW-18		1/6/2015	< 0.00030	< 0.00030	< 0.00020	< 0.00023	104,000	**64,400**	**49,700**	26,200
		12/3/2015	**0.00026** J	< 0.00020	< 0.00021	< 0.00037	102,000	**105,000** H	**42,900**	27,300 B
		12/28/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	105,000	**60,300**	**47,000**	28,100 B

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Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
ACW-18 (cont'd)		11/28/2017	**0.00062** J	< 0.00020	< 0.00021	< 0.00037	106,000	**91,400**	**60,200**	27,200 B
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	136,000	**79,200** H	**51,700**	25,400
		12/18/2019	**0.00058** J	< 0.00100	**0.00026** J	< 0.00200	100,000	**71,000**	**58,000** B^	20,000 B
		12/9/2020	**0.00041** J	< 0.00041	< 0.00050	< 0.0016	120,000	**88,000** J	**47,000**	28,000
ACW-19		1/6/2015	**0.07550**	**0.00064**	**0.00095**	**0.00345**	3,470	**2,180**	**972**	539
		12/3/2015	**0.08410**	**0.00156**	**0.00924**	**0.01480**	3,970	**2,560**	**1,080**	641 B
		12/1/2016	**0.06390**	**0.00052**	**0.00201**	**0.00217**	4,110	**2,520**	**1,050**	587 B
		11/28/2017	**0.04760**	**0.00057** J	**0.00137**	**0.00224**	4,600	**2,960**	**1,320**	645 B
		11/7/2018	**0.04730**	< 0.00100	**0.00225**	**0.00220**	6,300	**2,570** H	**1,240**	772
		12/18/2019	**0.05200**	**0.00320**	**0.00910**	**0.00620**	5,200	**2,500**	**1,300** B	820 B
		12/9/2020	**0.069**	**0.0083**	**0.010**	**0.0061** J	5,900	**3,100**	**1,400** J	810
ACW-20		1/12/2015	**0.06820**	**0.00988**	**0.00986**	**0.00755**	137,000	**86,600**	**73,200**	---
		12/3/2015	**0.07080**	**0.00876**	**0.01290**	**0.00995**	140,000	**116,000** H	**70,400**	43,500
		12/1/2016	**0.09420**	**0.01050**	**0.01740**	**0.01240**	130,000	**117,000**	**58,200**	40,200
		11/28/2017	**0.05530**	**0.00874**	**0.00503**	**0.00410**	150,000	**136,000**	**80,600**	46,700 B
		11/7/2018	**0.05620**	**0.00871**	**0.00640**	**0.00399** J	189,000	**182,000** H	**75,600**	192 J
	D	11/7/2018	**0.05530**	**0.01130**	**0.00824**	**0.00616** J	190,000	**164,000** H	**73,000**	46,400 J
		12/18/2019	**0.06900**	**0.01100**	**0.00870**	**0.00640**	150,000	**82,000**	**81,000** B^	42,000 B
		12/9/2020	**0.088** J	**0.0084**	**0.0059**	**0.0037** J	180,000	**120,000** J	**72,000**	44,000
	D	12/9/2020	**0.054** J	**0.0071**	**0.0054**	**0.0040** J	170,000	**120,000** J	**74,000**	35,000
ACW-21		1/12/2015	**0.07290**	< 0.00150	**0.01660**	**0.01040**	2,010	**1,010**	**410**	144
		12/3/2015	**0.77500**	< 0.00396	**0.04450**	**0.15400**	1,990	**1,280** H	**414**	146
		12/1/2016	**0.06400**	< 0.00396	**0.06170**	**0.04380**	2,050	**1,270**	**380**	150
		11/28/2017	**0.05620**	**0.00037** J	**0.00921**	**0.00220**	1,890	**1,280**	**572**	144 B
		11/7/2018	**0.475**	< 0.0200	**0.02690**	< 0.0400	2,430	**1,040** H	**298**	52
		12/18/2019	**0.022**	**0.00099** J	**0.01800**	**0.0055** J	2,000	**1,100**	**320** B	120 B
		12/9/2020	**0.030**	< 0.00041	**0.0039**	< 0.0016	2,300	**1,400**	**380** J	120

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-22		12/2/2015	< 0.00018	**0.00024** J	< 0.00021	< 0.00037	2,080	1,270 H	397	238 B
		12/2/2016	< 0.00018	**0.00024** J	< 0.00021	< 0.00037	2,220	1,230	3,150	284 B
		11/28/2017	**0.00027** J	**0.00024** J	< 0.00021	< 0.00037	2,190	1,350	418	260 B
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	2,770	1,210 H	383	312
		12/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	2,200	1,200	420 B	310 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	2,400	1,400	370 J	300
ACW-23		12/2/2015	< 0.00018	**0.00302**	< 0.00021	< 0.00037	2,820	1,940 H	646	291 B
		12/2/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	3,030	1,930	682	343 B
		11/28/2017	< 0.00018	< 0.00020	< 0.00021	< 0.00037	3,150	2,100	761	326 B
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	4,010	1,830 H	700	332
		12/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	3,300	1,900	630 B	350 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	3,500	1,900	690	290
ACW-24		12/2/2015	**0.00152**	**0.00105**	< 0.00021	< 0.00037	113,000	84,700 H	56,800	30,800
		12/2/2016	**0.00129**	< 0.00020	< 0.00021	< 0.00037	112,000	105,000	52,500	29,100 B
		11/28/2017	**0.00187**	**0.00033** J	< 0.00021	< 0.00037	115,000	110,000	64,000	29,600
		11/7/2018	**0.00136**	< 0.00100	< 0.00100	< 0.00200	147,000	115,000 H	58,200	31,400
		12/18/2019	**0.00210**	**0.00027** J	< 0.00100	< 0.00200	120,000	72,000	69,000 B	33,000 B
		12/9/2020	**0.0021**	**0.00048** J	< 0.00050	< 0.0016	130,000	95,000 E	83,000	27,000
ACW-25		12/2/2015	0.10600	**0.00105**	**0.00038** J	**0.00227**	34,300	22,600 H	15,700	4,490
		12/2/2016	0.01660	**0.00031**	< 0.00021	< 0.00037	40,400	31,200	16,000	5,390
		11/28/2017	0.01890	< 0.00020	< 0.00021	< 0.00037	41,500	33,400 H	22,400	5,660
		11/7/2018	0.0204	< 0.00100	< 0.00100	< 0.00200	54,400	34,100 H	20,200	6,160
		12/18/2019	0.0240	< 0.00100	< 0.00100	**0.00044** J	45,000	42,000	23,000 B	6,600 B
		12/9/2020	0.027	< 0.00041	< 0.00050	< 0.0016	51,000	35,000	18,000	6,000
ACW-26		12/18/2019	< 0.0010	< 0.00100	< 0.00100	< 0.00200	1,300	600	260 B	170 B
	D	12/18/2019	< 0.0010	< 0.00100	< 0.00100	< 0.00200	1,300	640	230 B	160 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	1,300	690	200	140

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El Paso Natural Gas Company, LLC
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Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ACW-27		12/18/2019	**0.00050** J	< 0.00100	< 0.00100	< 0.00200	4,100	3,200	1,200 B	330 B
	D	12/18/2019	**0.00050** J	< 0.00100	< 0.00100	< 0.00200	4,100	3,200	1,200 B	340 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	4,500	3,100	1,100	56
ACW-28		12/18/2019	< 0.0010	< 0.00100	< 0.00100	< 0.00200	820	450	54 JB	79 B
	D	12/18/2019	< 0.0010	< 0.00100	< 0.00100	< 0.00200	810	440	84 JB	74 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	690	510	29	48
ACW-29		12/18/2019	< 0.0010	< 0.00100	< 0.00100	< 0.00200	730	390	44 B	83 B
	D	12/18/2019	< 0.0010	< 0.00100	< 0.00100	< 0.00200	730	410	41 B	77 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	780	500	61 J	73
	D	12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	720	500	39 J	71
ACW-30S		11/7/2018	< 0.0010	< 0.00100	< 0.00100	< 0.00200	1,170	440 H	146	71
		12/18/2019	< 0.0010	< 0.00100	< 0.00100	< 0.00200	820	470	130 B	72 B
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	970	550	120 J	60
ACW-30D		11/7/2018	**0.00110**	< 0.00100	< 0.00100	< 0.00200	46,800	30,400 H	15,800	5,120
		12/18/2019	**0.00150**	**0.00037** J	< 0.00100	< 0.00200	40,000	39,000	19,000 B	6,100 B
		12/9/2020	**0.0014**	< 0.00041	< 0.00050	< 0.0016	46,000	33,000	16,000	5,500
	D	12/9/2020	**0.0010**	< 0.00041	< 0.00050	< 0.0016	42,000	33,000	17,000	4,000
ACW-32S		11/7/2018	< 0.0010	< 0.00100	< 0.00100	< 0.00200	6,080	3,100 H	1,080	287
		12/18/2019	< 0.0010	< 0.00100	< 0.00100	< 0.00200	3,900	3,400	780 B	290 B
		9/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	3,400	3,300	830	270
	D	9/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	3,400	3,300	860	260
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	3,900	2,900	1,000	260
	D	12/9/2020	< 0.00038	< 0.0004	< 0.0005	< 0.0016	3,900	3,100	1,000	250
ACW-32D		11/7/2018	< 0.0010	< 0.00100	< 0.00100	< 0.00200	2,970	1,410 H	602	178
		12/18/2019	< 0.0010	< 0.00100	< 0.00100	< 0.00200	1,500	850	260 B	120
		9/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	1,800	1,500	340	130
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	1,700	880	280	120

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
RW-01		11/3/2000	0.13000	0.04000	0.07300	0.12000	62,000	43,900	32,000	22,000
		11/9/2004	0.11400 R	0.02410	0.07030	0.06210	67,670	39,900	23,700	12,400
		12/15/2005	0.13600	0.02070	0.09050	0.09180	48,800	32,600	13,600	11,500
		3/5/2007	0.09300	0.02500	0.05900	0.07100	47,800	30,400	22,500	10,800
		11/12/2007	0.11000	0.04700	0.06900	0.08100	44,900	29,700	16,800	10,600
		11/17/2008	0.05700	0.03900	0.03700	0.05200	38,400	26,600	17,700	8,530
		2/19/2010	0.12000	0.10000	0.05600	0.08400	34,600	35,000	22,600	11,600
		12/7/2010	0.08600	0.06900	0.04600	0.07100	27,500	28,600	20,800	9,880
	D	12/7/2010	0.09400	0.07000	0.05000	0.07600	---	34,000	21,900	10,500
		11/9/2011	0.07360	0.05350	0.03340	0.05300	4,100	26,100	16,200	8,750
	D	11/9/2011	0.07680	0.05620	0.03500	0.05560	40,100	26,400	17,300	8,860
RW-02		11/3/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	7,340	5,660	2,800	680
		10/25/2001	---	---	---	---	8,380	5,050	2,400	---
		11/6/2002	0.00150	< 0.00100	< 0.00100	< 0.00300	8,700	5,800	3,500	1,400
		11/10/2004	0.00210	0.00048 J	< 0.00100	< 0.00200	5,870	7,000	2,850	1,220
		12/14/2005	0.00190 J	< 0.00200	< 0.00200	< 0.00600	8,450	5,060	2,280	1,100
		3/6/2007	0.00420	< 0.00100	< 0.00100	< 0.00100	10,320	7,200	3,950	1,510
		11/19/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	13,830	10,800	5,850	1,910
		2/24/2010	0.00400	< 0.00100	< 0.00100	< 0.00100	21,700	5,780	2,510	1,170
		12/9/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	11,340	8,620	3,840	1,590
		11/9/2011	0.00540	< 0.00100	< 0.00100	< 0.00300	10,100	6,140	2,990	1,450
	D	11/9/2011	0.00620	< 0.00100	< 0.00100	< 0.00300	10,100	6,640	3,030	1,360
RW-03		11/8/2012	0.09140	0.06060	0.02280	0.03980	88,400	74,000	58,200	27,200
ENSR-01		5/7/1997	0.00730	0.00370	0.00240	0.00200	8,620	5,200	3,200	---
		10/21/1997	0.01300	0.00630	0.00420	0.00560	13,800	7,600	4,400	---
		5/12/1998	0.01300	0.00460	0.00400	0.00440	12,000	6,700	3,600	---
		10/20/1998	---	---	---	---	12,400	7,590	4,200	---
		5/11/1999	---	---	---	---	14,700	8,450	5,500	---

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
ENSR-01 (cont'd)		10/20/1999	---	---	---	---	12,400	6,290	4,100	---
		5/9/2000	---	---	---	---	12,800	7,420	6,200	---
		10/27/2000	---	---	---	---	10,200	6,690	3,800	---
	D	10/27/2000	---	---	---	---	10,600	7,140	4,000	---
		5/2/2001	---	---	---	---	19,200	10,200	7,600	---
		10/23/2001	---	---	---	---	15,300	8,050	5,100	---
	D	10/23/2001	---	---	---	---	11,400	6,070	3,600	---
		4/29/2002	---	---	---	---	9,480	4,770	3,800	---
		11/4/2002	0.01800	< 0.01000	< 0.01000	< 0.03000	12,000	7,600	4,500	1,900
		11/4/2003	0.01310	**0.00120** J	**0.00310**	**0.00310** J	6,510	2,260	2,600	2,710
		11/10/2004	0.01080	**0.00110**	**0.00280**	**0.00200**	5,800	3,900	1,920	881
	D	11/10/2004	0.01140 R	**0.00130**	**0.00240**	**0.00170** J	---	3,150	1,420	823
		12/13/2005	**0.00990**	< 0.00200	**0.00220**	< 0.00600	5,530	2,740	1,120	969
		3/6/2007	**0.00740**	< 0.00100	**0.00250**	**0.00240**	4,860	4,010	2,230	882
		11/13/2007	0.01100	< 0.00100	**0.00370**	**0.00190**	7,430	2,830	1,230	1,040
		11/18/2008	**0.00620**	< 0.00100	**0.00220**	**0.00130**	7,690	3,270	1,680	1,140
		2/25/2010	**0.00410**	< 0.00100	**0.00110**	< 0.00100	13,890	3,760	1,640	1,330
	D	2/25/2010	**0.00420**	< 0.00100	**0.00120**	< 0.00100	---	3,760	1,630	1,240
		12/9/2010	0.01200	**0.00140**	**0.00090** J	**0.00120** J	22,500	9,210	4,620	2,310
	D	12/9/2010	0.01200	**0.00025** J	< 0.00100	< 0.00100	---	7,670	4,690	2,370
		11/10/2011	**0.00690**	**0.00063** J	**0.00210**	**0.00200** J	10,600	5,680	3,120	1,840
	D	11/10/2011	**0.00690**	**0.00066** J	**0.00190**	**0.00190** J	11,800	6,520	3,500	2,010
		11/7/2012	**0.00820**	< 0.00100	**0.00170**	**0.00100** J	11,800	7,480	3,940	2,300
		1/13/2014	**0.00786**	< 0.00030	**0.00156**	**0.00106** J	13,600	6,240	4,410	2,420
		1/6/2015	**0.00598**	**0.00039** J	**0.00260**	**0.00111** J	6,610	2,850	2,260	982
		12/1/2016	0.01480	**0.00047** J	**0.00160**	**0.00137** J	21,800	15,100	8,620	4,410 B
		11/28/2017	0.01360	**0.00055** J	**0.00205**	**0.00124** J	20,700	16,400	8,280	3,740 B
		11/7/2018	0.01420	< 0.00100	**0.00248**	< 0.00200	25,200	13,400 H	7,330	4,000

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
ENSR-01 (cont'd)		12/18/2019	0.01700	0.00059 J	0.00270	0.00140 J	19,000	11,000	3,800 B	3,600 B
		12/9/2020	0.016	0.00045 J	0.0015	< 0.0016	20,000	11,000	6,400	58
ENSR-02		5/6/1997	0.25000	0.23000	0.11000	0.19000	50,000	27,000	17,000	---
		10/20/1997	0.13000	0.16000	0.07700	0.12000	57,900	30,000	17,000	---
		5/12/1998	---	---	---	---	38,000	21,000	13,000	---
		10/19/1998	---	---	---	---	44,800	30,000	18,000	---
		5/11/1999	---	---	---	---	49,100	31,200	18,000	---
		10/19/1999	---	---	---	---	28,900	16,600	9,400	---
		5/9/2000	---	---	---	---	42,900	26,700	18,000	---
		10/29/2001	---	---	---	---	42,000	25,100	13,000	---
		11/9/2004	0.07210 R	0.02840	0.01810	0.09380	35,500	22,500	12,900	7,840
		12/14/2005	0.04940	0.05340	0.02150	0.03290	34,400	20,600	10,400	7,810
		3/5/2007	0.01000	0.01200	0.00450	0.00730	33,300	22,100	12,400	7,840
		11/17/2008	0.07200	0.09600	0.03800	0.07000	39,200	24,200	18,200	8,190
	D	11/17/2008	0.07300	0.09900	0.03900	0.07200	---	24,000	15,500	7,260
		2/19/2010	0.03000	0.03000	0.01300	0.02280	33,600	15,400	9,560	5,260
		12/8/2010	0.02800	0.03800	0.00910	0.01650	11,000	15,300	8,500	5,780
		11/10/2011	0.00510	0.00810	0.00160	0.00300	16,300	9,620	7,100	3,340
ENSR-03		5/7/1997	0.00760	0.00330	0.00290	0.00300	2,050	1,500	650	---
	D	5/7/1997	0.00680	0.00310	0.00280	0.00290	1,990	1,400	480	---
		10/21/1997	0.00500	0.00250	0.00300	0.00410	2,230	1,300	580	---
		5/12/1998	0.00950	0.00340	0.00190	0.00270	2,400	1,400	610	---
	D	5/12/1998	0.01400	0.00440	0.00230	0.00440	2,200	1,300	550	---
		10/20/1998	---	---	---	---	2,260	1,580	590	---
	D	10/20/1998	---	---	---	---	2,240	1,290	540	---
		5/11/1999	---	---	---	---	2,490	1,370	500	---
	D	5/11/1999	---	---	---	---	2,480	1,380	610	---
		10/20/1999	---	---	---	---	2,390	1,630	600	---

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
ENSR-03 (cont'd)	D	10/20/1999	---	---	---	---	2,390	1,560	590	---
		5/9/2000	---	---	---	---	2,360	1,580	710	---
	D	5/9/2000	---	---	---	---	2,410	1,580	710	---
		10/27/2000	---	---	---	---	2,410	1,870	640	---
		5/2/2001	---	---	---	---	2,480	1,240	610	---
	D	5/2/2001	---	---	---	---	2,490	1,270	680	---
		10/23/2001	---	---	---	---	2,480	1,300	620	---
		4/29/2002	---	---	---	---	2,500	1,350	580	---
	D	4/29/2002	---	---	---	---	2,370	1,390	490	---
		11/4/2002	**0.00710**	< 0.00500	**0.02200**	**0.02500**	2,100	1,400	520	190
		11/3/2003	**0.00930**	< 0.00200	**0.01120**	**0.01140**	2,020	1,460	471	174
		11/10/2004	0.01200	**0.00042** J	**0.00380**	**0.00340**	2,310	1,810	561	168
		5/23/2005	0.01300	< 0.00200	**0.00240**	< 0.00600	2,330	1,510	523	180
		12/12/2005	0.01160	< 0.00200	**0.00320**	**0.00270** J	2,450	1,240	564	191
	D	12/12/2005	0.01190	< 0.00200	**0.00330**	**0.00270** J	---	1,240	558	176
		3/6/2007	**0.00670**	< 0.00100	**0.01700**	**0.01800**	2,150	1,460	536	158
		11/12/2007	0.01100	< 0.00100	**0.02200**	**0.02200**	2,360	1,630	477	150
		11/17/2008	**0.00550**	< 0.00100	**0.01200**	**0.01300**	2,100	1,390	422	126
		2/25/2010	**0.00290**	< 0.00100	**0.00820**	**0.00560**	2,390	1,550	364	150
		12/8/2010	0.01900	**0.00073** J	**0.01400**	**0.01949**	8,000	2,060	552	177
		11/10/2011	**0.00420**	< 0.00100	**0.00410**	**0.00290** J	1,990	1,150	393	1,630
		11/7/2012	0.04320	< 0.00100	**0.00380**	**0.00620**	2,280	1,320	476	173
		1/10/2014	0.03020	< 0.00030	**0.00190**	**0.00714**	2,370	1,430	495	173
		1/10/2015	0.01250	**0.00087**	**0.00091**	< 0.00023	2,790	1,760	750	173
		12/3/2015	**0.00830**	**0.00113**	**0.00079** J	< 0.00037	2,740	1,850 H	811	191
		12/1/2016	0.01060	< 0.00020	**0.00080** J	< 0.00037	2,800	1,840	741	185 B
Oxy Supply		5/13/1998	< 0.00050	< 0.00050	< 0.00050	< 0.00100	800	480	120	65
		8/11/1998	< 0.00200	< 0.00200	< 0.00200	< 0.00600	762	604	120	67

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
Oxy Supply (cont'd)		10/20/1998	< 0.00200	< 0.00200	< 0.00200	< 0.00600	734	488	100	---
		2/23/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00200	810	407	120	82
		5/13/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00200	808	468	120	71
		8/11/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00200	831	466	140	72
		10/22/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00400	788	490	130	73
		2/23/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00600	630	392	38	71
		5/11/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	835	504	120	72
		8/7/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	802	433	120	68
		11/2/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	662	475	120	71
		2/20/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00400	805	442	130	68
		5/7/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00200	781	481	140	65
		8/1/2001	< 0.00200	< 0.00200	< 0.00200 Jc	< 0.00200	807	532	120	66
		10/25/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00200	822	500	120	64
		9/25/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00400	827	552	34	60
		11/6/2002	< 0.00100	< 0.00100	< 0.00100	< 0.00300	820	580	140	73
		3/26/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	870	556	162	53
		5/19/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	863	544	190	61
		8/19/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	786	500	126	64
		11/3/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	822	572	154	62
		2/25/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	830	548	136	70
		5/13/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	851	922	157	70
	D	5/13/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	568	162	67
		8/25/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	849	654	193	72
	D	8/25/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	650	200	73
		11/11/2004	< 0.00100	< 0.00100	< 0.00100	< 0.00200	984	588	135	66
		2/15/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	1,226	397	29	64
		5/25/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	935	611	147	63
		8/23/2005	< 0.00200 H	< 0.00200 H	< 0.00200 H	< 0.00600 H	1,190	650	217	84

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Table 3
Groundwater Analytical Results
El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
Oxy Supply (cont'd)		12/15/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	1,238	696	228	85
		2/14/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	1,198	635	213	76
		5/8/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	1,098	513	171	71
		8/23/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	980	556 R H	168	66
		3/8/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,036	730	199	74
	D	3/8/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	702	199	75
		5/16/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,094	699	202	73
	D	5/16/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	730	201	75
		8/23/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,159	701	186	68
		11/15/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,059	796	188	71
		4/1/2014	< 0.00014	< 0.00030	< 0.00022	< 0.00023	1,480	827	287	102
		5/29/2014	< 0.00014	< 0.00030	< 0.00022	< 0.00023	1,370	976	281	103
		9/10/2014	< 0.00014	< 0.00030	< 0.00022	< 0.00023	1,130	736	222	93
		1/12/2015	< 0.00014	< 0.00030	< 0.00022	< 0.00023	1,450	760	297	105
		3/4/2015	< 0.00033	< 0.00033	< 0.00020	< 0.00023	1,340	845	286	89
		6/3/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,450	1,000	298	103
		9/30/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,330	872	440	101
		12/8/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,230	970	230	99 B
		3/16/2016	< 0.00056	< 0.00055	< 0.00129	< 0.00198	1,400	1,050	234	100
		5/18/2016	< 0.00056	< 0.00055	< 0.00129	< 0.00198	1,410	1,200	262	99
		8/17/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,200	800	221	92
		12/2/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,160	702	201	92
		3/14/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	1,180	730	201 B	100
		6/21/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	1,370	1,050	290	107
		9/21/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	1,410	980	264	104
		11/28/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	1,390	924	289	111 B
		2/21/2018	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,360	804	265	99 B
		5/9/2018	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,410	940	235	103 B

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El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
Oxy Supply (cont'd)		8/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,470	840	245	101
		11/8/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,910	912 H	262	107
		3/5/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,310	864	254	106
		6/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,400	720	220	98
		9/10/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,500	810	250 B	110
		12/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,600	840	280 B	100
		3/19/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	1,400	930	250	96
		6/24/2020	**0.00033** J	**0.00022** J	< 0.0010	< 0.0020	1,200	820	210	98
		9/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	1,100	620	160	99
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	1,300	700	200	90
EPNG-01		5/8/1997	**0.00056**	**0.00055**	< 0.00050	< 0.00100	718	---	---	---
		10/23/1997	< 0.00050	< 0.00050	< 0.00050	< 0.00100	890	470	91	---
		5/14/1998	---	---	---	---	850	500	67	---
	D	5/14/1998	< 0.00050	< 0.00050	< 0.00050	< 0.00100	860	520	67	---
		10/22/1998	< 0.00200	< 0.00200	< 0.00200	< 0.00600	994	659	56	---
		5/14/1999	---	---	---	---	846	469	70	---
		10/23/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00600	891	540	3	---
		10/27/2000	---	---	---	---	850	603	94	---
		10/29/2001	---	---	---	---	890	523	65	---
		11/8/2002	< 0.00100	< 0.00100	< 0.00100	< 0.00300	940	600	60	91
		11/7/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	733	600	62	81
		11/12/2004	< 0.00100	< 0.00100	< 0.00100	< 0.00200	963	516	68	88
		12/15/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	1,103	674	52	62
		3/9/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	747	485	58	80
		11/16/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	738	851	52	70
	D	11/16/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	670	52	71
		11/20/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,118	674	71	76
	D	11/20/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	670	71	76

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Table 3
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El Paso Natural Gas Company, LLC
Jal No. 4 Gas Plant
Lea County, New Mexico

Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Disssolved Solids mg/L	Chloride mg/L	Sodium mg/L
Regulatory Limit			**0.01 mg/L**	**0.75 mg/L**	**0.75 mg/L**	**0.62 mg/L**	**--**	**1,000 mg/L**	**250 mg/L**	**--**
EPNG-01 (cont'd)		2/24/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	1,060	420	63	89
		12/9/2010	**0.00030** J	**0.00160**	**0.00320**	**0.00293**	2,300	980	74	87
		11/10/2011	**0.00060** J	< 0.00100	< 0.00100	< 0.00300	962	573	61	80
		11/7/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	982	607	65	97
	D	11/7/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	1,010	617	68	96
		1/12/2015	< 0.00030	< 0.00030	< 0.00020	< 0.00023	2,790	414	64	92
		12/4/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,140	806 H	201	164 B
		12/1/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	820	522	77	103 B
		11/28/2017	< 0.00018	< 0.00020	< 0.00021	< 0.00037	1,350	894	274	113 B
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,760	854 H	217	110
	D	11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	1,760	850 H	215	110
		12/18/2019	< 0.00100	< 0.00100	**0.00022** J	< 0.00200	1,200	640	180 B	99
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	1,000	660	120	91
Doom Supply		2/24/1998	< 0.00050	< 0.00050	< 0.00050	< 0.00100	634	410	38	64
		5/13/1998	< 0.00050	< 0.00050	< 0.00050	< 0.00100	640	410	30	
		8/10/1998	< 0.00200	< 0.00200	< 0.00200	< 0.00600	629	450	34	71
		10/20/1998	< 0.00200	< 0.00200	< 0.00200	< 0.00600	636	464	35	69
		2/23/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00200	627	364	31	72
		5/13/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00200	630	381	34	72
		8/11/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00200	629	372	30	73
		10/21/1999	< 0.00200	< 0.00200	< 0.00200	< 0.00400	617	400	32	77
		2/23/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00600	814	506	130	69
		5/10/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	619	417	31	72
		8/14/2000	< 0.00500	< 0.00500	< 0.00500	< 0.01000	597	400	28	4
		11/2/2000	< 0.00200	< 0.00200	< 0.00200	< 0.00400	530	375	32	79
		2/20/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00400	619	372	33	67
		5/3/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00200	615	419	30	73
		8/1/2001	< 0.00200	< 0.00200	< 0.00200 Jc	< 0.00200	618	374	28	66

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Well ID	QA/QC	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	Specific Conductance µmohs/cm	Total Dissolved Solids mg/L	Chloride mg/L	Sodium mg/L
		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
Doom Supply (cont'd)		10/29/2001	< 0.00200	< 0.00200	< 0.00200	< 0.00600	622	396	28	64
		2/20/2002	< 0.00200	**0.01900**	**0.00390**	**0.02400**	620	373	31	65
	R	2/20/2002	< 0.00200 H	< 0.00200 H	< 0.00200 H	< 0.00200 H	---	---	---	---
		3/27/2002	---	---	---	---	---	---	---	---
		5/2/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00200	624	351	30	65
		9/25/2002	< 0.00200	< 0.00200	< 0.00200	< 0.00400	626	411	68	63
		11/5/2002	< 0.00100	< 0.00100	< 0.00100	< 0.00300	620	470	29	70
		3/26/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	585	386	30	51
		5/20/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	602	410	36	63
		8/20/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	561	366	31	66
		11/6/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	6	406	28	65
	D	11/6/2003	< 0.00200	< 0.00200	< 0.00200	< 0.00600	---	398	29	63
		2/25/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	583	388	28	67
		5/13/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	609	396	3	63
		8/25/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	567	390	43	64
		11/15/2004	< 0.00200	< 0.00200	< 0.00200	< 0.00600	602	404	28	62
		2/15/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	784	659	84	74
		5/25/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	619	403	29	58
		8/23/2005	< 0.00200 H	< 0.00200 H	< 0.00200 H	< 0.00600 H	652	384	29	66
	D	8/23/2005	< 0.00200 H	< 0.00200 H	< 0.00200 H	< 0.00600 H	---	384	29	66
		12/15/2005	< 0.00200	< 0.00200	< 0.00200	< 0.00600	641	408	29	69
		2/14/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	645	384	28	60
		5/9/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	635	316	30	57
		8/23/2006	< 0.00200	< 0.00200	< 0.00200	< 0.00600	641	374	31	62
		3/6/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	631	415	32	66
		5/16/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	699	446	34	63
		8/23/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	723	426	31	59
		11/15/2007	< 0.00100	< 0.00100	< 0.00100	< 0.00100	619	447	31	63

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		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
Doom Supply (cont'd)		2/20/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	700	417	31	66
		6/10/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	669	451	35	67
		8/12/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	760	461	34	57
		11/18/2008	< 0.00100	< 0.00100	< 0.00100	< 0.00100	735	390	35	61
		3/4/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	641	485	29	65
		8/26/2009	**0.00230**	< 0.00100	< 0.00100	< 0.00100	721	426	32	65
		9/17/2009	< 0.00100	< 0.00100	< 0.00100	< 0.00100	---	---	---	---
		2/19/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	765	409	36	57
		6/28/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	642	215		66
		9/21/2010	< 0.00100	**0.00028** J	< 0.00100	< 0.00100	661	449	30	64
		12/8/2010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	8,490	930	33	68
		2/16/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00100	614	457	33	66
		5/11/2011	< 0.00200	< 0.00200	< 0.00200	< 0.00600	1,159	395	30	62
		8/17/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	569	569	30	65
		11/10/2011	< 0.00100	< 0.00100	< 0.00100	< 0.00300	635	250	29	60
		2/14/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	637	373	30	64
		5/8/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	646	347	33	67
		8/13/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	650	374	31	66
		11/5/2012	< 0.00100	< 0.00100	< 0.00100	< 0.00300	636	409	36	60
		3/5/2013	< 0.00100	< 0.00100	< 0.00100	< 0.00300	627	408	31	69
		6/28/2013	< 0.00100	< 0.00100	< 0.00100	< 0.00300	426	416	31	72
		10/5/2013	< 0.00100	< 0.00100	< 0.00100	< 0.00300	387	443	29	68
		4/1/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	659	403	31	67
		5/29/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	592	416	29	68
		9/10/2014	< 0.00014	< 0.00030	< 0.00020	< 0.00023	617	351	34	68
		1/12/2015	< 0.00014	< 0.00030	< 0.00020	< 0.00023	609	423	28	62
		3/4/2015	< 0.00033	< 0.00033	< 0.00020	< 0.00023	587	404	29	65
		6/3/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	646	374	30	0

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		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
Doom Supply (cont'd)		9/30/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	616	411	30	66
		12/16/2015	< 0.00018	< 0.00020	< 0.00021	< 0.00037	643	378	30	66
		3/16/2016	< 0.00056	< 0.00055	< 0.00129	< 0.00198	617	388	25	66
		5/18/2016	< 0.00056	< 0.00055	< 0.00129	< 0.00198	639	667	36	60
		8/17/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	625	412	57	64
	D	8/17/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	634	424	57	65
		12/2/2016	< 0.00018	< 0.00020	< 0.00021	< 0.00037	635	399	43	66
		3/14/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	628	429	30 B	70
		6/21/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	627	577	44	65
		9/21/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	636	438	43	64
		11/28/2017	< 0.00018 U	< 0.00020 U	< 0.00021 U	< 0.00037 U	665	541	20	67
		2/21/2018	< 0.00018	< 0.00020	< 0.00021	< 0.00037	644	403	43.4	62
		5/9/2018	< 0.00018	< 0.00020	< 0.00021	< 0.00037	642	423	57.7	64 B
		8/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	652	385	33.6	62
		11/7/2018	< 0.00100	< 0.00100	< 0.00100	< 0.00200	817	414 H	29.6	67
		3/5/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	607	371	31.4 F1	66.6
		6/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	640	390	27	63
		9/10/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	650	380	30	65
		12/18/2019	< 0.00100	< 0.00100	< 0.00100	< 0.00200	650	370	33 B	62
		3/19/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	620	390	27	61
		6/24/2020	**0.00069** J	**0.00034** J	< 0.0010	< 0.0020	570	380	48	65
		9/24/2020	< 0.0010	< 0.0010	< 0.0010	< 0.0020	580	360	1.0 J	65
		12/9/2020	< 0.00038	< 0.00041	< 0.00050	< 0.0016	700	410	30	54
PTP-01		5/7/1997	**0.03800**	**0.00051**	**0.02200**	**0.00840**	2,420	**1,500**	**490**	---
		10/21/1997	**0.00790**	< 0.00050	**0.01800**	**0.00310**	2,250	**1,400**	**470**	---
		5/12/1998	**0.06200**	**0.00160**	**0.02100**	**0.01300**	2,300	**1,400**	**480**	---
		10/20/1998	**0.00000**	---	---	---	2,090	**1,410**	**380**	---
		5/11/1999	**0.00000**	---	---	---	2,250	**1,240**	**330**	---

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Lea County, New Mexico

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		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
PTP-01 (cont'd)		10/20/1999	**0.00000**	---	---	---	2,300	1,630	460	---
		5/9/2000	**0.00000**	---	---	---	2,210	1,400	510	---
		10/27/2000	**0.00000**	---	---	---	2,050	1,570	530	---
		5/2/2001	**0.00000**	---	---	---	2,370	1,240	520	---
		10/23/2001	**0.00000**	---	---	---	2,370	1,280	550	---
		4/29/2002	**0.00000**	---	---	---	2,390	1,400	500	---
		11/4/2002	0.05000	< 0.01000	**0.01500**	**0.02400**	2,000	690	480	170
		11/3/2003	0.02180	< 0.00200	**0.01350**	**0.00880**	2,130	1,380	469	190
		11/10/2004	0.01360	< 0.00100	**0.01870**	**0.00960**	2,300	1,560	496	167
		12/12/2005	0.01370	**0.00160** J	**0.02250**	**0.02640**	2,360	1,140	442	192
		3/6/2007	0.01900	< 0.00100	**0.01500**	**0.03450**	2,150	1,280	397	222
		11/12/2007	0.01900	< 0.00100	**0.02000**	**0.03130**	2,200	1,380	348	197
		11/17/2008	0.01100	< 0.00100	**0.02400**	**0.02620**	2,110	1,250	351	145
		2/25/2010	**0.00430**	< 0.00100	**0.01900**	**0.01400**	2,050	1,120	265	183
		12/8/2010	**0.00260**	**0.00096** J	**0.01900**	**0.00910**	7,000	15,200	336	176
		11/10/2011	**0.00310**	< 0.00100	**0.01350**	**0.01570**	2,050	992	349	165
		11/8/2012	< 0.00100	< 0.00100	**0.00460**	< 0.00300	1,820	1,110	331	140
		1/10/2014	**0.00120**	< 0.00030	**0.00140**	**0.00809**	1,890	1,050	278	174
		1/6/2015	< 0.00030	**0.00180**	**0.00631**	**0.00053**	2,230	1,260	519	162
		11/28/2017	**0.00061** J	< 0.00030	**0.00182**	**0.00100** J	2,140	1,480	528	178 B
		11/7/2018	**0.00197**	**0.00151**	**0.00213**	**0.00233**	2,690	1,280 H	476	160
		12/18/2019	**0.00110**	< 0.00100	**0.00230**	**0.00460**	2,100	1,300	430 B	160 B
		12/9/2020	**0.00063** J	< 0.00041	**0.0013**	**0.0022** J	2,100	1,400	310	150
Injection Well		11/9/2004	0.08070	**0.01400**	**0.02560**	**0.02510**	---	20,300	11,300	6,010
		12/15/2005	0.08440	**0.02040**	**0.04050**	**0.04040**	36,800	23,800	7,850	8,620
		3/6/2007	0.05300	**0.03200**	**0.13000**	**0.03610**	29,400	19,200	13,900	6,690
		11/16/2007	0.08000	**0.03600**	**0.06800**	**0.06200**	37,900	26,900	15,600	9,260
		11/20/2008	0.05200	**0.03800**	**0.08200**	**0.03970**	23,600	17,300	10,500	5,250

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		Regulatory Limit	0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L	--	1,000 mg/L	250 mg/L	--
Injection Well (cont'd)		2/19/2010	**0.02200**	**0.01300**	**0.02300**	**0.01560**	19,600	**11,000**	**7,440**	3,700
		12/8/2010	**0.07200**	**0.05300**	**0.09000**	**0.05900**	19,000	**22,900**	**14,300**	7,240

Notes:
< : Denotes a sample value of less than the MDL
--- : No analysis performed
Bold Font: Indicates a detection above the laboratory detection limit
Bold Font: Indicates regulatory limit exceedance
B: Compound was found in the blank and sample
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value
U: Indicates the analyte was not dected at or above the MDL
D: Indicates a duplicate sample
H: Sample was prepped or analyzed beyond the specified holding time
F1: Indicates the MS and/or MSD recovery is outside of acceptance limits

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Appendix A

Site Chronology

AECOM

SITE CHRONOLOGY

Date	Activity
1952	Jal #4 Plant was constructed. It consisted of a gas plant, purification plant, dehydration plant, and compressor facilities. Brine and wastewater was stored in 8 unlined, retention ponds from 1952 to 1981.
1981	Since 1981, brine produced at the plant has been discharged into 3 ponds (brine ponds #9, #10 and #11) with synthetic liners.
October 19, 1982	EPNG met with NMOCD in Santa Fe, NM to discuss the Plant's Wastewater Disposal Plan.
November 16, 1982	Soil samples in dry ponds (#3 and #8) were taken and analyzed for various organic compounds. The analyses were reported in the Plant's Discharge Plan. Groundwater Discharge Plan for Jal #4 was approved by NMOCD.
November 29, 1982	EPNG representative met with NMOCD in Santa Fe, NM to discuss the closure plan for disposal ponds and to provide a progress report on the evaluation of organic constituents in pond sludges.
December 20, 1982	EPNG sampled and analyzed pond sludge for organic constituents. Only total phenols exceeded NMOCD standards.
1982	All ponds, not including the 3 brine ponds, were closed and capped in accordance with NMOCD. A leak detection system was installed in the brine ponds.
February 1985	In conjunction with the closure of the ponds it was necessary to ensure that storm water would not be generated in the area of the former ponds. Substantial grading east of the plant boundary was conducted, culverts were installed under the railroad and highway, and drainage was directed away from Plant property.
1987	EPNG plant operations were shutdown. Christie Gas began operating compressor facilities and using the lined ponds.
May 20, 1988	Texaco and Meridian, considering a possible joint venture, performed an environmental safety audit of Jal #4 to become acquainted with the environmental/safety concerns, if any, that would have to be addressed by Texaco and Meridian co- ownership and operation of the proposed cryogenic plant. The audit included a subsurface investigation which resulted in the detection of several organic compounds (i.e.: phenols, PCB, BTEX) in subsurface soils near pond #3.
1989	A leak was detected in a brine pond, the exact one is not known. Two brine ponds were retired. In response to the reported leak, NMOCD requested a hydrologic study be performed.
May 2. 1989	Texaco collected surface samples, sludges, soil, and core samples at Jal #3 and Jal "#4. Neither Texaco nor EPNG found anything unusual in the data except for chloride contamination in the deepest core on pond #3 at Jal "#4. This led to the drilling of 3 monitor wells (ENSR-1 through ENSR-3) and a limited groundwater study. The preliminary findings indicated chloride contamination.
May 10, 1989	EPNG received a copy of the new discharge plan from KWB for submittal to NMOCD.
May 23, 1989	EPNG requested KWB be contracted to provide continuing consulting services on geotechnical issues.
June 7, 1989	EPNG requested ENSR be contracted to conduct a closed pit and groundwater survey.

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Date	Activity
June 16, 1989	ENSR submitted a workplan for subsurface investigation/ monitoring well installation to assess the presence of potential soil and groundwater contamination based on Texaco's previous investigations.
August 1989	Groundwater quality assessment was performed by ENSR, including the results of installing ENSR-1 through ENSR-3.
August 18, 1989	NMOCD required that EPNG take corrective action steps concerning the Plant's brine ponds. EPNG applied with NMOCD to exempt one brine pond receiving only brine water and no oil-bearing wastewater from Rule R-8952.
August 31, 1989	EPNG met with NMOCD to discuss Answer data from the groundwater quality report. EPNG provided analytical results from soil samples, and a brief chronology of Texaco's environmental audit. The scope of the geotechnical study was negotiated.
March 21, 1990	EPNG submitted South Region Compliance Engineering's closure plan for two brine storage ponds and for the plugging of gas wells to the NMOCD.
April 4, 1990	NMOCD approved closure plan for the brine storage ponds.
May 1, 1990	KWB began an expanded geohydrological study.
May 24, 1990	EPNG filed a report for the period 11-86 to 5-90 with NMOCD concerning an on- site disposal well that has been inactive during this time.
June 1990	"Proposed scope of work for environmental investigation of the EPNG refinery" was prepared by John Mathes at the request of Meridian Oil, Inc. The purpose of this work is to obtain Phase II data and cost estimate assumptions. Phase I. KWB resampled wells to determine: aquifer characteristics, depth to groundwater, flow direction, hydraulic gradient, and plume configuration.
August 1990	KWB finalized the Phase I report, "Expanded Hydrogeology Study for the Jal 4 Facility." In the report KWB stated that inorganic and organic contaminants were detected above WQCC standards. Computer modelling suggested the contamination plume is migrating to the southeast and is off-site. EPNG was granted an extension by NMOCD until 3-31-91 to close the brine ponds.
October 4, 1990	Results from Phase I investigations indicated that a contamination plume with high. levels of chloride and low levels of benzene exists beneath the plant. The existence of the plume may be due to past plant operations. KWD recommended Phase II activities which include the drilling of three additional monitor wells and the drilling of an observation well to obtain information on aquifer conductivity.
November 1990	Phase II. KWB installed and sampled ACW wells (ACW-1 thorough ACW-3), installed piezometer (PTP-1), performed pump tests, and defined a chloride contamination plume.
January 1991	KWB finalized the Phase II report, "Expanded Hydrogeology Study for the Jal-4 Facility." The report confirmed that the chloride contamination groundwater plume is tied to past operation of the wastewater ponds. KWB suggested that any remediation required must deal with the removal of salts from the groundwater.
February 26, 1991	NMOCD requested EPNG to decide on a plan of action for closing or repairing the brine pits by 3-31-91.

Date	Activity
March 14, 1991	EPNG met with NMOCD to discuss the sale of Jal #4 "B" Plant and propane storage wells to Christie Gas.
March 18, 1991	EPNG notified Christie Gas of the existence of a new discharge plan for the Plant.
March 27, 1991	EPNG submitted a request to NMOCD for time extension to close or repair 2 brine storage ponds.
April 24, 1991	EPNG sent supplemental information to Christie Gas regarding requested information about Jal #4's environmental and other compliance issues.
July 15, 1991	Ownership of 4 LPG storage wells at Jal #4 were transferred from EPNG to Christie Gas.
October 1991	International Technology Corporation submitted an expanded geohydrological study (Phase III) for Jal #4.
December 13, 1991	EPNG sent copies of Jal #4's Discharge Plan to Christie Gas Corporation.
February 5, 1992	BEI performed a "Terrain Conductivity Survey for Jal #4." Readings were unreliable due to interference in the study area.
February 1992	Phase III. BEI determined vertical and horizontal extent of the contamination plume, confirmed EM survey, and made recommendations for remediation.
May 15, 1992	Permission was received from the State of New Mexico to enter state lands to drill three monitoring wells for remediation of chloride contaminated groundwater.
July 7, 1992	BEI installed four new monitoring wells; one at the Plant, and three on state property east of the Plant (ACW-4 through ACW-7).
September 2, 1992	Application sent to State of New Mexico Commissioner of Public Lands to request permission to enter state lands to drill four new groundwater recovery wells as part of Phase IV activities.
November 1992	BEI finalized the Phase Ill report, "Groundwater Study Jal No. 4 Plant." Groundwater analysis detected inorganic and organic contaminants exceeding WQCC standards. The source of the contamination is believed to be from the brine ponds; however, the exact pond or ponds is still unknown.
December 1992	Christie Gas sold the plant to Texas LPG Storage Company.
January 27, 1993	Rights obtained for construction of 2 monitoring wells on Mr. Doom's grazing lease as part Phase IV activities to monitor the extent of off-site chlorine contamination.
March 30, 1993	Meeting between NMOCD and EPNG was held to discuss groundwater study/remediation at Jal #4. EPNG requested this meeting to update NMOCD on Phase III monitoring well installation and sampling results and to discuss Phase IV installation of 4 additional monitoring wells. NMOCD recommended what contaminants EPNG should sample for, requested that a status report be prepared once Phase IV activities are completed, and requested modelling for remedial options.
June 14, 1993	Phase IV. BEI initiated a monitoring well installation program (ACW-8 through ACW-11).
November 18, 1993	BEI finalized the "Phase IV Groundwater Investigation Report, Jal No. 4 Plant." The report recommended the initiation of possible "pump and inject" on-site groundwater recovery and disposal, installation of a monitoring well cluster at the leading edge of the chloride plume, continued quarterly sampling, and an evaluation of the recovery system following a one-year period of operation.

Date	Activity
October 16, 1996	Philip Environmental Submitted Phase II Site Assessment Report detailing the installation and results of installing monitoring wells ACW-12 through ACW-14 and recovery wells RW-1 through RW-2.
January 1997	Groundwater monitoring program began including quarterly and annual sampling with Annual Reporting to the NMOCD.
October 1999	Groundwater Recovery began from RW-01. Monitoring well ACW-15 was installed
January 2000	Groundwater Recovery began from RW-02.
February 6, 2003	Atkins Americas, Inc. prepared a groundwater modelling report.
April 2005	Monitoring wells ACW-3 and ACW-8 pilot tests as groundwater recovery wells.
October 2005	Monitoring wells ACW-3 and ACW-8 were permitted by the NMOSE to be operated as production wells and were configured as permanent recovery wells and made operational.
March 2007	Texas LPG Storage company sold the plant to Western Refining, Inc.
January 2012	Groundwater monitoring continued. The well screen of Shell State #13 was fouled in 2012 and the groundwater recovery system was shut in.
May 2012	The recovery pump became stuck in ENSR-02. The well was plugged and replaced with RW-3.
January 2013	Groundwater monitoring continued, the recovery system was not operated.
January 2014	Groundwater monitoring continued, the recovery system was not operated.
October 2014	Monitoring wells ACW-16 through ACW-21 installed within the plant boundary adjacent to existing wells with alternate screened intervals.
January 2015	Groundwater monitoring continued, the recovery system was not operated.
November 2015	Monitoring wells ACW-22 through ACW-25 were installed east of the plant boundary to further delineate organic and inorganic impacts downgradient from the site. Recovery well RW-4 was installed along the plants eastern border.
January 2016	Groundwater monitoring continued, the recovery system was not operated. The recovery system infrastructure was inspected in 2016. The electrical components are aging significant components need to be replaced or upgraded to meet current engineering standards. The system piping passed pressure testing.
November 9, 2016	Arcadis completed a hydrocarbon treatability study and analyzed the relationship between BTEX biodegradation and Groundwater Salinity at the site to identify the conditions leading to failing of the injection well screen.
2017	Tesoro Corporation acquired Western Refining, Inc. and will operate the facility as Andeavor Corporation.
October 27, 2017	Arcadis completed a site investigation to further define the vertical and horizontal distribution of chloride and hydrocarbon concentrations within the existing monitor well network footprint, access the upper and lower groundwater quality conditions, increase the accuracy of the hydraulic gradient model across the site, and to develop a surface elevation model of the base of the water bearing zone.
2017	Quarterly groundwater monitoring continued at the site.

Date	Activity
2018	Quarterly groundwater monitoring continued at the site.
June-July 2018	Two pairs of nested monitoring wells, ACW-30S/D and ACW-31S/D, were installed east of the Plant across Highway 18.
October 1, 2018	Marathon Petroleum Corp. acquired Andeavor Corp.
2019	Quarterly groundwater monitoring continued at the site.
December 2019	Two sets of paired monitoring wells (ACW-26/ACW-27 and ACW-28/ACW-29) were installed north of the Plant property in December 2019.
2020	Quarterly groundwater monitoring continued at the site.
October-November 2020	Three exploratory soil borings (BH-1 through BH-3) were advanced to the base of the uppermost groundwater bearing unit using roto-sonic drilling methods to collect soil samples for lithologic inspection and soil grain size analysis to facilitate design of remediation extraction wells.

Appendix B

2020 Quarterly HMI Data

HMI
Groundwater

Hydrologic Monitoring
1654 W. Sam Houston Pkwy. N.
Houston, Texas 77043

Phone 713.464.5206
Fax 713.464.5207

March 23, 2020

Mr. Wally Gilmore, P.G.
AECOM
19219 Katy Freeway, Suite 100
Houston, Texas 77094

Subject: 1Q20 Groundwater Monitoring, March 19, 2020
Jal #4 Gas Plant, Jal, New Mexico

Dear Mr. Gilmore:

This document summarizes groundwater monitoring field activities conducted by HMI on behalf of El Paso Natural Gas Company and AECOM at the Jal #4 Gas Plant.

Contents

Field Activities Narrative
Table 1: Gauging Data and Groundwater Field Parameters, March 19, 2020
Groundwater Sampling Forms and Field Instrument Calibration Record
Chain-of-Custody Form
El Paso ARF
Groundwater Sampling SOP

Field Activities Narrative

1. HMI equipped the sampled-well network with HMI-owned dedicated bladder pumps in 2017. Two well nests were installed in 2H18 (ACW-30S & ACW30D and ACW-32S & ACW-32D). Two additional well nests (ACW-26 & 27 and ACW-28 & 29) were installed in 2H19 (ACW-26 is a "shallow" well & ACW-27 is a "deep" well; and ACW-28 is a "shallow" well & ACW-29 is a "deep" well). HMI equips all sampled wells with HMI-owned dedicated bladder pumps. HMI respectfully requests the opportunity to retrieve these pumps when HMI's monitoring obligations are completed at the site.

2. Sitewide gauging and groundwater sampling was conducted March 19, 2020.

3. Groundwater sampling was conducted in accordance with EPA guidelines (Puls and Barcelona, 1996 EPA Guidance on Low-Flow Groundwater Sampling, REV 4, September 19, 2017), and the attached Groundwater Sampling SOP. Low-flow purging was conducted at EPA-recommended purge rates of 0.1 - 0.2 liters/minute. Field parameters of pH, specific conductivity, temperature, dissolved oxygen, and oxidation-reduction potential were monitored at ½-liter intervals in an air-tight flow-through cell. Turbidity was measured outside the cell. Well drawdown was monitored at the same intervals. Upon field parameter stabilization, the water input tube was disconnected from the flow-through cell and groundwater samples were collected directly into lab-supplied bottles, which were placed in iced coolers. The groundwater sampling process is documented on the attached groundwater sampling forms.

4. Additionally, two (2) water supply wells (OXY Well & Doom Well) were sampled.

5. Field QA/QC Sampling:

   Dup-01 @ ACW-14 (all parameters)
   Trip Blank (BTEX)

6. Samples were delivered to Eurofins Test America-Houston, for analysis per the attached COC. Proper chain-of-custody was maintained.

7. Purgewater transferred to lined, southern-most brine pond, per site instruction.

8. Site notes:

   Facility Manager (Ken Parker or mgr.) to be notified by AECOM prior to routine sampling events, also, El Paso to notify Oxy's Dusty Wilson, per note:

   Contact for Oxy regarding their field station where we sample the water well. There have been on and off very low exceedances of the 250 mg/l New Mexico standard for chlorides and I needed to notify them. The contact, Dusty Wilson, indicated that personnel who enter that facility must have H2S training and have an H2S monitor operating. Mr. Wilson stated there is a significant amount of H2S associated with the tank battery. He also indicated they would like a few days prior notice so they know who is coming and going out there, so if you can email me with the scheduled sample dates as they come along I will pass that along to Dusty.

   Thanks,

Joseph (Joe) Wiley, P.G.
Project Manager - Pipeline Remediation
Kinder Morgan, Inc.
1001 Louisiana Street, Room 757A
Houston, TX 77002
Phone: 713-420-3475
Cell Phone: 832-279-1610
Joe_wiley@kindermorgan.com

Site Contact: Bill Evans (575-441-4101); Jal Police Phone No. on JHA, per Mr. Evans (575-395-2501).

Monitor well lock keys are maintained in HMI's files.

OXY Well is sampled via outdoor spigot; Doom Well is sampled via spigot inside the well shed, on Mr. Dylan Doom's ranch (follow driveway into ranch, then down to the left, shed is on the right).

HMI appreciates the opportunity to assist El Paso Natural Gas Company and AECOM with this project. If you have any questions or require additional information please feel free to call us at 713.464.5206.

Sincerely,

HYDROLOGIC MONITORING

Scott C. Ude



Scott C. Ude, P.G.

The seal appearing on this document was authorized by Scott C. Ude, P.G. 353 on March 23, 2020.

Attachments

cc: Joe Wiley, P.G., El Paso Natural Gas Company
Scott Duncan, HMI

Table 1
Gauging Data and Groundwater Field Parameters

El Paso Natural Gas Company - Jal #4 Gas Plant
Lea County, New Mexico
March 19, 2020

Well I.D.	1,2,3Q # Wells Sampled	1,2,3Q # Wells Gauged	4Q # Wells Sampled	4Q # Wells Gauged	Ded. Blad Pump	Top of Casing Elev (ft-msl)	Depth to LNAPL (ft-toc)	Depth to Water (ft-toc)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	GW Elev* (ft-msl)	Water Column (ft)	Total Depth (ft-toc)	Stickup (ft)	Screen Interval (ft-bgs)	Sample Intake (ft-toc)	Casing Diam	pH (S.U.)	Temp. (C)	S.C. (umhos)	D.O. (mg/L)	ORP (mV)	Turbidity (NTU)	Water Clarity	Comments
ACW-01		1	1		Yes	3,302.15	NP	105.33	0.00	0.00	3,196.82	30.12	135.45	1.9	110-130	130.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-02A		2	2		Yes	3,302.16	NP	105.57	0.00	0.00	3,196.59	19.92	125.49	2.0	98-118	120.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-03		3		1	No	3,301.62	NP	105.19	0.00	0.00	3,196.43	29.93	135.12	1.6	112-132	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-04		4	3		Yes	3,302.05	NP	107.11	0.00	0.00	3,194.94	63.99	171.10	1.7	154-169	169.1	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-05		5	4		Yes	3,297.18	NP	103.16	0.00	0.00	3,194.02	14.21	117.37	1.5	105-115	114.4	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-06		6	5		Yes	3,302.84	NP	107.28	0.00	0.00	3,195.56	15.35	122.63	1.7	110-120	119.6	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-07		7	6		Yes	3,297.63	NP	102.30	0.00	0.00	3,195.33	15.09	117.39	1.5	105-115	114.4	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-08		8		2	No	3,299.54	NP	103.27	0.00	0.00	3,196.27	53.33	156.60	1.2	140-160	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-09		9	7		Yes	3,304.69	NP	110.23	0.00	0.00	3,194.46	52.25	162.48	2.4	140-160	159.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-10		10	8		Yes	3,299.82	NP	106.33	0.00	0.00	3,193.49	56.71	163.04	2.5	140-160	160.0	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-11		11	9		Yes	3,301.64	NP	105.68	0.00	0.00	3,195.96	56.00	161.68	2.1	140-161	159.7	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-12		12	10		Yes	3,301.80	NP	109.42	0.00	0.00	3,192.38	62.51	171.93	2.5	150-170	168.9	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-13	1		11		Yes	3,291.72	NP	99.32	0.00	0.00	3,192.40	76.30	175.62	2.0	153-173	172.6	4" PVC	6.60	20.0	1,897	5.5	64.6	2.2	Clear	
ACW-14	2		12		Yes	3,294.74	NP	100.28	0.00	0.00	3,194.46	75.94	176.22	2.0	157-177	173.2	4" PVC	7.41	19.7	867	4.1	40.2	2.3	Clear	Dup-01
ACW-15	3		13		Yes	3,292.75	NP	102.39	0.00	0.00	3,190.36	69.18	171.57	2.3	150-170	168.6	4" PVC	7.07	22.0	813	4.7	70.6	3.2	Clear	
ACW-16		13	14		Yes	3,307.89	NP	109.38	0.00	0.00	3,198.51	67.56	176.94	2.4	156-176	174.9	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-17		14	15		Yes	3,306.17	NP	108.43	0.00	0.00	3,197.74	63.35	171.78	2.6	151-171	169.8	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-18		15	16		Yes	3,303.15	NP	107.42	0.00	0.00	3,195.73	69.78	177.20	2.5	160-180	175.2	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-19		16	17		Yes	3,302.68	NP	106.25	0.00	0.00	3,196.43	14.91	121.16	2.2	98-118	119.2	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-20		17	18		Yes	3,303.50	NP	108.50	0.00	0.00	3,195.00	65.53	174.03	2.2	154-174	172.0	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-21		18	19		Yes	3,301.82	NP	105.78	0.00	0.00	3,196.04	14.74	120.52	2.1	98-118	118.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-22		19	20		Yes	3,306.24	NP	111.93	0.00	0.00	3,194.31	13.11	125.04	2.5	102-122	123.0	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-23		20	21		Yes	3,306.29	NP	112.03	0.00	0.00	3,194.26	57.68	169.71	2.3	147-167	167.7	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-24		21	22		Yes	3,305.56	NP	110.74	0.00	0.00	3,194.82	78.38	189.12	2.2	166-186	187.1	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-25		22	23		Yes	3,297.59	NP	103.31	0.00	0.00	3,194.28	71.37	174.68	2.1	151-171	172.7	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-26		23	24		Yes	TBD	NP	110.45	0.00	0.00	#VALUE!	20.15	130.60	1.6	95-120	125.6	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-27		24	25		Yes	TBD	NP	110.41	0.00	0.00	#VALUE!	66.79	177.20	1.8	160-180	167.2	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-28		25	26		Yes	TBD	NP	109.05	0.00	0.00	#VALUE!	19.25	128.30	1.8	95-120	123.3	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-29		26	27		Yes	TBD	NP	108.89	0.00	0.00	#VALUE!	67.90	176.79	1.8	160-180	166.8	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-30S		27	28		Yes	3,300.17	NP	104.51	0.00	0.00	3,195.66	17.99	122.50	2.3	95-120	117.5	3" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-30D		28	29		Yes	3,300.15	NP	104.80	0.00	0.00	3,195.35	82.63	187.43	2.3	165-185	177.4	3" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-32S		29	30		Yes	3,299.60	NP	107.01	0.00	0.00	3,192.59	15.32	122.33	2.5	95-120	117.3	3" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-32D		30	31		Yes	3,299.61	NP	107.03	0.00	0.00	3,192.58	65.61	172.64	2.5	150-170	162.6	3" PVC	NS	NS	NS	NS	NS	NS	NS	
Doom	4		32		No	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.61	19.2	439	4.5	-24.1	1.1	Clear	
ENSR-01		31	33		Yes	3,306.71	NP	107.73	0.00	0.00	3,198.98	47.62	155.35	1.6	123-148	150.4	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ENSR-03		32		3	No	3,305.05	NP	107.12	0.00	0.00	3,197.93	47.98	155.10	1.5	123-148	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
EPNG-01		33	34		Yes	3,310.03	NP	109.24	0.00	0.00	3,200.79	54.69	163.93	AG	120-160	160.9	6" Steel	NS	NS	NS	NS	NS	NS	NS	
OXY	5		35		No	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.50	18.1	1,048	5.2	-32.4	2.4	Clear	
PTP-01**		34	36		Yes	3,305.67	NP	107.71	0.00	0.00	3,197.96	NM	136.09	2.3	110-130	131.1	2" PVC	NS	NS	NS	NS	NS	NS	NS	
RW-01		35		4	No	3,302.16	NP	105.55	0.00	0.00	3,196.61	76.08	181.63	1.8	109-179	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-02		36		5	No	3,303.71	NP	109.30	0.00	0.00	3,194.41	64.35	173.65	1.4	105-175	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-03		37		6	No	3,302.65	NP	106.28	0.00	0.00	3,196.37	71.41	177.69	1.4	136.7-176.7	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-04		38		7	No	3,303.26	NP	108.54	0.00	0.00	3,194.72	67.62	176.16	1.6	154-174	NA	NA	NS	NS	NS	NS	NS	NS	NS	

Notes: Monitoring completed by HMI on behalf of El Paso Natural Gas Company
Gauging and groundwater sampling conducted March 19, 2020
Top of casing survey data, per Piper Surveying, 2/9/16, Revised 7/23/18, per AECOM email 9-11-18
NP = No product (LNAPL), NA = Not applicable, NS = Not sampled, NM = Not measured, AG = At-Grade Surface Completion
ACW-30S, ACW-30D, ACW-32S, and ACW-32D (installed in 2H18), equipped with HMI-owned bladder sampling pumps; these wells to be sampled during 4Q (large) events ongoing, per El Paso
ACW-26, ACW-27, ACW-28, and ACW-29 (installed in 2H19), equipped with HMI-owned bladder sampling pumps; these wells to be sampled during 4Q (large) events ongoing, per El Paso
* GW elevation data uncorrected for ave. density of water column as a function of TDS
** 1Q17, a Hydrosleeve/rope assembly was found wedged in PTP-01 well casing @ 80 ft; HMI cleared blockage with steel cable & winch; dedicated bladder pump installed 2Q17, per El Paso

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Monitoring Well Purging and Sampling Record

Paso Natural Gas Company
al #4 Gas Plant
ea County, New Mexico

Well: ACW-13

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: DSD
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
3-19-20	915	NP	99.32	0.00	0.00	175.62	172.6	153 - 173				Weather: Clear 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
3-19-20	920	99.61	0.5	5.61	19.7	1790	6.5	100.6	7.1	Low-flow purge-sample with	Clear
	923	99.68	1.0	5.75	19.8	1788	6.4	96.7	6.5	HMI's dedicated bladder pump	
	925	99.68	1.5	6.03	19.9	1816	5.9	83.6	5.7		
	927	99.68	2.0	6.24	19.9	1857	5.7	72.9	5.2		
	930	99.68	2.5	6.39	19.9	1867	5.7	66.0	3.7		
	932	99.68	3.0	6.51	19.9	1875	5.6	66.6	4.5		
	935	99.68	3.5	6.58	20.0	1889	5.6	65.2	3.2		
	937	99.68	4.0	6.60	20.6	1897	5.5	64.6	2.2		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
3-19-20	940	ACW-13	99.68	6.60	20.6	1897	5.5	64.6	2.2	BTEX	HCL	Lab: Test America, Houston, TX
										TDS, CL, Conductivity	Neat	
										Sodium	HNO_3	

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+ Dup - 01
(all parameters)

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
al #4 Gas Plant
ea County, New Mexico

Well: ACW-14

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BD
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
3/19/20	1035	NP	100.28	0.00	0.00	176.22	173.2	157-177				Weather: Sunny 50's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
3/19/20	1040	100.44	0.5	7.28	20.9	952	5.4	45.9	6.3	Low-flow purge-sample with	Clear
	1043	100.44	1.0	7.34	20.5	937	5.1	44.0	4.2	HMI's dedicated bladder pump	"
	1045	100.44	1.5	7.37	20.2	921	4.8	43.7	3.5		"
	1048	100.44	2.0	7.39	19.9	903	4.5	42.8	2.9		"
	1050	100.44	2.5	7.40	19.8	881	4.3	41.3	2.6		"
	1053	100.44	3.0	7.40	19.7	872	4.2	40.8	2.4		"
	1055	100.44	3.5	7.41	19.7	869	4.1	40.5	2.3		"
	1058	100.44	4.0	7.41	19.7	867	4.1	40.2	2.3		"

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Test America, Houston, TX
3/19/20	1100	ACW-14	100.44	7.41	19.7	867	4.1	40.2	2.3	BTEX	HCL	
										TDS, CL, Conductivity	Neat	
										Sodium	HNO_3	
3/19/20	1000	DUP-01	100.44	7.41	19.7	867	4.1	40.2	2.3	BTEX	HCL	
										TDS, CL, Cond	Neat	
										Sodium	HNO_3	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
al #4 Gas Plant
ea County, New Mexico

Well: ACW-15

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: OSD
Well Condition: GOOD

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
3-19-20	1005	NP	102.39	0.00	0.00	171.57	168.6	150-170				Weather: Clear 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
3-19-20	1007	102.42	0.5	6.89	20.1	925	7.7	111.0	7.6	Low-flow purge-sample with	Clear
	1010	102.42	1.0	6.82	20.1	875	5.5	95.2	7.1	HMI's dedicated bladder pump	↓
	1012	102.42	1.5	6.91	20.1	861	5.1	82.1	6.6		
	1015	102.46	2.0	6.99	20.1	840	4.8	72.9	4.5		
	1017	102.50	2.5	7.04	20.2	830	4.8	68.3	5.4		
	1020	102.50	3.0	7.05	20.2	816	4.7	68.4	5.1		
	1022	102.50	3.5	7.06	22.1	810	4.7	69.9	4.1		
↓	1025	102.52	4.0	7.07	22.0	813	4.7	70.6	3.2		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
3-19-20	1030	ACW-15	102.52	7.07	22.0	813	4.7	70.6	3.2	BTEX	HCL	Lab: Test America, Houston, TX
										TDS, CL, Conductivity	Neat	
										Sodium	HNO_3	

Released to Imaging: 10/28/2022 9:54:55 AM
Received by OCD: 4/19/2021 1:26:48 PM

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: Doom Well

Hydrologic Monitoring
Houston, Texas

Initials: BB
Well Condition: Good

Well Inspection Information

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
3/19/20	910	NA	NA	NA	NA	NA	NA	NA				Weather: Sunny 50's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (G)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
3/19/20	915	NA	1.0	7.59	18.9	421	5.2	-42.8	1.6	Mr. Doom's water supply well;	Clear
↓	916	↓	2.0	7.62	19.1	430	4.8	-29.2	1.2	sampled from spigot inside	"
	917		3.0	7.61	19.0	437	4.6	-26.8	1.1	Mr. Doom's shed; purge	"
↓	918	↓	4.0	7.61	19.2	439	4.5	-24.1	1.1	approx. 4 gal prior to sampling	"

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Test America, Houston, TX
3/19/20	920	Doom Well	NA	7.61	19.2	439	4.5	-24.1	1.1	BTEX	HCL	
										TDS, CL, Conductivity	Neat	
										Sodium	HNO_3	

Released to Imaging: 10/28/2022 9:54:55 AM
Received by OCD: 4/19/2021 1:26:48 PM

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: OXY Well

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
3/19/20	1000	NA	NA	NA	NA	NA	NA	NA				Weather: Sunny 50's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (G)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
3/19/20	1005	NA	1.0	7.67	17.8	1078	6.1	-39.6	3.2	OXY building water supply well;	Clear
↓	1006	↓	2.0	7.56	17.9	1,056	5.5	-34.6	2.9	sampled at outside spigot	"
↓	1007	↓	3.0	7.52	17.9	1,051	5.3	-33.7	2.5	to the right of front door; possible	"
↓	1008	↓	4.0	7.50	18.1	1,048	5.2	-32.4	2.4	pliers needed; purge approx.	"
										4 gal prior to sampling	

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Test America, Houston, TX
3/19/20	1010	OXY Well	NA	7.50	18.1	1,048	5.2	-32.4	2.4	BTEX	HCL	
										TDS, CL, Conductivity	Neat	
										Sodium	HNO_3	

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Instrument Calibration Log

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Hydrologic Monitoring

Date	Time	pH Hanna (Std. units)	Specific Conductivity Hanna (umho/cm)	Dissolved Oxygen Hanna (Slope Cal. in saturated air)	Turbidity Lamotte (NTU)	ORP Hanna HI 7020 Soln (200-275 mV)		Initials / Comments
3-19-20	8:18	4.00/7.00	1,000	100%	10.0	235.7		DSD
3/19/20	8:20	4.01/7.00	1,000	100%	10.0	243.8		

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Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Brian Hillin + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-75501-20410.1
Client Contact: Mr. Wallace Gilmore	Phone: 713-653-3127	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant RWIP 1Q20	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - 6010 ~~6~~ Na (Sodium) D	8260B_LL - BTEX Only A	120.1-Turbidity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl only N	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
ACW-13	3-19-20	940	G	Water			X	X	X	6	
ACW-14	"	1100	"	Water			X	X	X	6	
ACW-15	"	1030	"	Water			X	X	X	6	
Doom well	"	1010	"	Water			X	X	X	6	
OXY well	"	920	"	Water			X	X	X	6	
DUP-01	"	1000	↓	Water			X	X	X	6	
Trip Blank	↓	—	—	Water				X		2	
				Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Kudy Mueller	3-20-20 1109	HMI			
2						
3						

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

Ver: 01/16/2019

ARF FORM: SHEET 1

Unless otherwise noted, all fields should be completed by ARF Initiator.

rev_7_04032017

KINDER MORGAN

Analytical Request Form (ARF)
Project Information

Current Site Company/Pipeline Name: EPNG

ARF #: ERG-ARC-01-03-20-ARS-01
xxx-xxx-mm-dd-yy-xxx-##

ENFOS AOC / Project Name (make sure to match ENFOS AOC): Jal #4 Gas Plant RWIP

FOR LAB USE ONLY

Lab Work Directive (WD)/ENFOS WD/PO#: WD801914

Lab Cost Cluster: CC06_Monitoring Lab Subtask: Lab - I (1.4, 2.3, 7.3, 8.4)(19)

Project Billing : [x] Lab Enters Invoice Through Enfos [ ] Paper invoice mailed to KM PM listed below [ ] Other/ Describe:

Site Description or contaminants of concern: BTEX, Chloride, Sodium, TDS, Specific Conductance

Site Address: 9 Miles North of Jal, NM on Hwy 18

City: Jal State: NM Country: USA

Regulatory Agency: NMOCD

Project Type (RCRA, CERCLA, TRRP):

Anticipated Start Date: 3/16/2020 Anticipated Completion Date: 3/20/2020

Frequency of Sampling: Sampling Plan Attached: No

Are there Additional Requests/ Special Instructions on Page 2? No

Title(s)/Date(s) of attached sampling information:

Project Management Contacts

KM Contact

KM Office: Houston ☑ Copy on ARF Distribution

Address: 1001 Louisiana Street, Room 757A
Houston, TX 770022

KM Project Manager: Joe Wiley

Phone : 713-420-3475 Fax: E-mail: Joe_Wiley@KinderMorgan.com

Designated Consultant Contact

Designated Consultant Firm Name: AECOM ☑ Copy on ARF Distribution

Address: 19219 Katy Freeway, Suite 100
Houston, TX 77094

Designated Consultant Project Manager: Wally Gilmore

Phone : 713-542-9523 Fax: E-mail: wallace.gilmore@aecom.com

Laboratory Contact

Laboratory Name: TestAmerica ☑ Copy on ARF Distribution

Address: 6310 Rothway Street
Houston, TX 77040

Laboratory Project Manager: Bethany McDaniel

Phone : 713-690-4444 Fax: 361-289-2471 E-mail: bethany.mcdaniel@testamericainc.com

Additional Parties to Receive ARF:

Name: E-mail:
Affliation:

Name: E-mail:
Affliation:

Name: E-mail:
Affliation:

ARF FORM: SHEET 1

Data Deliverables

Data Package Deliverables supplied to:

Required Data Deliverables Format(s): **PDF** Hardcopy PDF and Hardcopy CD
Required Format of Electronic Data Deliverables **Excel** Equis Enfos

Size Limitation for e-mail of deliverable **10** **MB** or Unlimited
Forward the Electronic Data Deliverables to:

	Name	E-Mail Address
	Wally Gilmore	wallace.gilmore@aecom.com

Special Instructions for data package or electronic deliverable?:

Record of ARF Initiation and Revisions

Initiated ARF:	Name:	Wally Gilmore	Date:	1/3/2020
Laboratory Acceptance:	Name:	Bethany McDaniel	Date:	1/3/2020
Revision 1:	Name:	Joe Wiley	Date:	1/3/2020
	Types of Changes:			
Revision 2:	Name:		Date:	
	Types of Changes:			
Revision 3:	Name:		Date:	
	Types of Changes:			
Revision 4:	Name:		Date:	
	Types of Changes:			

ARF FORM: SHEET 2

Parameters and Analytical Methods Requested *Unless otherwise noted, all fields should be completed by ARF Initiator.* *rev_7_04032017*

Projected Analytical Plan & Number of Samples to be Collected

Matrix Codes: A=Air W=Water S=Soil WP=wipe O=Oil OT=Other

Compound List or Parameter	Analytical Method	Matrix Code	DP/TAT Level Code	Number of Investigatory Samples	Number of Samples for Hold/Archival	*Quality Control Samples* MS/MSD Pairs	Trip Blanks	Rinse, Equipment, and Field Blanks	Field Duplicates	Total Number of Samples Expected	Total Number of Samples Analyzed	***For Laboratory Use Only*** Number of Samples Received by Laboratory	Unit Rate	Total Cost
BTEX	8260B	W	L2/28D	5	0	0	1	0	1	**7**				
Total Dissolved Solids	SM 2540C	W	L2/28D	5	0	0	0	0	1	**6**				
Chloride	EPA SW846 9056	W	L2/28D	5	0	0	0	0	1	**6**				
Sodium	EPA SW846 6010B	W	L2/28D	5	0	0	0	0	1	**6**				
Specific Conductance	EPA 120.1	W	L2/28D	5	0	0	0	0	1	**6**				

$ -

Sampling Frequency: SINGLE EVENT WEEKLY MONTHLY **QUARTERLY** SEMI-ANNUAL ANNUAL OTHER/DESCRIBE: _____

Are special regulatory requirements, detection limits or action levels needed? _____

Are SW-846 Method 5035 volatile organic analyses requested? No If yes, what container is required? Tared Vials Methanol Vials 4-oz. jars

EnCore Kits Terra Core Kits

Does an approved QAPjP exist? No Title: _____

Revision/Date _____

Are reporting estimated values "J" required for results less than the reporting limit? **Yes**

Are tentatively identified compounds (TICs) required? Volatiles Semivolatiles

Sample retention time (post reporting): 30 days (standard) Other (Hold for ____ days)

Ship Bottles to:

Name Scott Ude

Consultant HMI

Location Name

Street Address 1654 W Sam Houston Pkwy N

City, State, Zip Houston, Texas 77043

Phone Number 713-714-1624

Date/Time Bottles Required 8/1/2018

Shipping Return:

FedEx UPS Laboratory Courrier

Saturday Receipt

Jal #4_2020 1st Qtr ERG ARF

ARF FORM: SHEET 2

Laboratory Invoices for non-contracted laboratories must be submitted to:

Company Name	Kinder Morgan
Name	Joe Wiley
Street Address	1001 Louisiana Street, Room 757A
City, State, Zip	Houston, TX 77002
Phone Number	713-420-3475

LAB USE ONLY

Internal Laboratory Work Order Number

Invoice Approval

Company Name	Kinder Morgan
Final Invoice	

Additional Requests and Instructions

Please have sampling kits delivered to HMI by March 11, 2020 and provide return shipping labels with the cooler(s).

Phone Logs and Project Correspondence

HMI
Groundwater

Hydrologic Monitoring
1654 W. Sam Houston Pkwy. N.
Houston, Texas 77043

Phone 713.464.5206
Fax 713.464.5207

M E M O R A N D U M

Low-Flow Groundwater Sampling Procedures
El Paso Natural Gas Company
Jal #4 Gas Plant, Lea County, New Mexico

HMI conducts low-flow groundwater sampling in accordance with TCEQ and EPA guidelines (Puls and Barcelona, 1996 EPA Guidance on Low-Flow Groundwater Sampling, REV 4, September 19, 2017).

Groundwater Sampling Methodology

HMI conducts low-flow groundwater sampling using bladder pumps and polyethylene tubing dedicated in sampled wells at the site, during its first groundwater sampling event at the site in March 2017. Pumps were dedicated in the wells to increase sample quality and field efficiency, and remain property of HMI. HMI would appreciate the opportunity to retrieve the pumps at such time that HMI no longer conducts monitoring at the site.

Purging commences through a sealed flow-through cell at EPA-recommended purge rates (generally 0.1 to 0.2 liters/minute), selected to limit the monitored drawdown during the purging process. Each HMI flow-through cell has a volume of 0.5 liters. Field parameter readings are collected at 0.5-liter intervals (the equivalent of one cell volume "turnover"). Field parameters of pH, specific conductivity, temperature, dissolved oxygen, and oxidation-reduction potential are monitored inside the cell. Turbidity is monitored outside of the cell. Purging continues until a requisite volume of groundwater is purged (a minimum of 3,000 ml or six flow-through cell volumes), and field parameters have stabilized in accordance with the EPA guidance below:

Water Quality Parameters (Stabilization Parameters in Accordance with EPA (2002), Groundwater Sampling Guidelines for Superfund and RCRA Project Managers, Yeskis & Zavala, EPA/542:S-02/001)

- pH +/- 0.1 units;
- Temperature -
- Conductivity +/- 3%
- Dissolved Oxygen +/- 0.3 mg/L
- ORP +/- 10%
- Turbidity 10%

Groundwater samples are collected directly into laboratory-supplied containers. Groundwater samples are placed in iced coolers, and remain in HMI custody until delivery to the laboratory.

Decontamination Procedures

Non-dedicated equipment, (i.e., only the electronic water level probe for this project) is properly decontaminated prior to use and between wells. The decontamination procedure for the water level probe consists of a spray of isopropanol (likely not warranted at this site), followed by a thorough wash in distilled water and Liquinox non-phosphate soap, with a final distilled water. The probe is allowed to air dry.

HMI Deliverables

HMI provides thorough field documentation of groundwater monitoring activities performed, including groundwater sampling forms, field equipment calibration logs, a brief field narrative, and an Excel table summarizing gauging data and groundwater field parameters.

HMI Groundwater

Hydrologic Monitoring
1654 W. Sam Houston Pkwy. N.
Houston, Texas 77043

Phone 713.464.5206
Fax 713.464.5207

June 29, 2020

Mr. Wally Gilmore, P.G.
AECOM
19219 Katy Freeway, Suite 100
Houston, Texas 77094

Subject: 2Q20 Groundwater Monitoring, June 24, 2020
Jal #4 Gas Plant, Jal, New Mexico

Dear Mr. Gilmore:

This document summarizes groundwater monitoring field activities conducted by HMI on behalf of El Paso Natural Gas Company and AECOM at the Jal #4 Gas Plant.

Contents

Field Activities Narrative
Table 1: Gauging Data and Groundwater Field Parameters, June 24, 2020
Groundwater Sampling Forms and Field Instrument Calibration Record
Chain-of-Custody Form
El Paso ARF
Groundwater Sampling SOP

Field Activities Narrative

1. HMI equipped the sampled-well network with HMI-owned dedicated bladder pumps in 2017. Two well nests were installed in 2H18 (ACW-30S & ACW30D and ACW-32S & ACW-32D). Two additional well nests (ACW-26 & 27 and ACW-28 & 29) were installed in 2H19 (ACW-26 is the "shallow" well & ACW-27 is the "deep" well; ACW-28 is the "shallow" well & ACW-29 is the "deep" well). HMI equips all sampled wells with HMI-owned dedicated bladder pumps, to increase sample quality and field efficiencies. HMI respectfully requests the opportunity to retrieve the pumps when HMI's monitoring obligations are completed.

2. 2Q20 sitewide gauging and groundwater sampling was conducted June 24, 2020.

3. Groundwater sampling was conducted in accordance with EPA guidelines (Puls and Barcelona, 1996 EPA Guidance on Low-Flow Groundwater Sampling, REV 4, September 19, 2017), and the attached Groundwater Sampling SOP. Low-flow purging was conducted at EPA-recommended purge rates of 0.1 - 0.2 liters/minute. Field parameters of pH, specific conductivity, temperature, dissolved oxygen, and oxidation-reduction potential were monitored at ½-liter intervals in an air-tight flow-through cell. Turbidity was measured outside the cell. Well drawdown was monitored at the same intervals. Upon field parameter stabilization, the water input tube was disconnected from the flow-through cell and groundwater samples were collected directly into lab-supplied bottles, which were placed in iced coolers. The groundwater sampling process is documented on the attached groundwater sampling forms.

4. Additionally, two (2) water supply wells were sampled (OXY Well & Doom Well).

5. <u>Field QA/QC Sampling:</u>

   Dup-01 @ ACW-14 (all parameters)
   Trip Blank (BTEX)

6. Groundwater samples were delivered to Eurofins Test America-Houston, for analysis per attached COC. Proper chain-of-custody was maintained.

7. HMI has prototyped a *ventilated barrel cover*, designed to evaporate investigation-derived waste (IDW) purgewater, generated during routine groundwater monitoring, in a safe, cost-effective manner. Per Kinder Morgan (El Paso Natural Gas Company), a labeled 55-gallon steel drum with prototyped-version *ventilated barrel cover* (attached to drum by industry-standard, ring-bolt closure), was positioned on a wooden pallet, inside the steel cage around well RW-2 (east-side of Hwy). IDW groundwater monitoring is evaporated on an ongoing basis, since 2Q20. The drum contains five (5) gallons purgewater, following the 2Q20 groundwater monitoring event.



Jal #4 Gas Plant, Jal, New Mexico – Drum with Ventilated Barrel Cover



Jal #4 Gas Plant, Jal, New Mexico - Field-Deployed Drum with Ventilated Barrel Cover – Effectively Evaporates Groundwater Monitoring Purgewater "24-7"



Jal #4 Gas Plant, Jal, New Mexico - Field-Deployed Drum with Ventilated Barrel Cover (Well RW-2 Enclosure)

8. Site notes:
   Facility Manager (Ken Parker or mgr.) is notified by AECOM prior to sampling events; also, El Paso to notify Oxy's Dusty Wilson, per note below:

   Contact for Oxy regarding their field station where we sample the water well. There have been on and off very low exceedances of the 250 mg/l New Mexico standard for chlorides and I needed to notify them. The contact, Dusty Wilson, indicated that personnel who enter that facility must have H2S training and have an H2S monitor operating. Mr. Wilson stated there is a significant amount of H2S associated with the tank battery. He also indicated they would like a few days prior notice so they know who is coming and going out there, so if you can email me with the scheduled sample dates as they come along I will pass that along to Dusty.
   Thanks,
   Joseph (Joe) Wiley, P.G.
   Project Manager - Pipeline Remediation
   Kinder Morgan, Inc.
   1001 Louisiana Street, Room 757A
   Houston, TX 77002
   Phone: 713-420-3475
   Cell Phone: 832-279-1610
   Joe_wiley@kindermorgan.com

   Site Contact: Bill Evans (575-441-4101); Jal Police Phone No. on JHA, per Mr. Evans (575-395-2501).

   Monitor well lock keys are maintained in HMI's files.

   OXY Well is sampled via outdoor spigot; Doom Well is sampled via spigot inside well shed, on Mr. Dylan Doom's ranch (follow driveway into ranch, then down to the left; shed on the right).

HMI appreciates the opportunity to assist El Paso Natural Gas Company and AECOM with this project. If you have any questions or require additional information please feel free to call us at 713.464.5206.

Sincerely,

HYDROLOGIC MONITORING

Scott C. Ude

Scott C. Ude, P.G.



The seal appearing on this document was authorized by Scott C. Ude, P.G. 353 on June 29, 2020.

Attachments

cc: Joe Wiley, P.G., El Paso Natural Gas Company
Scott Duncan, HMI
Cameron Haber, HMI

Table 1
Gauging Data and Groundwater Field Parameters

El Paso Natural Gas Company - Jal #4 Gas Plant
Lea County, New Mexico
June 24, 2020

Well I.D.	1,2,3Q # Wells Sampled	1,2,3Q # Wells Gauged	4Q # Wells Sampled	4Q # Wells Gauged	Ded. Blad Pump	Top of Casing Elev (ft-msl)	Depth to LNAPL (ft-toc)	Depth to Water (ft-toc)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	GW Elev* (ft-msl)	Water Column (ft)	Total Depth (ft-toc)	Stickup (ft)	Screen Interval (ft-bgs)	Sample Intake (ft-toc)	Casing Diam	pH (S.U.)	Temp. (C)	S.C. (umhos)	D.O. (mg/L)	ORP (mV)	Turbidity (NTU)	Water Clarity	Comments
ACW-01		1	1		Yes	3,302.15	NP	105.22	0.00	0.00	3,196.93	30.23	135.45	1.9	110-130	130.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-02A		2	2		Yes	3,302.16	NP	105.50	0.00	0.00	3,196.66	19.99	125.49	2.0	98-118	120.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-03		3		1	No	3,301.62	NP	105.11	0.00	0.00	3,196.51	30.01	135.12	1.6	112-132	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-04		4	3		Yes	3,302.05	NP	107.08	0.00	0.00	3,194.97	64.02	171.10	1.7	154-169	169.1	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-05		5	4		Yes	3,297.18	NP	102.98	0.00	0.00	3,194.20	14.39	117.37	1.5	105-115	114.4	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-06		6	5		Yes	3,302.84	NP	107.20	0.00	0.00	3,195.64	15.43	122.63	1.7	110-120	119.6	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-07		7	6		Yes	3,297.63	NP	102.13	0.00	0.00	3,195.50	15.26	117.39	1.5	105-115	114.4	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-08		8		2	No	3,299.54	NP	103.22	0.00	0.00	3,196.32	53.38	156.60	1.2	140-160	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-09		9	7		Yes	3,304.69	NP	110.08	0.00	0.00	3,194.61	52.40	162.48	2.4	140-160	159.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-10		10	8		Yes	3,299.82	NP	106.19	0.00	0.00	3,193.63	56.85	163.04	2.5	140-160	160.0	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-11		11	9		Yes	3,301.64	NP	105.95	0.00	0.00	3,195.69	55.73	161.68	2.1	140-161	159.7	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-12		12	10		Yes	3,301.80	NP	109.26	0.00	0.00	3,192.54	62.67	171.93	2.5	150-170	168.9	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-13	1		11		Yes	3,291.72	NP	99.23	0.00	0.00	3,192.49	76.39	175.62	2.0	153-173	172.6	4" PVC	6.53	22.5	2,940	3.9	165.7	4.0	Clear	
ACW-14	2		12		Yes	3,294.74	NP	100.16	0.00	0.00	3,194.58	76.06	176.22	2.0	157-177	173.2	4" PVC	6.80	23.7	1,026	3.6	131.6	3.7	Clear	Dup-01
ACW-15	3		13		Yes	3,292.75	NP	102.13	0.00	0.00	3,190.62	69.44	171.57	2.3	150-170	168.6	4" PVC	7.08	23.4	1,086	3.2	156.9	5.0	Clear	
ACW-16		13	14		Yes	3,307.89	NP	109.23	0.00	0.00	3,198.66	67.71	176.94	2.4	156-176	174.9	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-17		14	15		Yes	3,306.17	NP	108.32	0.00	0.00	3,197.85	63.46	171.78	2.6	151-171	169.8	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-18		15	16		Yes	3,303.15	NP	107.30	0.00	0.00	3,195.85	69.90	177.20	2.5	160-180	175.2	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-19		16	17		Yes	3,302.68	NP	106.21	0.00	0.00	3,196.47	14.95	121.16	2.2	98-118	119.2	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-20		17	18		Yes	3,303.50	NP	108.42	0.00	0.00	3,195.08	65.61	174.03	2.2	154-174	172.0	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-21		18	19		Yes	3,301.82	NP	105.70	0.00	0.00	3,196.12	14.82	120.52	2.1	98-118	118.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-22		19	20		Yes	3,306.24	NP	111.75	0.00	0.00	3,194.49	13.29	125.04	2.5	102-122	123.0	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-23		20	21		Yes	3,306.29	NP	111.85	0.00	0.00	3,194.44	57.86	169.71	2.3	147-167	167.7	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-24		21	22		Yes	3,305.56	NP	110.68	0.00	0.00	3,194.88	78.44	189.12	2.2	166-186	187.1	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-25		22	23		Yes	3,297.59	NP	103.17	0.00	0.00	3,194.42	71.51	174.68	2.1	151-171	172.7	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-26		23	24		Yes	TBD	NP	110.38	0.00	0.00	#VALUE!	20.22	130.60	1.6	95-120	125.6	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-27		24	25		Yes	TBD	NP	110.36	0.00	0.00	#VALUE!	66.84	177.20	1.8	160-180	167.2	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-28		25	26		Yes	TBD	NP	109.00	0.00	0.00	#VALUE!	19.30	128.30	1.8	95-120	123.3	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-29		26	27		Yes	TBD	NP	108.84	0.00	0.00	#VALUE!	67.95	176.79	1.8	160-180	166.8	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-30S		27	28		Yes	3,300.17	NP	104.37	0.00	0.00	3,195.80	18.13	122.50	2.3	95-120	117.5	3" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-30D		28	29		Yes	3,300.15	NP	104.66	0.00	0.00	3,195.49	82.77	187.43	2.3	165-185	177.4	3" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-32S		29	30		Yes	3,299.60	NP	106.87	0.00	0.00	3,192.73	15.46	122.33	2.5	95-120	117.3	3" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-32D		30	31		Yes	3,299.61	NP	106.85	0.00	0.00	3,192.76	65.79	172.64	2.5	150-170	162.6	3" PVC	NS	NS	NS	NS	NS	NS	NS	
Doom	4		32		No	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.24	20.6	451	4.6	-22.9	1.5	Clear	
ENSR-01		31	33		Yes	3,306.71	NP	107.58	0.00	0.00	3,199.13	47.77	155.35	1.6	123-148	150.4	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ENSR-03		32		3	No	3,305.05	NP	106.98	0.00	0.00	3,198.07	48.12	155.10	1.5	123-148	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
EPNG-01		33	34		Yes	3,310.03	NP	109.18	0.00	0.00	3,200.85	54.75	163.93	AG	120-160	160.9	6" Steel	NS	NS	NS	NS	NS	NS	NS	
OXY	5		35		No	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.41	26.6	1,087	5.9	-16.5	2.2	Clear	
PTP-01**		34	36		Yes	3,305.67	NP	107.58	0.00	0.00	3,198.09	NM	136.09	2.3	110-130	131.1	2" PVC	NS	NS	NS	NS	NS	NS	NS	
RW-01		35		4	No	3,302.16	NP	105.48	0.00	0.00	3,196.68	76.15	181.63	1.8	109-179	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-02		36		5	No	3,303.71	NP	109.15	0.00	0.00	3,194.56	64.50	173.65	1.4	105-175	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-03		37		6	No	3,302.65	NP	106.20	0.00	0.00	3,196.45	71.49	177.69	1.4	136.7-176.7	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-04		38		7	No	3,303.26	NP	108.46	0.00	0.00	3,194.80	67.70	176.16	1.6	154-174	NA	NA	NS	NS	NS	NS	NS	NS	NS	

Notes: Monitoring completed by HMI on behalf of El Paso Natural Gas Company
Gauging and groundwater sampling conducted June 24, 2020
Top of casing survey data, per Piper Surveying, 2/9/16, Revised 7/23/18, per AECOM email 9-11-18
NP = No product (LNAPL), NA = Not applicable, NS = Not sampled, NM = Not measured, AG = At-Grade Surface Completion
ACW-30S, ACW-30D, ACW-32S, and ACW-32D (installed in 2H18), equipped with HMI-owned bladder sampling pumps; these wells to be sampled during 4Q (large) events ongoing, per El Paso
ACW-26, ACW-27, ACW-28, and ACW-29 (installed in 2H19), equipped with HMI-owned bladder sampling pumps; these wells to be sampled during 4Q (large) events ongoing, per El Paso
* GW elevation data uncorrected for ave. density of water column as a function of TDS
** 1Q17, a Hydrosleeve/rope assembly was found wedged in PTP-01 well casing @ 80 ft; HMI cleared blockage with steel cable & winch; dedicated bladder pump installed 2Q17, per El Paso

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Val #4 Gas Plant
Lea County, New Mexico

Well: ACW-13

Hydrologic Monitoring
Houston, Texas

Initials: CJH
Well Condition: good

Well Inspection Information

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
6.24.20	915	NP	99.23	0.00	0.00	175.62	172.6	153 - 173				Weather: clear, 70's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
6.24.20	920	99.51	0.5	7.03	24.7	3010	6.2	89.3	6.7	Low-flow purge-sample with	Clear
	922	99.53	1.0	6.52	23.3	2940	4.9	143.0	6.2	HMI's dedicated bladder pump	
	925	99.54	1.5	6.45	22.8	2910	4.4	160.2	6.4		
	927	99.54	2.0	6.47	22.6	2900	4.2	164.1	5.6		
	930	99.54	2.5	6.49	22.5	2910	4.1	165.1	5.1		
	932	99.54	3.0	6.50	22.5	2920	4.0	166.4	4.8		
	935	99.54	3.5	6.52	22.4	2930	3.9	166.0	4.4		
↓	937	99.54	4.0	6.53	22.5	2940	3.9	165.7	4.0		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Test America, Houston, TX
6.24.20	940	ACW-13	99.54	6.53	22.5	2940	3.9	165.7	4.0	BTEX	HCL	
										TDS, CL, Conductivity	Neat	
										Sodium	HNO_3	

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+ Dup-01 (all parameters)

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
al #4 Gas Plant
ea County, New Mexico

Well: ACW-14

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
6.24.20	1115	NP	100.16	0.00	0.00	176.22	173.2	157-177				Weather: Clear, 80's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
6.24.20	1120	100.31	0.5	7.21	25.5	1045	5.5	96.9	6.9	Low-flow purge-sample with	Clear
	1122	100.31	1.0	6.59	24.5	1044	4.4	138.8	6.1	HMI's dedicated bladder pump	
	1125	100.31	1.5	6.44	23.6	1036	3.9	150.4	5.8		
	1127	100.31	2.0	6.55	23.7	1034	3.8	146.8	5.4		
	1130	100.31	2.5	6.65	23.6	1031	3.8	141.5	5.0		
	1132	100.31	3.0	6.71	23.6	1029	3.7	137.9	4.4		
	1135	100.31	3.5	6.76	23.7	1027	3.7	134.2	4.2		
	1137	100.31	4.0	6.80	23.7	1026	3.6	131.6	3.7		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Test America, Houston, TX
6.24.20	1140	ACW-14	100.31	6.80	23.7	1026	3.6	131.6	3.7	BTEX	HCL	
										TDS, CL, Conductivity	Neat	
										Sodium	HNO_3	
	1100	DUP-01	100.31	6.80	23.7	1026	3.6	131.6	3.7	BTEX	HCL	
										TDS, CL, Cond	Neat	
										Sodium	HNO_3	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
al #4 Gas Plant
ea County, New Mexico

Well: ACW-15

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
6.24.20	1010	NP	102.13	0.00	0.00	171.57	168.6	150-170				Weather: clear, 80's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
6.24.20	1015	102.17	0.5	6.67	24.7	1201	3.2	178.4	8.0	Low-flow purge-sample with	Clear
	1017	102.17	1.0	6.39	24.1	1132	3.2	202.6	7.7	HMI's dedicated bladder pump	
	1020	102.17	1.5	6.61	23.5	1108	3.1	192.4	7.4		
	1022	102.17	2.0	6.89	23.3	1101	3.1	177.9	7.1		
	1025	102.18	2.5	6.96	23.3	1097	3.0	170.1	6.6		
	1027	102.18	3.0	7.01	23.2	1093	3.1	165.6	6.1		
	1030	102.18	3.5	7.04	23.3	1089	3.2	161.2	5.6		
	1032	102.18	4.0	7.08	23.4	1086	3.2	156.9	5.0		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Test America, Houston, TX
6.24.20	1035	ACW-15	102.18	7.08	23.4	1086	3.2	156.9	5.0	BTEX	HCL	
										TDS, CL, Conductivity	Neat	
										Sodium	HNO_3	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: Doom Well

Hydrologic Monitoring
Houston, Texas

Initials: BB
Well Condition: Good

Well Inspection Information

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
6/24/20	1035	NA	NA	NA	NA	NA	NA	NA				Weather: Sunny, 80s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (G)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
6/24/20	1035	NA	1.0	7.31	20.8	444	5.7	-31.8	2.0	Mr. Doom's water supply well;	Clear
↓	1036	↓	2.0	7.27	20.7	447	4.9	-25.6	1.7	sampled from spigot inside	"
	1037		3.0	7.25	20.7	449	4.7	-23.7	1.5	Mr. Doom's shed; purge	"
	1038		4.0	7.24	20.6	451	4.6	-22.9	1.5	approx. 4 gal prior to sampling	"

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Test America, Houston, TX
6/24/20	1040	Doom Well	NA	7.24	20.6	451	4.6	-22.9	1.5	BTEX	HCL	
										TDS, CL, Conductivity	Neat	
										Sodium	HNO_3	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: OXY Well

Hydrologic Monitoring
Houston, Texas

Initials: BB
Well Condition: Good

Well Inspection Information

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
6/24/20	945	NA	NA	NA	NA	NA	NA	NA				Weather: Sunny 80's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (G)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
6/24/20	950	NA	1.0	7.48	27.2	1103	6.4	-21.7	2.7	OXY building water supply well;	Clear
	951		2.0	7.43	26.9	1095	6.2	-17.3	2.6	sampled at outside spigot	"
	952		3.0	7.42	26.7	1091	6.1	-16.9	2.4	to the right of front door; possible	"
	953		4.0	7.41	26.6	1087	5.9	-16.5	2.2	pliers needed; purge approx.	"
										4 gal prior to sampling	

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Test America, Houston, TX
6/24/20	955	OXY Well	NA	7.41	26.6	1087	5.9	-16.5	2.2	BTEX	HCL	
										TDS, CL, Conductivity	Neat	
										Sodium	HNO_3	

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Instrument Calibration Log

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Hydrologic Monitoring

Date	Time	pH Hanna (Std. units)	Specific Conductivity Hanna (umho/cm)	Dissolved Oxygen Hanna (Slope Cal. in saturated air)	Turbidity Lamotte (NTU)	ORP Hanna HI 7020 Soln (200-275 mV)		Initials / Comments
3-19-20	8:18	4.00/7.00	1,000	100%	10.0	235.7		DSD
3/19/20	820	4.01/7.00	1,000	100%	10.0	243.8		KB
6.24.20	755	4.01/7.00	1,000	100%	10.0	232.7		CJH
6/24/20	757	4.01/7.00	1,000	100%	10.0	254.0		BTB

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Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Cameron Haber + HNI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-77484-20816.1
Client Contact: Mr. Wallace Gilmore	Phone: 469-223-8082	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	120.1-Conductivity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl	6010B - Sodium	8260B_LL - BTEX Only	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	A		
ACW-13	6.24.20	940	G	Water			X	X	X	5	
ACW-14	"	1140	G	Water			X	X	X	5	
ACW-15	"	1035	G	Water			X	X	X	5	
Doom well	"	1040	G	Water			X	X	X	5	
OXY well	"	955	G	Water			X	X	X	5	
DUP-01	"	1100	G	Water			X	X	X	5	
Trip Blank	↓	—	—	Water					X	3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Drop off @ lab		
Relinquished by: Cameron Haber	Date/Time: 6.25.20 1016	Company: HNI	Received by:	Date/Time: 6/25/20 10	Company: TM
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

ARF FORM: SHEET 1

Unless otherwise noted, all fields should be completed by ARF Initiator.

rev_7_04032017

KINDER MORGAN

Analytical Request Form (ARF)
Project Information

Current Site Company/Pipeline Name: EPNG

ARF #: ERG-ARC-06-09-20-ARS-02
xxx-xxx-mm-dd-yy-xxx-##

ENFOS AOC / Project Name (make sure to match ENFOS AOC): Jal #4 Gas Plant RWIP

FOR LAB USE ONLY

Lab Work Directive (WD)/ENFOS WD/PO#: WD801914

Lab Cost Cluster: CC06_Monitoring Lab Subtask: Lab - I (1.4, 2.3, 7.3, 8.4)(19)

Project Billing : [x] Lab Enters Invoice Through Enfos [ ] Paper invoice mailed to KM PM listed below [ ] Other/ Describe:

Site Description or contaminants of concern: BTEX, Chloride, Sodium, TDS, Specific Conductance

Site Address: 9 Miles North of Jal, NM on Hwy 18

City: Jal State: NM Country: USA

Regulatory Agency: NMOCD

Project Type (RCRA, CERCLA, TRRP):

Anticipated Start Date: 6/25/2020 Anticipated Completion Date: 6/25/2020

Frequency of Sampling: Quarterly Sampling Plan Attached: No

Are there Additional Requests/ Special Instructions on Page 2? No

Title(s)/Date(s) of attached sampling information:

Project Management Contacts

KM Contact

KM Office: Houston [x] Copy on ARF Distribution

Address: 1001 Louisiana Street, Room 757A
Houston, TX 770022

KM Project Manager: Joe Wiley

Phone : 713-420-3475 Fax: E-mail: Joe_Wiley@KinderMorgan.com

Designated Consultant Contact

Designated Consultant Firm Name: AECOM [x] Copy on ARF Distribution

Address: 19219 Katy Freeway, Suite 100
Houston, TX 77094

Designated Consultant Project Manager: Wally Gilmore

Phone : 713-542-9523 Fax: E-mail: wallace.gilmore@aecom.com

Laboratory Contact

Laboratory Name: TestAmerica [x] Copy on ARF Distribution

Address: 6310 Rothway Street
Houston, TX 77040

Laboratory Project Manager: Bethany McDaniel

Phone : 713-690-4444 Fax: 361-289-2471 E-mail: bethany.mcdaniel@testamericainc.com

Additional Parties to Receive ARF:

Name: E-mail:
Affliation:

Name: E-mail:
Affliation:

Name: E-mail:
Affliation:

ARF FORM: SHEET 1

Data Deliverables

Data Package Deliverables supplied to:

Required Data Deliverables Format(s): **PDF** Hardcopy PDF and Hardcopy CD
Required Format of Electronic Data Deliverables **Excel** Equis Enfos

Size Limitation for e-mail of deliverable **10** **MB** or Unlimited
Forward the Electronic Data Deliverables to:

	Name	E-Mail Address
	Wally Gilmore	wallace.gilmore@aecom.com

Special Instructions for data package or electronic deliverable?:

Record of ARF Initiation and Revisions

Initiated ARF:	Name:	Wally Gilmore	Date:	6/9/2020
Laboratory Acceptance:	Name:	Bethany McDaniel	Date:	6/9/2020
Revision 1:	Name:	Joe Wiley	Date:	6/9/2020
	Types of Changes:			
Revision 2:	Name:		Date:	
	Types of Changes:			
Revision 3:	Name:		Date:	
	Types of Changes:			
Revision 4:	Name:		Date:	
	Types of Changes:			

ARF FORM: SHEET 2

Parameters and Analytical Methods Requested *Unless otherwise noted, all fields should be completed by ARF Initiator.* *rev_7_04032017*

Projected Analytical Plan & Number of Samples to be Collected

Matrix Codes: A=Air W=Water S=Soil WP=wipe O=Oil OT=Other

Compound List or Parameter	Analytical Method	Matrix Code	DP/TAT Level Code	Number of Investigatory Samples	Number of Samples for Hold/Archival	*Quality Control Samples* MS/MSD Pairs	Trip Blanks	Rinse, Equipment, and Field Blanks	Field Duplicates	Total Number of Samples Expected	Total Number of Samples Analyzed	***For Laboratory Use Only*** Number of Samples Received by Laboratory	Unit Rate	Total Cost
BTEX	8260B	W	L2/28D	5	0	0	1	0	1	**7**				
Total Dissolved Solids	SM 2540C	W	L2/28D	5	0	0	0	0	1	**6**				
Chloride	EPA SW846 9056	W	L2/28D	5	0	0	0	0	1	**6**				
Sodium	EPA SW846 6010B	W	L2/28D	5	0	0	0	0	1	**6**				
Specific Conductance	EPA 120.1	W	L2/28D	5	0	0	0	0	1	**6**				

$ -

Sampling Frequency: SINGLE EVENT WEEKLY MONTHLY **QUARTERLY** SEMI-ANNUAL ANNUAL OTHER/DESCRIBE: _____

Are special regulatory requirements, detection limits or action levels needed? _____

Are SW-846 Method 5035 volatile organic analyses requested? No If yes, what container is required? Tared Vials Methanol Vials 4-oz. jars EnCore Kits Terra Core Kits

Does an approved QAPjP exist? No Title: _____

Revision/Date _____

Are reporting estimated values "J" required for results less than the reporting limit? **Yes**

Are tentatively identified compounds (TICs) required? Volatiles Semivolatiles

Sample retention time (post reporting): 30 days (standard) Other (Hold for ____ days)

Ship Bottles to:

Name: Scott Ude

Consultant: HMI

Location Name:

Street Address: 1654 W Sam Houston Pkwy N

City, State, Zip: Houston, Texas 77043

Phone Number: 713-714-1624

Date/Time Bottles Required: 8/1/2018

Shipping Return:

FedEx UPS Laboratory Courrier

Saturday Receipt

Jal #4_2020 2nd Qtr ERG ARF

ARF FORM: SHEET 2

Laboratory Invoices for non-contracted laboratories must be submitted to:

Company Name	Kinder Morgan
Name	Joe Wiley
Street Address	1001 Louisiana Street, Room 757A
City, State, Zip	Houston, TX 77002
Phone Number	713-420-3475

LAB USE ONLY

Internal Laboratory Work Order Number

Invoice Approval

Company Name: Kinder Morgan

Final Invoice

Additional Requests and Instructions

Please have sampling kits delivered to HMI by June 15, 2020 and provide return shipping labels with the cooler(s).

Phone Logs and Project Correspondence

HMI
Groundwater

Hydrologic Monitoring
1654 W. Sam Houston Pkwy. N.
Houston, Texas 77043

Phone 713.464.5206
Fax 713.464.5207

M E M O R A N D U M

Low-Flow Groundwater Sampling Procedures
El Paso Natural Gas Company
Jal #4 Gas Plant, Lea County, New Mexico

HMI conducts low-flow groundwater sampling in accordance with TCEQ and EPA guidelines (Puls and Barcelona, 1996 EPA Guidance on Low-Flow Groundwater Sampling, REV 4, September 19, 2017).

Groundwater Sampling Methodology

HMI conducts low-flow groundwater sampling using bladder pumps and polyethylene tubing dedicated in sampled wells at the site, during its first groundwater sampling event at the site in March 2017. Pumps were dedicated in the wells to increase sample quality and field efficiency, and remain property of HMI. HMI would appreciate the opportunity to retrieve the pumps at such time that HMI no longer conducts monitoring at the site.

Purging commences through a sealed flow-through cell at EPA-recommended purge rates (generally 0.1 to 0.2 liters/minute), selected to limit the monitored drawdown during the purging process. Each HMI flow-through cell has a volume of 0.5 liters. Field parameter readings are collected at 0.5-liter intervals (the equivalent of one cell volume "turnover"). Field parameters of pH, specific conductivity, temperature, dissolved oxygen, and oxidation-reduction potential are monitored inside the cell. Turbidity is monitored outside of the cell. Purging continues until a requisite volume of groundwater is purged (a minimum of 3,000 ml or six flow-through cell volumes), and field parameters have stabilized in accordance with the EPA guidance below:

Water Quality Parameters (Stabilization Parameters in Accordance with EPA (2002), Groundwater Sampling Guidelines for Superfund and RCRA Project Managers, Yeskis & Zavala, EPA/542:S-02/001)

- pH +/- 0.1 units;
- Temperature -
- Conductivity +/- 3%
- Dissolved Oxygen +/- 0.3 mg/L
- ORP +/- 10%
- Turbidity 10%

Groundwater samples are collected directly into laboratory-supplied containers. Groundwater samples are placed in iced coolers, and remain in HMI custody until delivery to the laboratory.

Decontamination Procedures

Non-dedicated equipment, (i.e., only the electronic water level probe for this project) is properly decontaminated prior to use and between wells. The decontamination procedure for the water level probe consists of a spray of isopropanol (likely not warranted at this site), followed by a thorough wash in distilled water and Liquinox non-phosphate soap, with a final distilled water. The probe is allowed to air dry.

HMI Deliverables

HMI provides thorough field documentation of groundwater monitoring activities performed, including groundwater sampling forms, field equipment calibration logs, a brief field narrative, and an Excel table summarizing gauging data and groundwater field parameters.

HMI
Groundwater

Hydrologic Monitoring
1654 W. Sam Houston Pkwy. N.
Houston, Texas 77043

Phone 713.464.5206
Fax 713.464.5207

September 25, 2020

Mr. Wally Gilmore, P.G.
AECOM
19219 Katy Freeway, Suite 100
Houston, Texas 77094

Subject: 3Q20 Groundwater Monitoring, September 24, 2020
Jal #4 Gas Plant, Jal, New Mexico

Dear Mr. Gilmore:

This document summarizes groundwater monitoring field activities conducted by HMI on behalf of El Paso Natural Gas Company and AECOM at the Jal #4 Gas Plant.

Contents

Field Activities Narrative
Table 1: Gauging Data and Groundwater Field Parameters, September 24, 2020
Groundwater Sampling Forms and Field Instrument Calibration Record
Chain-of-Custody Form
El Paso ARF
Groundwater Sampling SOP

Field Activities Narrative

1. HMI equipped the sampled-well network with HMI-owned dedicated bladder pumps in 2017. Two well nests were installed in 2H18 (ACW-30S & ACW-30D and ACW-32S & ACW-32D). Two additional well nests (ACW-26 & 27 and ACW-28 & 29) were installed in 2H19 (ACW-26 is the "shallow" well, ACW-27 is the "deep" well; ACW-28 is the "shallow" well, ACW-29 is the "deep" well). HMI equips all sampled wells with HMI-owned dedicated bladder pumps, to increase sample quality and field efficiencies. HMI respectfully requests the opportunity to retrieve these pumps when HMI's monitoring obligations are completed at the site.

2. 3Q20 sitewide gauging and groundwater sampling (ACW-13, 14, 15, 32S, 32D, and two water wells (Doom Well & OXY Well) was conducted September 24, 2020.

3. Groundwater sampling was conducted in accordance with EPA guidelines (Puls and Barcelona, 1996 EPA Guidance on Low-Flow Groundwater Sampling, REV 4, September 19, 2017), and the attached Groundwater Sampling SOP. Low-flow purging was conducted at EPA-recommended purge rates of 0.1 - 0.2 liters/minute. Field parameters of pH, specific conductivity, temperature, dissolved oxygen, and oxidation-reduction potential were monitored at ½-liter intervals in an air-tight flow-through cell. Turbidity was measured outside the cell. Well drawdown was monitored at the same intervals. Upon field parameter stabilization, the water input tube was disconnected from the flow-through cell and groundwater samples were collected directly into lab-supplied bottles, which were placed in iced coolers. The groundwater sampling process is documented on the attached groundwater sampling forms.

4. Field QA/QC Sampling:

   Dup-01 @ ACW-32S (all parameters)
   Trip Blank (BTEX)

5. Groundwater samples were delivered to Eurofins Test America-Houston, for analysis per attached COC. Proper chain-of-custody was maintained.

6. HMI prototyped a *ventilated barrel cover*, designed to evaporate investigation-derived waste (IDW) purgewater, generated during routine groundwater monitoring, in a safe, cost-effective manner. Per Kinder Morgan (El Paso Natural Gas Company), a labeled 55-gallon steel drum with prototyped *ventilated barrel cover* (attached to drum by industry-standard, ring-bolt closure), was positioned on a wood pallet, inside a steel cage, around well RW-2 (east-side of Hwy). Investigation-derived waste (IDW) groundwater monitoring is being effectively-evaporated, ongoing, since 2Q20. The drum contains (7) gallons 3Q20-purgewater, following the 3Q20 event.



Jal #4 Gas Plant, Jal, New Mexico – Drum with Ventilated Barrel Cover



Jal #4 Gas Plant, Jal, New Mexico - Field-Deployed Drum with Ventilated Barrel Cover – Evaporates Groundwater Monitoring IDW Purgewater "24-7"



Jal #4 Gas Plant, Jal, New Mexico - Field-Deployed Drum with Ventilated Barrel Cover (Well RW-2 Enclosure)

7. Site notes:
Facility Manager (Ken Parker or current mgr.) is notified by AECOM prior to sampling events; also, El Paso to notify Oxy's Dusty Wilson, per note below:

Contact for Oxy regarding their field station where we sample the water well. There have been on and off very low exceedances of the 250 mg/l New Mexico standard for chlorides and I needed to notify them. The contact, Dusty Wilson, indicated that personnel who enter that facility must have H2S training and have an H2S monitor operating. Mr. Wilson stated there is a significant amount of H2S associated with the tank battery. He also indicated they would like a few days prior notice so they know who is coming and going out there, so if you can email me with the scheduled sample dates as they come along I will pass that along to Dusty.
Thanks,
Joseph (Joe) Wiley, P.G.
Project Manager - Pipeline Remediation
Kinder Morgan, Inc.
1001 Louisiana Street, Room 757A
Houston, TX 77002
Phone: 713-420-3475
Cell Phone: 832-279-1610
Joe_wiley@kindermorgan.com

Site Contact: Bill Evans (575-441-4101); Jal Police Phone No. on JHA, per Mr. Evans (575-395-2501).

Monitor well lock keys are maintained in HMI's files.

OXY Well is sampled at outdoor spigot; Doom Well is sampled at spigot inside well shed, on Mr. Jerold Doom's ranch (nephew-Dylan Doom; follow driveway into ranch, then down to left; shed on the right)..see below.

Note from EPNG-3Q20: I was following up with Jerold Doom on the power line issue (it turned out to be Oxy's line and was confirmed to be de-energized) and he said he wants to be present when the Doom well gets sampled. He's around, so just give him a call at 575-395-3537 when you get there to coordinate. He also stated that there's a lot of rattlesnake activity around there, so heads up.

HMI appreciates the opportunity to assist El Paso Natural Gas Company and AECOM with this project. If you have any questions or require additional information please feel free to call us at 713.464.5206.

Sincerely,

HYDROLOGIC MONITORING

Scott C. Ude



Scott C. Ude, P.G.

The seal appearing on this document was authorized by Scott C. Ude, P.G. 353 on September 25, 2020.

Attachments

cc: Joe Wiley, P.G., El Paso Natural Gas Company
Scott Duncan, HMI
Cameron Haber, HMI

Table 1
Gauging Data and Groundwater Field Parameters

El Paso Natural Gas Company - Jal #4 Gas Plant
Lea County, New Mexico
September 24, 2020

Well I.D.	1,2,3Q # Wells Sampled	1,2,3Q # Wells Gauged	4Q # Wells Sampled	4Q # Wells Gauged	Ded. Blad Pump	Top of Casing Elev (ft-msl)	Depth to LNAPL (ft-toc)	Depth to Water (ft-toc)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	GW Elev* (ft-msl)	Water Column (ft)	Total Depth (ft-toc)	Stickup (ft)	Screen Interval (ft-bgs)	Sample Intake (ft-toc)	Casing Diam	pH (S.U.)	Temp. (C)	S.C. (umhos)	D.O. (mg/L)	ORP (mV)	Turbidity (NTU)	Water Clarity	Comments
ACW-01		1	1		Yes	3,302.15	NP	105.23	0.00	0.00	3,196.92	30.22	135.45	1.9	110-130	130.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-02A		2	2		Yes	3,302.16	NP	105.51	0.00	0.00	3,196.65	19.98	125.49	2.0	98-118	120.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-03		3		1	No	3,301.62	NP	105.14	0.00	0.00	3,196.48	29.98	135.12	1.6	112-132	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-04		4	3		Yes	3,302.05	NP	107.09	0.00	0.00	3,194.96	64.01	171.10	1.7	154-169	169.1	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-05		5	4		Yes	3,297.18	NP	103.07	0.00	0.00	3,194.11	14.30	117.37	1.5	105-115	114.4	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-06		6	5		Yes	3,302.84	NP	107.23	0.00	0.00	3,195.61	15.40	122.63	1.7	110-120	119.6	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-07		7	6		Yes	3,297.63	NP	102.23	0.00	0.00	3,195.40	15.16	117.39	1.5	105-115	114.4	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-08		8		2	No	3,299.54	NP	103.25	0.00	0.00	3,196.29	56.66	159.91	1.2	140-160	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-09		9	7		Yes	3,304.69	NP	110.14	0.00	0.00	3,194.55	52.34	162.48	2.4	140-160	159.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-10		10	8		Yes	3,299.82	NP	106.26	0.00	0.00	3,193.56	56.78	163.04	2.5	140-160	160.0	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-11		11	9		Yes	3,301.64	NP	105.64	0.00	0.00	3,196.00	56.04	161.68	2.1	140-161	159.7	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-12		12	10		Yes	3,301.80	NP	109.32	0.00	0.00	3,192.48	62.61	171.93	2.5	150-170	168.9	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-13	1		11		Yes	3,291.72	NP	99.24	0.00	0.00	3,192.48	76.38	175.62	2.0	153-173	172.6	4" PVC	6.70	21.7	3,320	4.0	98.2	5.5	Clear	
ACW-14	2		12		Yes	3,294.74	NP	100.18	0.00	0.00	3,194.56	76.04	176.22	2.0	157-177	173.2	4" PVC	7.11	21.5	1,054	5.3	93.1	3.1	Clear	
ACW-15	3		13		Yes	3,292.75	NP	102.18	0.00	0.00	3,190.57	69.39	171.57	2.3	150-170	168.6	4" PVC	7.01	21.1	1,087	4.3	91.2	2.0	Clear	
ACW-16		13	14		Yes	3,307.89	NP	109.24	0.00	0.00	3,198.65	67.70	176.94	2.4	156-176	174.9	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-17		14	15		Yes	3,306.17	NP	108.33	0.00	0.00	3,197.84	63.45	171.78	2.6	151-171	169.8	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-18		15	16		Yes	3,303.15	NP	107.32	0.00	0.00	3,195.83	69.88	177.20	2.5	160-180	175.2	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-19		16	17		Yes	3,302.68	NP	106.24	0.00	0.00	3,196.44	14.92	121.16	2.2	98-118	119.2	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-20		17	18		Yes	3,303.50	NP	108.45	0.00	0.00	3,195.05	65.58	174.03	2.2	154-174	172.0	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-21		18	19		Yes	3,301.82	NP	105.75	0.00	0.00	3,196.07	14.77	120.52	2.1	98-118	118.5	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-22		19	20		Yes	3,306.24	NP	111.77	0.00	0.00	3,194.47	13.27	125.04	2.5	102-122	123.0	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-23		20	21		Yes	3,306.29	NP	111.92	0.00	0.00	3,194.37	57.79	169.71	2.3	147-167	167.7	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-24		21	22		Yes	3,305.56	NP	110.69	0.00	0.00	3,194.87	78.43	189.12	2.2	166-186	187.1	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-25		22	23		Yes	3,297.59	NP	103.23	0.00	0.00	3,194.36	71.45	174.68	2.1	151-171	172.7	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-26		23	24		Yes	3,309.27	NP	110.33	0.00	0.00	3,198.94	20.27	130.60	1.6	103-128	125.6	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-27		24	25		Yes	3,309.22	NP	110.31	0.00	0.00	3,198.91	66.89	177.20	1.8	160-180	167.2	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-28		25	26		Yes	3,306.49	NP	108.92	0.00	0.00	3,197.57	19.38	128.30	1.8	102-127	123.3	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-29		26	27		Yes	3,306.35	NP	108.77	0.00	0.00	3,197.58	68.02	176.79	1.8	160-180	166.8	4"PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-30S		27	28		Yes	3,300.17	NP	104.44	0.00	0.00	3,195.73	18.06	122.50	2.3	95-120	117.5	3" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-30D		28	29		Yes	3,300.15	NP	104.75	0.00	0.00	3,195.40	82.68	187.43	2.3	165-185	177.4	3" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-32S	4		30		Yes	3,299.60	NP	106.94	0.00	0.00	3,192.66	15.39	122.33	2.5	95-120	117.3	3" PVC	10.60	25.0	2,720	2.2	-43.4	5.8	Clear	Dup-01
ACW-32D	5		31		Yes	3,299.61	NP	106.93	0.00	0.00	3,192.68	65.71	172.64	2.5	150-170	162.6	3" PVC	7.69	26.2	1,544	2.3	-95.1	4.3	Clear	
Doom Well	6		32		No	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.35	25.6	486	4.9	-41.9	1.4	Clear	
ENSR-01		29	33		Yes	3,306.71	NP	107.56	0.00	0.00	3,199.15	47.79	155.35	1.6	123-148	150.4	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ENSR-03		30		3	No	3,305.05	NP	107.02	0.00	0.00	3,198.03	48.08	155.10	1.5	123-148	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
EPNG-01		31	34		Yes	3,310.03	NP	109.19	0.00	0.00	3,200.84	54.74	163.93	AG	120-160	160.9	6" Steel	NS	NS	NS	NS	NS	NS	NS	
OXY Well	7		35		No	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.49	25.1	1,232	4.9	-69.8	8.9	Clear	
PTP-01		32	36		Yes	3,305.67	NP	107.59	0.00	0.00	3,198.08	NM	136.09	2.3	110-130	131.1	2" PVC	NS	NS	NS	NS	NS	NS	NS	
RW-01		33		4	No	3,302.16	NP	105.50	0.00	0.00	3,196.66	76.13	181.63	1.8	109-179	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-02		34		5	No	3,303.71	NP	109.15	0.00	0.00	3,194.56	64.50	173.65	1.4	105-175	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-03		35		6	No	3,302.65	NP	106.22	0.00	0.00	3,196.43	71.47	177.69	1.4	136.7-176.7	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-04		36		7	No	3,303.26	NP	108.49	0.00	0.00	3,194.77	67.67	176.16	1.6	154-174	NA	NA	NS	NS	NS	NS	NS	NS	NS	

Notes: Monitoring completed by HMI on behalf of El Paso Natural Gas Company
Gauging and groundwater sampling conducted September 24, 2020
Top of casing survey data, per Piper Surveying, 2/9/16, Revised 7/23/18, per AECOM email 9-11-18
NP = No product (LNAPL), NA = Not applicable, NS = Not sampled, NM = Not measured, AG = At-Grade Surface Completion
ACW-30S, ACW-30D, ACW-32S, and ACW-32D (installed in 2H18), equipped with HMI-owned bladder sampling pumps; ACW-32S & 32D sampled quarterly, per EPNG, 7-10-20
ACW-26, ACW-27, ACW-28, and ACW-29 (installed in 2H19), equipped with HMI-owned bladder sampling pumps; these wells to be sampled during 4Q (large) events ongoing, per EPNG
* GW elevation data uncorrected for ave. density of water column as a function of TDS

Released to Imaging: 10/28/2022 9:54:55 AM
Received by OCD: 4/19/2021 1:26:48 PM

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-13

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
9.24.20	935	NP	99.24	0.00	0.00	175.62	172.6	153-173				Weather: Clear, 70's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
9.24.20	940	99.50	0.5	7.19	22.7	2870	6.5	113.1	8.1	Low-flow purge-sample with	Clear
↓	942	99.50	1.0	6.80	22.2	2940	6.0	118.2	8.6	HMI's dedicated bladder pump	↓
	945	99.50	1.5	6.56	21.9	3090	4.4	123.3	7.8		
	947	99.51	2.0	6.55	21.9	3170	4.1	118.3	7.2		
	950	99.51	2.5	6.60	21.8	3240	4.0	109.1	6.7		
	952	99.51	3.0	6.64	21.8	3270	4.0	104.2	6.0		
	955	99.51	3.5	6.67	21.7	3300	4.0	100.1	5.9		
↓	957	99.51	4.0	6.70	21.7	3320	4.0	98.2	5.5		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Eurofins TA, Houston, TX
9.24.20	1000	ACW-13	99.51	6.70	21.7	3320	4.0	98.2	5.5	Per COC	Per Lab	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-14

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
9.24.20	1025	NP	100.18	0.00	0.00	176.22	173.2	157-177				Weather: Clear, 80s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
9.24.20	1030	100.29	0.5	7.23	23.6	1362	5.4	102.3	6.1	Low-flow purge-sample with	Clear
↓	1032	100.29	1.0	6.90	22.4	1235	5.3	110.9	5.5	HMI's dedicated bladder pump	↓
	1035	100.29	1.5	6.87	22.1	1185	5.1	110.7	5.0		
	1037	100.29	2.0	6.95	21.9	1081	5.2	105.1	4.6		
	1040	100.29	2.5	7.00	21.7	1070	5.2	101.2	4.1		
	1042	100.29	3.0	7.04	21.6	1064	5.3	97.1	3.8		
	1045	100.29	3.5	7.08	21.6	1058	5.3	95.0	3.4		
↓	1047	100.29	4.0	7.11	21.5	1054	5.3	93.1	3.1		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Eurofins TA, Houston, TX
9.24.20	1050	ACW-14	100.29	7.11	21.5	1054	5.3	93.1	3.1	Per COC	Per Lab	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-15

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
9.24.20	850	NP	102.18	0.00	0.00	171.57	168.6	150-170				Weather: Clear, 70's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
9.24.20	855	102.20	0.5	6.76	22.1	1284	4.1	110.7	4.1	Low-flow purge-sample with	Clear
↓	857	102.20	1.0	6.44	21.7	1194	4.3	120.6	3.6	HMI's dedicated bladder pump	↓
	900	102.20	1.5	6.57	21.5	1133	4.4	113.1	3.0		
	902	102.20	2.0	6.78	21.4	1109	4.5	104.1	2.8		
	905	102.20	2.5	6.87	21.3	1101	4.5	100.3	2.4		
	907	102.21	3.0	6.93	21.2	1096	4.4	96.9	2.4		
	910	102.21	3.5	6.97	21.2	1091	4.4	94.0	2.1		
↓	912	102.21	4.0	7.01	21.1	1087	4.3	91.2	2.0		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Eurofins TA, Houston, TX
9.24.20	915	ACW-15	102.21	7.01	21.1	1087	4.3	91.2	2.0	Per COC	Per Lab	

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+ Dup-01

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-32S

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: RJM
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
9-24-20	835	NP	106.94	0.00	0.00	122.33	117.3	95-120				Weather: Sunny 70s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
9-24-20	840	107.02	0.5	9.25	25.4	2840	3.6	40.6	10.2	Low-flow purge-sample with	clear
	842	107.08	1.0	9.68	25.2	2800	3.1	11.3	9.7	HMI's dedicated bladder pump	
	845	107.09	1.5	10.34	25.1	2780	2.7	-25.9	9.2		
	847	107.09	2.0	10.42	25.2	2760	2.5	-32.7	8.6		
	850	107.09	2.5	10.51	25.2	2740	2.3	-37.5	8.4		
	852	107.10	3.0	10.55	25.1	2730	2.2	-40.1	7.9		
	855	107.10	3.5	10.58	25.0	2730	2.2	-41.9	7.1		
	857	107.10	4.0	10.60	25.0	2720	2.2	-43.4	5.8		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
9-24-20	900	ACW-32S	107.10	10.60	25.0	2720	2.2	-43.4	5.8	Per COC	Per Lab	Lab: Eurofins TA, Houston, TX
	1100	Dup-01	107.10	10.60	25.0	2720	2.2	-43.4	5.8	same	same	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-32D

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: RJM
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
9.24.20	935	NP	106.93	0.00	0.00	172.64	162.6	150-170				Weather: Sunny 70's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
9.24.20	940	106.98	0.5	7.95	26.7	1392	3.9	-76.1	8.6	Low-flow purge-sample with	clear
	942	106.98	1.0	7.89	26.5	1471	3.4	-62.5	7.3	HMI's dedicated bladder pump	
	945	106.98	1.5	7.82	26.5	1493	2.9	-79.1	6.2		
	947	106.98	2.0	7.76	26.6	1504	2.6	-83.6	6.1		
	950	106.98	2.5	7.74	26.5	1516	2.5	-87.5	5.9		
	952	106.99	3.0	7.73	26.4	1525	2.4	-90.2	5.4		
	955	106.99	3.5	7.71	26.4	1538	2.4	-92.8	4.6		
	957	106.99	4.0	7.69	26.2	1544	2.3	-95.1	4.3		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
9.24.20	1000	ACW-32D	106.99	7.69	26.2	1544	2.3	-95.1	4.3	Per COC	Per Lab	Lab: Eurofins TA, Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: Doom Well

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
9/24/20	930	NA	NA	NA	NA	NA	NA	NA				Weather Sunny 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (G)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
9/24/20	935	NA	1.0	7.40	26.1	492	5.7	-48.6	1.9	Mr. Doom's water supply well;	Clear
↓	936	↓	2.0	7.37	25.8	488	5.2	-44.3	1.6	sampled at spigot inside	11
	937		3.0	7.35	25.7	486	5.0	-42.7	1.5	Mr. Doom's shed; purged	11
↓	938	↓	4.0	7.35	25.6	486	4.9	-41.9	1.4	4 gal prior to sampling	11

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Eurofins TA, Houston, TX
9/24/20	940	Doom Well	NA	7.35	25.6	486	4.9	-41.9	1.4	Per COC	Per Lab	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Val #4 Gas Plant
Lea County, New Mexico

Well: OXY Well

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
9/24/20	845	NA	NA	NA	NA	NA	NA	NA				Weather: Sunny, 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (G)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
9/24/20	850	NA	1.0	7.53	26.6	1217	5.4	-74.8	9.2	OXY bldg. water supply well;	Clear
	851		2.0	7.51	25.9	1225	5.1	-70.3	9.0	sampled at outdoor spigot (to	"
	852		3.0	7.50	25.2	1230	4.9	-70.1	8.7	right of front door; pliers may be	"
	853		4.0	7.49	25.1	1232	4.9	-69.8	8.9	needed); purge 4 gal prior to	"
										sampling	

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments Lab: Eurofins TA, Houston, TX
9/24/20	855	OXY Well	NA	7.49	25.1	1232	4.9	-69.8	8.9	Per COC	Per Lab	

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Instrument Calibration Log

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Hydrologic Monitoring

Date	Time	pH Hanna (Std. units)	Specific Conductivity Hanna (umho/cm)	Dissolved Oxygen Hanna (Slope Cal. in saturated air)	Turbidity Lamotte (NTU)	ORP Hanna HI 7020 Soln (200-275 mV)		Initials / Comments
3-19-20	8:18	4.0X7.00	1,000	100%	10.0	235.7		DSD
3/19/20	820	4.01/7.00	1,000	100%	10.0	243.8		RB
6.24.20	755	4.01/7.00	1,000	100%	10.0	232.7		CJH
6/24/20	757	4.01/7.00	1,000	100%	10.0	254.0		BTB
9.24.20	745	4.01/7.00	1,000	100%	10.0	250.3		RJM
9.24.20	748	4.01/7.00	1,000	100%	10.0	232.1		CJH
9.24.20	748	4.01/7.00	1,000	100%	10.0	232.9		BB

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Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Bryan Bayles + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-77484-20816.1
Client Contact: Mr. Wallace Gilmore	Phone: 832-347-4513	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant (3Q20)	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	120.1-Conductivity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl	6010B - Sodium	8260B_LL - BTEX Only	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	A		
ACW-13	9.24.20	1000	G	Water			✓	✓	✓		
ACW-14	"	1050	"	Water			✓	✓	✓		
ACW-15	"	915	"	Water			✓	✓	✓		
ACW-32S	"	900	"	Water			✓	✓	✓		
ACW-32D	"	1000	"	Water			✓	✓	✓		
DUP-01	"	1100	"	Water			✓	✓	✓		
Trip Blank	"	-	↓	Water					✓		
Doom Well	"	940	"	"			✓	✓	✓		
OXY Well	↓	855	↓	↓			✓	✓	✓		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Ruben Mueller	9.25.20 1004	HMI		9/25/20 1004	CTT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

ARF FORM: SHEET 1

Unless otherwise noted, all fields should be completed by ARF Initiator.

rev_7_04032017

KINDER MORGAN

Analytical Request Form (ARF)
Project Information

Current Site Company/Pipeline Name: EPNG

ARF #: ERG-ARC-09-10-20-ARS-03
xxx-xxx-mm-dd-yy-xxx-##

ENFOS AOC / Project Name (make sure to match ENFOS AOC): Jal #4 Gas Plant RWIP

FOR LAB USE ONLY

Lab Work Directive (WD)/ENFOS WD/PO#: WD801914

Lab Cost Cluster: CC06_Monitoring Lab Subtask: Lab - I (1.4, 2.3, 7.3, 8.4)(19)

Project Billing : [x] Lab Enters Invoice Through Enfos [ ] Paper invoice mailed to KM PM listed below [ ] Other/ Describe:

Site Description or contaminants of concern: BTEX, Chloride, Sodium, TDS, Specific Conductance

Site Address: 9 Miles North of Jal, NM on Hwy 18

City: Jal State: NM Country: USA

Regulatory Agency: NMOCD

Project Type (RCRA, CERCLA, TRRP):

Anticipated Start Date: 9/24/2020 Anticipated Completion Date: 9/24/2020

Frequency of Sampling: Quarterly Sampling Plan Attached: No

Are there Additional Requests/ Special Instructions on Page 2? No

Title(s)/Date(s) of attached sampling information:

Project Management Contacts

KM Contact

KM Office: Houston [x] Copy on ARF Distribution

Address: 1001 Louisiana Street, Room 757A
Houston, TX 770022

KM Project Manager: Joe Wiley

Phone : 713-420-3475 Fax: E-mail: Joe_Wiley@KinderMorgan.com

Designated Consultant Contact

Designated Consultant Firm Name: AECOM [x] Copy on ARF Distribution

Address: 19219 Katy Freeway, Suite 100
Houston, TX 77094

Designated Consultant Project Manager: Wally Gilmore

Phone : 713-542-9523 Fax: E-mail: wallace.gilmore@aecom.com

Laboratory Contact

Laboratory Name: TestAmerica [x] Copy on ARF Distribution

Address: 6310 Rothway Street
Houston, TX 77040

Laboratory Project Manager: Bethany McDaniel

Phone : 713-690-4444 Fax: 361-289-2471 E-mail: bethany.mcdaniel@testamericainc.com

Additional Parties to Receive ARF:

Name: E-mail:
Affliation:

Name: E-mail:
Affliation:

Name: E-mail:
Affliation:

ARF FORM: SHEET 1

Data Deliverables

Data Package Deliverables supplied to:

Required Data Deliverables Format(s): **PDF** Hardcopy PDF and Hardcopy CD
Required Format of Electronic Data Deliverables **Excel** Equis Enfos

Size Limitation for e-mail of deliverable **10** **MB** or Unlimited
Forward the Electronic Data Deliverables to:

	Name	E-Mail Address
	Wally Gilmore	wallace.gilmore@aecom.com

Special Instructions for data package or electronic deliverable?:

Record of ARF Initiation and Revisions

Initiated ARF:	Name:	Wally Gilmore	Date:	9/10/2020
Laboratory Acceptance:	Name:	Bethany McDaniel	Date:	9/10/2020
Revision 1:	Name:	Joe Wiley	Date:	9/10/2020
	Types of Changes:			
Revision 2:	Name:		Date:	
	Types of Changes:			
Revision 3:	Name:		Date:	
	Types of Changes:			
Revision 4:	Name:		Date:	
	Types of Changes:			

ARF FORM: SHEET 2

Parameters and Analytical Methods Requested *Unless otherwise noted, all fields should be completed by ARF Initiator.* *rev_7_04032017*

Projected Analytical Plan & Number of Samples to be Collected

Matrix Codes: A=Air W=Water S=Soil WP=wipe O=Oil OT=Other

Compound List or Parameter	Analytical Method	Matrix Code	DP/TAT Level Code	Number of Investigatory Samples	Number of Samples for Hold/Archival	*Quality Control Samples* MS/MSD Pairs	Trip Blanks	Rinse, Equipment, and Field Blanks	Field Duplicates	Total Number of Samples Expected	Total Number of Samples Analyzed	***For Laboratory Use Only*** Number of Samples Received by Laboratory	Unit Rate	Total Cost
BTEX	8260B	W	L2/28D	7	0	0	1	0	1	**9**				
Total Dissolved Solids	SM 2540C	W	L2/28D	7	0	0	0	0	1	**8**				
Chloride	EPA SW846 9056	W	L2/28D	7	0	0	0	0	1	**8**				
Sodium	EPA SW846 6010B	W	L2/28D	7	0	0	0	0	1	**8**				
Specific Conductance	EPA 120.1	W	L2/28D	7	0	0	0	0	1	**8**				

$ -

Sampling Frequency: SINGLE EVENT WEEKLY MONTHLY **QUARTERLY** SEMI-ANNUAL ANNUAL OTHER/DESCRIBE: _____

Are special regulatory requirements, detection limits or action levels needed? _____

Are SW-846 Method 5035 volatile organic analyses requested? No If yes, what container is required? Tared Vials Methanol Vials 4-oz. jars EnCore Kits Terra Core Kits

Does an approved QAPjP exist? No Title: _____

Revision/Date _____

Are reporting estimated values "J" required for results less than the reporting limit? **Yes**

Are tentatively identified compounds (TICs) required? Volatiles Semivolatiles

Sample retention time (post reporting): 30 days (standard) Other (Hold for ____ days)

Ship Bottles to:

Name: Scott Ude

Consultant: HMI

Location Name:

Street Address: 1654 W Sam Houston Pkwy N

City, State, Zip: Houston, Texas 77043

Phone Number: 713-714-1624

Date/Time Bottles Required: 8/1/2018

Shipping Return:

FedEx UPS Laboratory Courrier

Saturday Receipt

Jal #4_2020 3rd Qtr ERG ARF

ARF FORM: SHEET 2

Laboratory Invoices for non-contracted laboratories must be submitted to:	***LAB USE ONLY***
Company Name: Kinder Morgan	Internal Laboratory Work Order Number
Name: Joe Wiley	
Street Address: 1001 Louisiana Street, Room 757A	
City, State, Zip: Houston, TX 77002	
Phone Number: 713-420-3475	
Invoice Approval	
Company Name: Kinder Morgan	
Final Invoice	

Additional Requests and Instructions

Please have sampling kits delivered to HMI by September 15, 2020 and provide return shipping labels with the cooler(s).

Phone Logs and Project Correspondence

HMI
Groundwater

Hydrologic Monitoring
1654 W. Sam Houston Pkwy. N.
Houston, Texas 77043

Phone 713.464.5206
Fax 713.464.5207

M E M O R A N D U M

Low-Flow Groundwater Sampling Procedures
El Paso Natural Gas Company
Jal #4 Gas Plant, Lea County, New Mexico

HMI conducts low-flow groundwater sampling in accordance with TCEQ and EPA guidelines (Puls and Barcelona, 1996 EPA Guidance on Low-Flow Groundwater Sampling, REV 4, September 19, 2017).

Groundwater Sampling Methodology

HMI conducts low-flow groundwater sampling using bladder pumps and polyethylene tubing dedicated in sampled wells at the site, during its first groundwater sampling event at the site in March 2017. Pumps were dedicated in the wells to increase sample quality and field efficiency, and remain property of HMI. HMI would appreciate the opportunity to retrieve the pumps at such time that HMI no longer conducts monitoring at the site.

Purging commences through a sealed flow-through cell at EPA-recommended purge rates (generally 0.1 to 0.2 liters/minute), selected to limit the monitored drawdown during the purging process. Each HMI flow-through cell has a volume of 0.5 liters. Field parameter readings are collected at 0.5-liter intervals (the equivalent of one cell volume "turnover"). Field parameters of pH, specific conductivity, temperature, dissolved oxygen, and oxidation-reduction potential are monitored inside the cell. Turbidity is monitored outside of the cell. Purging continues until a requisite volume of groundwater is purged (a minimum of 3,000 ml or six flow-through cell volumes), and field parameters have stabilized in accordance with the EPA guidance below:

Water Quality Parameters (Stabilization Parameters in Accordance with EPA (2002), Groundwater Sampling Guidelines for Superfund and RCRA Project Managers, Yeskis & Zavala, EPA/542:S-02/001)

- pH +/- 0.1 units;
- Temperature -
- Conductivity +/- 3%
- Dissolved Oxygen +/- 0.3 mg/L
- ORP +/- 10%
- Turbidity 10%

Groundwater samples are collected directly into laboratory-supplied containers. Groundwater samples are placed in iced coolers, and remain in HMI custody until delivery to the laboratory.

Decontamination Procedures

Non-dedicated equipment, (i.e., only the electronic water level probe for this project) is properly decontaminated prior to use and between wells. The decontamination procedure for the water level probe consists of a spray of isopropanol (likely not warranted at this site), followed by a thorough wash in distilled water and Liquinox non-phosphate soap, with a final distilled water. The probe is allowed to air dry.

HMI Deliverables

HMI provides thorough field documentation of groundwater monitoring activities performed, including groundwater sampling forms, field equipment calibration logs, a brief field narrative, and an Excel table summarizing gauging data and groundwater field parameters.

HMI
Groundwater

Hydrologic Monitoring
1654 W. Sam Houston Pkwy. N.
Houston, Texas 77043

Phone 713.464.5206
Fax 713.464.5207

December 11, 2020

Mr. Wally Gilmore, P.G.
AECOM
19219 Katy Freeway, Suite 100
Houston, Texas 77094

Subject: 4Q20 Groundwater Monitoring, December 9, 2020
Jal #4 Gas Plant, Jal, New Mexico

Dear Mr. Gilmore:

This document summarizes groundwater monitoring field activities conducted by HMI on behalf of El Paso Natural Gas Company and AECOM at the Jal #4 Gas Plant.

Contents

Field Activities Narrative
Table 1: Gauging Data and Groundwater Field Parameters, December 9, 2020
Groundwater Sampling Forms and Field Instrument Calibration Record
Chain-of-Custody Form
El Paso ARF
Groundwater Sampling SOP

Field Activities Narrative

1. HMI equipped the sampled-well network with HMI-owned dedicated bladder pumps in 2017. Two well nests were installed in 2H18 (ACW-30S & ACW-30D and ACW-32S & ACW-32D). Two additional well nests (ACW-26 & 27 and ACW-28 & 29) were installed in 2H19 (ACW-26 is the "shallow" well, ACW-27 is the "deep" well; ACW-28 is the "shallow" well, ACW-29 is the "deep" well). HMI equips all sampled wells with HMI-owned dedicated bladder pumps, to increase sample quality and field efficiencies. HMI respectfully requests the opportunity to retrieve the pumps when HMI's monitoring obligations are completed at the site.

2. 4Q20 sitewide gauging and groundwater sampling (4Q = large "annual" event, i.e., 34 monitor wells, plus two water wells (Doom Well & OXY Well).

3. Groundwater sampling was conducted in accordance with EPA guidelines (Puls and Barcelona, 1996 EPA Guidance on Low-Flow Groundwater Sampling, REV 4, September 19, 2017), and the attached Groundwater Sampling SOP. Low-flow purging was conducted at EPA-recommended purge rates of 0.1 - 0.2 liters/minute. Field parameters of pH, specific conductivity, temperature, dissolved oxygen, and oxidation-reduction potential were monitored at ½-liter intervals, in an air-tight flow-through cell. Turbidity was measured outside the cell. Well drawdown was monitored at the same intervals. Upon field parameter stabilization, the water input tube was disconnected from the flow-through cell, and groundwater samples were collected directly into lab-supplied bottles and placed in iced coolers. The groundwater sampling process is documented on the attached groundwater sampling forms.

4. Field QA/QC Sampling:

   Dup-01 @ ACW-32S (all parameters)
   Dup-02 @ ACW-30D (all parameters)
   Dup-03 @ ACW-20 (all parameters)
   Dup-04 @ ACW-29 (all parameters)
   Trip Blank (BTEX)

5. Per EP, beginning 4Q20, groundwater samples submitted to:
   Eurofins Test America-Pensacola, FL (Marty Edwards, PM)
   3355 McLemore Drive
   Pensacola, FL 32514
   FedEx account # - 2301-5223-3

   Proper chain-of-custody was maintained.

6. HMI prototyped a *ventilated barrel cover*, for evaporating investigation-derived waste (IDW) purgewater, generated during routine groundwater monitoring, in an agency-approved, safe, cost-effective manner. Per El Paso Natural Gas Company (Kinder Morgan), a labeled 55-gallon steel drum with prototyped *ventilated barrel cover* (attached to drum by standard, ring-bolt closure), was placed on a wooden pallet, strapped to protective steel posts, surrounding RW-2 (east-side of Hwy). IDW purgewater has been successfully-evaporating "24/7", since 2Q20. The (7) gallons of purgewater from 3Q20 event had been fully-evaporated; 35 gallons were added from the 4Q20 event.



Jal #4 Gas Plant, Jal, New Mexico – Drum with Ventilated Barrel Cover



Jal #4 Gas Plant, Jal, New Mexico - Field-Deployed Drum with Ventilated Barrel Cover – Evaporates Groundwater Monitoring IDW Purgewater "24-7"



Jal #4 Gas Plant, Jal, New Mexico - Field-Deployed Drum with Ventilated Barrel Cover (Well RW-2 Enclosure)

7. Site notes:
   AECOM notifies Jal Facility Mgr. prior to sampling events; EP notifies Oxy's Dusty Wilson, per note below:

   Contact for Oxy regarding their field station where we sample the water well. There have been on and off very low exceedances of the 250 mg/l New Mexico standard for chlorides and I needed to notify them. The contact, Dusty Wilson, indicated that personnel who enter that facility must have H2S training and have an H2S monitor operating. Mr. Wilson stated there is a significant amount of H2S associated with the tank battery. He also indicated they would like a few days prior notice so they know who is coming and going out there, so if you can email me with the scheduled sample dates as they come along I will pass that along to Dusty.
   Thanks,
   Joseph (Joe) Wiley, P.G.
   Project Manager - Pipeline Remediation
   Kinder Morgan, Inc.
   Phone: 713-420-3475
   Cell Phone: 832-279-1610
   Joe_wiley@kindermorgan.com

   Site Contact: Bill Evans (575-441-4101); Jal Police Ph. on JHA per Bill (575-395-2501).

   Monitor well lock keys are maintained in HMI's files.

   OXY Well is sampled at outdoor spigot; Doom Well is sampled at spigot inside well shed, on Mr. Jerold Doom's ranch (nephew-Dylan Doom; follow driveway into ranch, then down to left; shed on the right)..see below.

   Per KM, beginning 4Q20, selected lab changed **from** Eurofins Xenco-Stafford, TX (Bethany McDaniel) **to** Eurofins TA-Pensacola, FL (Marty Edwards).

HMI appreciates the opportunity to assist El Paso Natural Gas Company with this project. If you have any questions or require additional information please feel free to call us at 713-464-5206.

Sincerely,

HYDROLOGIC MONITORING

Scott C. Ude

STATE OF TEXAS
SCOTT C. UDE
GEOLOGY
353
LICENSED
PROFESSIONAL GEOSCIENTIST

Scott C. Ude, P.G.

The seal appearing on this document was authorized by Scott C. Ude, P.G. 353 on December 11, 2020.

Attachments

cc: Joe Wiley, P.G., El Paso Natural Gas Company
Scott Duncan, HMI
Cameron Haber, HMI

Table 1
Gauging Data and Groundwater Field Parameters

El Paso Natural Gas Company - Jal #4 Gas Plant
Lea County, New Mexico
December 9, 2020

Well I.D.	1,2,3Q # Wells Sampled	1,2,3Q # Wells Gauged	4Q # Wells Sampled	4Q # Wells Gauged	Ded. Blad Pump	Top of Casing Elev (ft-msl)	Depth to LNAPL (ft-toc)	Depth to Water (ft-toc)	LNAPL Thickness (ft)	DNAPL Thickness (ft)	GW Elev* (ft-msl)	Water Column (ft)	Total Depth (ft-toc)	Stickup (ft)	Screen Interval (ft-bgs)	Sample Intake (ft-toc)	Casing Diam	pH (S.U.)	Temp. (C)	S.C. (umhos)	D.O. (mg/L)	ORP (mV)	Turbidity (NTU)	Water Clarity	Comments
ACW-01		1	1		Yes	3,302.15	NP	105.17	0.00	0.00	3,196.98	30.28	135.45	1.9	110-130	130.5	4" PVC	8.90	20.6	14,700	1.0	-296.0	1.7	Clear	
ACW-02A		2	2		Yes	3,302.16	NP	105.48	0.00	0.00	3,196.68	20.01	125.49	2.0	98-118	120.5	4" PVC	10.36	20.7	13,800	1.1	-384.1	2.6	Clear	
ACW-03		3		1	No	3,301.62	NP	105.04	0.00	0.00	3,196.58	30.08	135.12	1.6	112-132	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-04		4	3		Yes	3,302.05	NP	107.05	0.00	0.00	3,195.00	64.05	171.10	1.7	154-169	169.1	4" PVC	7.22	20.5	110,100	1.4	-243.3	3.0	Clear	
ACW-05		5	4		Yes	3,297.18	NP	103.03	0.00	0.00	3,194.15	14.34	117.37	1.5	105-115	114.4	4" PVC	6.28	17.1	7,940	1.6	-82.4	7.4	Clear	
ACW-06		6	5		Yes	3,302.84	NP	107.16	0.00	0.00	3,195.68	15.47	122.63	1.7	110-120	119.6	4" PVC	8.43	17.5	5,980	1.5	-174.6	4.4	Clear	
ACW-07		7	6		Yes	3,297.63	NP	102.18	0.00	0.00	3,195.45	15.21	117.39	1.5	105-115	114.4	4" PVC	7.22	17.2	8,400	1.6	-131.1	3.7	Clear	
ACW-08		8		2	No	3,299.54	NP	103.22	0.00	0.00	3,196.32	56.69	159.91	1.2	140-160	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
ACW-09		9	7		Yes	3,304.69	NP	110.00	0.00	0.00	3,194.69	52.48	162.48	2.4	140-160	159.5	4" PVC	6.41	21.5	29,600	1.6	-39.0	4.6	Clear	
ACW-10		10	8		Yes	3,299.82	NP	106.17	0.00	0.00	3,193.65	56.87	163.04	2.5	140-160	160.0	4" PVC	6.65	21.4	7,810	1.8	94.1	7.2	Clear	
ACW-11		11	9		Yes	3,301.64	NP	105.58	0.00	0.00	3,196.06	56.10	161.68	2.1	140-161	159.7	4" PVC	6.38	22.9	36,800	1.9	-34.6	5.3	Clear	
ACW-12		12	10		Yes	3,301.80	NP	109.22	0.00	0.00	3,192.58	62.71	171.93	2.5	150-170	168.9	4" PVC	6.66	22.5	6,540	2.1	-82.7	7.0	Clear	
ACW-13	1		11		Yes	3,291.72	NP	99.22	0.00	0.00	3,192.50	76.40	175.62	2.0	153-173	172.6	4" PVC	6.74	21.8	3,590	3.9	102.4	6.4	Clear	
ACW-14	2		12		Yes	3,294.74	NP	100.22	0.00	0.00	3,194.52	76.00	176.22	2.0	157-177	173.2	4" PVC	7.15	16.8	1,136	3.5	52.6	4.6	Clear	
ACW-15	3		13		Yes	3,292.75	NP	102.22	0.00	0.00	3,190.53	69.35	171.57	2.3	150-170	168.6	4" PVC	6.87	21.1	1,109	3.7	119.9	1.6	Clear	
ACW-16		13	14		Yes	3,307.89	NP	109.29	0.00	0.00	3,198.60	67.65	176.94	2.4	156-176	174.9	4" PVC	7.50	20.1	23,200	1.4	-230.8	0.9	Clear	
ACW-17		14	15		Yes	3,306.17	NP	108.43	0.00	0.00	3,197.74	63.35	171.78	2.6	151-171	169.8	4" PVC	6.92	20.3	11,780	1.0	-124.6	6.4	Clear	
ACW-18		15	16		Yes	3,303.15	NP	107.23	0.00	0.00	3,195.92	69.97	177.20	2.5	160-180	175.2	4" PVC	7.52	20.6	98,400	1.0	-196.9	0.6	Clear	
ACW-19		16	17		Yes	3,302.68	NP	106.08	0.00	0.00	3,196.60	15.08	121.16	2.2	98-118	119.2	4" PVC	7.08	21.8	5,590	1.1	164.8	1.9	Clear	
ACW-20		17	18		Yes	3,303.50	NP	108.55	0.00	0.00	3,194.95	65.48	174.03	2.2	154-174	172.0	4" PVC	6.35	20.1	118,500	2.2	-141.3	5.5	Clear	Dup-03
ACW-21		18	19		Yes	3,301.82	NP	105.60	0.00	0.00	3,196.22	14.92	120.52	2.1	98-118	118.5	4" PVC	7.03	21.8	3,080	2.1	-145.3	2.7	Clear	
ACW-22		19	20		Yes	3,306.24	NP	111.70	0.00	0.00	3,194.54	13.34	125.04	2.5	102-122	123.0	4" PVC	6.97	21.2	2,210	1.7	-21.1	6.1	Clear	
ACW-23		20	21		Yes	3,306.29	NP	111.85	0.00	0.00	3,194.44	57.86	169.71	2.3	147-167	167.7	4" PVC	6.86	20.0	3,220	2.3	-34.6	3.7	Clear	
ACW-24		21	22		Yes	3,305.56	NP	110.63	0.00	0.00	3,194.93	78.49	189.12	2.2	166-186	187.1	4" PVC	6.08	17.8	108,700	1.3	69.5	3.9	Clear	
ACW-25		22	23		Yes	3,297.59	NP	103.22	0.00	0.00	3,194.37	71.46	174.68	2.1	151-171	172.7	4" PVC	6.53	17.2	41,800	1.4	-22.7	3.9	Clear	
ACW-26		23	24		Yes	3,309.27	NP	110.33	0.00	0.00	3,198.94	20.27	130.60	1.6	103-128	125.6	4"PVC	7.49	20.3	1,186	3.3	-22.5	8.9	Clear	
ACW-27		24	25		Yes	3,309.22	NP	110.32	0.00	0.00	3,198.90	66.88	177.20	1.8	160-180	167.2	4"PVC	6.86	20.5	3,360	2.7	-74.7	4.2	Clear	
ACW-28		25	26		Yes	3,306.49	NP	108.93	0.00	0.00	3,197.56	19.37	128.30	1.8	102-127	123.3	4"PVC	7.38	20.6	764	2.0	17.9	12.3	Clear	
ACW-29		26	27		Yes	3,306.35	NP	108.81	0.00	0.00	3,197.54	67.98	176.79	1.8	160-180	166.8	4"PVC	7.31	20.7	719	2.3	36.0	2.6	Clear	Dup-04
ACW-30S		27	28		Yes	3,300.17	NP	104.49	0.00	0.00	3,195.68	18.01	122.50	2.3	95-120	117.5	3" PVC	7.36	14.9	872	2.5	68.3	6.4	Clear	
ACW-30D		28	29		Yes	3,300.15	NP	104.77	0.00	0.00	3,195.38	82.66	187.43	2.3	165-185	177.4	3" PVC	6.56	15.3	36,400	2.0	-90.8	6.2	Clear	Dup-02
ACW-32S	4		30		Yes	3,299.60	NP	106.88	0.00	0.00	3,192.72	15.45	122.33	2.5	95-120	117.3	3" PVC	7.35	18.2	3,560	3.3	96.4	6.6	Clear	Dup-01
ACW-32D	5		31		Yes	3,299.61	NP	106.85	0.00	0.00	3,192.76	65.79	172.64	2.5	150-170	162.6	3" PVC	7.39	19.4	2,290	2.3	-73.2	5.2	Clear	
Doom Well	6		32		No	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.28	19.6	585	4.5	-28.7	1.3	Clear	
ENSR-01		29	33		Yes	3,306.71	NP	107.65	0.00	0.00	3,199.06	47.70	155.35	1.6	123-148	150.4	4" PVC	7.10	20.5	19,200	1.7	-190.1	1.3	Clear	
ENSR-03		30		3	No	3,305.05	NP	107.09	0.00	0.00	3,197.96	48.01	155.10	1.5	123-148	NA	4" PVC	NS	NS	NS	NS	NS	NS	NS	
EPNG-01		31	34		Yes	3,310.03	NP	109.28	0.00	0.00	3,200.75	54.65	163.93	AG	120-160	160.9	6" Steel	7.61	20.6	1,036	3.3	-209.1	2.7	Clear	
OXY Well	7		35		No	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.36	16.7	1,209	5.2	28.4	8.9	Clear	
PTP-01		32	36		Yes	3,305.67	NP	107.72	0.00	0.00	3,197.95	NM	136.09	2.3	110-130	131.1	2" PVC	6.89	20.3	1,970	1.7	-171.5	2.1	Clear	
RW-01		33		4	No	3,302.16	NP	105.50	0.00	0.00	3,196.66	76.13	181.63	1.8	109-179	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-02		34		5	No	3,303.71	NP	109.08	0.00	0.00	3,194.63	64.57	173.65	1.4	105-175	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-03		35		6	No	3,302.65	NP	106.13	0.00	0.00	3,196.52	71.56	177.69	1.4	136.7-176.7	NA	NA	NS	NS	NS	NS	NS	NS	NS	
RW-04		36		7	No	3,303.26	NP	108.49	0.00	0.00	3,194.77	67.67	176.16	1.6	154-174	NA	NA	NS	NS	NS	NS	NS	NS	NS	

Notes: Monitoring completed by HMI on behalf of El Paso Natural Gas Company
Gauging and groundwater sampling conducted December 9, 2020
Top of casing survey data, per Piper Surveying, 2/9/16, Revised 7/23/18, per AECOM email 9-11-18
NP = No product (LNAPL), NA = Not applicable, NS = Not sampled, NM = Not measured, AG = At-Grade Surface Completion
ACW-30S, ACW-30D, ACW-32S, and ACW-32D (installed in 2H18), equipped with HMI-owned bladder sampling pumps; ACW-32S & 32D sampled quarterly, per EPNG, 7-10-20
ACW-26, ACW-27, ACW-28, and ACW-29 (installed in 2H19), equipped with HMI-owned bladder sampling pumps; these wells to be sampled during 4Q (large) events ongoing, per EPNG
* GW elevation data uncorrected for ave. density of water column as a function of TDS

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-01

Hydrologic Monitoring
Houston, Texas

Initials: TAB
Well Condition: good

Well Inspection Information

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1140	NP	105.17	0.00	0.00	135.45	130.5	110-130				Weather: Clear 50°

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1145	105.23	0.5	8.99	20.8	15070	1.2	-312.0	3.24	Low-flow purge-sample with	Clear/odor
	1147	105.23	1.0	9.01	20.7	15,430	1.1	-314.2	3.0	HMI's dedicated bladder pump	
	1150	105.23	1.5	8.99	20.7	15,420	0.9	-311.7	2.9		
	1153	105.23	2.0	8.96	20.6	15,520	0.9	-306.6	2.7		
	1155	105.23	2.5	8.92	20.6	14,910	0.9	-298.7	2.1		
	1157	105.23	3.0	8.92	20.6	14,800	1.0	-297.5	2.0		
	1200	105.23	3.5	8.91	20.6	14,700	1.0	-296.3	1.9		
	1203	105.23	4.0	8.90	20.6	14,700	1.0	-296.0	1.7		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1205	ACW-01	105.23	8.90	20.6	14,700	1.0	-296.0	1.7	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

Received by OCD: 4/19/2021 1:26:48 PM
Released to Imaging: 10/28/2022 9:54:55 AM

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-02A

Hydrologic Monitoring
Houston, Texas

Initials: TKB
Well Condition: good

Well Inspection Information

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1055	NP	105.48	0.00	0.00	125.49	120.5	98-118				Weather: Clear 46°

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1100	105.68	0.5	9.40	20.5	22,000	1.4	-389.7	5.2	Low-flow purge-sample with	clear
	1103	105.73	1.0	9.97	20.8	18,200	1.2	-405.4	4.8	HMI's dedicated bladder pump	
	1105	105.78	1.5	10.25	20.8	14,240	1.1	-406.4	4.1		
	1107	105.82	2.0	10.32	20.8	14,140	1.0	-400.2	4.0		
	1110	105.84	2.5	10.34	20.8	14,000	1.0	-387.9	3.7		
	1113	105.86	3.0	10.35	20.8	13,900	1.0	-385.2	3.5		
	1115	105.88	3.5	10.35	20.7	13,800	1.1	-384.8	2.8		
	1117	105.90	4.0	10.36	20.7	13,800	1.1	-384.1	2.6		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1120	ACW-02A	105.90	10.36	20.7	13,800	1.1	-384.1	2.6	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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(Gauge-only)

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-03

4" PVC recovery well

Hydrologic Monitoring
Houston, Texas

Initials: TAB
Well Condition: OK

Well Inspection Information

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12/9/20	1310	NP	105.04	0.00	0.00	135.12	NA	112-132				Weather: Clear 50s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
			0.5							Low-flow purge-sample with	
			1.0							HMI's dedicated bladder pump	
			1.5								
			2.0								
			2.5								
			3.0								
			3.5								
			4.0								

Well Sampling Record

No sampling; Gauge-only

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
										Per COC	Per Lab	Lab: Eurofins Xenco Houston TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-04

Hydrologic Monitoring
Houston, Texas

Initials: TAB
Well Condition: good

Well Inspection Information

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	1015	NP	107.05	0.00	0.00	171.10	169.1	154-169				Weather: clear 40°

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	1020	107.25	0.5	7.20	20.5	99,700	1.7	-216.2	5.7	Low-flow purge-sample with	clear
	1023	107.30	1.0	7.19	20.5	99,900	1.7	-219.4	5.6	HMI's dedicated bladder pump	
	1025	107.32	1.5	7.19	20.5	100,600	1.4	-225.7	4.9		
	1027	107.34	2.0	7.21	20.4	109,900	1.3	-235.5	3.8		
	1030	107.37	2.5	7.21	20.5	111,100	1.3	-238.9	3.7		
	1033	107.38	3.0	7.21	20.5	110,900	1.3	-241.1	3.5		
	1035	107.39	3.5	7.22	20.5	110,00	1.3	-242.7	3.4		
↓	1037	107.39	4.0	7.22	20.5	110,100	1.4	-243.3	3.0		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	1040	ACW-04	107.39	7.22	20.5	110,100	1.4	-243.3	3.0	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-05

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BRH
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1105	NP	103.03	0.00	0.00	117.37	114.4	105-115				Weather: Sunny, 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1110	103.33	0.5	6.48	18.2	10460	2.4	-51.3	13.6	Low-flow purge-sample with	clear
↓	1113	103.48	1.0	6.47	17.7	8870	2.1	-58.7	10.5	HMI's dedicated bladder pump	↓
↓	1115	103.59	1.5	6.42	17.5	8430	1.9	-64.3	9.2	↓	↓
↓	1118	103.65	2.0	6.36	17.3	8210	1.8	-69.0	8.7	↓	↓
↓	1120	103.68	2.5	6.33	17.2	8030	1.7	-74.3	8.1	↓	↓
↓	1123	103.71	3.0	6.31	17.2	7980	1.7	-78.2	7.9	↓	↓
↓	1125	103.73	3.5	6.29	17.1	7960	1.6	-80.9	7.6	↓	↓
↓	1128	103.75	4.0	6.28	17.1	7940	1.6	-82.4	7.4	↓	↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1130	ACW-05	103.75	6.28	17.1	7940	1.6	-82.4	7.4	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-06

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BRH
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1305	NP	107.16	0.00	0.00	122.63	119.6	110-120				Weather: Sunny, 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1310	107.28	0.5	8.04	18.3	15,120	2.9	-38.0	8.2	Low-flow purge-sample with	Clear
	1313	107.38	1.0	8.05	18.1	10,640	2.0	-120.4	7.1	HMI's dedicated bladder pump	
	1315	107.45	1.5	8.22	17.9	7120	1.9	-137.2	6.4		
	1318	107.51	2.0	8.30	17.7	6180	1.8	-155.9	5.9		
	1320	107.55	2.5	8.36	17.6	6070	1.7	-164.3	5.5		
	1323	107.59	3.0	8.39	17.6	6020	1.6	-169.1	5.2		
	1325	107.62	3.5	8.41	17.5	5990	1.6	-172.5	4.8		
	1328	107.65	4.0	8.43	17.5	5980	1.5	-174.6	4.4		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1330	ACW-06	107.65	8.43	17.5	5980	1.5	-174.6	4.4	Per COC	Per Lab	Lab: Eurofins Xenco Houston TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-07

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BFH
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1150	NP	102.18	0.00	0.00	117.39	114.4	105-115				Weather Sunny, 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1155	102.26	0.5	7.54	18.2	8650	3.0	-99.8	9.2	Low-flow purge-sample with	Clear
	1158	102.29	1.0	7.43	17.8	8520	2.4	-108.3	7.0	HMI's dedicated bladder pump	↓
	1200	102.31	1.5	7.38	17.5	8470	2.2	-115.1	6.4		
	1203	102.32	2.0	7.32	17.3	8440	2.0	-119.9	5.8		
	1205	102.33	2.5	7.28	17.2	8420	1.8	-123.6	5.3		
	1208	102.33	3.0	7.25	17.2	8410	1.7	-127.0	4.9		
	1210	102.33	3.5	7.23	17.2	8410	1.6	-129.5	4.4		
↓	1213	102.33	4.0	7.22	17.2	8400	1.6	-131.1	3.7		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1215	ACW-07	102.33	7.22	17.2	8400	1.6	-131.1	3.7	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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(Gauge-only)

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-08

Hydrologic Monitoring
Houston, Texas

4" PVC recovery well

Well Inspection Information

Initials: DSD
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1410	NP	103.22	0.00	0.00	159.91	NA	140-160				Weather: Clear 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
			0.5							Low-flow purge-sample with	
			1.0							HMI's dedicated bladder pump	
			1.5								
			2.0								
			2.5								
			3.0								
			3.5								
			4.0								

Well Sampling Record

No sampling; Gauge-only

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
												Lab: Eurofins Xenco Houston TX
										Per COC	Per Lab	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-09

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	1335	NP	110.00	0.00	0.00	162.48	159.5	140-160				Weather: Clear, 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	1340	110.23	0.5	6.38	22.4	26,100	2.4	13.0	7.6	Low-flow purge-sample with	Clear
↓	1342	110.24	1.0	6.24	21.9	28,500	2.1	-6.4	7.1	HMI's dedicated bladder pump	↓
	1345	110.24	1.5	6.22	21.8	28,900	1.8	-15.0	6.5		
	1347	110.24	2.0	6.29	21.7	29,300	1.7	-26.0	6.0		
	1350	110.24	2.5	6.35	21.7	29,400	1.6	-30.4	5.7		
	1352	110.24	3.0	6.37	21.6	29,500	1.6	-34.2	5.2		
	1355	110.24	3.5	6.39	21.6	29,600	1.6	-37.1	4.9		
↓	1357	110.24	4.0	6.41	21.5	29,600	1.6	-39.0	4.6		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	1400	ACW-09	110.24	6.41	21.5	29,600	1.6	-39.0	4.6	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-10

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	1130	NP	106.17	0.00	0.00	163.04	160.0	140-160				Weather: Clear, 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	1135	106.46	0.5	7.31	22.4	7360	7.1	103.1	14.1	Low-flow purge-sample with	Clear
	1137	106.54	1.0	7.14	22.0	7480	4.7	109.9	11.9	HMI's dedicated bladder pump	
	1140	106.54	1.5	6.71	21.7	7610	2.4	108.2	9.8		
	1142	106.56	2.0	6.57	21.6	7700	2.1	103.3	9.1		
	1145	106.58	2.5	6.60	21.5	7750	2.0	99.1	8.6		
	1147	106.59	3.0	6.62	21.5	7770	1.9	97.0	8.4		
	1150	106.60	3.5	6.64	21.4	7790	1.9	95.2	8.4		
	1152	106.61	4.0	6.65	21.4	7810	1.8	94.1	7.2		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	1155	ACW-10	106.61	6.65	21.4	7810	1.8	94.1	7.2	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-11

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: DSD
Well Condition: GOOD

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1235	NP	105.58	0.00	0.00	161.68	159.7	140-161				Weather: CLEAR 60S

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1240	105.84	0.5	6.53	21.9	32,300	2.9	+53.6	9.6	Low-flow purge-sample with	Clear
	1243	105.89	1.0	6.50	21.9	35,100	2.6	-50.8	8.3	HMI's dedicated bladder pump	
	1245	105.93	1.5	6.46	22.2	35,900	2.4	-47.3	8.7		
	1248	105.95	2.0	6.43	22.5	36,300	2.2	-43.4	7.5		
	1250	105.98	2.5	6.41	22.8	36,600	2.1	-41.6	7.2		
	1253	106.02	3.0	6.40	22.9	36,700	2.0	-39.8	6.8		
	1255	106.05	3.5	6.39	22.9	36,800	2.0	-37.5	6.1		
	1258	106.09	4.0	6.38	22.9	36,800	1.9	-34.6	5.3		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1300	ACW-11	106.09	6.38	22.9	36,800	1.9	-34.6	5.3	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-12

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	1210	NP	109.22	0.00	0.00	171.93	168.9	150-170				Weather: Clear, 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	1215	109.29	0.5	7.14	22.9	6640	2.9	-55.7	14.0	Low-flow purge-sample with	Clear
	1217	109.39	1.0	6.85	22.8	6600	2.1	-60.6	11.1	HMI's dedicated bladder pump	
	1220	109.47	1.5	6.73	22.7	6580	1.9	-65.1	10.4		
	1222	109.53	2.0	6.70	22.7	6570	1.9	-70.1	9.6		
	1225	109.58	2.5	6.68	22.6	6560	2.0	-74.6	9.1		
	1227	109.62	3.0	6.67	22.6	6550	2.0	-77.3	8.4		
	1230	109.66	3.5	6.67	22.5	6540	2.1	-80.0	7.5		
	1232	109.70	4.0	6.66	22.5	6540	2.1	-82.7	7.0		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	1235	ACW-12	109.70	6.66	22.5	6540	2.1	-82.7	7.0	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-13

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	1045	NP	99.22	0.00	0.00	175.62	172.6	153-173				Weather: Clear, 50's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	1050	99.44	0.5	7.75	22.8	3380	7.5	53.2	9.2	Low-flow purge-sample with	Clear
	1052	99.44	1.0	7.59	22.2	3380	6.4	70.9	8.6	HMI's dedicated bladder pump	
	1055	99.47	1.5	7.12	22.1	3430	4.9	88.9	8.1		
	1057	99.47	2.0	6.89	22.0	3510	4.3	93.1	7.5		
	1100	99.47	2.5	6.84	21.9	3540	4.1	96.2	7.0		
	1102	99.47	3.0	6.81	21.9	3560	3.9	98.1	6.7		
	1105	99.47	3.5	6.77	21.8	3580	3.8	100.6	6.2		
↓	1107	99.47	4.0	6.74	21.8	3590	3.9	102.4	6.4		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	1110	ACW-13	99.47	6.74	21.8	3590	3.9	102.4	6.4	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-14

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BRH
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	945	NP	100.22	0.00	0.00	176.22	173.2	157-177				Weather: Sunny, 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	950	100.33	0.5	7.92	17.2	5010	5.1	-31.4	8.1	Low-flow purge-sample with	Clear
↓	953	100.33	1.0	7.51	17.0	2720	4.4	10.2	7.6	HMI's dedicated bladder pump	
	955	100.33	1.5	7.36	16.9	1826	4.1	28.1	7.2		
	958	100.33	2.0	7.22	16.9	1227	3.9	36.9	6.9		
	1000	100.33	2.5	7.19	16.8	1164	3.7	44.3	6.3		
	1003	100.33	3.0	7.18	16.8	1149	3.6	47.8	5.4		
	1005	100.33	3.5	7.16	16.8	1141	3.6	50.7	4.9		
↓	1008	100.33	4.0	7.15	16.8	1136	3.5	52.6	4.6		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1010	ACW-14	100.33	7.15	16.8	1136	3.5	52.6	4.6	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-15

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12/9/20	1035	NP	102.22	0.00	0.00	171.57	168.6	150-170				Weather: Sunny 50's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12/9/20	1040	102.24	0.5	6.78	22.2	1151	3.8	148.6	3.7	Low-flow purge-sample with	Clear
	1043	102.24	1.0	6.73	21.9	1134	3.5	134.8	3.1	HMI's dedicated bladder pump	"
	1045	102.24	1.5	6.71	21.7	1126	3.5	127.3	2.8		"
	1048	102.24	2.0	6.79	21.6	1119	3.5	124.1	2.3		"
	1050	102.24	2.5	6.83	21.4	1115	3.6	122.0	1.9		"
	1053	102.24	3.0	6.84	21.3	1113	3.6	121.2	1.7		"
	1055	102.24	3.5	6.86	21.2	1111	3.7	120.8	1.6		"
	1058	102.24	4.0	6.87	21.2	1109	3.7	119.9	1.6		"

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12/9/20	1100	ACW-15	102.24	6.87	21.2	1109	3.7	119.9	1.6	Per COC	Per Lab	Lab: Eurofins, Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-16

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: TAB
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	930	NP	109.29	0.00	0.00	176.94	174.9	156-176				Weather: Clear, 40°

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	935	109.39	0.5	7.38	19.8	23,000	1.8	-200.1	3.4	Low-flow purge-sample with	Clear
	937	109.49	1.0	7.40	19.9	23,100	1.7	-210.7	1.9	HMI's dedicated bladder pump	
	940	109.57	1.5	7.44	20.0	23,300	1.5	-219.2	1.5		
	943	109.61	2.0	7.46	20.0	23,200	1.5	-224.4	1.3		
	945	109.63	2.5	7.47	20.1	23,100	1.5	-225.9	1.2		
	947	109.65	3.0	7.49	20.1	23,100	1.4	-228.1	1.0		
	950	109.65	3.5	7.49	20.1	23,200	1.4	-229.4	0.9		
	953	109.65	4.0	7.50	20.1	23,200	1.4	-230.8	0.9		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	955	ACW-16	109.65	7.50	20.1	23,200	1.4	-230.8	0.9	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-17

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: OSD
Well Condition: GOOD

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	910	NP	108.43	0.00	0.00	171.78	169.8	151-171				Weather: Clear 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	915	108.55	0.5	6.81	19.5	10,300	1.8	-144.3	20.8	Low-flow purge-sample with	Clear
	917	108.58	1.0	6.85	19.8	10,560	1.4	-140.7	17.3	HMI's dedicated bladder pump	
	920	108.60	1.5	6.88	19.9	10,780	1.3	-137.8	15.6		
	923	108.60	2.0	6.96	20.1	10,990	1.2	-135.6	12.1		
	925	108.60	2.5	6.90	20.2	11,130	1.1	-132.1	9.6		
	928	108.60	3.0	6.91	20.3	11,460	1.1	-130.5	8.5		
	930	108.60	3.5	6.92	20.3	11,630	1.0	-127.3	7.3		
	933	108.60	4.0	6.92	20.3	11,780	1.0	-124.6	6.4		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	935	ACW-17	108.60	6.92	20.3	11,780	1.0	-124.6	6.4	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-18

Hydrologic Monitoring
Houston, Texas

Initials: TAB
Well Condition: good

Well Inspection Information

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	1225	NP	107.23	0.00	0.00	177.20	175.2	160-180				Weather: clear

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	1230	107.44	0.5	7.65	21.0	89,700	1.7	-235.2	1.5	Low-flow purge-sample with	clear
	1233	107.48	1.0	7.58	20.9	91,000	1.4	-228.7	1.3	HMI's dedicated bladder pump	
	1235	107.52	1.5	7.55	20.8	96,600	1.2	-219.5	1.1		
	1237	107.56	2.0	7.54	20.7	100,900	1.1	-210.2	1.0		
	1240	107.58	2.5	7.54	20.7	98,900	1.0	-201.7	1.0		
	1243	107.59	3.0	7.53	20.6	98,600	1.0	-198.8	0.9		
	1245	107.60	3.5	7.52	20.6	98,500	1.0	-198.0	0.8		
	1247	107.61	4.0	7.52	20.6	99,400	1.0	-196.9	0.6		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	1250	ACW-18	107.61	7.52	20.6	96,400	1.0	-196.9	0.6	Per COC	Per Lab	Lab: Eurofins Xenco Houston TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-19

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: OSD
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1325	NP	106.08	0.00	0.00	121.16	119.2	98-118				Weather: Clear 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1330	106.29	0.5	7.28	21.0	5800	2.1	-145.3	6.3	Low-flow purge-sample with	Clear
	1333	106.33	1.0	7.25	20.8	5,780	1.8	148.7	5.8	HMI's dedicated bladder pump	
	1335	106.33	1.5	7.21	20.9	5,720	1.5	150.6	5.1		
	1338	106.33	2.0	7.18	21.1	5,680	1.3	153.8	4.2		
	1340	106.33	2.5	7.16	21.3	5,640	1.2	155.1	3.3		
	1343	106.33	3.0	7.13	21.5	5,620	1.2	159.9	2.7		
	1345	106.33	3.5	7.10	21.7	5,600	1.1	161.3	2.3		
	1348	106.33	4.0	7.08	21.8	5,590	1.1	164.8	1.9		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1350	ACW-19	106.33	7.08	21.8	5,590	1.1	164.8	1.9	Per COC	Per Lab	Lab: Eurofins Xenco Houston TX

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+ Dup - 03 (All parameters)

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-20

* 8" of erosion under pad. Gravel filling suggested

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: DSD
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1040	NP	108.55	0.00	0.00	174.03	172.0	154-174				Weather: Clear 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1045	108.71	0.5	6.47	20.4	120,600	3.1	-165.1	10.8	Low-flow purge-sample with	Clear
	1048	108.73	1.0	6.45	20.4	120,100	2.8	-159.3	9.1	HMI's dedicated bladder pump	
	1050	108.76	1.5	6.43	20.3	119,400	2.6	-158.4	8.3		
	1053	108.76	2.0	6.40	20.3	119,100	2.5	-153.8	7.9		
	1055	108.76	2.5	6.39	20.2	118,700	2.4	-150.7	6.5		
	1058	108.76	3.0	6.38	20.1	118,600	2.3	-148.3	6.1		
	1100	108.76	3.5	6.37	20.1	118,500	2.3	-145.6	5.7		
	1103	108.76	4.0	6.35	20.1	118,500	2.2	-141.3	5.5		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1105	ACW-20	108.76	6.35	20.1	118,500	2.2	-141.3	5.5	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX
12-9-20	1130	Dup-03	108.76	6.35	20.1	118,500	2.2	-141.3	5.5	Per COC	Per Lab	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-21

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: OSD
Well Condition: GOOD

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1145	NP	105.60	0.00	0.00	120.52	118.5	98-118				Weather: Clear 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1150	105.78	0.5	6.85	21.1	2870	2.9	-169.2	7.3	Low-flow purge-sample with	Clear
	1153	105.83	1.0	6.87	21.3	2930	2.6	-163.4	6.8	HMI's dedicated bladder pump	
	1155	105.87	1.5	6.90	21.5	2950	2.4	-160.5	6.1		
	1158	105.90	2.0	6.92	21.6	2970	2.3	-156.3	5.5		
	1200	105.93	2.5	6.95	21.7	2990	2.2	-154.1	4.7		
	1203	105.96	3.0	6.97	21.7	3010	2.1	-151.7	4.1		
	1205	106.00	3.5	7.01	21.8	3060	2.1	-148.6	3.2		
	1208	106.03	4.0	7.03	21.8	3080	2.1	-145.3	2.7		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1210	ACW-21	106.03	7.03	21.8	3080	2.1	-145.3	2.7	Per COC	Per Lab	Lab: Eurofins ` Xenco, Houston TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-22

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	1255	NP	111.70	0.00	0.00	125.04	123.0	102-122				Weather: Clear, 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	1300	111.90	0.5	7.59	22.0	2520	4.8	7.5	10.7	Low-flow purge-sample with	Clear
	1302	111.90	1.0	7.32	21.7	2390	3.1	-2.1	9.4	HMI's dedicated bladder pump	
	1305	111.90	1.5	7.17	21.5	2280	2.3	-9.1	8.6		
	1307	111.91	2.0	7.10	21.4	2250	2.0	-13.6	8.1		
	1310	111.91	2.5	7.05	21.3	2240	1.8	-15.9	7.7		
	1312	111.91	3.0	7.02	21.3	2230	1.7	-17.4	7.4		
	1315	111.91	3.5	6.99	21.2	2220	1.7	-19.1	6.5		
	1317	111.91	4.0	6.97	21.2	2210	1.7	-21.2	6.1		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	1320	ACW-22	111.91	6.97	21.2	2210	1.7	-21.2	6.1	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-23

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	955	NP	111.85	0.00	0.00	169.71	167.7	147-167				Weather: Clear, 40's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	1000	111.89	0.5	7.71	19.2	2890	3.9	32.1	6.4	Low-flow purge-sample with	Clear
↓	1002	111.90	1.0	7.59	19.4	2990	3.4	3.1	6.0	HMI's dedicated bladder pump	↓
	1005	111.90	1.5	7.19	19.7	3100	2.9	-13.0	5.6		
	1007	111.91	2.0	7.03	19.8	3130	2.7	-19.7	5.1		
	1010	111.91	2.5	6.94	19.9	3170	2.5	-26.7	4.9		
	1012	111.91	3.0	6.91	19.9	3190	2.4	-29.1	4.6		
	1015	111.91	3.5	6.88	20.0	3210	2.3	-32.3	4.2		
↓	1017	111.91	4.0	6.86	20.0	3220	2.3	-34.6	3.7		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	1020	ACW-23	111.91	6.86	20.0	3220	2.3	-34.6	3.7	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-24

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BRH
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1225	NP	110.63	0.00	0.00	189.12	187.1	166-186				Weather: Sunny, 60s

Well Purging Record

*SC confirmed

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1230	110.75	0.5	6.53	18.6	103500	2.4	-1.7	7.5	Low-flow purge-sample with	clear
	1233	110.75	1.0	6.35	18.2	105,900	2.0	21.9	6.1	HMI's dedicated bladder pump	
	1235	110.75	1.5	6.21	18.0	107,100	1.8	40.2	5.4		
	1238	110.75	2.0	6.16	17.9	108,100	1.6	53.0	5.0		
	1240	110.75	2.5	6.14	17.9	108,300	1.5	60.8	4.8		
	1243	110.75	3.0	6.11	17.8	108,500	1.4	64.7	4.4		
	1245	110.75	3.5	6.09	17.8	108,600	1.4	67.3	4.2		
	1248	110.75	4.0	6.08	17.8	108,700	1.3	69.5	3.9		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1250	ACW-24	110.75	6.08	17.8	108,700	1.3	69.5	3.9	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-25

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BRH
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1025	NP	103.22	0.00	0.00	174.68	172.7	151-171				Weather: Sunny, 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1030	103.39	0.5	6.59	18.1	38,300	2.7	-62.8	7.4	Low-flow purge-sample with	clear
	1033	103.49	1.0	6.55	17.7	39,800	2.1	-49.2	6.8	HMI's dedicated bladder pump	
	1035	103.51	1.5	6.53	17.4	40,200	1.9	-41.5	6.1		
	1038	103.52	2.0	6.52	17.3	40,700	1.7	-33.2	5.7		
	1040	103.53	2.5	6.52	17.2	41,300	1.6	-29.1	5.2		
	1043	103.53	3.0	6.52	17.2	41,600	1.5	-26.0	4.9		
	1045	103.54	3.5	6.53	17.2	41,700	1.4	-24.8	4.4		
	1048	103.54	4.0	6.53	17.2	41,800	1.4	-22.7	3.9		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1050	ACW-25	103.54	6.53	17.2	41,800	1.4	-22.7	3.9	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-26

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: RB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12/9/20	1130	NP	110.33	0.00	0.00	130.60	125.6	103-128				Weather: Sunny 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12/9/20	1135	110.33	0.5	7.87	20.9	1230	6.1	-57.3	11.3	Low-flow purge-sample with	Clear
	1138	110.33	1.0	7.59	20.6	1221	4.5	-41.2	10.1	HMI's dedicated bladder pump	"
	1140	110.33	1.5	7.55	20.5	1203	4.0	-35.6	9.6		"
	1143	110.33	2.0	7.53	20.5	1194	3.7	-29.8	9.3		"
	1145	110.33	2.5	7.51	20.4	1190	3.5	-25.4	9.2		"
	1148	110.33	3.0	7.50	20.4	1188	3.4	-23.6	9.0		"
	1150	110.33	3.5	7.50	20.4	1187	3.3	-22.9	8.9		"
	1153	110.33	4.0	7.49	20.3	1186	3.3	-22.5	8.9		"

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12/9/20	1155	ACW-26	110.33	7.49	20.3	1186	3.3	-22.5	8.9	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-27

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)	-			Comments
12/9/20	1210	NP	110.32	0.00	0.00	177.20	167.2	160-180				Weather: Sunny 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12/9/20	1215	110.39	0.5	6.98	21.3	3760	4.1	-48.2	-5.6	Low-flow purge-sample with	Clear
	1218	110.39	1.0	6.91	20.9	3410	3.8	-54.8	5.1	HMI's dedicated bladder pump	"
	1220	110.39	1.5	6.89	20.7	3390	3.4	-60.2	4.8		"
	1223	110.39	2.0	6.88	20.6	3380	3.2	-68.7	4.6		"
	1225	110.39	2.5	6.87	20.6	3380	3.0	-72.8	4.5		"
	1228	110.39	3.0	6.87	20.6	3370	2.8	-73.4	4.3		"
	1230	110.39	3.5	6.86	20.5	3360	2.7	-74.1	4.3		"
	1233	110.39	4.0	6.86	20.5	3360	2.7	-74.7	4.2		"

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12/9/20	1235	ACW-27	110.39	6.86	20.5	3360	2.7	-74.7	4.2	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-28

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12/9/20	1300	NP	108.93	0.00	0.00	128.30	123.3	102-127				Weather: Sunny 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12/9/20	1305	109.07	0.5	7.20	21.6	804	3.0	28.2	6.1	Low-flow purge-sample with	Clear
	1308	109.16	1.0	7.27	21.3	780	2.6	21.6	7.8	HMI's dedicated bladder pump	"
	1310	109.18	1.5	7.33	21.1	772	2.3	19.8	9.3		"
	1313	109.19	2.0	7.35	21.0	768	2.2	19.5	9.8		"
	1315	109.19	2.5	7.36	20.8	766	2.1	18.8	10.6		"
	1318	109.20	3.0	7.36	20.7	765	2.1	18.7	11.8		"
	1320	109.20	3.5	7.37	20.7	764	2.0	18.1	12.1		"
V	1323	109.20	4.0	7.38	20.6	764	2.0	17.9	12.3		"

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12/9/20	1325	ACW-28	109.20	7.38	20.6	764	2.0	17.9	12.3	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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+ Dup - 04
(All parameters)

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-29

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12/9/20	1345	NP	108.81	0.00	0.00	176.79	166.8	160-180				Weather: Sunny 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12/9/20	1350	108.87	0.5	7.13	21.3	704	3.3	52.6	4.1	Low-flow purge-sample with	Clear
	1353	108.95	1.0	7.18	21.1	708	3.0	41.8	3.9	HMI's dedicated bladder pump	"
	1355	109.01	1.5	7.22	20.9	713	2.7	39.4	3.6		"
	1358	109.03	2.0	7.25	20.8	715	2.6	38.2	3.2		"
	1400	109.04	2.5	7.27	20.8	717	2.5	37.1	2.9		"
	1403	109.05	3.0	7.28	20.7	718	2.4	36.8	2.7		"
	1405	109.05	3.5	7.30	20.7	718	2.3	36.4	2.6		"
	1408	109.05	4.0	7.31	20.7	719	2.3	36.0	2.6		"

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12/9/20	1410	ACW-29	109.05	7.31	20.7	719	2.3	36.0	2.6	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX
12/9/20	1200	Dup-04	109.05	7.31	20.7	719	2.3	36.0	2.6	Per COC	Per Lab	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-305

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BRH
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	800	NP	104.49	0.00	0.00	122.50	117.5	95-120				Weather: Sunny, 40s

Well Purging Record

*SC confirmed in 1,000 solution

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	805	104.49	0.5	7.60	13.2	1595	4.4	56.7	19.6	Low-flow purge-sample with	clear
	808	104.49	1.0	7.51	14.0	1164	3.7	60.2	17.1	HMI's dedicated bladder pump	
	810	104.49	1.5	7.44	14.3	927	3.1	63.8	12.4		
	813	104.49	2.0	7.40	14.6	905	2.9	64.9	9.9		
	815	104.49	2.5	7.38	14.7	894	2.7	66.5	8.0		
	818	104.49	3.0	7.37	14.8	881	2.6	67.1	7.2		
	820	104.49	3.5	7.36	14.9	876	2.6	67.9	6.8		
↓	823	104.49	4.0	7.36	14.9	872	2.5	68.3	6.4		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	825	ACW-305	104.49	7.36	14.9	872	2.5	68.3	6.4	Per COC	Per Lab	Lab: Eurofins Xenco Houston TX

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+ Dup-02 (All parameters)

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-30D

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BRH
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	840	NP	104.77	0.00	0.00	187.43	177.4	165-185				Weather: Sunny, 50s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	845	105.04	0.5	6.91	14.7	34,700	3.9	-108.4	10.2	Low-flow purge-sample with	Clear
↓	848	105.06	1.0	6.74	15.0	35,600	2.7	-110.6	9.1	HMI's dedicated bladder pump	↓
	850	105.08	1.5	6.67	15.1	36,000	2.4	-105.5	8.4		
	853	105.09	2.0	6.64	15.2	36,200	2.3	-99.1	7.6		
	855	105.09	2.5	6.60	15.2	36,300	2.2	-96.0	7.1		
	858	105.10	3.0	6.58	15.3	36,300	2.1	-94.3	6.8		
	900	105.10	3.5	6.57	15.3	36,400	2.1	-92.7	6.4		
↓	903	105.11	4.0	6.56	15.3	36,400	2.0	-90.8	6.2		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	905	ACW-30D	105.11	6.56	15.3	36,400	2.0	-90.8	6.2	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX
↓												
↓	1100	Dup-02	105.11	6.56	15.3	36,400	2.0	-90.8	6.2	Per COC	Per Lab	

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+ Dup -01 (All parameters)

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-32S

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	830	NP	106.88	0.00	0.00	122.33	117.3	95-120				Weather: Clear, 40's

Well Purging Record

*pH Confirmed

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	835	106.98	0.5	7.42	15.9	3600	4.6	136.4	9.1	Low-flow purge-sample with	Clear
	837	107.03	1.0	7.30	16.7	3630	4.1	140.3	5.4	HMI's dedicated bladder pump	
	840	107.04	1.5	7.12	17.2	3670	3.9	142.7	8.0		
	842	107.04	2.0	7.14	17.6	3650	3.7	121.8	7.5		
	845	107.04	2.5	7.23	17.8	3620	3.5	114.1	7.1		
	847	107.04	3.0	7.28	18.0	3600	3.4	105.6	6.5		
	850	107.04	3.5	7.31	18.1	3580	3.3	100.1	6.7		
	852	107.04	4.0	7.35	18.2	3560	3.3	96.4	6.6		

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	855	ACW-32S	107.04	7.35	18.2	3560	3.3	96.4	6.6	Per COC	Per Lab	Lab: Eurofins Xenco Houston TX
	1100	Dup-01	107.04	7.35	18.2	3560	3.3	96.4	6.6	Per COC	Per Lab	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ACW-32D

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	915	NP	106.85	0.00	0.00	172.64	162.6	150-170				Weather: Clear, 40's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	920	106.90	0.5	8.22	18.8	1658	5.1	50.6	8.1	Low-flow purge-sample with	Clear
	922	106.90	1.0	7.55	18.9	1844	3.9	-14.9	7.6	HMI's dedicated bladder pump	↓
	925	106.90	1.5	7.61	19.0	2110	3.0	-61.4	7.0		
	927	106.90	2.0	7.45	19.2	2390	2.7	-78.9	6.5		
	930	106.90	2.5	7.42	19.2	2360	2.5	-79.1	6.1		
	932	106.90	3.0	7.41	19.3	2330	2.4	-77.0	5.9		
	935	106.90	3.5	7.40	19.4	2310	2.4	-75.0	5.6		
↓	937	106.90	4.0	7.39	19.4	2290	2.3	-73.2	5.2		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	940	ACW-32D	106.90	7.39	19.4	2290	2.3	-73.2	5.2	Per COC	Per Lab	Lab: Eurofins Xenco, Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: Doom Well

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BS
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12/9/20	845	NA	NA	NA	NA	NA	NA	NA				Weather: Sunny 50's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (G)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12/9/20	850	NA	1.0	7.31	18.9	593	4.7	-30.8	1.6	Mr. Doom's water supply well;	Clear
↓	851	↓	2.0	7.29	19.3	589	4.6	-29.3	1.4	sampled at spigot inside	11
	852		3.0	7.28	19.5	587	4.6	-29.0	1.3	Mr. Doom's shed; purged	11
↓	853	↓	4.0	7.28	19.6	585	4.5	-28.7	1.3	4 gal prior to sampling	11

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12/9/20	855	Doom Well	NA	7.28	19.6	585	4.5	-28.7	1.3	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ENSR-01

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: TAB
Well Condition: OK

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	830	NP	107.65	0.00	0.00	155.35	150.4	123-148				Weather: Clear 40s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12.9.20	835	107.69	0.5	6.83	19.0	12,180	2.6	-159.4	2.4	Low-flow purge-sample with	Clear
	837	107.70	1.0	6.91	20.0	14,940	2.2	-164.0	2.2	HMI's dedicated bladder pump	
	840	107.70	1.5	7.02	20.3	18,650	1.9	-180.7	1.9		
	843	107.70	2.0	7.05	20.3	18,890	1.9	-183.5	1.7		
	845	107.70	2.5	7.07	20.4	18,980	1.8	-185.1	1.5		
	847	107.70	3.0	7.09	20.5	19,000	1.7	-188.2	1.5		
	850	107.70	3.5	7.10	20.5	19,100	1.7	-189.0	1.4		
↓	853	107.70	4.0	7.10	20.5	19,200	1.7	-190.1	1.3		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12.9.20	855	ENSR-01	107.70	7.10	20.5	19,200	1.7	-190.1	1.3	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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(Gauge-only)

Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: ENSR-03

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: DD
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1035	NP	107.09	0.00	0.00	155.10	NA	123-148				Weather: Clear 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
			0.5							Low-flow purge-sample with	
			1.0							HMI's dedicated bladder pump	
			1.5								
			2.0								
			2.5								
			3.0								
			3.5								
			4.0								

Well Sampling Record

No Sample; Gauge-only

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
		ENSR-03								Per COC	Per Lab	Lab: Eurofins · Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: EPNG-01

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12/9/20	945	NP	109.28	0.00	0.00	163.93	160.9	120-160				Weather: Sunny 50's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12/9/20	950	109.30	0.5	7.42	21.3	1109	4.9	-186.3	7.3	Low-flow purge-sample with	Clear
	953	109.30	1.0	7.49	21.0	1074	4.2	-195.8	5.8	HMI's dedicated bladder pump	"
	955	109.30	1.5	7.53	20.9	1056	3.9	-199.3	4.9		"
	958	109.30	2.0	7.56	20.8	1045	3.7	-202.4	3.4		"
	1000	109.30	2.5	7.58	20.8	1047	3.5	-205.8	3.0		"
	1003	109.30	3.0	7.59	20.7	1039	3.4	-207.2	2.8		"
	1005	109.30	3.5	7.60	20.7	1037	3.4	-208.4	2.7		"
	1008	109.30	4.0	7.61	20.6	1036	3.3	-209.1	2.7		"

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12/9/20	1010	EPNG-01	109.30	7.61	20.6	1036	3.3	-209.1	2.7	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: OXY Well

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12/9/20	915	NA	NA	NA	NA	NA	NA	NA				Weather: Sunny 50's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (G)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12/9/20	920	NA	1.0	7.44	16.4	1179	5.9	41.6	12.6	OXY bldg. water supply well;	Clear
↓	921	↓	2.0	7.42	16.6	1194	5.5	32.6	9.4	sampled at outdoor spigot (to	"
	922		3.0	7.38	16.7	1203	5.3	29.8	9.2	right of front door; pliers may be	"
↓	923	↓	4.0	7.36	16.7	1209	5.2	28.4	8.9	needed); purge 4 gal prior to	"
										sampling	

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12/9/20	925	OXY Well	NA	7.36	16.7	1209	5.2	28.4	8.9	Per COC	Per Lab	Lab: Eurofins Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: PTP-01

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: OSD
Well Condition: GOOD

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	955	NP	107.72	0.00	0.00	136.09	131.1	110-130				Weather: Clear, 60's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
12-9-20	1000	107.93	0.5	7.06	19.7	2460	2.5	-150.2	4.5	Low-flow purge-sample with	Clear
	1003	107.93	1.0	7.02	19.9	2130	2.3	-153.6	4.3	HMI's dedicated bladder pump	
	1005	107.93	1.5	7.01	20.1	2070	2.1	-155.7	3.6		
	1008	107.93	2.0	6.98	20.1	2090	2.0	-159.3	3.3		
	1010	107.93	2.5	6.96	20.2	2030	1.9	-161.4	3.1		
	1013	107.93	3.0	6.93	20.3	2010	1.8	-165.8	2.7		
	1015	107.93	3.5	6.90	20.3	1990	1.7	-169.3	2.3		
↓	1018	107.93	4.0	6.89	20.3	1970	1.7	-171.5	2.1		↓

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
12-9-20	1020	PTP-01	107.93	6.89	20.3	1970	1.7	-171.5	2.1	Per COC	Per Lab	Lab: Eurofins : Xenco Houston, TX

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: RW-01

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: TAB
Well Condition: Good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12/9/20	1300	NP	105.50	0.00	0.00	181.63	NA	109-179				Weather: Clear 50s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
			0.5							Low-flow purge-sample with	
			1.0							HMI's dedicated bladder pump	
			1.5								
			2.0								
			2.5								
			3.0								
			3.5								
			4.0								

Well Sampling Record

No Sample - Gauge-only

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
												Lab: Eurofins Xenco Houston, TX
										Per COC	Per Lab	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: RW-02

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: CJH
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12.9.20	1035	NP	109.08	0.00	0.00	173.65	NA	105-175				Weather: Clear, 50's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
			0.5							Low-flow purge-sample with	
			1.0							HMI's dedicated bladder pump	
			1.5								
			2.0								
			2.5								
			3.0								
			3.5								
			4.0								

Well Sampling Record

No sample; Gauge-only

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
												Lab: Eurofins Xenco Houston TX
										Per COC	Per Lab	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: RW-03

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: TAB
Well Condition: good

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12/9/20	1305	NP	106.13	0.00	0.00	177.69	NA	136.7 -				Weather: Clear 50°
								176.7				

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
			0.5							Low-flow purge-sample with	
			1.0							HMI's dedicated bladder pump	
			1.5								
			2.0								
			2.5								
			3.0								
			3.5								
			4.0								

Well Sampling Record

No Sample; Gauge-only

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
												Lab: Eurofins ~ Xenco Houston, TX
										Per COC	Per Lab	

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Monitoring Well Purging and Sampling Record

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Well: RW-04

Hydrologic Monitoring
Houston, Texas

Well Inspection Information

Initials: BSL
Well Condition: G-20D

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	DNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake	Screen (Ft-BGS)				Comments
12-9-20	1135	NP	108.49	0.00	0.08	176.16	NA	154-174				Weather: Clear 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Purging and Sampling Method	Water Color / Clarity
			0.5							Low-flow purge-sample with	
			1.0							HMI's dedicated bladder pump	
			1.5								
			2.0								
			2.5								
			3.0								
			3.5								
			4.0								

Well Sampling Record

No sample; Gauge-only

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
												Lab: Eurofins · Xenco, Houston, TX
										Per COC	Per Lab	

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Instrument Calibration Log

El Paso Natural Gas Company
Jal #4 Gas Plant
Lea County, New Mexico

Hydrologic Monitoring

Date	Time	pH Hanna (Std. units)	Specific Conductivity Hanna (umho/cm)	Dissolved Oxygen Hanna (Slope Cal. in saturated air)	Turbidity Lamotte (NTU)	ORP Hanna HI 7020 Soln (200-275 mV)		Initials / Comments
3-19-20	8:18	4.01/7.00	1,000	100%	10.0	235.7		OSD
3/19/20	820	4.01/7.00	1,000	100%	10.0	243.8		KB
6.24.20	755	4.01/7.00	1,000	100%	10.0	232.7		CJH
6/24/20	757	4.01/7.00	1,000	100%	10.0	254.0		BTB
9.24.20	745	4.01/7.00	1,000	100%	10.0	250.3		RJM
9.24.20	748	4.01/7.00	1,000	100%	10.0	232.1		CJH
9.24.20	748	4.01/7.00	1,000	100%	10.0	232.9		BB
12-9-20	740	4.01/7.00	1,000	100%	10.0	242.2		BRH
12/9/20	748	4.01/7.00	1,000	100%	10.0	251.8		BR
12.9.20	750	4.01/7.00	1,000	100%	10.0	240.3		CJH
12.9.20	753	4.01/7.00	1,000	100%	10.0	255.8		TAB
12-9-20	755	4.01/7.00	1,100	100%	10.0	227.6		OSD

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Received by OCD: 4/19/2021 1:26:48 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Cameron Haber + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-75501-20410.1
Client Contact: Mr. Wallace Gilmore	Phone: 469-223-8082	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 4
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - 6010-Ca (D)	8260B_LL - BTEX Only (A)	120.1-Turbidity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl only (N)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N		
ACW-01	12.9.20	1205	G	Water			✓	✓	✓		
ACW-02A		1120		Water			✓	✓	✓		
ACW-04		1040		Water			✓	✓	✓		
ACW-05		1130		Water			✓	✓	✓		
ACW-06		1330		Water			✓	✓	✓		
ACW-07		1215		Water			✓	✓	✓		
ACW-09		1400		Water			✓	✓	✓		
ACW-10		1155		Water			✓	✓	✓		
ACW-11		1300		Water			✓	✓	✓		
ACW-12		1235		Water			✓	✓	✓		
ACW-13	↓	1110	↓	Water			✓	✓	✓		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Cameron Haber	12.9.20 1500	HMI			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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Received by OCD: 4/19/2021 1:26:48 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Cameron Haber + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-75501-20410.1
Client Contact: Mr. Wallace Gilmore	Phone: 469-223-8082	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 2 of 4
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - 6010-Ca	8260B_LL - BTEX Only	120.1-Turbidity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl only	Total Number of containers	Special Instructions/Note:
			Preservation Code				D	A	N		
ACW-14	12.9.20	1010	G	Water			✓	✓	✓		
ACW-15	"	1100	"	Water			✓	✓	✓		
ACW-16	"	955	"	Water			✓	✓	✓		
ACW-17	"	935	"	Water			✓	✓	✓		
ACW-18	"	1250	"	Water			✓	✓	✓		
ACW-19	"	1350	"	Water			✓	✓	✓		
ACW-20	"	1105	"	Water			✓	✓	✓		
ACW-21	"	1210	"	Water			✓	✓	✓		
ACW-22	"	1320	"	Water			✓	✓	✓		
ACW-23	"	1020	"	Water			✓	✓	✓		
ACW-24	"	1250	"	Water			✓	✓	✓		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Cameron Haber	12.9.20 1500	HMI			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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Received by OCD: 4/19/2021 1:26:48 PM

Eurofins TestAmerica, Houston
5310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Cameron Haber + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-75501-20410.1
Client Contact: Mr. Wallace Gilmore	Phone: 469-273-8082	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 3 of 4
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - 6010-Ca	8260B_LL - BTEX Only	120.1-Turbidity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl only	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N		
ACW-25	12.9.20	1050	G	Water			✓	✓	✓		
ACW-26		1155		Water			✓	✓	✓		
ACW-27		1235		Water			✓	✓	✓		
ACW-28		1325		Water			✓	✓	✓		
ACW-29		1410		Water			✓	✓	✓		
ACW-30S		825		Water			✓	✓	✓		
ACW-30D		905		Water			✓	✓	✓		
ACW-32S		855		Water			✓	✓	✓		
ACW-32D		940		Water			✓	✓	✓		
Droom		855		Water			✓	✓	✓		
EQSR-01	↓	855	↓	Water			✓	✓	✓		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Cameron Haber	12.9.20 1500	HMI			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Cameron Haber + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-75501-20410.1
Client Contact: Mr. Wallace Gilmore	Phone: 469-273-8052	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - 6010-Ca	8260B_LL - BTEX Only	120.1-Turbidity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl only	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N		
EPNG-01	12.9.20	1010	G	Water			✓	✓	✓		
Oxy		925		Water			✓	✓	✓		
PTP-01		1020		Water			✓	✓	✓		
Dup-01		1100		Water			✓	✓	✓		
Dup-02		1100		Water			✓	✓	✓		
Dup-03		1130		Water			✓	✓	✓		
Dup-04		1200		Water			✓	✓	✓		
Trip Blank-01	✓	—	✓	Water				✓			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Cameron Haber	12.9.20 1500	HMI			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

ARF FORM: SHEET 1

Unless otherwise noted, all fields should be completed by ARF Initiator.

rev_7_04032017

KINDER MORGAN

Analytical Request Form (ARF)
Project Information

Current Site Company/Pipeline Name: EPNG

ARF #: ERG-ARC-11-25-20-ARS-04
xxx-xxx-mm-dd-yy-xxx-##

ENFOS AOC / Project Name (make sure to match ENFOS AOC): Jal #4 Gas Plant RWIP

FOR LAB USE ONLY

Lab Work Directive (WD)/ENFOS WD/PO#: WD801914

Lab Cost Cluster: CC06_Monitoring Lab Subtask: Lab - I (1.4, 2.3, 7.3, 8.4)(19)

Project Billing : [x] Lab Enters Invoice Through Enfos [ ] Paper invoice mailed to KM PM listed below [ ] Other/ Describe:

Site Description or contaminants of concern: BTEX, Chloride, Sodium, TDS, Specific Conductance

Site Address: 9 Miles North of Jal, NM on Hwy 18

City: Jal State: NM Country: USA

Regulatory Agency: NMOCD

Project Type (RCRA, CERCLA, TRRP):

Anticipated Start Date: 12/9/2020 Anticipated Completion Date: 12/9/2020

Frequency of Sampling: Quarterly Sampling Plan Attached: No

Are there Additional Requests/ Special Instructions on Page 2? No

Title(s)/Date(s) of attached sampling information:

Project Management Contacts

KM Contact

KM Office: Houston [x] Copy on ARF Distribution

Address: 1001 Louisiana Street, Room 757A
Houston, TX 770022

KM Project Manager: Joe Wiley

Phone : 713-420-3475 Fax: E-mail: Joe_Wiley@KinderMorgan.com

Designated Consultant Contact

Designated Consultant Firm Name: AECOM [x] Copy on ARF Distribution

Address: 19219 Katy Freeway, Suite 100
Houston, TX 77094

Designated Consultant Project Manager: Wally Gilmore

Phone : 713-542-9523 Fax: E-mail: wallace.gilmore@aecom.com

Laboratory Contact

Laboratory Name: TestAmerica [x] Copy on ARF Distribution

Address: 6310 Rothway Street
Houston, TX 77040

Laboratory Project Manager: Bethany McDaniel

Phone : 713-690-4444 Fax: 361-289-2471 E-mail: bethany.mcdaniel@testamericainc.com

Additional Parties to Receive ARF:

Name: E-mail:
Affliation:

Name: E-mail:
Affliation:

Name: E-mail:
Affliation:

ARF FORM: SHEET 1

Data Deliverables

Data Package Deliverables supplied to:

Required Data Deliverables Format(s): **PDF** Hardcopy PDF and Hardcopy CD
Required Format of Electronic Data Deliverables **Excel** Equis Enfos

Size Limitation for e-mail of deliverable **10** **MB** or Unlimited
Forward the Electronic Data Deliverables to:

	Name	E-Mail Address
	Wally Gilmore	wallace.gilmore@aecom.com

Special Instructions for data package or electronic deliverable?:

Record of ARF Initiation and Revisions

Initiated ARF:	Name:	Wally Gilmore	Date:	11/25/2020
Laboratory Acceptance:	Name:	Bethany McDaniel	Date:	11/25/2020
Revision 1:	Name:	Joe Wiley	Date:	11/25/2020
	Types of Changes:			
Revision 2:	Name:		Date:	
	Types of Changes:			
Revision 3:	Name:		Date:	
	Types of Changes:			
Revision 4:	Name:		Date:	
	Types of Changes:			

ARF FORM: SHEET 2

Parameters and Analytical Methods Requested *Unless otherwise noted, all fields should be completed by ARF Initiator.* *rev_7_04032017*

Projected Analytical Plan & Number of Samples to be Collected

Matrix Codes: A=Air W=Water S=Soil WP=wipe O=Oil OT=Other

Compound List or Parameter	Analytical Method	Matrix Code	DP/TAT Level Code	Number of Investigatory Samples	Number of Samples for Hold/Archival	*Quality Control Samples* MS/MSD Pairs	Trip Blanks	Number of Rinse, Equipment, and Field Blanks	Field Duplicates	Total Number of Samples Expected	Total Number of Samples Analyzed	***For Laboratory Use Only*** Number of Samples Received by Laboratory	Unit Rate	Total Cost
BTEX	8260B	W	L2/28D	36	0	0	6	0	4	**46**				
Total Dissolved Solids	SM 2540C	W	L2/28D	36	0	0	0	0	4	**40**				
Chloride	EPA SW846 9056	W	L2/28D	36	0	0	0	0	4	**40**				
Sodium	EPA SW846 6010B	W	L2/28D	36	0	0	0	0	4	**40**				
Specific Conductance	EPA 120.1	W	L2/28D	36	0	0	0	0	4	**40**				

$ -

Sampling Frequency: SINGLE EVENT WEEKLY MONTHLY **QUARTERLY** SEMI-ANNUAL ANNUAL OTHER/DESCRIBE: _____

Are special regulatory requirements, detection limits or action levels needed? _____

Are SW-846 Method 5035 volatile organic analyses requested? No If yes, what container is required? Tared Vials Methanol Vials 4-oz. jars EnCore Kits Terra Core Kits

Does an approved QAPjP exist? No Title: _____

Revision/Date _____

Are reporting estimated values "J" required for results less than the reporting limit? **Yes**

Are tentatively identified compounds (TICs) required? Volatiles Semivolatiles

Sample retention time (post reporting): 30 days (standard) Other (Hold for ____ days)

Ship Bottles to:

Name: Scott Ude

Consultant: HMI

Location Name:

Street Address: 1654 W Sam Houston Pkwy N

City, State, Zip: Houston, Texas 77043

Phone Number: 713-714-1624

Date/Time Bottles Required: 12/2/2020

Shipping Return:

FedEx UPS Laboratory Courrier

Saturday Receipt

ARF FORM: SHEET 2

Laboratory Invoices for non-contracted laboratories must be submitted to:

Company Name	Kinder Morgan
Name	Joe Wiley
Street Address	1001 Louisiana Street, Room 757A
City, State, Zip	Houston, TX 77002
Phone Number	713-420-3475

LAB USE ONLY

Internal Laboratory Work Order Number

Invoice Approval

Company Name	Kinder Morgan
Final Invoice	

Additional Requests and Instructions

Please have sampling kits and return shipping labels delivered to HMI by December 2, 2020.

Phone Logs and Project Correspondence

HMI
Groundwater

Hydrologic Monitoring
1654 W. Sam Houston Pkwy. N.
Houston, Texas 77043

Phone 713.464.5206
Fax 713.464.5207

M E M O R A N D U M

Low-Flow Groundwater Sampling Procedures
El Paso Natural Gas Company
Jal #4 Gas Plant, Lea County, New Mexico

HMI conducts low-flow groundwater sampling in accordance with TCEQ and EPA guidelines (Puls and Barcelona, 1996 EPA Guidance on Low-Flow Groundwater Sampling, REV 4, September 19, 2017).

Groundwater Sampling Methodology

HMI conducts low-flow groundwater sampling using bladder pumps and polyethylene tubing dedicated in sampled wells at the site, during its first groundwater sampling event at the site in March 2017. Pumps were dedicated in the wells to increase sample quality and field efficiency, and remain property of HMI. HMI would appreciate the opportunity to retrieve the pumps at such time that HMI no longer conducts monitoring at the site.

Purging commences through a sealed flow-through cell at EPA-recommended purge rates (generally 0.1 to 0.2 liters/minute), selected to limit the monitored drawdown during the purging process. Each HMI flow-through cell has a volume of 0.5 liters. Field parameter readings are collected at 0.5-liter intervals (the equivalent of one cell volume "turnover"). Field parameters of pH, specific conductivity, temperature, dissolved oxygen, and oxidation-reduction potential are monitored inside the cell. Turbidity is monitored outside of the cell. Purging continues until a requisite volume of groundwater is purged (a minimum of 3,000 ml or six flow-through cell volumes), and field parameters have stabilized in accordance with the EPA guidance below:

Water Quality Parameters (Stabilization Parameters in Accordance with EPA (2002), Groundwater Sampling Guidelines for Superfund and RCRA Project Managers, Yeskis & Zavala, EPA/542:S-02/001)

- pH +/- 0.1 units;
- Temperature -
- Conductivity +/- 3%
- Dissolved Oxygen +/- 0.3 mg/L
- ORP +/- 10%
- Turbidity 10%

Groundwater samples are collected directly into laboratory-supplied containers. Groundwater samples are placed in iced coolers, and remain in HMI custody until delivery to the laboratory.

Decontamination Procedures

Non-dedicated equipment, (i.e., only the electronic water level probe for this project) is properly decontaminated prior to use and between wells. The decontamination procedure for the water level probe consists of a spray of isopropanol (likely not warranted at this site), followed by a thorough wash in distilled water and Liquinox non-phosphate soap, with a final distilled water. The probe is allowed to air dry.

HMI Deliverables

HMI provides thorough field documentation of groundwater monitoring activities performed, including groundwater sampling forms, field equipment calibration logs, a brief field narrative, and an Excel table summarizing gauging data and groundwater field parameters.

Appendix C

Laboratory Analytical Reports

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-202630-1
Client Project/Site: JAL#4 Gas Plant-- 1Q20

For:
AECOM
19219 Katy Freeway
Suite 100
Houston, Texas 77094

Attn: Mr. Wallace Gilmore

Bethany McDaniel

Authorized for release by:
4/3/2020 9:07:45 AM

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: AECOM
Project/Site: JAL#4 Gas Plant-- 1Q20

Laboratory Job ID: 600-202630-1

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Case Narrative

Client: AECOM
Project/Site: JAL#4 Gas Plant-- 1Q20

Job ID: 600-202630-1

Job ID: 600-202630-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-202630-1

Comments
No additional comments.

Receipt
The samples were received on 3/20/2020 11:09 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.0º C and 0.5º C.

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

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

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

Released to Imaging: 10/28/2022 9:54:55 AM

Method Summary

Client: AECOM Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
120.1	Conductivity, Specific Conductance	MCAWW	TAL HOU
2540 C-1997	Total Dissolved Solids (Dried at 180 °C)	SM	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU

Protocol References:

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

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: AECOM Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-202630-1	ACW-13	Water	03/19/20 09:40	03/20/20 11:09	
600-202630-2	ACW-14	Water	03/19/20 11:00	03/20/20 11:09	
600-202630-3	ACW-15	Water	03/19/20 10:30	03/20/20 11:09	
600-202630-4	Doom Well	Water	03/19/20 10:10	03/20/20 11:09	
600-202630-5	Oxy Well	Water	03/19/20 09:20	03/20/20 11:09	
600-202630-6	Dup-01	Water	03/19/20 10:00	03/20/20 11:09	
600-202630-7	Trip Blank	Water	03/19/20 00:00	03/20/20 11:09	

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant-- 1Q20

Job ID: 600-202630-1

Client Sample ID: ACW-13

Lab Sample ID: 600-202630-1
Date Collected: 03/19/20 09:40
Matrix: Water
Date Received: 03/20/20 11:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			03/24/20 00:43	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			03/24/20 00:43	1
Toluene	<0.0010		0.0010	0.00020	mg/L			03/24/20 00:43	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			03/24/20 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*		*03/24/20 00:43*	*1*
4-Bromofluorobenzene	*80*		*67 - 139*		*03/24/20 00:43*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*03/24/20 00:43*	*1*
Toluene-d8 (Surr)	*79*		*70 - 130*		*03/24/20 00:43*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**740**		20	2.7	mg/L			04/02/20 08:26	50

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**150**		1.0	0.021	mg/L		03/31/20 07:40	04/01/20 11:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**2700**		2.0	1.3	umhos/cm			03/23/20 17:30	1
Total Dissolved Solids	**3100**		20	20	mg/L			03/25/20 11:22	1

Client Sample ID: ACW-14

Lab Sample ID: 600-202630-2
Date Collected: 03/19/20 11:00
Matrix: Water
Date Received: 03/20/20 11:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			03/24/20 01:11	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			03/24/20 01:11	1
Toluene	**0.00038**	**J**	0.0010	0.00020	mg/L			03/24/20 01:11	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			03/24/20 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*		*03/24/20 01:11*	*1*
4-Bromofluorobenzene	*82*		*67 - 139*		*03/24/20 01:11*	*1*
Dibromofluoromethane	*86*		*62 - 130*		*03/24/20 01:11*	*1*
Toluene-d8 (Surr)	*75*		*70 - 130*		*03/24/20 01:11*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**160**		4.0	0.53	mg/L			04/02/20 08:37	10

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**100**		1.0	0.021	mg/L		03/31/20 07:40	04/01/20 11:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**880**		2.0	1.3	umhos/cm			03/28/20 07:30	1

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Client Sample Results

Client: AECOM
Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

Client Sample ID: ACW-14
Lab Sample ID: 600-202630-2
Date Collected: 03/19/20 11:00
Matrix: Water
Date Received: 03/20/20 11:09

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	600		10	10	mg/L			03/26/20 11:31	1

Client Sample ID: ACW-15
Lab Sample ID: 600-202630-3
Date Collected: 03/19/20 10:30
Matrix: Water
Date Received: 03/20/20 11:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			03/24/20 01:39	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			03/24/20 01:39	1
Toluene	<0.0010		0.0010	0.00020	mg/L			03/24/20 01:39	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			03/24/20 01:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*03/24/20 01:39*	*1*
4-Bromofluorobenzene	*86*		*67 - 139*		*03/24/20 01:39*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*03/24/20 01:39*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*03/24/20 01:39*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		4.0	0.53	mg/L			04/02/20 08:48	10

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	92		1.0	0.021	mg/L		03/31/20 07:40	04/01/20 11:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	1000		2.0	1.3	umhos/cm			03/23/20 17:30	1
Total Dissolved Solids	620		10	10	mg/L			03/26/20 11:31	1

Client Sample ID: Doom Well
Lab Sample ID: 600-202630-4
Date Collected: 03/19/20 10:10
Matrix: Water
Date Received: 03/20/20 11:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			03/24/20 17:59	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			03/24/20 17:59	1
Toluene	<0.0010		0.0010	0.00020	mg/L			03/24/20 17:59	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			03/24/20 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*75*		*50 - 134*		*03/24/20 17:59*	*1*
4-Bromofluorobenzene	*78*		*67 - 139*		*03/24/20 17:59*	*1*
Dibromofluoromethane	*79*		*62 - 130*		*03/24/20 17:59*	*1*
Toluene-d8 (Surr)	*77*		*70 - 130*		*03/24/20 17:59*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.27	mg/L			04/02/20 08:58	5

Client Sample Results

Client: AECOM
Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

Client Sample ID: Doom Well
Lab Sample ID: 600-202630-4
Date Collected: 03/19/20 10:10
Matrix: Water
Date Received: 03/20/20 11:09

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	61		1.0	0.021	mg/L		03/31/20 07:40	04/01/20 11:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	620		2.0	1.3	umhos/cm			03/23/20 17:30	1
Total Dissolved Solids	390		10	10	mg/L			03/26/20 11:31	1

Client Sample ID: Oxy Well
Lab Sample ID: 600-202630-5
Date Collected: 03/19/20 09:20
Matrix: Water
Date Received: 03/20/20 11:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			03/24/20 18:28	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			03/24/20 18:28	1
Toluene	<0.0010		0.0010	0.00020	mg/L			03/24/20 18:28	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			03/24/20 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*50 - 134*		*03/24/20 18:28*	*1*
4-Bromofluorobenzene	*88*		*67 - 139*		*03/24/20 18:28*	*1*
Dibromofluoromethane	*92*		*62 - 130*		*03/24/20 18:28*	*1*
Toluene-d8 (Surr)	*82*		*70 - 130*		*03/24/20 18:28*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		4.0	0.53	mg/L			04/02/20 09:09	10

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	96		1.0	0.021	mg/L		03/31/20 07:40	04/01/20 12:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	1400		2.0	1.3	umhos/cm			03/23/20 17:30	1
Total Dissolved Solids	930		20	20	mg/L			03/26/20 11:31	1

Client Sample ID: Dup-01
Lab Sample ID: 600-202630-6
Date Collected: 03/19/20 10:00
Matrix: Water
Date Received: 03/20/20 11:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			03/24/20 18:56	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			03/24/20 18:56	1
Toluene	<0.0010		0.0010	0.00020	mg/L			03/24/20 18:56	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			03/24/20 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*03/24/20 18:56*	*1*
4-Bromofluorobenzene	*85*		*67 - 139*		*03/24/20 18:56*	*1*
Dibromofluoromethane	*90*		*62 - 130*		*03/24/20 18:56*	*1*

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Client Sample Results

Client: AECOM
Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

Client Sample ID: Dup-01
Lab Sample ID: 600-202630-6
Date Collected: 03/19/20 10:00
Matrix: Water
Date Received: 03/20/20 11:09

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*84*		*70 - 130*		*03/24/20 18:56*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**160**		4.0	0.53	mg/L			04/02/20 10:14	10

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**100**		1.0	0.021	mg/L		03/31/20 07:40	04/01/20 12:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**1000**		2.0	1.3	umhos/cm			03/23/20 17:30	1
Total Dissolved Solids	**600**		10	10	mg/L			03/26/20 11:31	1

Client Sample ID: Trip Blank
Lab Sample ID: 600-202630-7
Date Collected: 03/19/20 00:00
Matrix: Water
Date Received: 03/20/20 11:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			03/23/20 17:13	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			03/23/20 17:13	1
Toluene	<0.0010		0.0010	0.00020	mg/L			03/23/20 17:13	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			03/23/20 17:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*03/23/20 17:13*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*03/23/20 17:13*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*03/23/20 17:13*	*1*
4-Bromofluorobenzene	*85*		*67 - 139*		*03/23/20 17:13*	*1*

Definitions/Glossary

Client: AECOM Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant-- 1Q20

Job ID: 600-202630-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(50-134)	(67-139)	(62-130)	(70-130)
600-202630-1	ACW-13	76	80	87	79
600-202630-2	ACW-14	76	82	86	75
600-202630-3	ACW-15	82	86	89	83
600-202630-4	Doom Well	75	78	79	77
600-202630-5	Oxy Well	84	88	92	82
600-202630-6	Dup-01	82	85	90	84
600-202630-7	Trip Blank	79	85	89	85
LCS 600-290927/4	Lab Control Sample	77	90	84	81
LCS 600-291057/4	Lab Control Sample	70	82	80	75
LCSD 600-290927/5	Lab Control Sample Dup	79	89	89	80
LCSD 600-291057/5	Lab Control Sample Dup	75	95	85	81
MB 600-290927/7	Method Blank	79	85	90	86
MB 600-291057/7	Method Blank	73	84	82	80

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant-- 1Q20

Job ID: 600-202630-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-290927/7
Matrix: Water
Analysis Batch: 290927

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			03/23/20 16:44	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			03/23/20 16:44	1
Toluene	<0.0010		0.0010	0.00020	mg/L			03/23/20 16:44	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			03/23/20 16:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*03/23/20 16:44*	*1*
4-Bromofluorobenzene	*85*		*67 - 139*		*03/23/20 16:44*	*1*
Dibromofluoromethane	*90*		*62 - 130*		*03/23/20 16:44*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*03/23/20 16:44*	*1*

Lab Sample ID: LCS 600-290927/4
Matrix: Water
Analysis Batch: 290927

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.00975		mg/L		97	70 - 130
Ethylbenzene	0.0100	0.00880		mg/L		88	70 - 130
Toluene	0.0100	0.00894		mg/L		89	70 - 130
Xylenes, Total	0.0200	0.0173		mg/L		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*50 - 134*
4-Bromofluorobenzene	*90*		*67 - 139*
Dibromofluoromethane	*84*		*62 - 130*
Toluene-d8 (Surr)	*81*		*70 - 130*

Lab Sample ID: LCSD 600-290927/5
Matrix: Water
Analysis Batch: 290927

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.00988		mg/L		99	70 - 130	1	20
Ethylbenzene	0.0100	0.00879		mg/L		88	70 - 130	0	20
Toluene	0.0100	0.00889		mg/L		89	70 - 130	1	20
Xylenes, Total	0.0200	0.0175		mg/L		88	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*
4-Bromofluorobenzene	*89*		*67 - 139*
Dibromofluoromethane	*89*		*62 - 130*
Toluene-d8 (Surr)	*80*		*70 - 130*

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant-- 1Q20

Job ID: 600-202630-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-291057/7
Matrix: Water
Analysis Batch: 291057

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			03/24/20 16:07	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			03/24/20 16:07	1
Toluene	<0.0010		0.0010	0.00020	mg/L			03/24/20 16:07	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			03/24/20 16:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*73*		*50 - 134*		*03/24/20 16:07*	*1*
4-Bromofluorobenzene	*84*		*67 - 139*		*03/24/20 16:07*	*1*
Dibromofluoromethane	*82*		*62 - 130*		*03/24/20 16:07*	*1*
Toluene-d8 (Surr)	*80*		*70 - 130*		*03/24/20 16:07*	*1*

Lab Sample ID: LCS 600-291057/4
Matrix: Water
Analysis Batch: 291057

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.00874		mg/L		87	70 - 130
Ethylbenzene	0.0100	0.00773		mg/L		77	70 - 130
Toluene	0.0100	0.00792		mg/L		79	70 - 130
Xylenes, Total	0.0200	0.0154		mg/L		77	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*70*		*50 - 134*
4-Bromofluorobenzene	*82*		*67 - 139*
Dibromofluoromethane	*80*		*62 - 130*
Toluene-d8 (Surr)	*75*		*70 - 130*

Lab Sample ID: LCSD 600-291057/5
Matrix: Water
Analysis Batch: 291057

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.00953		mg/L		95	70 - 130	9	20
Ethylbenzene	0.0100	0.00879		mg/L		88	70 - 130	13	20
Toluene	0.0100	0.00867		mg/L		87	70 - 130	9	20
Xylenes, Total	0.0200	0.0178		mg/L		89	70 - 130	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*50 - 134*
4-Bromofluorobenzene	*95*		*67 - 139*
Dibromofluoromethane	*85*		*62 - 130*
Toluene-d8 (Surr)	*81*		*70 - 130*

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant-- 1Q20

Job ID: 600-202630-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-291822/36
Matrix: Water
Analysis Batch: 291822

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		0.40	0.053	mg/L			04/02/20 12:55	1

Lab Sample ID: MB 600-291822/6
Matrix: Water
Analysis Batch: 291822

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		0.40	0.053	mg/L			04/02/20 06:47	1

Lab Sample ID: LCS 600-291822/37
Matrix: Water
Analysis Batch: 291822

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	19.3		mg/L		96	90 - 110

Lab Sample ID: LCS 600-291822/7
Matrix: Water
Analysis Batch: 291822

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	19.5		mg/L		97	90 - 110

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-291585/1-A
Matrix: Water
Analysis Batch: 291718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 291585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	<1.0		1.0	0.021	mg/L		03/31/20 07:40	04/01/20 11:16	1

Lab Sample ID: LCS 600-291585/2-A
Matrix: Water
Analysis Batch: 291718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 291585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	9.33		mg/L		93	80 - 120

Method: 120.1 - Conductivity, Specific Conductance

Lab Sample ID: MB 600-290984/31
Matrix: Water
Analysis Batch: 290984

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<2.0		2.0	1.3	umhos/cm			03/23/20 17:30	1

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant-- 1Q20

Job ID: 600-202630-1

Method: 120.1 - Conductivity, Specific Conductance (Continued)

Lab Sample ID: MB 600-290984/59
Matrix: Water
Analysis Batch: 290984

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<2.0		2.0	1.3	umhos/cm			03/23/20 17:30	1

Lab Sample ID: LCS 600-290984/32
Matrix: Water
Analysis Batch: 290984

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	10.0	10.8		umhos/cm		108	90 - 110

Lab Sample ID: LCS 600-290984/60
Matrix: Water
Analysis Batch: 290984

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	10.0	10.6		umhos/cm		106	90 - 110

Lab Sample ID: MB 600-291446/1
Matrix: Water
Analysis Batch: 291446

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<2.0		2.0	1.3	umhos/cm			03/28/20 07:30	1

Lab Sample ID: LCS 600-291446/2
Matrix: Water
Analysis Batch: 291446

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	10.0	10.6		umhos/cm		106	90 - 110

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 600-291164/1
Matrix: Water
Analysis Batch: 291164

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/25/20 11:22	1

Lab Sample ID: LCS 600-291164/2
Matrix: Water
Analysis Batch: 291164

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1800	1790		mg/L		99	90 - 110

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant-- 1Q20

Job ID: 600-202630-1

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C) (Continued)

Lab Sample ID: 600-202630-1 DU
Matrix: Water
Analysis Batch: 291164

Client Sample ID: ACW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	3100			3100		mg/L				1	10

Lab Sample ID: MB 600-291291/1
Matrix: Water
Analysis Batch: 291291

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/26/20 11:31	1

Lab Sample ID: LCS 600-291291/2
Matrix: Water
Analysis Batch: 291291

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1800	1790		mg/L		99	90 - 110		

QC Association Summary

Client: AECOM Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

GC/MS VOA

Analysis Batch: 290927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-202630-1	ACW-13	Total/NA	Water	8260B	
600-202630-2	ACW-14	Total/NA	Water	8260B	
600-202630-3	ACW-15	Total/NA	Water	8260B	
600-202630-7	Trip Blank	Total/NA	Water	8260B	
MB 600-290927/7	Method Blank	Total/NA	Water	8260B	
LCS 600-290927/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-290927/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 291057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-202630-4	Doom Well	Total/NA	Water	8260B	
600-202630-5	Oxy Well	Total/NA	Water	8260B	
600-202630-6	Dup-01	Total/NA	Water	8260B	
MB 600-291057/7	Method Blank	Total/NA	Water	8260B	
LCS 600-291057/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-291057/5	Lab Control Sample Dup	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 291822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-202630-1	ACW-13	Total/NA	Water	300.0	
600-202630-2	ACW-14	Total/NA	Water	300.0	
600-202630-3	ACW-15	Total/NA	Water	300.0	
600-202630-4	Doom Well	Total/NA	Water	300.0	
600-202630-5	Oxy Well	Total/NA	Water	300.0	
600-202630-6	Dup-01	Total/NA	Water	300.0	
MB 600-291822/36	Method Blank	Total/NA	Water	300.0	
MB 600-291822/6	Method Blank	Total/NA	Water	300.0	
LCS 600-291822/37	Lab Control Sample	Total/NA	Water	300.0	
LCS 600-291822/7	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 291585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-202630-1	ACW-13	Total/NA	Water	3010A	
600-202630-2	ACW-14	Total/NA	Water	3010A	
600-202630-3	ACW-15	Total/NA	Water	3010A	
600-202630-4	Doom Well	Total/NA	Water	3010A	
600-202630-5	Oxy Well	Total/NA	Water	3010A	
600-202630-6	Dup-01	Total/NA	Water	3010A	
MB 600-291585/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-291585/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 291718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-202630-1	ACW-13	Total/NA	Water	6010B	291585
600-202630-2	ACW-14	Total/NA	Water	6010B	291585
600-202630-3	ACW-15	Total/NA	Water	6010B	291585
600-202630-4	Doom Well	Total/NA	Water	6010B	291585
600-202630-5	Oxy Well	Total/NA	Water	6010B	291585

QC Association Summary

Client: AECOM Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

Metals (Continued)

Analysis Batch: 291718 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-202630-6	Dup-01	Total/NA	Water	6010B	291585
MB 600-291585/1-A	Method Blank	Total/NA	Water	6010B	291585
LCS 600-291585/2-A	Lab Control Sample	Total/NA	Water	6010B	291585

General Chemistry

Analysis Batch: 290984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-202630-1	ACW-13	Total/NA	Water	120.1	
600-202630-3	ACW-15	Total/NA	Water	120.1	
600-202630-4	Doom Well	Total/NA	Water	120.1	
600-202630-5	Oxy Well	Total/NA	Water	120.1	
600-202630-6	Dup-01	Total/NA	Water	120.1	
MB 600-290984/31	Method Blank	Total/NA	Water	120.1	
MB 600-290984/59	Method Blank	Total/NA	Water	120.1	
LCS 600-290984/32	Lab Control Sample	Total/NA	Water	120.1	
LCS 600-290984/60	Lab Control Sample	Total/NA	Water	120.1	

Analysis Batch: 291164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-202630-1	ACW-13	Total/NA	Water	2540 C-1997	
MB 600-291164/1	Method Blank	Total/NA	Water	2540 C-1997	
LCS 600-291164/2	Lab Control Sample	Total/NA	Water	2540 C-1997	
600-202630-1 DU	ACW-13	Total/NA	Water	2540 C-1997	

Analysis Batch: 291291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-202630-2	ACW-14	Total/NA	Water	2540 C-1997	
600-202630-3	ACW-15	Total/NA	Water	2540 C-1997	
600-202630-4	Doom Well	Total/NA	Water	2540 C-1997	
600-202630-5	Oxy Well	Total/NA	Water	2540 C-1997	
600-202630-6	Dup-01	Total/NA	Water	2540 C-1997	
MB 600-291291/1	Method Blank	Total/NA	Water	2540 C-1997	
LCS 600-291291/2	Lab Control Sample	Total/NA	Water	2540 C-1997	

Analysis Batch: 291446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-202630-2	ACW-14	Total/NA	Water	120.1	
MB 600-291446/1	Method Blank	Total/NA	Water	120.1	
LCS 600-291446/2	Lab Control Sample	Total/NA	Water	120.1	

Lab Chronicle

Client: AECOM
Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

Client Sample ID: ACW-13
Lab Sample ID: 600-202630-1
Date Collected: 03/19/20 09:40
Matrix: Water
Date Received: 03/20/20 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	290927	03/24/20 00:43	KLV	TAL HOU
Total/NA	Analysis	300.0		50	291822	04/02/20 08:26	W1N	TAL HOU
Total/NA	Prep	3010A			291585	03/31/20 07:40	KP1	TAL HOU
Total/NA	Analysis	6010B		1	291718	04/01/20 11:52	KP1	TAL HOU
Total/NA	Analysis	120.1		1	290984	03/23/20 17:30	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	291164	03/25/20 11:22	TNL	TAL HOU

Client Sample ID: ACW-14
Lab Sample ID: 600-202630-2
Date Collected: 03/19/20 11:00
Matrix: Water
Date Received: 03/20/20 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	290927	03/24/20 01:11	KLV	TAL HOU
Total/NA	Analysis	300.0		10	291822	04/02/20 08:37	W1N	TAL HOU
Total/NA	Prep	3010A			291585	03/31/20 07:40	KP1	TAL HOU
Total/NA	Analysis	6010B		1	291718	04/01/20 11:54	KP1	TAL HOU
Total/NA	Analysis	120.1		1	291446	03/28/20 07:30	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	291291	03/26/20 11:31	TNL	TAL HOU

Client Sample ID: ACW-15
Lab Sample ID: 600-202630-3
Date Collected: 03/19/20 10:30
Matrix: Water
Date Received: 03/20/20 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	290927	03/24/20 01:39	KLV	TAL HOU
Total/NA	Analysis	300.0		10	291822	04/02/20 08:48	W1N	TAL HOU
Total/NA	Prep	3010A			291585	03/31/20 07:40	KP1	TAL HOU
Total/NA	Analysis	6010B		1	291718	04/01/20 11:56	KP1	TAL HOU
Total/NA	Analysis	120.1		1	290984	03/23/20 17:30	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	291291	03/26/20 11:31	TNL	TAL HOU

Client Sample ID: Doom Well
Lab Sample ID: 600-202630-4
Date Collected: 03/19/20 10:10
Matrix: Water
Date Received: 03/20/20 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	291057	03/24/20 17:59	KLV	TAL HOU
Total/NA	Analysis	300.0		5	291822	04/02/20 08:58	W1N	TAL HOU
Total/NA	Prep	3010A			291585	03/31/20 07:40	KP1	TAL HOU
Total/NA	Analysis	6010B		1	291718	04/01/20 11:58	KP1	TAL HOU
Total/NA	Analysis	120.1		1	290984	03/23/20 17:30	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	291291	03/26/20 11:31	TNL	TAL HOU

Lab Chronicle

Client: AECOM
Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

Client Sample ID: Oxy Well
Lab Sample ID: 600-202630-5
Date Collected: 03/19/20 09:20
Matrix: Water
Date Received: 03/20/20 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	291057	03/24/20 18:28	KLV	TAL HOU
Total/NA	Analysis	300.0		10	291822	04/02/20 09:09	W1N	TAL HOU
Total/NA	Prep	3010A			291585	03/31/20 07:40	KP1	TAL HOU
Total/NA	Analysis	6010B		1	291718	04/01/20 12:00	KP1	TAL HOU
Total/NA	Analysis	120.1		1	290984	03/23/20 17:30	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	291291	03/26/20 11:31	TNL	TAL HOU

Client Sample ID: Dup-01
Lab Sample ID: 600-202630-6
Date Collected: 03/19/20 10:00
Matrix: Water
Date Received: 03/20/20 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	291057	03/24/20 18:56	KLV	TAL HOU
Total/NA	Analysis	300.0		10	291822	04/02/20 10:14	W1N	TAL HOU
Total/NA	Prep	3010A			291585	03/31/20 07:40	KP1	TAL HOU
Total/NA	Analysis	6010B		1	291718	04/01/20 12:08	KP1	TAL HOU
Total/NA	Analysis	120.1		1	290984	03/23/20 17:30	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	291291	03/26/20 11:31	TNL	TAL HOU

Client Sample ID: Trip Blank
Lab Sample ID: 600-202630-7
Date Collected: 03/19/20 00:00
Matrix: Water
Date Received: 03/20/20 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	290927	03/23/20 17:13	KLV	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: AECOM Job ID: 600-202630-1
Project/Site: JAL#4 Gas Plant-- 1Q20

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20

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

Analysis Method	Prep Method	Matrix	Analyte
120.1		Water	Specific Conductance
2540 C-1997		Water	Total Dissolved Solids
300.0		Water	Chloride

Released to Imaging: 10/28/2022 9:54:55 AM
Received by OCD: 4/19/2021 1:26:48 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Brian Hillin + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-75501-20410.1
Client Contact: Mr. Wallace Gilmore	Phone: 713-653-3127	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant RWIP 1Q20	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - 6010 for Na (Sodium)	8260B_LL - BTEX Only	120.1-Turbidity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl only	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N		
ACW-13	3-19-20	940	G	Water			X	X	X	6	
ACW-14		1100		Water			X	X	X	6	
ACW-15		1030		Water			X	X	X	6	
Doom well		1010		Water			X	X	X	6	
OXY well		920		Water			X	X	X	6	
DUP-01		1000		Water			X	X	X	6	
Trip Blank		—	—	Water				X		3	
				Water							

600-202630 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Rudy Mueller	Date/Time: 3-20-20 1109	Company: HMI	Received by: Sarah Jones	Date/Time: 3/20/20 1109	Company: ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

Loc: 600
202630

'20 MAR 20 11:09

eurofins | Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: AECOM

UNPACKED BY: YB CARRIER/DRIVER: client

Custody Seal Present: ☑YES ☐NO Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (℃)	Therm ID	Therm CF	Corrected Temp (℃)
BW	~~Y~~ / N	~~Y~~ / N	0.1	678	-0.1	0.0
BW	~~Y~~ / N	Y / ~~N~~	0.6	678	-0.1	0.5
	Y / N	Y / N				
	~~Y~~ / N	~~Y~~ / N				
	~~Y~~ / N	~~Y~~ / N			3/20/20	
	~~Y~~ / N	~~Y~~ / N				

CF = correction factor

Samples received on ice? ☑YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____ VOA headspace acceptable (5-6mm): ☑YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☐YES	☐ NO

COMMENTS: CS# 1075880, 1075881

3/20/20
ST

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: AECOM Job Number: 600-202630-1

Login Number: 202630 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	0.0,0.5
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

AECOM

Data Usability Summary

Date: February 10, 2021

To: Wally Gilmore, AECOM

CC: Robert Jones, AECOM

From: Ruth Parks, AECOM

Subject: Data Usability Summary for Review of Groundwater Data
Laboratory Report Number 202630
Jal #4 Gas Plant, Jal, New Mexico

Data Usability Summary

Data from TestAmerica in Houston, Texas were reviewed for the analysis of samples collected March 19, 2020 at the Jal #4 Gas Plant in Jal, New Mexico.

Data were reviewed for conformance to the requirements of *SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods* (SW-846). The purpose of this sampling event was to provide current data on concentrations of potential chemicals of concern (COCs) in groundwater for the Jal #4 Gas Plant property.

Samples were analyzed using:

- SW-846 6010B – Inductively Coupled Plasma – Atomic Emission Spectrometry,
- SW-846 8260B - Volatile Organic Compounds by Gas Chromatography-Mass Spectrometry (GC/MS),
- SW-846 300.0 – Determination of Inorganic Anions by Ion Chromatograph,
- SW-846 120.1 – Conductivity, Specific Conductance, and
- SW-846 2540 C-1997 – Total Dissolved Solids (Dried at 180 C).

Data were reviewed and the results are discussed in this Data Usability Summary (DUS). The reportable data, quality control results, sample receipt checklist and chain-of-custody (C-O-C) records were examined for laboratory report 202630.

Introduction

Groundwater samples, a field duplicate, and a trip blank were analyzed for site-specific metals, volatile organic compounds (VOCs), inorganic anions, specific conductivity, and total dissolved solids (TDS) as requested on the chain-of-custodies (C-O-C). **Table B-1** lists the sample identifications cross-referenced to the laboratory identifications.

Analytical Results

No data were qualified.

Reviewed by
Robert G. Jones
2/12/2021

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Data Usability Summary

Preservation and Holding Times

All samples were evaluated for agreement with the chain-of-custody (C-O-C). Sample bottles were received in good condition and within the temperature acceptance criteria of ≤ 6 °C. Samples were prepared and analyzed within the holding times specified in SW-846 Table 2-40.

Calibrations

Calibration data were not submitted in this package and are not part of the standard deliverable.

Blanks

Target analytes were not detected in trip or method blanks.

Internal Standards and Surrogate Recoveries

Results with internal standard area counts above the laboratory specifications are qualified as "JL" and below specifications are qualified as "JH" for detected results and "UJL" for non-detected results and listed in **Table B-2**.

Laboratory Control Samples

Samples with laboratory control sample (LCS) recoveries (%R) outside of laboratory specifications are qualified as "JL" and "UJL" when below specifications and as "JH" when above specifications and listed in **Table B-2**. If a laboratory control sampled duplicate (LCSD) was analyzed, data with duplicate precision (as relative percent difference [RPD]) outside of laboratory acceptance criteria is qualified as "J" for LCS precision and listed in **Table B-2.**

Matrix Spike (MS)/Matrix Spike Duplicates (MSD)

Non-project sample data were not evaluated. Data with MS/MSD recoveries outside of laboratory specifications are qualified as "JL" for detections and "UJ" for non-detects when below specifications and "JH" when above specifications and listed in **Table B-2**. Sample data with MS/MSD precision (RPD) outside of the laboratory acceptance criteria are qualified as "J" for MS/MSD precision and listed in **Table B-2**.

Field Precision

Precision results for replicate and duplicate samples are summarized in **Table B-3.** Duplicate precision was not calculated for analytes which were reported as non-detect (U) or qualified as "U" in **Table B-2**. Analytes with non-detect results for both replicate and duplicate were not listed in the table. Field sample and sample duplicate analytes with RPD results outside of the project quality acceptance criteria of ≤ 30 % RPD are qualified as estimated "J" and listed in **Table B-2**.

Summary

Groundwater analytical data are usable for the purpose of determining concentrations of metals, VOCs, inorganics anions, specific conductivity, and TDS in samples.

Tables

Reviewed by
Robert G. Jones
2/12/2021

AECOM

Data Usability Summary

Table B-1. Cross-Reference Field Sample Identifications and Laboratory Identifications

Field Identification	Laboratory Identification	Comment
ACW-13	600-202630-1	
ACW-14	600-202630-2	
ACW-15	600-202630-3	
Doom Well	600-202630-4	
Oxy Well	600-202630-5	
DUP-01	600-202630-6	Duplicate of ACW-14
Trip Blank	600-202630-7	Trip Blank

Table B-2. Qualified Analytical Data

Field Identification	Analyte	Qualification	Reason for Qualification
* No Data Qualified.			

Table B-3. Field Precision

Field Identification	Analyte	Sample Result	Duplicate Result	RPD	Qualified
ACW-14 / DUP-01	Toluene	0.00038 J	U	NA	A
	Chloride	160	160	0	A
	Sodium	100	100	0	A
	Specific Conductance	880	1000	12.8	A
	TDS	600	600	0	A

RPD = ((SR-DR)*200)/(SR+DR)
A – Acceptable data
NA – Not applicable
J – Estimated data due to inability to meet QC criteria
U – Analyte not detected
U* – Analyte qualified as non-detect per Table B-2

Reviewed by
Robert G. Jones
2/12/2021

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-207289-1
Client Project/Site: JAL#4 Gas Plant

For:
AECOM
19219 Katy Freeway
Suite 100
Houston, Texas 77094

Attn: Mr. Wallace Gilmore

Authorized for release by:
7/9/2020 2:29:52 PM
Tiffany Fleming, Project Management Assistant I
(361)289-2673
tiffany.fleming@testamericainc.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: AECOM
Project/Site: JAL#4 Gas Plant

Laboratory Job ID: 600-207289-1

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Case Narrative

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Job ID: 600-207289-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-207289-1

Comments
No additional comments.

Receipt
The samples were received on 6/25/2020 10:16 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.2º C.

GC/MS VOA
Method 8260B: The following volatile sample was analyzed with significant headspace in the sample container(s): OXY WELL (600-207289-5). Significant headspace is defined as a bubble greater than 6 mm in diameter.

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

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

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

Released to Imaging: 10/28/2022 9:54:55 AM

Method Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
120.1	Conductivity, Specific Conductance	MCAWW	TAL HOU
2540 C-1997	Total Dissolved Solids (Dried at 180 °C)	SM	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-207289-1	ACW-13	Water	06/24/20 09:40	06/25/20 10:16	
600-207289-2	ACW-14	Water	06/24/20 11:40	06/25/20 10:16	
600-207289-3	ACW-15	Water	06/24/20 10:35	06/25/20 10:16	
600-207289-4	DOOM WELL	Water	06/24/20 10:40	06/25/20 10:16	
600-207289-5	OXY WELL	Water	06/24/20 09:55	06/25/20 10:16	
600-207289-6	DUP-01	Water	06/24/20 11:00	06/25/20 10:16	
600-207289-7	Trip Blank	Water	06/24/20 00:00	06/25/20 10:16	

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Client Sample ID: ACW-13
Date Collected: 06/24/20 09:40
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			06/29/20 17:56	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			06/29/20 17:56	1
Toluene	<0.0010		0.0010	0.00020	mg/L			06/29/20 17:56	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			06/29/20 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*50 - 134*		*06/29/20 17:56*	*1*
4-Bromofluorobenzene	*97*		*67 - 139*		*06/29/20 17:56*	*1*
Dibromofluoromethane	*101*		*62 - 130*		*06/29/20 17:56*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/29/20 17:56*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**570**		40	5.3	mg/L			07/07/20 16:44	100

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**170**		1.0	0.021	mg/L		07/08/20 10:50	07/09/20 11:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**2600**		2.0	1.3	umhos/cm			06/30/20 10:57	1
Total Dissolved Solids	**3300**		20	20	mg/L			06/30/20 11:44	1

Client Sample ID: ACW-14
Date Collected: 06/24/20 11:40
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			06/29/20 18:24	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			06/29/20 18:24	1
Toluene	<0.0010		0.0010	0.00020	mg/L			06/29/20 18:24	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			06/29/20 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*50 - 134*		*06/29/20 18:24*	*1*
4-Bromofluorobenzene	*91*		*67 - 139*		*06/29/20 18:24*	*1*
Dibromofluoromethane	*94*		*62 - 130*		*06/29/20 18:24*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*06/29/20 18:24*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**220**		8.0	1.1	mg/L			07/07/20 16:54	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**110**		1.0	0.021	mg/L		07/08/20 10:50	07/09/20 11:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**860**		2.0	1.3	umhos/cm			06/30/20 10:57	1

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Client Sample ID: ACW-14
Date Collected: 06/24/20 11:40
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**620**		10	10	mg/L			06/30/20 11:44	1

Client Sample ID: ACW-15
Date Collected: 06/24/20 10:35
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00026**	**J**	0.0010	0.00018	mg/L			06/30/20 00:53	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			06/30/20 00:53	1
Toluene	<0.0010		0.0010	0.00020	mg/L			06/30/20 00:53	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			06/30/20 00:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*50 - 134*		*06/30/20 00:53*	*1*
4-Bromofluorobenzene	*98*		*67 - 139*		*06/30/20 00:53*	*1*
Dibromofluoromethane	*105*		*62 - 130*		*06/30/20 00:53*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*06/30/20 00:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**210**		8.0	1.1	mg/L			07/07/20 17:05	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**96**		1.0	0.021	mg/L		07/08/20 10:50	07/09/20 11:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**950**		2.0	1.3	umhos/cm			06/30/20 10:57	1
Total Dissolved Solids	**670**		10	10	mg/L			06/30/20 11:44	1

Client Sample ID: DOOM WELL
Date Collected: 06/24/20 10:40
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00069**	**J**	0.0010	0.00018	mg/L			06/30/20 01:22	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			06/30/20 01:22	1
Toluene	**0.00034**	**J**	0.0010	0.00020	mg/L			06/30/20 01:22	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			06/30/20 01:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*50 - 134*		*06/30/20 01:22*	*1*
4-Bromofluorobenzene	*91*		*67 - 139*		*06/30/20 01:22*	*1*
Dibromofluoromethane	*95*		*62 - 130*		*06/30/20 01:22*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*06/30/20 01:22*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**48**		4.0	0.53	mg/L			07/07/20 17:16	10

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Client Sample ID: DOOM WELL
Lab Sample ID: 600-207289-4
Date Collected: 06/24/20 10:40
Matrix: Water
Date Received: 06/25/20 10:16

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	65		1.0	0.021	mg/L		07/08/20 10:50	07/09/20 11:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	570		2.0	1.3	umhos/cm			06/30/20 10:57	1
Total Dissolved Solids	380		10	10	mg/L			06/30/20 11:44	1

Client Sample ID: OXY WELL
Lab Sample ID: 600-207289-5
Date Collected: 06/24/20 09:55
Matrix: Water
Date Received: 06/25/20 10:16

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00033	J	0.0010	0.00018	mg/L			06/30/20 15:55	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			06/30/20 15:55	1
Toluene	0.00022	J	0.0010	0.00020	mg/L			06/30/20 15:55	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			06/30/20 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*50 - 134*		*06/30/20 15:55*	*1*
4-Bromofluorobenzene	*96*		*67 - 139*		*06/30/20 15:55*	*1*
Dibromofluoromethane	*101*		*62 - 130*		*06/30/20 15:55*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/30/20 15:55*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		10	1.3	mg/L			07/07/20 17:48	25

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	98		1.0	0.021	mg/L		07/08/20 10:50	07/09/20 11:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	1200		2.0	1.3	umhos/cm			06/30/20 10:57	1
Total Dissolved Solids	820		20	20	mg/L			06/30/20 11:44	1

Client Sample ID: DUP-01
Lab Sample ID: 600-207289-6
Date Collected: 06/24/20 11:00
Matrix: Water
Date Received: 06/25/20 10:16

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			06/30/20 16:24	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			06/30/20 16:24	1
Toluene	<0.0010		0.0010	0.00020	mg/L			06/30/20 16:24	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			06/30/20 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*50 - 134*		*06/30/20 16:24*	*1*
4-Bromofluorobenzene	*98*		*67 - 139*		*06/30/20 16:24*	*1*
Dibromofluoromethane	*103*		*62 - 130*		*06/30/20 16:24*	*1*

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Client Sample ID: DUP-01

Lab Sample ID: 600-207289-6
Matrix: Water
Date Collected: 06/24/20 11:00
Date Received: 06/25/20 10:16

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/30/20 16:24*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		8.0	1.1	mg/L			07/07/20 17:59	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	110		1.0	0.021	mg/L		07/08/20 10:50	07/09/20 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	930		2.0	1.3	umhos/cm			06/30/20 10:57	1
Total Dissolved Solids	620		10	10	mg/L			06/30/20 11:44	1

Client Sample ID: Trip Blank

Lab Sample ID: 600-207289-7
Matrix: Water
Date Collected: 06/24/20 00:00
Date Received: 06/25/20 10:16

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			06/30/20 14:58	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			06/30/20 14:58	1
Toluene	<0.0010		0.0010	0.00020	mg/L			06/30/20 14:58	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			06/30/20 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*50 - 134*		*06/30/20 14:58*	*1*
4-Bromofluorobenzene	*95*		*67 - 139*		*06/30/20 14:58*	*1*
Dibromofluoromethane	*102*		*62 - 130*		*06/30/20 14:58*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/30/20 14:58*	*1*

Definitions/Glossary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Surrogate Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (50-134)	BFB (67-139)	DBFM (62-130)	TOL (70-130)
600-207289-1	ACW-13	110	97	101	99
600-207289-2	ACW-14	104	91	94	93
600-207289-3	ACW-15	114	98	105	105
600-207289-4	DOOM WELL	106	91	95	95
600-207289-5	OXY WELL	111	96	101	99
600-207289-6	DUP-01	111	98	103	102
600-207289-7	Trip Blank	111	95	102	101
LCS 600-297727/4	Lab Control Sample	110	96	102	99
LCS 600-297807/4	Lab Control Sample	105	89	100	96
LCSD 600-297807/5	Lab Control Sample Dup	97	79	94	87
MB 600-297727/7	Method Blank	109	96	99	98
MB 600-297807/7	Method Blank	111	93	103	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-297727/7
Matrix: Water
Analysis Batch: 297727

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			06/29/20 16:04	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			06/29/20 16:04	1
Toluene	<0.0010		0.0010	0.00020	mg/L			06/29/20 16:04	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			06/29/20 16:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*50 - 134*		*06/29/20 16:04*	*1*
4-Bromofluorobenzene	*96*		*67 - 139*		*06/29/20 16:04*	*1*
Dibromofluoromethane	*99*		*62 - 130*		*06/29/20 16:04*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/29/20 16:04*	*1*

Lab Sample ID: LCS 600-297727/4
Matrix: Water
Analysis Batch: 297727

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.00922		mg/L		92	70 - 130
Ethylbenzene	0.0100	0.00892		mg/L		89	70 - 130
Toluene	0.0100	0.00876		mg/L		88	70 - 130
Xylenes, Total	0.0200	0.0172		mg/L		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*50 - 134*
4-Bromofluorobenzene	*96*		*67 - 139*
Dibromofluoromethane	*102*		*62 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 600-297807/7
Matrix: Water
Analysis Batch: 297807

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			06/30/20 14:02	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			06/30/20 14:02	1
Toluene	<0.0010		0.0010	0.00020	mg/L			06/30/20 14:02	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			06/30/20 14:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*50 - 134*		*06/30/20 14:02*	*1*
4-Bromofluorobenzene	*93*		*67 - 139*		*06/30/20 14:02*	*1*
Dibromofluoromethane	*103*		*62 - 130*		*06/30/20 14:02*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/30/20 14:02*	*1*

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-297807/4
Matrix: Water
Analysis Batch: 297807

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.00998		mg/L		100	70 - 130		
Ethylbenzene			0.0100	0.00989		mg/L		99	70 - 130		
Toluene			0.0100	0.00969		mg/L		97	70 - 130		
Xylenes, Total			0.0200	0.0193		mg/L		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*50 - 134*
4-Bromofluorobenzene	*89*		*67 - 139*
Dibromofluoromethane	*100*		*62 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 600-297807/5
Matrix: Water
Analysis Batch: 297807

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.0102		mg/L		102	70 - 130	2	20
Ethylbenzene			0.0100	0.00978		mg/L		98	70 - 130	1	20
Toluene			0.0100	0.00952		mg/L		95	70 - 130	2	20
Xylenes, Total			0.0200	0.0191		mg/L		96	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*50 - 134*
4-Bromofluorobenzene	*79*		*67 - 139*
Dibromofluoromethane	*94*		*62 - 130*
Toluene-d8 (Surr)	*87*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-298169/6
Matrix: Water
Analysis Batch: 298169

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		0.40	0.053	mg/L			07/07/20 09:31	1

Lab Sample ID: LCS 600-298169/7
Matrix: Water
Analysis Batch: 298169

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			20.0	20.3		mg/L		101	90 - 110		

Lab Sample ID: 600-207289-4 MS
Matrix: Water
Analysis Batch: 298169

Client Sample ID: DOOM WELL
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	48		100	129		mg/L		81	80 - 120

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 600-207289-4 MSD — **Client Sample ID: DOOM WELL**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298169

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	48		100	128		mg/L		81	80 - 120	0	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-298314/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298470 — **Prep Batch: 298314**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	<1.0		1.0	0.021	mg/L		07/08/20 10:50	07/09/20 10:23	1

Lab Sample ID: LCS 600-298314/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298470 — **Prep Batch: 298314**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	10.3		mg/L		103	80 - 120

Lab Sample ID: 600-207289-1 MS — **Client Sample ID: ACW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298470 — **Prep Batch: 298314**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	170		10.0	186	4	mg/L		119	75 - 125

Lab Sample ID: 600-207289-1 MSD — **Client Sample ID: ACW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298470 — **Prep Batch: 298314**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	170		10.0	187	4	mg/L		127	75 - 125	0	20

Lab Sample ID: 600-207289-1 DU — **Client Sample ID: ACW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298470 — **Prep Batch: 298314**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sodium	170		176		mg/L		1	20

Method: 120.1 - Conductivity, Specific Conductance

Lab Sample ID: MB 600-297815/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 297815

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<2.0		2.0	1.3	umhos/cm			06/30/20 10:57	1

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Method: 120.1 - Conductivity, Specific Conductance (Continued)

Lab Sample ID: LCS 600-297815/2
Matrix: Water
Analysis Batch: 297815

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Conductance			10.0	9.57		umhos/cm		96	90 - 110		

Lab Sample ID: 600-207289-1 DU
Matrix: Water
Analysis Batch: 297815

Client Sample ID: ACW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	2600			2640		umhos/cm				0.7	20

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 600-297821/1
Matrix: Water
Analysis Batch: 297821

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			06/30/20 11:44	1

Lab Sample ID: LCS 600-297821/2
Matrix: Water
Analysis Batch: 297821

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1800	1800		mg/L		100	90 - 110		

Lab Sample ID: 600-207289-1 DU
Matrix: Water
Analysis Batch: 297821

Client Sample ID: ACW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	3300			3370		mg/L				2	10

QC Association Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

GC/MS VOA

Analysis Batch: 297727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-207289-1	ACW-13	Total/NA	Water	8260B	
600-207289-2	ACW-14	Total/NA	Water	8260B	
600-207289-3	ACW-15	Total/NA	Water	8260B	
600-207289-4	DOOM WELL	Total/NA	Water	8260B	
MB 600-297727/7	Method Blank	Total/NA	Water	8260B	
LCS 600-297727/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 297807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-207289-5	OXY WELL	Total/NA	Water	8260B	
600-207289-6	DUP-01	Total/NA	Water	8260B	
600-207289-7	Trip Blank	Total/NA	Water	8260B	
MB 600-297807/7	Method Blank	Total/NA	Water	8260B	
LCS 600-297807/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-297807/5	Lab Control Sample Dup	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 298169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-207289-1	ACW-13	Total/NA	Water	300.0	
600-207289-2	ACW-14	Total/NA	Water	300.0	
600-207289-3	ACW-15	Total/NA	Water	300.0	
600-207289-4	DOOM WELL	Total/NA	Water	300.0	
600-207289-5	OXY WELL	Total/NA	Water	300.0	
600-207289-6	DUP-01	Total/NA	Water	300.0	
MB 600-298169/6	Method Blank	Total/NA	Water	300.0	
LCS 600-298169/7	Lab Control Sample	Total/NA	Water	300.0	
600-207289-4 MS	DOOM WELL	Total/NA	Water	300.0	
600-207289-4 MSD	DOOM WELL	Total/NA	Water	300.0	

Metals

Prep Batch: 298314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-207289-1	ACW-13	Total/NA	Water	3010A	
600-207289-2	ACW-14	Total/NA	Water	3010A	
600-207289-3	ACW-15	Total/NA	Water	3010A	
600-207289-4	DOOM WELL	Total/NA	Water	3010A	
600-207289-5	OXY WELL	Total/NA	Water	3010A	
600-207289-6	DUP-01	Total/NA	Water	3010A	
MB 600-298314/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-298314/2-A	Lab Control Sample	Total/NA	Water	3010A	
600-207289-1 MS	ACW-13	Total/NA	Water	3010A	
600-207289-1 MSD	ACW-13	Total/NA	Water	3010A	
600-207289-1 DU	ACW-13	Total/NA	Water	3010A	

Analysis Batch: 298470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-207289-1	ACW-13	Total/NA	Water	6010B	298314
600-207289-2	ACW-14	Total/NA	Water	6010B	298314
600-207289-3	ACW-15	Total/NA	Water	6010B	298314

QC Association Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Metals (Continued)

Analysis Batch: 298470 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-207289-4	DOOM WELL	Total/NA	Water	6010B	298314
600-207289-5	OXY WELL	Total/NA	Water	6010B	298314
600-207289-6	DUP-01	Total/NA	Water	6010B	298314
MB 600-298314/1-A	Method Blank	Total/NA	Water	6010B	298314
LCS 600-298314/2-A	Lab Control Sample	Total/NA	Water	6010B	298314
600-207289-1 MS	ACW-13	Total/NA	Water	6010B	298314
600-207289-1 MSD	ACW-13	Total/NA	Water	6010B	298314
600-207289-1 DU	ACW-13	Total/NA	Water	6010B	298314

General Chemistry

Analysis Batch: 297815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-207289-1	ACW-13	Total/NA	Water	120.1	
600-207289-2	ACW-14	Total/NA	Water	120.1	
600-207289-3	ACW-15	Total/NA	Water	120.1	
600-207289-4	DOOM WELL	Total/NA	Water	120.1	
600-207289-5	OXY WELL	Total/NA	Water	120.1	
600-207289-6	DUP-01	Total/NA	Water	120.1	
MB 600-297815/1	Method Blank	Total/NA	Water	120.1	
LCS 600-297815/2	Lab Control Sample	Total/NA	Water	120.1	
600-207289-1 DU	ACW-13	Total/NA	Water	120.1	

Analysis Batch: 297821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-207289-1	ACW-13	Total/NA	Water	2540 C-1997	
600-207289-2	ACW-14	Total/NA	Water	2540 C-1997	
600-207289-3	ACW-15	Total/NA	Water	2540 C-1997	
600-207289-4	DOOM WELL	Total/NA	Water	2540 C-1997	
600-207289-5	OXY WELL	Total/NA	Water	2540 C-1997	
600-207289-6	DUP-01	Total/NA	Water	2540 C-1997	
MB 600-297821/1	Method Blank	Total/NA	Water	2540 C-1997	
LCS 600-297821/2	Lab Control Sample	Total/NA	Water	2540 C-1997	
600-207289-1 DU	ACW-13	Total/NA	Water	2540 C-1997	

Lab Chronicle

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Client Sample ID: ACW-13
Date Collected: 06/24/20 09:40
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	297727	06/29/20 17:56	KLV	TAL HOU
Total/NA	Analysis	300.0		100	298169	07/07/20 16:44	W1N	TAL HOU
Total/NA	Prep	3010A			298314	07/08/20 10:50	KP1	TAL HOU
Total/NA	Analysis	6010B		1	298470	07/09/20 11:19	KP1	TAL HOU
Total/NA	Analysis	120.1		1	297815	06/30/20 10:57	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	297821	06/30/20 11:44	TNL	TAL HOU

Client Sample ID: ACW-14
Date Collected: 06/24/20 11:40
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	297727	06/29/20 18:24	KLV	TAL HOU
Total/NA	Analysis	300.0		20	298169	07/07/20 16:54	W1N	TAL HOU
Total/NA	Prep	3010A			298314	07/08/20 10:50	KP1	TAL HOU
Total/NA	Analysis	6010B		1	298470	07/09/20 11:26	KP1	TAL HOU
Total/NA	Analysis	120.1		1	297815	06/30/20 10:57	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	297821	06/30/20 11:44	TNL	TAL HOU

Client Sample ID: ACW-15
Date Collected: 06/24/20 10:35
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	297727	06/30/20 00:53	KLV	TAL HOU
Total/NA	Analysis	300.0		20	298169	07/07/20 17:05	W1N	TAL HOU
Total/NA	Prep	3010A			298314	07/08/20 10:50	KP1	TAL HOU
Total/NA	Analysis	6010B		1	298470	07/09/20 11:28	KP1	TAL HOU
Total/NA	Analysis	120.1		1	297815	06/30/20 10:57	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	297821	06/30/20 11:44	TNL	TAL HOU

Client Sample ID: DOOM WELL
Date Collected: 06/24/20 10:40
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	297727	06/30/20 01:22	KLV	TAL HOU
Total/NA	Analysis	300.0		10	298169	07/07/20 17:16	W1N	TAL HOU
Total/NA	Prep	3010A			298314	07/08/20 10:50	KP1	TAL HOU
Total/NA	Analysis	6010B		1	298470	07/09/20 11:30	KP1	TAL HOU
Total/NA	Analysis	120.1		1	297815	06/30/20 10:57	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	297821	06/30/20 11:44	TNL	TAL HOU

Lab Chronicle

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Client Sample ID: OXY WELL
Date Collected: 06/24/20 09:55
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	297807	06/30/20 15:55	KLV	TAL HOU
Total/NA	Analysis	300.0		25	298169	07/07/20 17:48	W1N	TAL HOU
Total/NA	Prep	3010A			298314	07/08/20 10:50	KP1	TAL HOU
Total/NA	Analysis	6010B		1	298470	07/09/20 11:32	KP1	TAL HOU
Total/NA	Analysis	120.1		1	297815	06/30/20 10:57	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	297821	06/30/20 11:44	TNL	TAL HOU

Client Sample ID: DUP-01
Date Collected: 06/24/20 11:00
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	297807	06/30/20 16:24	KLV	TAL HOU
Total/NA	Analysis	300.0		20	298169	07/07/20 17:59	W1N	TAL HOU
Total/NA	Prep	3010A			298314	07/08/20 10:50	KP1	TAL HOU
Total/NA	Analysis	6010B		1	298470	07/09/20 11:34	KP1	TAL HOU
Total/NA	Analysis	120.1		1	297815	06/30/20 10:57	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	297821	06/30/20 11:44	TNL	TAL HOU

Client Sample ID: Trip Blank
Date Collected: 06/24/20 00:00
Date Received: 06/25/20 10:16

Lab Sample ID: 600-207289-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	297807	06/30/20 14:58	KLV	TAL HOU

Laboratory References:
TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-207289-1

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0759	08-04-20
Louisiana	NELAP	01967	06-30-21
Oklahoma	State	2019-073	08-31-20
Texas	NELAP	T104704223-19-25	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21
Utah	NELAP	TX000832019-5	07-31-20

Released to Imaging: 10/28/2022 9:54:55 AM
Received by OCD: 4/19/2021 1:26:48 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Cameron Haber + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-77484-20816.1
Client Contact: Mr. Wallace Gilmore	Phone: 469-223-8082	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:

Address: 19219 Katy Freeway Suite 100	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Houston	TAT Requested (days):		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: TX, 77094			
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914		Other:
Email: wallace.gilmore@aecom.com	WO #:		
Project Name: JAL#4 Gas Plant	Project #: 60008415		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	120.1-Condutivity; 2540C_Calcd-TDS, 300_ORGFM_28D-Cl	6010B - Sodium	8260B_LL - BTEX Only											Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	A												
ACW - 13	6.24.20	940	G	Water			X	X	X											5	
ACW - 14		1140	G	Water			X	X	X											5	
ACW - 15		1035	G	Water			X	X	X											5	
Doom well		1040	G	Water			X	X	X											5	
OXY well		955	G	Water			X	X	X											5	
DUP-01		1100	G	Water			X	X	X											5	
Trip Blank	↓	—	—	Water					X											3	

600-207289 Chain of Custody

Possible ☐ Non-r.. B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Drop off @ lab

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Cameron Haber	6.25.20 1016	HMI		6/25/20 1016	ETd
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

Loc: 600
207289

'20 JUN 25 10:18

eurofins | Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

Date/Time Received: _____

JOB NUMBER: 207289 CLIENT: AECOM

UNPACKED BY: ST CARRIER/DRIVER: client

Custody Seal Present: ☒YES ☐NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
BW	Y / N	Y / N	0.3	IR8	-0.1	0.2
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____ VOA headspace acceptable (5-6mm): ☑YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☑YES	☐ NO

COMMENTS:

1323077

Custody Seal

DATE 6.25.20

SIGNATURE

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1323077

CSA 1323077

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: AECOM Job Number: 600-207289-1

Login Number: 207289 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Torres, Sandra

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	0.2
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

AECOM

Data Usability Summary

Date: February 10, 2021

To: Wally Gilmore, AECOM

CC: Robert Jones, AECOM

From: Ruth Parks, AECOM

Subject: Data Usability Summary for Review of Groundwater Data
Laboratory Report Number 207289
Jal #4 Gas Plant, Jal, New Mexico

Data Usability Summary

Data from TestAmerica in Houston, Texas were reviewed for the analysis of samples collected June 24, 2020 at the Jal #4 Gas Plant in Jal, New Mexico.

Data were reviewed for conformance to the requirements of *SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods* (SW-846). The purpose of this sampling event was to provide current data on concentrations of potential chemicals of concern (COCs) in groundwater for the Jal #4 Gas Plant property.

Samples were analyzed using:

- SW-846 6010B – Inductively Coupled Plasma – Atomic Emission Spectrometry,
- SW-846 8260B - Volatile Organic Compounds by Gas Chromatography-Mass Spectrometry (GC/MS),
- SW-846 300.0 – Determination of Inorganic Anions by Ion Chromatograph,
- SW-846 120.1 – Conductivity, Specific Conductance, and
- SW-846 2540 C-1997 – Total Dissolved Solids (Dried at 180° C).

Data were reviewed and the results are discussed in this Data Usability Summary (DUS). The reportable data, quality control results, sample receipt checklist and chain-of-custody (C-O-C) records were examined for laboratory report 207289.

Introduction

Groundwater samples, a field duplicate, and a trip blank were analyzed for site-specific metals, volatile organic compounds (VOCs), inorganic anions, specific conductivity, and total dissolved solids (TDS) as requested on the chain-of-custodies (C-O-C). **Table B-1** lists the sample identifications cross-referenced to the laboratory identifications.

Analytical Results

Qualified data are listed in **Table B-2**.

Reviewed by
Robert G. Jones
2/12/2021
Robert G. Jones

AECOM

Data Usability Summary

Preservation and Holding Times

All samples were evaluated for agreement with the chain-of-custody (C-O-C). Sample bottles were received in good condition and within the temperature acceptance criteria of ≤ 6 °C except for sample OXY WELL which was received and analyzed with significant headspace which is defined as a bubble greater than 6 mm in diameter. Samples were prepared and analyzed within the holding times specified in SW-846 Table 2-40.

Calibrations

Calibration data were not submitted in this package and are not part of the standard deliverable.

Blanks

Target analytes were not detected in trip or method blanks.

Internal Standards and Surrogate Recoveries

Results with internal standard area counts above the laboratory specifications are qualified as "JL" and below specifications are qualified as "JH" for detected results and "UJL" for non-detected results and listed in **Table B-2**.

Laboratory Control Samples

Samples with laboratory control sample (LCS) recoveries (%R) outside of laboratory specifications are qualified as "JL" and "UJL" when below specifications and as "JH" when above specifications and listed in **Table B-2**. If a laboratory control sampled duplicate (LCSD) was analyzed, data with duplicate precision (as relative percent difference [RPD]) outside of laboratory acceptance criteria is qualified as "J" for LCS precision and listed in **Table B-2.**

Matrix Spike (MS)/Matrix Spike Duplicates (MSD)

Non-project sample data were not evaluated. Data with MS/MSD recoveries outside of laboratory specifications are qualified as "JL" for detections and "UJ" for non-detects when below specifications and "JH" when above specifications and listed in **Table B-2**. Sample data with MS/MSD precision (RPD) outside of the laboratory acceptance criteria are qualified as "J" for MS/MSD precision and listed in **Table B-2**.

Field Precision

Precision results for replicate and duplicate samples are summarized in **Table B-3.** Duplicate precision was not calculated for analytes which were reported as non-detect (U) or qualified as "U" in **Table B-2**. Analytes with non-detect results for both replicate and duplicate were not listed in the table. Field sample and sample duplicate analytes with RPD results outside of the project quality acceptance criteria of ≤ 30 % RPD are qualified as estimated "J" and listed in **Table B-2**.

Reviewed by
Robert G. Jones
2/12/2021

AECOM

Data Usability Summary

Summary

Groundwater analytical data are usable for the purpose of determining concentrations of metals, VOCs, inorganics anions, specific conductivity, and TDS in samples.

Tables

Table B-1. Cross-Reference Field Sample Identifications and Laboratory Identifications

Field Identification	Laboratory Identification	Comment
ACW-13	600-207289-1	
ACW-14	600-207289-2	
ACW-15	600-207289-3	
Doom Well	600-207289-4	
Oxy Well	600-207289-5	
DUP-01	600-207289-6	Duplicate of ACW-14
Trip Blank	600-207289-7	Trip Blank

Table B-2. Qualified Analytical Data

Field Identification	Analyte	Qualification	Reason for Qualification
OXY WELL	Benzene	JL	Significant headspace in vial.
OXY WELL	Ethylbenzene	UJL	Significant headspace in vial.
OXY WELL	Toluene	JL	Significant headspace in vial.
OXY WELL	Xylenes, Total	UJL	Significant headspace in vial.

J – Estimated data; the sample concentration is approximated.
L – Bias in sample result is likely low.
U – Not detected.

Reviewed by
Robert G. Jones
2/12/2021

Table B-3. Field Precision

Field Identification	Analyte	Sample Result	Duplicate Result	RPD	Qualified
ACW-14 / DUP-01	Chloride	220	220	0	A
	Sodium	110	110	0	A
	Specific Conductance	860	930	7.8	A
	TDS	620	620	0	A

RPD = ((SR-DR)*200)/(SR+DR)
A – Acceptable data
NA – Not applicable
J – Estimated data due to inability to meet QC criteria
U – Analyte not detected
U* – Analyte qualified as non-detect per Table B-2

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ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-211739-1
Client Project/Site: JAL#4 Gas Plant 3Q20

For:
AECOM
19219 Katy Freeway
Suite 100
Houston, Texas 77094

Attn: Mr. Wallace Gilmore

Bethany McDaniel

Authorized for release by:
10/2/2020 3:30:49 PM

Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Laboratory Job ID: 600-211739-1

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Case Narrative

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Job ID: 600-211739-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-211739-1

Comments
No additional comments.

Receipt
The samples were received on 9/25/2020 10:04 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.8º C.

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

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

General Chemistry
Method 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Doom Well (600-211739-8). Elevated reporting limits (RLs) are provided.

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

Released to Imaging: 10/28/2022 9:54:55 AM

Method Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
120.1	Conductivity, Specific Conductance	MCAWW	TAL HOU
2540 C-1997	Total Dissolved Solids (Dried at 180 °C)	SM	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-211739-1	ACW-13	Water	09/24/20 10:00	09/25/20 10:04	
600-211739-2	ACW-14	Water	09/24/20 10:50	09/25/20 10:04	
600-211739-3	ACW-15	Water	09/24/20 09:15	09/25/20 10:04	
600-211739-4	ACW-32S	Water	09/24/20 09:00	09/25/20 10:04	
600-211739-5	ACW-32D	Water	09/24/20 10:00	09/25/20 10:04	
600-211739-6	DUP-01	Water	09/24/20 11:00	09/25/20 10:04	
600-211739-7	Trip Blank	Water	09/24/20 00:00	09/25/20 10:04	
600-211739-8	Doom Well	Water	09/24/20 09:40	09/25/20 10:04	
600-211739-9	OXY Well	Water	09/24/20 08:55	09/25/20 10:04	

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Client Sample ID: ACW-13

Date Collected: 09/24/20 10:00
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			09/25/20 15:34	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			09/25/20 15:34	1
Toluene	<0.0010		0.0010	0.00020	mg/L			09/25/20 15:34	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			09/25/20 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*09/25/20 15:34*	*1*
4-Bromofluorobenzene	*111*		*67 - 139*		*09/25/20 15:34*	*1*
Dibromofluoromethane	*84*		*62 - 130*		*09/25/20 15:34*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*09/25/20 15:34*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**770**		40	5.3	mg/L			09/30/20 22:08	100

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**190**		1.0	0.20	mg/L		09/28/20 08:40	09/29/20 13:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**2900**		2.0	1.3	umhos/cm			09/28/20 10:28	1
Total Dissolved Solids	**3200**		20	20	mg/L			09/28/20 11:25	1

Client Sample ID: ACW-14

Date Collected: 09/24/20 10:50
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			09/25/20 15:58	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			09/25/20 15:58	1
Toluene	<0.0010		0.0010	0.00020	mg/L			09/25/20 15:58	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			09/25/20 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*09/25/20 15:58*	*1*
4-Bromofluorobenzene	*112*		*67 - 139*		*09/25/20 15:58*	*1*
Dibromofluoromethane	*80*		*62 - 130*		*09/25/20 15:58*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*09/25/20 15:58*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**140**		4.0	0.53	mg/L			09/30/20 22:20	10

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**110**		1.0	0.20	mg/L		09/28/20 08:40	09/29/20 13:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**1000**		2.0	1.3	umhos/cm			09/28/20 10:28	1

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Client Sample ID: ACW-14
Date Collected: 09/24/20 10:50
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**570**		20	20	mg/L			09/28/20 11:25	1

Client Sample ID: ACW-15
Date Collected: 09/24/20 09:15
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			09/25/20 16:21	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			09/25/20 16:21	1
Toluene	<0.0010		0.0010	0.00020	mg/L			09/25/20 16:21	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			09/25/20 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*09/25/20 16:21*	*1*
4-Bromofluorobenzene	*109*		*67 - 139*		*09/25/20 16:21*	*1*
Dibromofluoromethane	*83*		*62 - 130*		*09/25/20 16:21*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*09/25/20 16:21*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**160**		4.0	0.53	mg/L			09/30/20 22:31	10

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**99**		1.0	0.20	mg/L		09/28/20 08:40	09/29/20 13:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**1000**		2.0	1.3	umhos/cm			09/28/20 10:28	1
Total Dissolved Solids	**650**		10	10	mg/L			09/28/20 11:25	1

Client Sample ID: ACW-32S
Date Collected: 09/24/20 09:00
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			09/25/20 16:44	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			09/25/20 16:44	1
Toluene	<0.0010		0.0010	0.00020	mg/L			09/25/20 16:44	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			09/25/20 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*50 - 134*		*09/25/20 16:44*	*1*
4-Bromofluorobenzene	*112*		*67 - 139*		*09/25/20 16:44*	*1*
Dibromofluoromethane	*81*		*62 - 130*		*09/25/20 16:44*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*09/25/20 16:44*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**830**		40	5.3	mg/L			09/30/20 22:43	100

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Client Sample ID: ACW-32S
Lab Sample ID: 600-211739-4
Date Collected: 09/24/20 09:00
Matrix: Water
Date Received: 09/25/20 10:04

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	270		1.0	0.20	mg/L		09/28/20 08:40	09/29/20 13:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	3400		2.0	1.3	umhos/cm			09/28/20 10:28	1
Total Dissolved Solids	3300		20	20	mg/L			09/28/20 11:25	1

Client Sample ID: ACW-32D
Lab Sample ID: 600-211739-5
Date Collected: 09/24/20 10:00
Matrix: Water
Date Received: 09/25/20 10:04

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			09/25/20 17:08	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			09/25/20 17:08	1
Toluene	<0.0010		0.0010	0.00020	mg/L			09/25/20 17:08	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			09/25/20 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*09/25/20 17:08*	*1*
4-Bromofluorobenzene	*109*		*67 - 139*		*09/25/20 17:08*	*1*
Dibromofluoromethane	*82*		*62 - 130*		*09/25/20 17:08*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*09/25/20 17:08*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	340		20	2.7	mg/L			09/30/20 22:55	50

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	130		1.0	0.20	mg/L		09/28/20 08:40	09/29/20 13:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	1800		2.0	1.3	umhos/cm			09/28/20 10:28	1
Total Dissolved Solids	1500		20	20	mg/L			09/28/20 11:25	1

Client Sample ID: DUP-01
Lab Sample ID: 600-211739-6
Date Collected: 09/24/20 11:00
Matrix: Water
Date Received: 09/25/20 10:04

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			09/25/20 17:31	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			09/25/20 17:31	1
Toluene	<0.0010		0.0010	0.00020	mg/L			09/25/20 17:31	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			09/25/20 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*50 - 134*		*09/25/20 17:31*	*1*
4-Bromofluorobenzene	*111*		*67 - 139*		*09/25/20 17:31*	*1*
Dibromofluoromethane	*85*		*62 - 130*		*09/25/20 17:31*	*1*

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Client Sample ID: DUP-01

Lab Sample ID: 600-211739-6
Date Collected: 09/24/20 11:00
Matrix: Water
Date Received: 09/25/20 10:04

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*70 - 130*		*09/25/20 17:31*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**860**		40	5.3	mg/L			09/30/20 23:07	100

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**260**		1.0	0.20	mg/L		09/28/20 08:40	09/29/20 13:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**3400**		2.0	1.3	umhos/cm			09/28/20 10:28	1
Total Dissolved Solids	**3300**		20	20	mg/L			09/28/20 11:25	1

Client Sample ID: Trip Blank

Lab Sample ID: 600-211739-7
Date Collected: 09/24/20 00:00
Matrix: Water
Date Received: 09/25/20 10:04

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			09/25/20 18:41	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			09/25/20 18:41	1
Toluene	<0.0010		0.0010	0.00020	mg/L			09/25/20 18:41	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			09/25/20 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*50 - 134*		*09/25/20 18:41*	*1*
4-Bromofluorobenzene	*111*		*67 - 139*		*09/25/20 18:41*	*1*
Dibromofluoromethane	*81*		*62 - 130*		*09/25/20 18:41*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*09/25/20 18:41*	*1*

Client Sample ID: Doom Well

Lab Sample ID: 600-211739-8
Date Collected: 09/24/20 09:40
Matrix: Water
Date Received: 09/25/20 10:04

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			09/25/20 17:54	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			09/25/20 17:54	1
Toluene	<0.0010		0.0010	0.00020	mg/L			09/25/20 17:54	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			09/25/20 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*50 - 134*		*09/25/20 17:54*	*1*
4-Bromofluorobenzene	*112*		*67 - 139*		*09/25/20 17:54*	*1*
Dibromofluoromethane	*82*		*62 - 130*		*09/25/20 17:54*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*09/25/20 17:54*	*1*

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Client Sample ID: Doom Well

Lab Sample ID: 600-211739-8
Date Collected: 09/24/20 09:40
Matrix: Water
Date Received: 09/25/20 10:04

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	J	2.0	0.27	mg/L			10/01/20 14:59	5

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	65		1.0	0.20	mg/L		09/28/20 08:40	09/29/20 13:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	580		2.0	1.3	umhos/cm			09/28/20 10:28	1
Total Dissolved Solids	360		10	10	mg/L			09/28/20 11:25	1

Client Sample ID: OXY Well

Lab Sample ID: 600-211739-9
Date Collected: 09/24/20 08:55
Matrix: Water
Date Received: 09/25/20 10:04

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			09/25/20 18:17	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			09/25/20 18:17	1
Toluene	<0.0010		0.0010	0.00020	mg/L			09/25/20 18:17	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			09/25/20 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*		*09/25/20 18:17*	*1*
4-Bromofluorobenzene	*112*		*67 - 139*		*09/25/20 18:17*	*1*
Dibromofluoromethane	*83*		*62 - 130*		*09/25/20 18:17*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*09/25/20 18:17*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		4.0	0.53	mg/L			10/01/20 15:11	10

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	99		1.0	0.20	mg/L		09/28/20 08:40	09/29/20 13:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	1100		2.0	1.3	umhos/cm			09/28/20 10:28	1
Total Dissolved Solids	620		20	20	mg/L			09/28/20 11:25	1

Definitions/Glossary

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Surrogate Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(50-134)	(67-139)	(62-130)	(70-130)
600-211739-1	ACW-13	79	111	84	86
600-211739-2	ACW-14	82	112	80	87
600-211739-3	ACW-15	82	109	83	87
600-211739-4	ACW-32S	80	112	81	88
600-211739-5	ACW-32D	79	109	82	85
600-211739-6	DUP-01	84	111	85	87
600-211739-7	Trip Blank	77	111	81	86
600-211739-8	Doom Well	80	112	82	85
600-211739-9	OXY Well	83	112	83	87
LCS 600-304225/3	Lab Control Sample	75	109	82	96
LCSD 600-304225/4	Lab Control Sample Dup	78	111	82	96
MB 600-304225/6	Method Blank	76	113	81	89

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-304225/6
Matrix: Water
Analysis Batch: 304225

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	0.00018	mg/L			09/25/20 09:45	1
Ethylbenzene	<0.0010		0.0010	0.00021	mg/L			09/25/20 09:45	1
Toluene	<0.0010		0.0010	0.00020	mg/L			09/25/20 09:45	1
Xylenes, Total	<0.0020		0.0020	0.00037	mg/L			09/25/20 09:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*		*09/25/20 09:45*	*1*
4-Bromofluorobenzene	*113*		*67 - 139*		*09/25/20 09:45*	*1*
Dibromofluoromethane	*81*		*62 - 130*		*09/25/20 09:45*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*09/25/20 09:45*	*1*

Lab Sample ID: LCS 600-304225/3
Matrix: Water
Analysis Batch: 304225

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.00927		mg/L		93	70 - 130		
Ethylbenzene			0.0100	0.0104		mg/L		104	70 - 130		
Toluene			0.0100	0.0102		mg/L		102	70 - 130		
Xylenes, Total			0.0200	0.0212		mg/L		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*50 - 134*
4-Bromofluorobenzene	*109*		*67 - 139*
Dibromofluoromethane	*82*		*62 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 600-304225/4
Matrix: Water
Analysis Batch: 304225

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.00917		mg/L		92	70 - 130	1	20
Ethylbenzene			0.0100	0.0101		mg/L		101	70 - 130	3	20
Toluene			0.0100	0.0100		mg/L		100	70 - 130	2	20
Xylenes, Total			0.0200	0.0204		mg/L		102	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*
4-Bromofluorobenzene	*111*		*67 - 139*
Dibromofluoromethane	*82*		*62 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-304502/35
Matrix: Water
Analysis Batch: 304502

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		0.40	0.053	mg/L			09/30/20 20:45	1

Lab Sample ID: LCS 600-304502/36
Matrix: Water
Analysis Batch: 304502

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	20.4		mg/L		102	90 - 110

Lab Sample ID: MB 600-304580/6
Matrix: Water
Analysis Batch: 304580

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		0.40	0.053	mg/L			10/01/20 09:35	1

Lab Sample ID: LCS 600-304580/7
Matrix: Water
Analysis Batch: 304580

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	18.1		mg/L		91	90 - 110

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-304333/1-A
Matrix: Water
Analysis Batch: 304442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 304333

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	<1.0		1.0	0.20	mg/L		09/28/20 08:40	09/29/20 12:05	1

Lab Sample ID: LCS 600-304333/2-A
Matrix: Water
Analysis Batch: 304442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 304333

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	10.2		mg/L		102	80 - 120

Lab Sample ID: 600-211739-1 MS
Matrix: Water
Analysis Batch: 304442

Client Sample ID: ACW-13
Prep Type: Total/NA
Prep Batch: 304333

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	190		10.0	194	4	mg/L		39	75 - 125

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-211739-1 MSD — **Client Sample ID: ACW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 304442 — **Prep Batch: 304333**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	190		10.0	193	4	mg/L		23	75 - 125	1	20

Lab Sample ID: 600-211739-1 DU — **Client Sample ID: ACW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 304442 — **Prep Batch: 304333**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sodium	190			189		mg/L				0.7	20

Method: 120.1 - Conductivity, Specific Conductance

Lab Sample ID: MB 600-304358/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 304358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<2.0		2.0	1.3	umhos/cm			09/28/20 10:28	1

Lab Sample ID: LCS 600-304358/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 304358

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Conductance			10.0	9.74		umhos/cm		97	90 - 110		

Lab Sample ID: 600-211739-1 DU — **Client Sample ID: ACW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 304358

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	2900			3100		umhos/cm				5	20

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 600-304361/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 304361

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/28/20 11:25	1

Lab Sample ID: LCS 600-304361/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 304361

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1800	1780		mg/L		99	90 - 110		

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C) (Continued)

Lab Sample ID: 600-211739-1 DU
Matrix: Water
Analysis Batch: 304361

Client Sample ID: ACW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	3200			3070		mg/L				4	10

QC Association Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

GC/MS VOA

Analysis Batch: 304225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-211739-1	ACW-13	Total/NA	Water	8260B	
600-211739-2	ACW-14	Total/NA	Water	8260B	
600-211739-3	ACW-15	Total/NA	Water	8260B	
600-211739-4	ACW-32S	Total/NA	Water	8260B	
600-211739-5	ACW-32D	Total/NA	Water	8260B	
600-211739-6	DUP-01	Total/NA	Water	8260B	
600-211739-7	Trip Blank	Total/NA	Water	8260B	
600-211739-8	Doom Well	Total/NA	Water	8260B	
600-211739-9	OXY Well	Total/NA	Water	8260B	
MB 600-304225/6	Method Blank	Total/NA	Water	8260B	
LCS 600-304225/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-304225/4	Lab Control Sample Dup	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 304502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-211739-1	ACW-13	Total/NA	Water	300.0	
600-211739-2	ACW-14	Total/NA	Water	300.0	
600-211739-3	ACW-15	Total/NA	Water	300.0	
600-211739-4	ACW-32S	Total/NA	Water	300.0	
600-211739-5	ACW-32D	Total/NA	Water	300.0	
600-211739-6	DUP-01	Total/NA	Water	300.0	
MB 600-304502/35	Method Blank	Total/NA	Water	300.0	
LCS 600-304502/36	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 304580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-211739-8	Doom Well	Total/NA	Water	300.0	
600-211739-9	OXY Well	Total/NA	Water	300.0	
MB 600-304580/6	Method Blank	Total/NA	Water	300.0	
LCS 600-304580/7	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 304333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-211739-1	ACW-13	Total/NA	Water	3010A	
600-211739-2	ACW-14	Total/NA	Water	3010A	
600-211739-3	ACW-15	Total/NA	Water	3010A	
600-211739-4	ACW-32S	Total/NA	Water	3010A	
600-211739-5	ACW-32D	Total/NA	Water	3010A	
600-211739-6	DUP-01	Total/NA	Water	3010A	
600-211739-8	Doom Well	Total/NA	Water	3010A	
600-211739-9	OXY Well	Total/NA	Water	3010A	
MB 600-304333/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-304333/2-A	Lab Control Sample	Total/NA	Water	3010A	
600-211739-1 MS	ACW-13	Total/NA	Water	3010A	
600-211739-1 MSD	ACW-13	Total/NA	Water	3010A	
600-211739-1 DU	ACW-13	Total/NA	Water	3010A	

QC Association Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Metals

Analysis Batch: 304442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-211739-1	ACW-13	Total/NA	Water	6010B	304333
600-211739-2	ACW-14	Total/NA	Water	6010B	304333
600-211739-3	ACW-15	Total/NA	Water	6010B	304333
600-211739-4	ACW-32S	Total/NA	Water	6010B	304333
600-211739-5	ACW-32D	Total/NA	Water	6010B	304333
600-211739-6	DUP-01	Total/NA	Water	6010B	304333
600-211739-8	Doom Well	Total/NA	Water	6010B	304333
600-211739-9	OXY Well	Total/NA	Water	6010B	304333
MB 600-304333/1-A	Method Blank	Total/NA	Water	6010B	304333
LCS 600-304333/2-A	Lab Control Sample	Total/NA	Water	6010B	304333
600-211739-1 MS	ACW-13	Total/NA	Water	6010B	304333
600-211739-1 MSD	ACW-13	Total/NA	Water	6010B	304333
600-211739-1 DU	ACW-13	Total/NA	Water	6010B	304333

General Chemistry

Analysis Batch: 304358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-211739-1	ACW-13	Total/NA	Water	120.1	
600-211739-2	ACW-14	Total/NA	Water	120.1	
600-211739-3	ACW-15	Total/NA	Water	120.1	
600-211739-4	ACW-32S	Total/NA	Water	120.1	
600-211739-5	ACW-32D	Total/NA	Water	120.1	
600-211739-6	DUP-01	Total/NA	Water	120.1	
600-211739-8	Doom Well	Total/NA	Water	120.1	
600-211739-9	OXY Well	Total/NA	Water	120.1	
MB 600-304358/1	Method Blank	Total/NA	Water	120.1	
LCS 600-304358/2	Lab Control Sample	Total/NA	Water	120.1	
600-211739-1 DU	ACW-13	Total/NA	Water	120.1	

Analysis Batch: 304361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-211739-1	ACW-13	Total/NA	Water	2540 C-1997	
600-211739-2	ACW-14	Total/NA	Water	2540 C-1997	
600-211739-3	ACW-15	Total/NA	Water	2540 C-1997	
600-211739-4	ACW-32S	Total/NA	Water	2540 C-1997	
600-211739-5	ACW-32D	Total/NA	Water	2540 C-1997	
600-211739-6	DUP-01	Total/NA	Water	2540 C-1997	
600-211739-8	Doom Well	Total/NA	Water	2540 C-1997	
600-211739-9	OXY Well	Total/NA	Water	2540 C-1997	
MB 600-304361/1	Method Blank	Total/NA	Water	2540 C-1997	
LCS 600-304361/2	Lab Control Sample	Total/NA	Water	2540 C-1997	
600-211739-1 DU	ACW-13	Total/NA	Water	2540 C-1997	

Lab Chronicle

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Client Sample ID: ACW-13
Date Collected: 09/24/20 10:00
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	304225	09/25/20 15:34	WS1	TAL HOU
Total/NA	Analysis	300.0		100	304502	09/30/20 22:08	W1N	TAL HOU
Total/NA	Prep	3010A			304333	09/28/20 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1	304442	09/29/20 13:00	KP1	TAL HOU
Total/NA	Analysis	120.1		1	304358	09/28/20 10:28	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	304361	09/28/20 11:25	TNL	TAL HOU

Client Sample ID: ACW-14
Date Collected: 09/24/20 10:50
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	304225	09/25/20 15:58	WS1	TAL HOU
Total/NA	Analysis	300.0		10	304502	09/30/20 22:20	W1N	TAL HOU
Total/NA	Prep	3010A			304333	09/28/20 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1	304442	09/29/20 13:08	KP1	TAL HOU
Total/NA	Analysis	120.1		1	304358	09/28/20 10:28	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	304361	09/28/20 11:25	TNL	TAL HOU

Client Sample ID: ACW-15
Date Collected: 09/24/20 09:15
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	304225	09/25/20 16:21	WS1	TAL HOU
Total/NA	Analysis	300.0		10	304502	09/30/20 22:31	W1N	TAL HOU
Total/NA	Prep	3010A			304333	09/28/20 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1	304442	09/29/20 13:10	KP1	TAL HOU
Total/NA	Analysis	120.1		1	304358	09/28/20 10:28	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	304361	09/28/20 11:25	TNL	TAL HOU

Client Sample ID: ACW-32S
Date Collected: 09/24/20 09:00
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	304225	09/25/20 16:44	WS1	TAL HOU
Total/NA	Analysis	300.0		100	304502	09/30/20 22:43	W1N	TAL HOU
Total/NA	Prep	3010A			304333	09/28/20 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1	304442	09/29/20 13:12	KP1	TAL HOU
Total/NA	Analysis	120.1		1	304358	09/28/20 10:28	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	304361	09/28/20 11:25	TNL	TAL HOU

Lab Chronicle

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Client Sample ID: ACW-32D
Date Collected: 09/24/20 10:00
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	304225	09/25/20 17:08	WS1	TAL HOU
Total/NA	Analysis	300.0		50	304502	09/30/20 22:55	W1N	TAL HOU
Total/NA	Prep	3010A			304333	09/28/20 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1	304442	09/29/20 13:14	KP1	TAL HOU
Total/NA	Analysis	120.1		1	304358	09/28/20 10:28	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	304361	09/28/20 11:25	TNL	TAL HOU

Client Sample ID: DUP-01
Date Collected: 09/24/20 11:00
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	304225	09/25/20 17:31	WS1	TAL HOU
Total/NA	Analysis	300.0		100	304502	09/30/20 23:07	W1N	TAL HOU
Total/NA	Prep	3010A			304333	09/28/20 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1	304442	09/29/20 13:22	KP1	TAL HOU
Total/NA	Analysis	120.1		1	304358	09/28/20 10:28	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	304361	09/28/20 11:25	TNL	TAL HOU

Client Sample ID: Trip Blank
Date Collected: 09/24/20 00:00
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	304225	09/25/20 18:41	WS1	TAL HOU

Client Sample ID: Doom Well
Date Collected: 09/24/20 09:40
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	304225	09/25/20 17:54	WS1	TAL HOU
Total/NA	Analysis	300.0		5	304580	10/01/20 14:59	W1N	TAL HOU
Total/NA	Prep	3010A			304333	09/28/20 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1	304442	09/29/20 13:24	KP1	TAL HOU
Total/NA	Analysis	120.1		1	304358	09/28/20 10:28	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	304361	09/28/20 11:25	TNL	TAL HOU

Client Sample ID: OXY Well
Date Collected: 09/24/20 08:55
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	304225	09/25/20 18:17	WS1	TAL HOU

Lab Chronicle

Client: AECOM
Project/Site: JAL#4 Gas Plant 3Q20

Job ID: 600-211739-1

Client Sample ID: OXY Well

Date Collected: 09/24/20 08:55
Date Received: 09/25/20 10:04

Lab Sample ID: 600-211739-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	304580	10/01/20 15:11	W1N	TAL HOU
Total/NA	Prep	3010A			304333	09/28/20 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1	304442	09/29/20 13:26	KP1	TAL HOU
Total/NA	Analysis	120.1		1	304358	09/28/20 10:28	TNL	TAL HOU
Total/NA	Analysis	2540 C-1997		1	304361	09/28/20 11:25	TNL	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: AECOM
Job ID: 600-211739-1
Project/Site: JAL#4 Gas Plant 3Q20

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-20-26	10-31-20

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

Analysis Method	Prep Method	Matrix	Analyte
120.1		Water	Specific Conductance
2540 C-1997		Water	Total Dissolved Solids
300.0		Water	Chloride

Released to Imaging: 10/28/2022 9:54:55 AM
Received by OCD: 4/19/2021 1:26:48 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Bryan Bayles + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-77484-20816.1
Client Contact: Mr. Wallace Gilmore	Phone: 832-347-4513	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant (3Q20)	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	120.1-Condutivity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl	6010B - Sodium	8260B_LL - BTEX Only	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	A		
ACW-13	9.24.20	1000	G	Water			✓	✓	✓		
ACW-14		1050		Water			✓	✓	✓		
ACW-15		915		Water			✓	✓	✓		
ACW-32S		900		Water			✓	✓	✓		
ACW-32D		1000		Water			✓	✓	✓		
DUP-01		1100		Water			✓	✓	✓		
Trip Blank		-	↓	Water					✓		
Doom Well		940		↓			✓	✓	✓		
OXY Well	↓	855	↓	↓			✓	✓	✓		

600-211739 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Rudy Mueller	9.25.20 1004	HMI		9/25/20 1004	ETA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

Loc: 600
211739

eurofins | Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: AECOM

UNPACKED BY: _____ CARRIER/DRIVER: Client

Custody Seal Present: ☒YES ☐NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (℃)	Therm ID	Therm CF	Corrected Temp (℃)
Green	Y / N	Y / N	5.7	68D	0.1	5.8
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☒YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot # HC746336 VOA headspace acceptable (5-6mm): ☒YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒YES	☐ NO

COMMENTS:

1381163

Custody Seal

DATE 9.24.20

SIGNATURE

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1381163

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: AECOM Job Number: 600-211739-1

Login Number: 211739 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	5.8
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

AECOM

Data Usability Summary

Date: February 10, 2021

To: Wally Gilmore, AECOM

CC: Robert Jones, AECOM

From: Ruth Parks, AECOM

Subject: Data Usability Summary for Review of Groundwater Data
Laboratory Report Number 211739
Jal #4 Gas Plant, Jal, New Mexico

Data Usability Summary

Data from TestAmerica in Houston, Texas were reviewed for the analysis of samples collected September 24, 2020 at the Jal #4 Gas Plant in Jal, New Mexico.

Data were reviewed for conformance to the requirements of *SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods* (SW-846). The purpose of this sampling event was to provide current data on concentrations of potential chemicals of concern (COCs) in groundwater for the Jal #4 Gas Plant property.

Samples were analyzed using:

- SW-846 6010B – Inductively Coupled Plasma – Atomic Emission Spectrometry,
- SW-846 8260B - Volatile Organic Compounds by Gas Chromatography-Mass Spectrometry (GC/MS),
- SW-846 300.0 – Determination of Inorganic Anions by Ion Chromatograph,
- SW-846 120.1 – Conductivity, Specific Conductance, and
- SW-846 2540 C-1997 – Total Dissolved Solids (Dried at 180 C).

Data were reviewed and the results are discussed in this Data Usability Summary (DUS). The reportable data, quality control results, sample receipt checklist and chain-of-custody (C-O-C) records were examined for laboratory report 211739.

Introduction

Groundwater samples, a field duplicate, and a trip blank were analyzed for site-specific metals, volatile organic compounds (VOCs), inorganic anions, specific conductivity, and total dissolved solids (TDS) as requested on the chain-of-custodies (C-O-C). **Table B-1** lists the sample identifications cross-referenced to the laboratory identifications.

Analytical Results

No data were qualified.

Reviewed by
Robert G. Jones
2/12/2021
Robert G. Jones

AECOM

Data Usability Summary

Preservation and Holding Times

All samples were evaluated for agreement with the chain-of-custody (C-O-C). Sample bottles were received in good condition and within the temperature acceptance criteria of ≤ 6 °C. Samples were prepared and analyzed within the holding times specified in SW-846 Table 2-40.

Calibrations

Calibration data were not submitted in this package and are not part of the standard deliverable.

Blanks

Target analytes were not detected in trip or method blanks.

Internal Standards and Surrogate Recoveries

Results with internal standard area counts above the laboratory specifications are qualified as "JL" and below specifications are qualified as "JH" for detected results and "UJL" for non-detected results and listed in **Table B-2**.

Laboratory Control Samples

Samples with laboratory control sample (LCS) recoveries (%R) outside of laboratory specifications are qualified as "JL" and "UJL" when below specifications and as "JH" when above specifications and listed in **Table B-2**. If a laboratory control sampled duplicate (LCSD) was analyzed, data with duplicate precision (as relative percent difference [RPD]) outside of laboratory acceptance criteria is qualified as "J" for LCS precision and listed in **Table B-2.**

Matrix Spike (MS)/Matrix Spike Duplicates (MSD)

Non-project sample data were not evaluated. Data with MS/MSD recoveries outside of laboratory specifications are qualified as "JL" for detections and "UJ" for non-detects when below specifications and "JH" when above specifications and listed in **Table B-2**. Sample data with MS/MSD precision (RPD) outside of the laboratory acceptance criteria are qualified as "J" for MS/MSD precision and listed in **Table B-2**.

Field Precision

Precision results for replicate and duplicate samples are summarized in **Table B-3.** Duplicate precision was not calculated for analytes which were reported as non-detect (U) or qualified as "U" in **Table B-2**. Analytes with non-detect results for both replicate and duplicate were not listed in the table. Field sample and sample duplicate analytes with RPD results outside of the project quality acceptance criteria of ≤ 30 % RPD are qualified as estimated "J" and listed in **Table B-2**.

Summary

Groundwater analytical data are usable for the purpose of determining concentrations of metals, VOCs, inorganics anions, specific conductivity, and TDS in samples.

Reviewed by
Robert G. Jones
2/12/2021

AECOM

Data Usability Summary

Tables

Table B-1. Cross-Reference Field Sample Identifications and Laboratory Identifications

Field Identification	Laboratory Identification	Comment
ACW-13	600-211739-1	MS/MSD
ACW-14	600-211739-2	
ACW-15	600-211739-3	
ACW-32S	600-211739-4	
Acw-32D	600-211739-5	
DUP-01	600-211739-6	Duplicate of ACW-32S
Trip Blank	600-211739-7	Trip Blank
Doom Well	600-211739-8	
Oxy Well	600-211739-9	

Table B-2. Qualified Analytical Data

Field Identification	Analyte	Qualification	Reason for Qualification
* No Data Qualified.			

Table B-3. Field Precision

Field Identification	Analyte	Sample Result	Duplicate Result	RPD	Qualified
ACW-32S / DUP-01	Chloride	830	860	3.6	A
	Sodium	270	260	3.8	A
	Specific Conductance	3400	3400	0	A
	TDS	3300	3300	0	A

RPD = ((SR-DR)*200)/(SR+DR)
A – Acceptable data
NA – Not applicable
J – Estimated data due to inability to meet QC criteria
U – Analyte not detected
U* – Analyte qualified as non-detect per Table B-2

Reviewed by
Robert G. Jones
2/12/2021

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-196954-1
Client Project/Site: Jal #4 Gas Plant

For:
AECOM
19219 Katy Freeway
Suite 100
Houston, Texas 77094

Attn: Mr. Wallace Gilmore

Marty Edwards

Authorized for release by:
12/29/2020 3:45:49 PM

Marty Edwards, Client Service Manager
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LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: AECOM
Project/Site: Jal #4 Gas Plant

Laboratory Job ID: 400-196954-1

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Case Narrative

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Job ID: 400-196954-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-196954-1

Comments
No additional comments.

Receipt
The samples were received on 12/10/2020 9:06 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 0.3º C, 1.2º C, 2.2º C, 2.5º C and 4.5º C.

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

HPLC/IC
Method 300.0: Due to the high concentration of Chloride, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batches 400-515077, 400-515268, 400-515260, 400-515481 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: ACW-01 (400-196954-1), ACW-02A (400-196954-2), ACW-04 (400-196954-3), ACW-05 (400-196954-4), ACW-06 (400-196954-5), ACW-07 (400-196954-6), ACW-09 (400-196954-7), ACW-10 (400-196954-8), ACW-11 (400-196954-9), ACW-12 (400-196954-10), ACW-13 (400-196954-11), ACW-14 (400-196954-12), ACW-15 (400-196954-13), ACW-16 (400-196954-14), ACW-17 (400-196954-15), ACW-18 (400-196954-16), ACW-19 (400-196954-17), ACW-20 (400-196954-18), ACW-21 (400-196954-19), ACW-22 (400-196954-20), ACW-23 (400-196954-21), ACW-24 (400-196954-22), ACW-25 (400-196954-23), ACW-26 (400-196954-24), ACW-27 (400-196954-25), ACW-28 (400-196954-26), ACW-29 (400-196954-27), ACW-30S (400-196954-28), ACW-30D (400-196954-29), ACW-32S (400-196954-30), ACW-32D (400-196954-31), ENSR-01 (400-196954-33), EPNG-01 (400-196954-34), OXY (400-196954-35), PTP-01 (400-196954-36) DUP-01 (400-196954-37), DUP-02 (400-196954-38), DUP-03 (400-196954-39) and DUP-04 (400-196954-40). Elevated reporting limits (RLs) are provided.

Method 300.0: CCV 400-515260/2 bracketing the batch QC recovered outside of criteria for Chloride; however, the MRL and batch LCS/LCSD were within criteria; therefore, the data is reported. All associated samples will be re-analyzed with passing CCVs.

Method 300.0: The continuing calibration blank (CCB) for analytical batch 400-515260 contained Chloride above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the continuing calibration blank (CCB).

Method 300.0: The matrix spike duplicate (MSD) recoveries for analytical batch 400-515840 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-514498 and analytical batch 400-515075 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: The following samples were diluted due to the nature of the sample matrix: ACW-02A (400-196954-2), ACW-04 (400-196954-3), ACW-05 (400-196954-4), ACW-06 (400-196954-5), ACW-07 (400-196954-6), ACW-09 (400-196954-7), ACW-10 (400-196954-8), ACW-11 (400-196954-9), ACW-12 (400-196954-10), ACW-13 (400-196954-11), ACW-14 (400-196954-12), ACW-15 (400-196954-13), ACW-16 (400-196954-14), ACW-17 (400-196954-15), ACW-18 (400-196954-16), ACW-19 (400-196954-17), ACW-20 (400-196954-18), ACW-21 (400-196954-19), ACW-22 (400-196954-20), ACW-23 (400-196954-21), ACW-25 (400-196954-23), ACW-26 (400-196954-24), ACW-29 (400-196954-27), ACW-30S (400-196954-28), ACW-30D (400-196954-29), ACW-32S (400-196954-30), ACW-32D (400-196954-31), EPNG-01 (400-196954-34), OXY (400-196954-35) and DUP-04 (400-196954-40). Elevated reporting limits (RLs) are provided.

Case Narrative

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Job ID: 400-196954-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

General Chemistry
Method SM 2540C: Due to the sample matrix, 5mL of sample was used for the method. The sample aliquot was over the method accepted range. Using a smaller amount of sample will prevent the ability to obtain a representative aliquot for the method. As such, the 5mL run is being reported and annotated for the following samples: ACW-04 (400-196954-3), ACW-11 (400-196954-9), ACW-18 (400-196954-16), ACW-20 (400-196954-18), ACW-24 (400-196954-22) and DUP-03 (400-196954-39).

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

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

Released to Imaging: 10/28/2022 9:54:55 AM

Detection Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-01 — Lab Sample ID: 400-196954-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.26		0.0010	0.00038	mg/L	1		8260B	Total/NA
Toluene	0.0022		0.0010	0.00041	mg/L	1		8260B	Total/NA
Ethylbenzene	0.00086	J	0.0010	0.00050	mg/L	1		8260B	Total/NA
Chloride	6200		500	60	mg/L	500		300.0	Total/NA
Sodium	3900		100	46	mg/L	50		6010B	Total/NA
Specific Conductance	20000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	10000		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-02A — Lab Sample ID: 400-196954-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0064		0.0010	0.00038	mg/L	1		8260B	Total/NA
Toluene	0.0017		0.0010	0.00041	mg/L	1		8260B	Total/NA
Ethylbenzene	0.0016		0.0010	0.00050	mg/L	1		8260B	Total/NA
Chloride	3300		100	12	mg/L	100		300.0	Total/NA
Sodium	2700		40	18	mg/L	20		6010B	Total/NA
Specific Conductance	13000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	7000		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-04 — Lab Sample ID: 400-196954-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.028		0.0010	0.00038	mg/L	1		8260B	Total/NA
Toluene	0.00070	J	0.0010	0.00041	mg/L	1		8260B	Total/NA
Ethylbenzene	0.0037		0.0010	0.00050	mg/L	1		8260B	Total/NA
Xylenes, Total	0.0056	J	0.010	0.0016	mg/L	1		8260B	Total/NA
Chloride	58000		10000	1200	mg/L	10000		300.0	Total/NA
Sodium	38000		1000	460	mg/L	500		6010B	Total/NA
Specific Conductance	160000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	110000	E	50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-05 — Lab Sample ID: 400-196954-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0098		0.0010	0.00038	mg/L	1		8260B	Total/NA
Toluene	0.0015		0.0010	0.00041	mg/L	1		8260B	Total/NA
Ethylbenzene	0.00063	J	0.0010	0.00050	mg/L	1		8260B	Total/NA
Chloride	2500		200	24	mg/L	200		300.0	Total/NA
Sodium	1300		20	9.2	mg/L	10		6010B	Total/NA
Specific Conductance	9600		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	6200		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-06 — Lab Sample ID: 400-196954-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1600		100	12	mg/L	100		300.0	Total/NA
Sodium	1300		20	9.2	mg/L	10		6010B	Total/NA
Specific Conductance	6800		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	3500		50	50	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-07 — Lab Sample ID: 400-196954-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2500		200	24	mg/L	200		300.0	Total/NA
Sodium	1900		40	18	mg/L	20		6010B	Total/NA
Specific Conductance	9800		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	5600		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-09 — Lab Sample ID: 400-196954-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	49000		5000	600	mg/L	5000		300.0	Total/NA
Sodium	3200		100	46	mg/L	50		6010B	Total/NA
Specific Conductance	30000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	26000		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-10 — Lab Sample ID: 400-196954-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0025		0.0010	0.00038	mg/L	1		8260B	Total/NA
Chloride	2500		200	24	mg/L	200		300.0	Total/NA
Sodium	390		10	4.6	mg/L	5		6010B	Total/NA
Specific Conductance	8500		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	7100		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-11 — Lab Sample ID: 400-196954-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.017		0.0010	0.00038	mg/L	1		8260B	Total/NA
Chloride	21000		1000	120	mg/L	1000		300.0	Total/NA
Sodium	6700		100	46	mg/L	50		6010B	Total/NA
Specific Conductance	55000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	48000	E	50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-12 — Lab Sample ID: 400-196954-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2100		100	12	mg/L	100		300.0	Total/NA
Sodium	390		10	4.6	mg/L	5		6010B	Total/NA
Specific Conductance	7100		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	5900		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-13 — Lab Sample ID: 400-196954-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1000		50	6.0	mg/L	50		300.0	Total/NA
Sodium	190		2.0	0.92	mg/L	1		6010B	Total/NA
Specific Conductance	3900		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	3300		25	25	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-14 — Lab Sample ID: 400-196954-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	160		5.0	0.60	mg/L	5		300.0	Total/NA
Sodium	110		2.0	0.92	mg/L	1		6010B	Total/NA
Specific Conductance	1100		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	650		5.0	5.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Released to Imaging: 10/28/2022 9:54:55 AM

Detection Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-15 — Lab Sample ID: 400-196954-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	170		10	1.2	mg/L	10		300.0	Total/NA
Sodium	93		2.0	0.92	mg/L	1		6010B	Total/NA
Specific Conductance	1200		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	670		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-16 — Lab Sample ID: 400-196954-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0017		0.0010	0.00038	mg/L	1		8260B	Total/NA
Chloride	11000		500	60	mg/L	500		300.0	Total/NA
Sodium	4500		100	46	mg/L	50		6010B	Total/NA
Specific Conductance	30000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	22000		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-17 — Lab Sample ID: 400-196954-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5800		500	60	mg/L	500		300.0	Total/NA
Sodium	1700		20	9.2	mg/L	10		6010B	Total/NA
Specific Conductance	18000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	14000		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-18 — Lab Sample ID: 400-196954-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.00041	J	0.0010	0.00038	mg/L	1		8260B	Total/NA
Chloride	47000		1000	120	mg/L	1000		300.0	Total/NA
Sodium	28000		1000	460	mg/L	500		6010B	Total/NA
Specific Conductance	120000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	88000	E	50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-19 — Lab Sample ID: 400-196954-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.069		0.0010	0.00038	mg/L	1		8260B	Total/NA
Toluene	0.0083		0.0010	0.00041	mg/L	1		8260B	Total/NA
Ethylbenzene	0.010		0.0010	0.00050	mg/L	1		8260B	Total/NA
Xylenes, Total	0.0061	J	0.010	0.0016	mg/L	1		8260B	Total/NA
Chloride	1400	^2	100	12	mg/L	100		300.0	Total/NA
Sodium	810		20	9.2	mg/L	10		6010B	Total/NA
Specific Conductance	5900		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	3100		25	25	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-20 — Lab Sample ID: 400-196954-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.088		0.0010	0.00038	mg/L	1		8260B	Total/NA
Toluene	0.0084		0.0010	0.00041	mg/L	1		8260B	Total/NA
Ethylbenzene	0.0059		0.0010	0.00050	mg/L	1		8260B	Total/NA
Xylenes, Total	0.0037	J	0.010	0.0016	mg/L	1		8260B	Total/NA
Chloride	72000		10000	1200	mg/L	10000		300.0	Total/NA
Sodium	44000		1000	460	mg/L	500		6010B	Total/NA
Specific Conductance	180000		5.0	5.0	umhos/cm	1		120.1	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Detection Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-20 (Continued) — Lab Sample ID: 400-196954-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	120000	E	50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-21 — Lab Sample ID: 400-196954-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.030		0.0010	0.00038	mg/L	1		8260B	Total/NA
Ethylbenzene	0.0039		0.0010	0.00050	mg/L	1		8260B	Total/NA
Chloride	380	^2	20	2.4	mg/L	20		300.0	Total/NA
Sodium	120		2.0	0.92	mg/L	1		6010B	Total/NA
Specific Conductance	2300		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	1400		25	25	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-22 — Lab Sample ID: 400-196954-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	370	^2	20	2.4	mg/L	20		300.0	Total/NA
Sodium	300		10	4.6	mg/L	5		6010B	Total/NA
Specific Conductance	2400		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	1400		25	25	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-23 — Lab Sample ID: 400-196954-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	690		50	6.0	mg/L	50		300.0	Total/NA
Sodium - DL	290		10	4.6	mg/L	5		6010B	Total/NA
Specific Conductance	3500		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	1900		25	25	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-24 — Lab Sample ID: 400-196954-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0021		0.0010	0.00038	mg/L	1		8260B	Total/NA
Toluene	0.00048	J	0.0010	0.00041	mg/L	1		8260B	Total/NA
Chloride	83000		10000	1200	mg/L	10000		300.0	Total/NA
Sodium - DL	27000		1000	460	mg/L	500		6010B	Total/NA
Specific Conductance	130000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	95000	E	50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-25 — Lab Sample ID: 400-196954-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.027		0.0010	0.00038	mg/L	1		8260B	Total/NA
Chloride	18000		1000	120	mg/L	1000		300.0	Total/NA
Sodium - DL2	6000		1000	460	mg/L	500		6010B	Total/NA
Specific Conductance	51000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	35000		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-26 — Lab Sample ID: 400-196954-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	200		20	2.4	mg/L	20		300.0	Total/NA
Sodium - DL	140		4.0	1.8	mg/L	2		6010B	Total/NA
Specific Conductance	1300		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	690		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-27 — Lab Sample ID: 400-196954-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1100		100	12	mg/L	100		300.0	Total/NA
Sodium	56		2.0	0.92	mg/L	1		6010B	Total/NA
Specific Conductance	4500		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	3100		25	25	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-28 — Lab Sample ID: 400-196954-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	29		20	2.4	mg/L	20		300.0	Total/NA
Sodium	48		2.0	0.92	mg/L	1		6010B	Total/NA
Specific Conductance	690		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	510		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-29 — Lab Sample ID: 400-196954-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	61		2.0	0.24	mg/L	2		300.0	Total/NA
Sodium - DL	73		4.0	1.8	mg/L	2		6010B	Total/NA
Specific Conductance	780		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	500		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-30S — Lab Sample ID: 400-196954-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	120	^2	20	2.4	mg/L	20		300.0	Total/NA
Sodium - DL	60		4.0	1.8	mg/L	2		6010B	Total/NA
Specific Conductance	970		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	550		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-30D — Lab Sample ID: 400-196954-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0014		0.0010	0.00038	mg/L	1		8260B	Total/NA
Chloride	16000		1000	120	mg/L	1000		300.0	Total/NA
Sodium - DL2	5500		1000	460	mg/L	500		6010B	Total/NA
Specific Conductance	46000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	33000		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-32S — Lab Sample ID: 400-196954-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1000		100	12	mg/L	100		300.0	Total/NA
Sodium - DL	260		20	9.2	mg/L	10		6010B	Total/NA
Specific Conductance	3900		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	2900		25	25	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ACW-32D — Lab Sample ID: 400-196954-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	280		10	1.2	mg/L	10		300.0	Total/NA
Sodium - DL2	120		40	18	mg/L	20		6010B	Total/NA
Specific Conductance	1700		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	880		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Released to Imaging: 10/28/2022 9:54:55 AM

Detection Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: DOOM — Lab Sample ID: 400-196954-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	30		1.0	0.12	mg/L	1		300.0	Total/NA
Sodium	54		2.0	0.92	mg/L	1		6010B	Total/NA
Specific Conductance	700		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	410		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: ENSR-01 — Lab Sample ID: 400-196954-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.016		0.0010	0.00038	mg/L	1		8260B	Total/NA
Toluene	0.00045	J	0.0010	0.00041	mg/L	1		8260B	Total/NA
Ethylbenzene	0.0015		0.0010	0.00050	mg/L	1		8260B	Total/NA
Chloride	6400		500	60	mg/L	500		300.0	Total/NA
Sodium	58		2.0	0.92	mg/L	1		6010B	Total/NA
Specific Conductance	20000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	11000		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EPNG-01 — Lab Sample ID: 400-196954-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	120		10	1.2	mg/L	10		300.0	Total/NA
Sodium - DL	91		4.0	1.8	mg/L	2		6010B	Total/NA
Specific Conductance	1000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	660		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: OXY — Lab Sample ID: 400-196954-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	200		10	1.2	mg/L	10		300.0	Total/NA
Sodium - DL	90		4.0	1.8	mg/L	2		6010B	Total/NA
Specific Conductance	1300		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	700		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: PTP-01 — Lab Sample ID: 400-196954-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.00063	J	0.0010	0.00038	mg/L	1		8260B	Total/NA
Ethylbenzene	0.0013		0.0010	0.00050	mg/L	1		8260B	Total/NA
Xylenes, Total	0.0022	J	0.010	0.0016	mg/L	1		8260B	Total/NA
Chloride	310		10	1.2	mg/L	10		300.0	Total/NA
Sodium - DL	150		4.0	1.8	mg/L	2		6010B	Total/NA
Specific Conductance	2100		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	1400		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 400-196954-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1000		50	6.0	mg/L	50		300.0	Total/NA
Sodium - DL	250		20	9.2	mg/L	10		6010B	Total/NA
Specific Conductance	3900		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	3100		25	25	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Detection Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: DUP-02 — Lab Sample ID: 400-196954-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0010		0.0010	0.00038	mg/L	1		8260B	Total/NA
Chloride	17000		500	60	mg/L	500		300.0	Total/NA
Sodium - DL	4000		10	4.6	mg/L	5		6010B	Total/NA
Specific Conductance	42000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	33000		50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-03 — Lab Sample ID: 400-196954-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.054		0.0010	0.00038	mg/L	1		8260B	Total/NA
Toluene	0.0071		0.0010	0.00041	mg/L	1		8260B	Total/NA
Ethylbenzene	0.0054		0.0010	0.00050	mg/L	1		8260B	Total/NA
Xylenes, Total	0.0040	J	0.010	0.0016	mg/L	1		8260B	Total/NA
Chloride	74000		5000	600	mg/L	5000		300.0	Total/NA
Sodium - DL2	35000		1000	460	mg/L	500		6010B	Total/NA
Specific Conductance	170000		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	120000	E	50	50	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-04 — Lab Sample ID: 400-196954-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	39		1.0	0.12	mg/L	1		300.0	Total/NA
Sodium - DL	71		4.0	1.8	mg/L	2		6010B	Total/NA
Specific Conductance	720		5.0	5.0	umhos/cm	1		120.1	Total/NA
Total Dissolved Solids	500		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: TRIP BLANK-01 — Lab Sample ID: 400-196954-41

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Sample Summary

Client: AECOM Job ID: 400-196954-1
Project/Site: Jal #4 Gas Plant

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-196954-1	ACW-01	Water	12/09/20 12:05	12/10/20 09:06	
400-196954-2	ACW-02A	Water	12/09/20 11:20	12/10/20 09:06	
400-196954-3	ACW-04	Water	12/09/20 10:40	12/10/20 09:06	
400-196954-4	ACW-05	Water	12/09/20 11:30	12/10/20 09:06	
400-196954-5	ACW-06	Water	12/09/20 13:30	12/10/20 09:06	
400-196954-6	ACW-07	Water	12/09/20 12:15	12/10/20 09:06	
400-196954-7	ACW-09	Water	12/09/20 14:00	12/10/20 09:06	
400-196954-8	ACW-10	Water	12/09/20 11:55	12/10/20 09:06	
400-196954-9	ACW-11	Water	12/09/20 13:00	12/10/20 09:06	
400-196954-10	ACW-12	Water	12/09/20 12:35	12/10/20 09:06	
400-196954-11	ACW-13	Water	12/09/20 11:10	12/10/20 09:06	
400-196954-12	ACW-14	Water	12/09/20 10:10	12/10/20 09:06	
400-196954-13	ACW-15	Water	12/09/20 11:00	12/10/20 09:06	
400-196954-14	ACW-16	Water	12/09/20 09:55	12/10/20 09:06	
400-196954-15	ACW-17	Water	12/09/20 09:35	12/10/20 09:06	
400-196954-16	ACW-18	Water	12/09/20 12:50	12/10/20 09:06	
400-196954-17	ACW-19	Water	12/09/20 13:50	12/10/20 09:06	
400-196954-18	ACW-20	Water	12/09/20 11:05	12/10/20 09:06	
400-196954-19	ACW-21	Water	12/09/20 12:10	12/10/20 09:06	
400-196954-20	ACW-22	Water	12/09/20 13:20	12/10/20 09:06	
400-196954-21	ACW-23	Water	12/09/20 10:20	12/10/20 09:06	
400-196954-22	ACW-24	Water	12/09/20 12:50	12/10/20 09:06	
400-196954-23	ACW-25	Water	12/09/20 10:50	12/10/20 09:06	
400-196954-24	ACW-26	Water	12/09/20 11:55	12/10/20 09:06	
400-196954-25	ACW-27	Water	12/09/20 12:35	12/10/20 09:06	
400-196954-26	ACW-28	Water	12/09/20 13:25	12/10/20 09:06	
400-196954-27	ACW-29	Water	12/09/20 14:10	12/10/20 09:06	
400-196954-28	ACW-30S	Water	12/09/20 08:25	12/10/20 09:06	
400-196954-29	ACW-30D	Water	12/09/20 09:05	12/10/20 09:06	
400-196954-30	ACW-32S	Water	12/09/20 08:55	12/10/20 09:06	
400-196954-31	ACW-32D	Water	12/09/20 09:40	12/10/20 09:06	
400-196954-32	DOOM	Water	12/09/20 08:55	12/10/20 09:06	
400-196954-33	ENSR-01	Water	12/09/20 08:55	12/10/20 09:06	
400-196954-34	EPNG-01	Water	12/09/20 10:10	12/10/20 09:06	
400-196954-35	OXY	Water	12/09/20 09:25	12/10/20 09:06	
400-196954-36	PTP-01	Water	12/09/20 10:20	12/10/20 09:06	
400-196954-37	DUP-01	Water	12/09/20 11:00	12/10/20 09:06	
400-196954-38	DUP-02	Water	12/09/20 11:00	12/10/20 09:06	
400-196954-39	DUP-03	Water	12/09/20 11:30	12/10/20 09:06	
400-196954-40	DUP-04	Water	12/09/20 12:00	12/10/20 09:06	
400-196954-41	TRIP BLANK-01	Water	12/09/20 00:00	12/10/20 09:06	

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-01

Date Collected: 12/09/20 12:05
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.26		0.0010	0.00038	mg/L			12/22/20 13:38	1
Toluene	0.0022		0.0010	0.00041	mg/L			12/22/20 13:38	1
Ethylbenzene	0.00086	J	0.0010	0.00050	mg/L			12/22/20 13:38	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*78 - 118*		*12/22/20 13:38*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*12/22/20 13:38*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/22/20 13:38*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6200		500	60	mg/L			12/21/20 13:41	500

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	3900		100	46	mg/L		12/16/20 09:59	12/20/20 17:32	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	20000		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	10000		50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-02A

Date Collected: 12/09/20 11:20
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0064		0.0010	0.00038	mg/L			12/22/20 14:03	1
Toluene	0.0017		0.0010	0.00041	mg/L			12/22/20 14:03	1
Ethylbenzene	0.0016		0.0010	0.00050	mg/L			12/22/20 14:03	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*12/22/20 14:03*	*1*
Dibromofluoromethane	*97*		*81 - 121*		*12/22/20 14:03*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/22/20 14:03*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3300		100	12	mg/L			12/23/20 23:27	100

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	2700		40	18	mg/L		12/16/20 09:59	12/20/20 18:14	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	13000		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	7000		50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-04

Date Collected: 12/09/20 10:40
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.028		0.0010	0.00038	mg/L			12/20/20 10:40	1
Toluene	0.00070	J	0.0010	0.00041	mg/L			12/20/20 10:40	1
Ethylbenzene	0.0037		0.0010	0.00050	mg/L			12/20/20 10:40	1
Xylenes, Total	0.0056	J	0.010	0.0016	mg/L			12/20/20 10:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*78 - 118*		*12/20/20 10:40*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*12/20/20 10:40*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*12/20/20 10:40*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58000		10000	1200	mg/L			12/21/20 15:58	10000

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	38000		1000	460	mg/L		12/16/20 09:59	12/20/20 18:19	500

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	160000		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	110000	E	50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-05

Date Collected: 12/09/20 11:30
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0098		0.0010	0.00038	mg/L			12/20/20 12:19	1
Toluene	0.0015		0.0010	0.00041	mg/L			12/20/20 12:19	1
Ethylbenzene	0.00063	J	0.0010	0.00050	mg/L			12/20/20 12:19	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*12/20/20 12:19*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/20/20 12:19*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*12/20/20 12:19*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2500		200	24	mg/L			12/21/20 16:20	200

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	1300		20	9.2	mg/L		12/16/20 09:59	12/20/20 18:30	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	9600		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	6200		50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-06

Date Collected: 12/09/20 13:30
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 12:44	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 12:44	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 12:44	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*78 - 118*		*12/20/20 12:44*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*12/20/20 12:44*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*12/20/20 12:44*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1600**		100	12	mg/L			12/21/20 16:43	100

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**1300**		20	9.2	mg/L		12/16/20 09:59	12/20/20 18:35	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**6800**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**3500**		50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-07

Date Collected: 12/09/20 12:15
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 13:08	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 13:08	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 13:08	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*78 - 118*		*12/20/20 13:08*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*12/20/20 13:08*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*12/20/20 13:08*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2500**		200	24	mg/L			12/23/20 17:23	200

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**1900**		40	18	mg/L		12/16/20 09:59	12/20/20 18:40	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**9800**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**5600**		50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-09

Date Collected: 12/09/20 14:00
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 13:33	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 13:33	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 13:33	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*12/20/20 13:33*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*12/20/20 13:33*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*12/20/20 13:33*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**49000**		5000	600	mg/L			12/23/20 23:50	5000

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**3200**		100	46	mg/L		12/16/20 09:59	12/20/20 18:46	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**30000**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**26000**		50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-10

Date Collected: 12/09/20 11:55
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0025**		0.0010	0.00038	mg/L			12/20/20 13:58	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 13:58	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 13:58	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*12/20/20 13:58*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*12/20/20 13:58*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*12/20/20 13:58*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2500**		200	24	mg/L			12/22/20 15:31	200

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**390**		10	4.6	mg/L		12/16/20 09:59	12/20/20 18:51	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**8500**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**7100**		50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-11

Date Collected: 12/09/20 13:00
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.017**		0.0010	0.00038	mg/L			12/20/20 14:22	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 14:22	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 14:22	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*12/20/20 14:22*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/20/20 14:22*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*12/20/20 14:22*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21000**		1000	120	mg/L			12/22/20 15:54	1000

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**6700**		100	46	mg/L		12/16/20 09:59	12/20/20 19:12	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**55000**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**48000**	**E**	50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-12

Date Collected: 12/09/20 12:35
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 14:47	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 14:47	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 14:47	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*78 - 118*		*12/20/20 14:47*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/20/20 14:47*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*12/20/20 14:47*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2100**		100	12	mg/L			12/22/20 16:17	100

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**390**		10	4.6	mg/L		12/16/20 09:59	12/20/20 19:17	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**7100**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**5900**		50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-13

Date Collected: 12/09/20 11:10
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 15:12	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 15:12	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 15:12	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*78 - 118*		*12/20/20 15:12*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/20/20 15:12*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*12/20/20 15:12*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1000**		50	6.0	mg/L			12/23/20 18:32	50

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**190**		2.0	0.92	mg/L		12/16/20 09:59	12/20/20 19:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**3900**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**3300**		25	25	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-14

Date Collected: 12/09/20 10:10
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 15:37	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 15:37	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 15:37	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*78 - 118*		*12/20/20 15:37*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/20/20 15:37*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*12/20/20 15:37*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**160**		5.0	0.60	mg/L			12/23/20 18:55	5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**110**		2.0	0.92	mg/L		12/16/20 09:59	12/20/20 19:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**1100**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**650**		5.0	5.0	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-15

Date Collected: 12/09/20 11:00
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-13

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 16:01	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 16:01	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 16:01	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*12/20/20 16:01*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/20/20 16:01*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*12/20/20 16:01*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**170**		10	1.2	mg/L			12/22/20 16:17	10

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**93**		2.0	0.92	mg/L		12/16/20 09:59	12/20/20 19:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**1200**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**670**		5.0	5.0	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-16

Date Collected: 12/09/20 09:55
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-14

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0017**		0.0010	0.00038	mg/L			12/20/20 16:26	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 16:26	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 16:26	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*78 - 118*		*12/20/20 16:26*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/20/20 16:26*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*12/20/20 16:26*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11000**		500	60	mg/L			12/22/20 17:26	500

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**4500**		100	46	mg/L		12/16/20 09:59	12/20/20 19:38	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**30000**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**22000**		50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-17

Date Collected: 12/09/20 09:35
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 16:51	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 16:51	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 16:51	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*78 - 118*		*12/20/20 16:51*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/20/20 16:51*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*12/20/20 16:51*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5800**		500	60	mg/L			12/22/20 18:11	500

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**1700**		20	9.2	mg/L		12/16/20 09:59	12/20/20 19:44	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**18000**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**14000**		50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-18

Date Collected: 12/09/20 12:50
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-16

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00041**	**J**	0.0010	0.00038	mg/L			12/20/20 17:15	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 17:15	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 17:15	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*12/20/20 17:15*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*12/20/20 17:15*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*12/20/20 17:15*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**47000**		1000	120	mg/L			12/22/20 18:34	1000

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**28000**		1000	460	mg/L		12/16/20 09:59	12/20/20 19:49	500

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**120000**		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	**88000**	**E**	50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-19

Date Collected: 12/09/20 13:50
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-17

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.069		0.0010	0.00038	mg/L			12/23/20 10:19	1
Toluene	0.0083		0.0010	0.00041	mg/L			12/23/20 10:19	1
Ethylbenzene	0.010		0.0010	0.00050	mg/L			12/23/20 10:19	1
Xylenes, Total	0.0061	J	0.010	0.0016	mg/L			12/23/20 10:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*12/23/20 10:19*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*12/23/20 10:19*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*12/23/20 10:19*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1400	^2	100	12	mg/L			12/22/20 20:51	100

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	810		20	9.2	mg/L		12/16/20 09:59	12/20/20 19:59	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	5900		5.0	5.0	umhos/cm			12/16/20 14:43	1
Total Dissolved Solids	3100		25	25	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-20

Date Collected: 12/09/20 11:05
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-18

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.088		0.0010	0.00038	mg/L			12/23/20 10:46	1
Toluene	0.0084		0.0010	0.00041	mg/L			12/23/20 10:46	1
Ethylbenzene	0.0059		0.0010	0.00050	mg/L			12/23/20 10:46	1
Xylenes, Total	0.0037	J	0.010	0.0016	mg/L			12/23/20 10:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*12/23/20 10:46*	*1*
Dibromofluoromethane	*117*		*81 - 121*		*12/23/20 10:46*	*1*
Toluene-d8 (Surr)	*84*		*80 - 120*		*12/23/20 10:46*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72000		10000	1200	mg/L			12/24/20 00:36	10000

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	44000		1000	460	mg/L		12/16/20 09:59	12/20/20 20:20	500

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	180000		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	120000	E	50	50	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-21

Date Collected: 12/09/20 12:10
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-19

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.030**		0.0010	0.00038	mg/L			12/23/20 11:12	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/23/20 11:12	1
Ethylbenzene	**0.0039**		0.0010	0.00050	mg/L			12/23/20 11:12	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/23/20 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*12/23/20 11:12*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*12/23/20 11:12*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*12/23/20 11:12*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**380**	**^2**	20	2.4	mg/L			12/22/20 22:22	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**120**		2.0	0.92	mg/L		12/16/20 09:59	12/20/20 20:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**2300**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**1400**		25	25	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-22

Date Collected: 12/09/20 13:20
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 17:40	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 17:40	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 17:40	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*12/20/20 17:40*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*12/20/20 17:40*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*12/20/20 17:40*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**370**	**^2**	20	2.4	mg/L			12/22/20 22:45	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**300**		10	4.6	mg/L		12/16/20 09:59	12/20/20 20:36	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**2400**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**1400**		25	25	mg/L			12/16/20 20:49	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-23

Date Collected: 12/09/20 10:20
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-21

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 18:05	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 18:05	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 18:05	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*12/20/20 18:05*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*12/20/20 18:05*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*12/20/20 18:05*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**690**		50	6.0	mg/L			12/22/20 17:25	50

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**290**		10	4.6	mg/L		12/16/20 12:23	12/22/20 17:34	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**3500**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**1900**		25	25	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-24

Date Collected: 12/09/20 12:50
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-22

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0021		0.0010	0.00038	mg/L			12/22/20 14:27	1
Toluene	0.00048	J	0.0010	0.00041	mg/L			12/22/20 14:27	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 14:27	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*78 - 118*		*12/22/20 14:27*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*12/22/20 14:27*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/22/20 14:27*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83000		10000	1200	mg/L			12/22/20 18:11	10000

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	27000		1000	460	mg/L		12/16/20 12:23	12/21/20 21:11	500

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	130000		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	95000	E	50	50	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-25

Date Collected: 12/09/20 10:50
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-23

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.027**		0.0010	0.00038	mg/L			12/22/20 14:51	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 14:51	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 14:51	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*12/22/20 14:51*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*12/22/20 14:51*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/22/20 14:51*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18000**		1000	120	mg/L			12/22/20 18:34	1000

Method: 6010B - Metals (ICP) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**6000**		1000	460	mg/L		12/16/20 12:23	12/22/20 19:08	500

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**51000**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**35000**		50	50	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-26

Date Collected: 12/09/20 11:55
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-24

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 15:15	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 15:15	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 15:15	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*12/22/20 15:15*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*12/22/20 15:15*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/22/20 15:15*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**200**		20	2.4	mg/L			12/22/20 18:57	20

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**140**		4.0	1.8	mg/L		12/16/20 12:23	12/22/20 17:44	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**1300**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**690**		10	10	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-27

Date Collected: 12/09/20 12:35
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-25

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 15:40	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 15:40	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 15:40	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*12/22/20 15:40*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*12/22/20 15:40*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/22/20 15:40*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**		100	12	mg/L			12/22/20 19:19	100

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**56**		2.0	0.92	mg/L		12/16/20 12:23	12/21/20 21:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**4500**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**3100**		25	25	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-28

Date Collected: 12/09/20 13:25
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-26

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 16:04	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 16:04	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 16:04	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*12/22/20 16:04*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*12/22/20 16:04*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/22/20 16:04*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29**		20	2.4	mg/L			12/22/20 19:42	20

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**48**		2.0	0.92	mg/L		12/16/20 12:23	12/21/20 21:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**690**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**510**		5.0	5.0	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-29

Date Collected: 12/09/20 14:10
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-27

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 16:28	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 16:28	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 16:28	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*12/22/20 16:28*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*12/22/20 16:28*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/22/20 16:28*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**61**		2.0	0.24	mg/L			12/22/20 20:28	2

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**73**		4.0	1.8	mg/L		12/16/20 12:23	12/22/20 17:50	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**780**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**500**		5.0	5.0	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-30S

Lab Sample ID: 400-196954-28

Date Collected: 12/09/20 08:25
Matrix: Water
Date Received: 12/10/20 09:06

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 16:52	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 16:52	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 16:52	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*12/22/20 16:52*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*12/22/20 16:52*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/22/20 16:52*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**	**^2**	20	2.4	mg/L			12/22/20 23:31	20

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**60**		4.0	1.8	mg/L		12/16/20 12:23	12/22/20 17:55	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**970**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**550**		5.0	5.0	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-30D

Date Collected: 12/09/20 09:05
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-29

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0014**		0.0010	0.00038	mg/L			12/22/20 17:17	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 17:17	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 17:17	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*12/22/20 17:17*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*12/22/20 17:17*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/22/20 17:17*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16000**		1000	120	mg/L			12/24/20 00:59	1000

Method: 6010B - Metals (ICP) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**5500**		1000	460	mg/L		12/16/20 12:23	12/22/20 19:14	500

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**46000**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**33000**		50	50	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-32S

Date Collected: 12/09/20 08:55
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 17:41	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 17:41	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 17:41	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*12/22/20 17:41*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*12/22/20 17:41*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/22/20 17:41*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1000**		100	12	mg/L			12/24/20 01:21	100

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**260**		20	9.2	mg/L		12/16/20 12:23	12/22/20 18:06	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**3900**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**2900**		25	25	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-32D

Date Collected: 12/09/20 09:40
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-31

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 18:05	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 18:05	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 18:05	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*12/22/20 18:05*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/22/20 18:05*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/22/20 18:05*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**280**		10	1.2	mg/L			12/23/20 21:34	10

Method: 6010B - Metals (ICP) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**120**		40	18	mg/L		12/16/20 12:23	12/22/20 19:19	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**1700**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**880**		10	10	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: DOOM

Date Collected: 12/09/20 08:55
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-32

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 18:29	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 18:29	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 18:29	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*12/22/20 18:29*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*12/22/20 18:29*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/22/20 18:29*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30**		1.0	0.12	mg/L			12/24/20 03:39	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**54**		2.0	0.92	mg/L		12/16/20 12:23	12/21/20 22:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**700**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**410**		5.0	5.0	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ENSR-01

Date Collected: 12/09/20 08:55
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-33

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.016		0.0010	0.00038	mg/L			12/22/20 18:54	1
Toluene	0.00045	J	0.0010	0.00041	mg/L			12/22/20 18:54	1
Ethylbenzene	0.0015		0.0010	0.00050	mg/L			12/22/20 18:54	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*12/22/20 18:54*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/22/20 18:54*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/22/20 18:54*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6400		500	60	mg/L			12/28/20 15:29	500

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	58		2.0	0.92	mg/L		12/16/20 12:23	12/21/20 22:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	20000		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	11000		50	50	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: EPNG-01

Date Collected: 12/09/20 10:10
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-34

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 19:18	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 19:18	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 19:18	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*12/22/20 19:18*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/22/20 19:18*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/22/20 19:18*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		10	1.2	mg/L			12/23/20 23:05	10

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**91**		4.0	1.8	mg/L		12/16/20 12:23	12/22/20 18:16	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**1000**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**660**		5.0	5.0	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: OXY

Lab Sample ID: 400-196954-35

Date Collected: 12/09/20 09:25
Matrix: Water
Date Received: 12/10/20 09:06

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 14:38	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 14:38	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 14:38	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*12/22/20 14:38*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*12/22/20 14:38*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/22/20 14:38*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**200**		10	1.2	mg/L			12/23/20 23:28	10

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**90**		4.0	1.8	mg/L		12/16/20 12:23	12/22/20 18:21	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**1300**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**700**		10	10	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: PTP-01

Lab Sample ID: 400-196954-36

Date Collected: 12/09/20 10:20
Matrix: Water
Date Received: 12/10/20 09:06

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00063	J	0.0010	0.00038	mg/L			12/22/20 16:18	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 16:18	1
Ethylbenzene	0.0013		0.0010	0.00050	mg/L			12/22/20 16:18	1
Xylenes, Total	0.0022	J	0.010	0.0016	mg/L			12/22/20 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*12/22/20 16:18*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*12/22/20 16:18*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/22/20 16:18*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	310		10	1.2	mg/L			12/23/20 23:51	10

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	150		4.0	1.8	mg/L		12/16/20 12:23	12/23/20 17:24	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	2100		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	1400		10	10	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: DUP-01

Date Collected: 12/09/20 11:00
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-37

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 16:43	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 16:43	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 16:43	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*12/22/20 16:43*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*12/22/20 16:43*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/22/20 16:43*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1000**		50	6.0	mg/L			12/28/20 15:52	50

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**250**		20	9.2	mg/L		12/16/20 12:23	12/23/20 17:27	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**3900**		5.0	5.0	umhos/cm			12/18/20 13:17	1
Total Dissolved Solids	**3100**		25	25	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: DUP-02

Date Collected: 12/09/20 11:00
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-38

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0010**		0.0010	0.00038	mg/L			12/22/20 17:08	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 17:08	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 17:08	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*12/22/20 17:08*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*12/22/20 17:08*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/22/20 17:08*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17000**		500	60	mg/L			12/28/20 17:00	500

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**4000**		10	4.6	mg/L		12/16/20 12:23	12/23/20 17:31	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**42000**		5.0	5.0	umhos/cm			12/29/20 11:26	1
Total Dissolved Solids	**33000**		50	50	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: DUP-03

Date Collected: 12/09/20 11:30
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-39

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.054		0.0010	0.00038	mg/L			12/22/20 17:33	1
Toluene	0.0071		0.0010	0.00041	mg/L			12/22/20 17:33	1
Ethylbenzene	0.0054		0.0010	0.00050	mg/L			12/22/20 17:33	1
Xylenes, Total	0.0040	J	0.010	0.0016	mg/L			12/22/20 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*12/22/20 17:33*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*12/22/20 17:33*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/22/20 17:33*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74000		5000	600	mg/L			12/28/20 17:23	5000

Method: 6010B - Metals (ICP) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	35000		1000	460	mg/L		12/16/20 12:23	12/23/20 17:39	500

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	170000		5.0	5.0	umhos/cm			12/29/20 11:26	1
Total Dissolved Solids	120000	E	50	50	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: DUP-04

Date Collected: 12/09/20 12:00
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 17:59	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 17:59	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 17:59	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*78 - 118*		*12/22/20 17:59*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*12/22/20 17:59*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/22/20 17:59*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39**		1.0	0.12	mg/L			12/24/20 00:59	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**71**		4.0	1.8	mg/L		12/16/20 12:23	12/22/20 19:03	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	**720**		5.0	5.0	umhos/cm			12/29/20 11:26	1
Total Dissolved Solids	**500**		5.0	5.0	mg/L			12/16/20 21:02	1

Client Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: TRIP BLANK-01
Date Collected: 12/09/20 00:00
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-41
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 18:24	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 18:24	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 18:24	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*12/22/20 18:24*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*12/22/20 18:24*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/22/20 18:24*	*1*

Definitions/Glossary

Client: AECOM Job ID: 400-196954-1
Project/Site: Jal #4 Gas Plant

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
^2	Calibration Blank is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.

Glossary

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

Surrogate Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(78-118)	(81-121)	(80-120)
400-196954-1	ACW-01	79	95	96
400-196954-2	ACW-02A	94	97	94
400-196954-3	ACW-04	114	95	105
400-196954-3 MS	ACW-04	113	93	107
400-196954-3 MSD	ACW-04	112	95	106
400-196954-4	ACW-05	113	94	108
400-196954-5	ACW-06	116	93	106
400-196954-6	ACW-07	114	96	108
400-196954-7	ACW-09	113	95	105
400-196954-8	ACW-10	113	95	105
400-196954-9	ACW-11	111	94	106
400-196954-10	ACW-12	116	94	107
400-196954-11	ACW-13	114	94	106
400-196954-12	ACW-14	112	94	107
400-196954-13	ACW-15	113	94	105
400-196954-14	ACW-16	112	94	104
400-196954-15	ACW-17	112	94	105
400-196954-16	ACW-18	113	95	104
400-196954-17	ACW-19	97	101	91
400-196954-17 MS	ACW-19	97	105	84
400-196954-17 MSD	ACW-19	97	107	86
400-196954-18	ACW-20	97	117	84
400-196954-19	ACW-21	102	105	88
400-196954-20	ACW-22	113	93	106
400-196954-21	ACW-23	113	95	105
400-196954-22	ACW-24	87	96	95
400-196954-23	ACW-25	97	96	94
400-196954-24	ACW-26	94	91	94
400-196954-25	ACW-27	92	96	93
400-196954-26	ACW-28	98	99	94
400-196954-27	ACW-29	93	93	95
400-196954-28	ACW-30S	99	93	94
400-196954-29	ACW-30D	100	93	95
400-196954-30	ACW-32S	95	95	96
400-196954-31	ACW-32D	93	94	93
400-196954-32	DOOM	96	91	96
400-196954-33	ENSR-01	100	94	94
400-196954-34	EPNG-01	93	94	94
400-196954-35	OXY	92	93	95
400-196954-35 MS	OXY	90	96	97
400-196954-35 MSD	OXY	91	95	98
400-196954-36	PTP-01	92	93	96
400-196954-37	DUP-01	91	94	96
400-196954-38	DUP-02	92	92	98
400-196954-39	DUP-03	93	93	96
400-196954-40	DUP-04	90	92	97
400-196954-41	TRIP BLANK-01	93	93	97
LCS 400-515022/1002	Lab Control Sample	115	93	110
LCS 400-515228/1002	Lab Control Sample	98	99	94

Surrogate Summary

Client: AECOM Job ID: 400-196954-1
Project/Site: Jal #4 Gas Plant

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(78-118)	(81-121)	(80-120)
LCS 400-515232/1002	Lab Control Sample	91	95	98
LCS 400-515400/1002	Lab Control Sample	94	111	82
MB 400-515022/5	Method Blank	113	92	107
MB 400-515228/5	Method Blank	97	91	96
MB 400-515232/4	Method Blank	92	93	97
MB 400-515400/4	Method Blank	93	115	86

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

QC Association Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

GC/MS VOA

Analysis Batch: 515022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-3	ACW-04	Total/NA	Water	8260B	
400-196954-4	ACW-05	Total/NA	Water	8260B	
400-196954-5	ACW-06	Total/NA	Water	8260B	
400-196954-6	ACW-07	Total/NA	Water	8260B	
400-196954-7	ACW-09	Total/NA	Water	8260B	
400-196954-8	ACW-10	Total/NA	Water	8260B	
400-196954-9	ACW-11	Total/NA	Water	8260B	
400-196954-10	ACW-12	Total/NA	Water	8260B	
400-196954-11	ACW-13	Total/NA	Water	8260B	
400-196954-12	ACW-14	Total/NA	Water	8260B	
400-196954-13	ACW-15	Total/NA	Water	8260B	
400-196954-14	ACW-16	Total/NA	Water	8260B	
400-196954-15	ACW-17	Total/NA	Water	8260B	
400-196954-16	ACW-18	Total/NA	Water	8260B	
400-196954-20	ACW-22	Total/NA	Water	8260B	
400-196954-21	ACW-23	Total/NA	Water	8260B	
MB 400-515022/5	Method Blank	Total/NA	Water	8260B	
LCS 400-515022/1002	Lab Control Sample	Total/NA	Water	8260B	
400-196954-3 MS	ACW-04	Total/NA	Water	8260B	
400-196954-3 MSD	ACW-04	Total/NA	Water	8260B	

Analysis Batch: 515228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-1	ACW-01	Total/NA	Water	8260B	
400-196954-2	ACW-02A	Total/NA	Water	8260B	
400-196954-22	ACW-24	Total/NA	Water	8260B	
400-196954-23	ACW-25	Total/NA	Water	8260B	
400-196954-24	ACW-26	Total/NA	Water	8260B	
400-196954-25	ACW-27	Total/NA	Water	8260B	
400-196954-26	ACW-28	Total/NA	Water	8260B	
400-196954-27	ACW-29	Total/NA	Water	8260B	
400-196954-28	ACW-30S	Total/NA	Water	8260B	
400-196954-29	ACW-30D	Total/NA	Water	8260B	
400-196954-30	ACW-32S	Total/NA	Water	8260B	
400-196954-31	ACW-32D	Total/NA	Water	8260B	
400-196954-32	DOOM	Total/NA	Water	8260B	
400-196954-33	ENSR-01	Total/NA	Water	8260B	
400-196954-34	EPNG-01	Total/NA	Water	8260B	
MB 400-515228/5	Method Blank	Total/NA	Water	8260B	
LCS 400-515228/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 515232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-35	OXY	Total/NA	Water	8260B	
400-196954-36	PTP-01	Total/NA	Water	8260B	
400-196954-37	DUP-01	Total/NA	Water	8260B	
400-196954-38	DUP-02	Total/NA	Water	8260B	
400-196954-39	DUP-03	Total/NA	Water	8260B	
400-196954-40	DUP-04	Total/NA	Water	8260B	
400-196954-41	TRIP BLANK-01	Total/NA	Water	8260B	
MB 400-515232/4	Method Blank	Total/NA	Water	8260B	

QC Association Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

GC/MS VOA (Continued)

Analysis Batch: 515232 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-515232/1002	Lab Control Sample	Total/NA	Water	8260B	
400-196954-35 MS	OXY	Total/NA	Water	8260B	
400-196954-35 MSD	OXY	Total/NA	Water	8260B	

Analysis Batch: 515400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-17	ACW-19	Total/NA	Water	8260B	
400-196954-18	ACW-20	Total/NA	Water	8260B	
400-196954-19	ACW-21	Total/NA	Water	8260B	
MB 400-515400/4	Method Blank	Total/NA	Water	8260B	
LCS 400-515400/1002	Lab Control Sample	Total/NA	Water	8260B	
400-196954-17 MS	ACW-19	Total/NA	Water	8260B	
400-196954-17 MSD	ACW-19	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 515077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-1	ACW-01	Total/NA	Water	300.0	
400-196954-3	ACW-04	Total/NA	Water	300.0	
400-196954-4	ACW-05	Total/NA	Water	300.0	
400-196954-5	ACW-06	Total/NA	Water	300.0	
MB 400-515077/4	Method Blank	Total/NA	Water	300.0	
LCS 400-515077/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-515077/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 400-515077/5	Lab Control Sample	Total/NA	Water	300.0	
400-196954-1 MS	ACW-01	Total/NA	Water	300.0	
400-196954-1 MSD	ACW-01	Total/NA	Water	300.0	

Analysis Batch: 515260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-13	ACW-15	Total/NA	Water	300.0	
400-196954-14	ACW-16	Total/NA	Water	300.0	
400-196954-15	ACW-17	Total/NA	Water	300.0	
400-196954-16	ACW-18	Total/NA	Water	300.0	
400-196954-17	ACW-19	Total/NA	Water	300.0	
400-196954-19	ACW-21	Total/NA	Water	300.0	
400-196954-20	ACW-22	Total/NA	Water	300.0	
400-196954-28	ACW-30S	Total/NA	Water	300.0	
MB 400-515260/4	Method Blank	Total/NA	Water	300.0	
LCS 400-515260/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-515260/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 400-515260/5	Lab Control Sample	Total/NA	Water	300.0	
400-196954-6 MS	ACW-07	Total/NA	Water	300.0	
400-196954-6 MSD	ACW-07	Total/NA	Water	300.0	

Analysis Batch: 515268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-8	ACW-10	Total/NA	Water	300.0	
400-196954-9	ACW-11	Total/NA	Water	300.0	
400-196954-10	ACW-12	Total/NA	Water	300.0	

QC Association Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

HPLC/IC (Continued)

Analysis Batch: 515268 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-21	ACW-23	Total/NA	Water	300.0	
400-196954-22	ACW-24	Total/NA	Water	300.0	
400-196954-23	ACW-25	Total/NA	Water	300.0	
400-196954-24	ACW-26	Total/NA	Water	300.0	
400-196954-25	ACW-27	Total/NA	Water	300.0	
400-196954-26	ACW-28	Total/NA	Water	300.0	
400-196954-27	ACW-29	Total/NA	Water	300.0	
MB 400-515268/4	Method Blank	Total/NA	Water	300.0	
LCS 400-515268/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-515268/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 400-515268/5	Lab Control Sample	Total/NA	Water	300.0	
400-196954-7 MS	ACW-09	Total/NA	Water	300.0	
400-196954-7 MSD	ACW-09	Total/NA	Water	300.0	

Analysis Batch: 515471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-6	ACW-07	Total/NA	Water	300.0	
400-196954-11	ACW-13	Total/NA	Water	300.0	
400-196954-12	ACW-14	Total/NA	Water	300.0	
400-196954-31	ACW-32D	Total/NA	Water	300.0	
400-196954-32	DOOM	Total/NA	Water	300.0	
400-196954-34	EPNG-01	Total/NA	Water	300.0	
400-196954-35	OXY	Total/NA	Water	300.0	
400-196954-36	PTP-01	Total/NA	Water	300.0	
400-196954-40	DUP-04	Total/NA	Water	300.0	
MB 400-515471/4	Method Blank	Total/NA	Water	300.0	
MB 400-515471/41	Method Blank	Total/NA	Water	300.0	
LCS 400-515471/42	Lab Control Sample	Total/NA	Water	300.0	
LCS 400-515471/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-515471/43	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 400-515471/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 400-515471/5	Lab Control Sample	Total/NA	Water	300.0	
400-196954-32 MS	DOOM	Total/NA	Water	300.0	
400-196954-32 MSD	DOOM	Total/NA	Water	300.0	

Analysis Batch: 515481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-2	ACW-02A	Total/NA	Water	300.0	
400-196954-7	ACW-09	Total/NA	Water	300.0	
400-196954-18	ACW-20	Total/NA	Water	300.0	
400-196954-29	ACW-30D	Total/NA	Water	300.0	
400-196954-30	ACW-32S	Total/NA	Water	300.0	
MB 400-515481/4	Method Blank	Total/NA	Water	300.0	
LCS 400-515481/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-515481/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 400-515481/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 515840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-33	ENSR-01	Total/NA	Water	300.0	
400-196954-37	DUP-01	Total/NA	Water	300.0	

QC Association Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

HPLC/IC (Continued)

Analysis Batch: 515840 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-38	DUP-02	Total/NA	Water	300.0	
400-196954-39	DUP-03	Total/NA	Water	300.0	
MB 400-515840/4	Method Blank	Total/NA	Water	300.0	
LCS 400-515840/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-515840/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 400-515840/5	Lab Control Sample	Total/NA	Water	300.0	
400-196954-32 MS	DOOM	Total/NA	Water	300.0	
400-196954-32 MSD	DOOM	Total/NA	Water	300.0	

Metals

Prep Batch: 514498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-1	ACW-01	Total/NA	Water	3010A	
400-196954-2	ACW-02A	Total/NA	Water	3010A	
400-196954-3	ACW-04	Total/NA	Water	3010A	
400-196954-4	ACW-05	Total/NA	Water	3010A	
400-196954-5	ACW-06	Total/NA	Water	3010A	
400-196954-6	ACW-07	Total/NA	Water	3010A	
400-196954-7	ACW-09	Total/NA	Water	3010A	
400-196954-8	ACW-10	Total/NA	Water	3010A	
400-196954-9	ACW-11	Total/NA	Water	3010A	
400-196954-10	ACW-12	Total/NA	Water	3010A	
400-196954-11	ACW-13	Total/NA	Water	3010A	
400-196954-12	ACW-14	Total/NA	Water	3010A	
400-196954-13	ACW-15	Total/NA	Water	3010A	
400-196954-14	ACW-16	Total/NA	Water	3010A	
400-196954-15	ACW-17	Total/NA	Water	3010A	
400-196954-16	ACW-18	Total/NA	Water	3010A	
400-196954-17	ACW-19	Total/NA	Water	3010A	
400-196954-18	ACW-20	Total/NA	Water	3010A	
400-196954-19	ACW-21	Total/NA	Water	3010A	
400-196954-20	ACW-22	Total/NA	Water	3010A	
MB 400-514498/1-A	Method Blank	Total/NA	Water	3010A	
LCS 400-514498/2-A	Lab Control Sample	Total/NA	Water	3010A	
400-196954-1 MS	ACW-01	Total/NA	Water	3010A	
400-196954-1 MSD	ACW-01	Total/NA	Water	3010A	

Prep Batch: 514511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-21 - DL	ACW-23	Total/NA	Water	3010A	
400-196954-22 - DL	ACW-24	Total/NA	Water	3010A	
400-196954-23 - DL2	ACW-25	Total/NA	Water	3010A	
400-196954-24 - DL	ACW-26	Total/NA	Water	3010A	
400-196954-25	ACW-27	Total/NA	Water	3010A	
400-196954-26	ACW-28	Total/NA	Water	3010A	
400-196954-27 - DL	ACW-29	Total/NA	Water	3010A	
400-196954-28 - DL	ACW-30S	Total/NA	Water	3010A	
400-196954-29 - DL2	ACW-30D	Total/NA	Water	3010A	
400-196954-30 - DL	ACW-32S	Total/NA	Water	3010A	
400-196954-31 - DL2	ACW-32D	Total/NA	Water	3010A	

QC Association Summary

Client: AECOM Job ID: 400-196954-1
Project/Site: Jal #4 Gas Plant

Metals (Continued)

Prep Batch: 514511 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-32	DOOM	Total/NA	Water	3010A	
400-196954-33	ENSR-01	Total/NA	Water	3010A	
400-196954-34 - DL	EPNG-01	Total/NA	Water	3010A	
400-196954-35 - DL	OXY	Total/NA	Water	3010A	
400-196954-36 - DL	PTP-01	Total/NA	Water	3010A	
400-196954-37 - DL	DUP-01	Total/NA	Water	3010A	
400-196954-38 - DL	DUP-02	Total/NA	Water	3010A	
400-196954-39 - DL2	DUP-03	Total/NA	Water	3010A	
400-196954-40 - DL	DUP-04	Total/NA	Water	3010A	
MB 400-514511/1-A	Method Blank	Total/NA	Water	3010A	
LCS 400-514511/2-A	Lab Control Sample	Total/NA	Water	3010A	
400-196954-21 MS - DL	ACW-23	Total/NA	Water	3010A	
400-196954-21 MSD - DL	ACW-23	Total/NA	Water	3010A	

Analysis Batch: 515075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-1	ACW-01	Total/NA	Water	6010B	514498
400-196954-2	ACW-02A	Total/NA	Water	6010B	514498
400-196954-3	ACW-04	Total/NA	Water	6010B	514498
400-196954-4	ACW-05	Total/NA	Water	6010B	514498
400-196954-5	ACW-06	Total/NA	Water	6010B	514498
400-196954-6	ACW-07	Total/NA	Water	6010B	514498
400-196954-7	ACW-09	Total/NA	Water	6010B	514498
400-196954-8	ACW-10	Total/NA	Water	6010B	514498
400-196954-9	ACW-11	Total/NA	Water	6010B	514498
400-196954-10	ACW-12	Total/NA	Water	6010B	514498
400-196954-11	ACW-13	Total/NA	Water	6010B	514498
400-196954-12	ACW-14	Total/NA	Water	6010B	514498
400-196954-13	ACW-15	Total/NA	Water	6010B	514498
400-196954-14	ACW-16	Total/NA	Water	6010B	514498
400-196954-15	ACW-17	Total/NA	Water	6010B	514498
400-196954-16	ACW-18	Total/NA	Water	6010B	514498
400-196954-17	ACW-19	Total/NA	Water	6010B	514498
400-196954-18	ACW-20	Total/NA	Water	6010B	514498
400-196954-19	ACW-21	Total/NA	Water	6010B	514498
400-196954-20	ACW-22	Total/NA	Water	6010B	514498
MB 400-514498/1-A	Method Blank	Total/NA	Water	6010B	514498
LCS 400-514498/2-A	Lab Control Sample	Total/NA	Water	6010B	514498
400-196954-1 MS	ACW-01	Total/NA	Water	6010B	514498
400-196954-1 MSD	ACW-01	Total/NA	Water	6010B	514498

Analysis Batch: 515218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-22 - DL	ACW-24	Total/NA	Water	6010B	514511
400-196954-25	ACW-27	Total/NA	Water	6010B	514511
400-196954-26	ACW-28	Total/NA	Water	6010B	514511
400-196954-32	DOOM	Total/NA	Water	6010B	514511
400-196954-33	ENSR-01	Total/NA	Water	6010B	514511
MB 400-514511/1-A	Method Blank	Total/NA	Water	6010B	514511
LCS 400-514511/2-A	Lab Control Sample	Total/NA	Water	6010B	514511
400-196954-21 MS - DL	ACW-23	Total/NA	Water	6010B	514511

QC Association Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Metals (Continued)

Analysis Batch: 515218 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-21 MSD - DL	ACW-23	Total/NA	Water	6010B	514511

Analysis Batch: 515464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-21 - DL	ACW-23	Total/NA	Water	6010B	514511
400-196954-23 - DL2	ACW-25	Total/NA	Water	6010B	514511
400-196954-24 - DL	ACW-26	Total/NA	Water	6010B	514511
400-196954-27 - DL	ACW-29	Total/NA	Water	6010B	514511
400-196954-28 - DL	ACW-30S	Total/NA	Water	6010B	514511
400-196954-29 - DL2	ACW-30D	Total/NA	Water	6010B	514511
400-196954-30 - DL	ACW-32S	Total/NA	Water	6010B	514511
400-196954-31 - DL2	ACW-32D	Total/NA	Water	6010B	514511
400-196954-34 - DL	EPNG-01	Total/NA	Water	6010B	514511
400-196954-35 - DL	OXY	Total/NA	Water	6010B	514511
400-196954-40 - DL	DUP-04	Total/NA	Water	6010B	514511

Analysis Batch: 515572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-36 - DL	PTP-01	Total/NA	Water	6010B	514511
400-196954-37 - DL	DUP-01	Total/NA	Water	6010B	514511
400-196954-38 - DL	DUP-02	Total/NA	Water	6010B	514511
400-196954-39 - DL2	DUP-03	Total/NA	Water	6010B	514511

General Chemistry

Analysis Batch: 514612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-1	ACW-01	Total/NA	Water	SM 2540C	
400-196954-2	ACW-02A	Total/NA	Water	SM 2540C	
400-196954-3	ACW-04	Total/NA	Water	SM 2540C	
400-196954-4	ACW-05	Total/NA	Water	SM 2540C	
400-196954-5	ACW-06	Total/NA	Water	SM 2540C	
400-196954-6	ACW-07	Total/NA	Water	SM 2540C	
400-196954-7	ACW-09	Total/NA	Water	SM 2540C	
400-196954-8	ACW-10	Total/NA	Water	SM 2540C	
400-196954-9	ACW-11	Total/NA	Water	SM 2540C	
400-196954-10	ACW-12	Total/NA	Water	SM 2540C	
400-196954-11	ACW-13	Total/NA	Water	SM 2540C	
400-196954-12	ACW-14	Total/NA	Water	SM 2540C	
400-196954-13	ACW-15	Total/NA	Water	SM 2540C	
400-196954-14	ACW-16	Total/NA	Water	SM 2540C	
400-196954-15	ACW-17	Total/NA	Water	SM 2540C	
400-196954-16	ACW-18	Total/NA	Water	SM 2540C	
400-196954-17	ACW-19	Total/NA	Water	SM 2540C	
400-196954-18	ACW-20	Total/NA	Water	SM 2540C	
400-196954-19	ACW-21	Total/NA	Water	SM 2540C	
400-196954-20	ACW-22	Total/NA	Water	SM 2540C	
MB 400-514612/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-514612/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-196954-12 DU	ACW-14	Total/NA	Water	SM 2540C	
400-196954-13 DU	ACW-15	Total/NA	Water	SM 2540C	

QC Association Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

General Chemistry

Analysis Batch: 514614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-21	ACW-23	Total/NA	Water	SM 2540C	
400-196954-22	ACW-24	Total/NA	Water	SM 2540C	
400-196954-23	ACW-25	Total/NA	Water	SM 2540C	
400-196954-24	ACW-26	Total/NA	Water	SM 2540C	
400-196954-25	ACW-27	Total/NA	Water	SM 2540C	
400-196954-26	ACW-28	Total/NA	Water	SM 2540C	
400-196954-27	ACW-29	Total/NA	Water	SM 2540C	
400-196954-28	ACW-30S	Total/NA	Water	SM 2540C	
400-196954-29	ACW-30D	Total/NA	Water	SM 2540C	
400-196954-30	ACW-32S	Total/NA	Water	SM 2540C	
400-196954-31	ACW-32D	Total/NA	Water	SM 2540C	
400-196954-32	DOOM	Total/NA	Water	SM 2540C	
400-196954-33	ENSR-01	Total/NA	Water	SM 2540C	
400-196954-34	EPNG-01	Total/NA	Water	SM 2540C	
400-196954-35	OXY	Total/NA	Water	SM 2540C	
400-196954-36	PTP-01	Total/NA	Water	SM 2540C	
400-196954-37	DUP-01	Total/NA	Water	SM 2540C	
400-196954-38	DUP-02	Total/NA	Water	SM 2540C	
400-196954-39	DUP-03	Total/NA	Water	SM 2540C	
400-196954-40	DUP-04	Total/NA	Water	SM 2540C	
MB 400-514614/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-514614/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-196954-28 DU	ACW-30S	Total/NA	Water	SM 2540C	
400-196954-32 DU	DOOM	Total/NA	Water	SM 2540C	

Analysis Batch: 514873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-1	ACW-01	Total/NA	Water	120.1	
400-196954-2	ACW-02A	Total/NA	Water	120.1	
400-196954-3	ACW-04	Total/NA	Water	120.1	
400-196954-4	ACW-05	Total/NA	Water	120.1	
400-196954-5	ACW-06	Total/NA	Water	120.1	
400-196954-6	ACW-07	Total/NA	Water	120.1	
400-196954-7	ACW-09	Total/NA	Water	120.1	
400-196954-8	ACW-10	Total/NA	Water	120.1	
400-196954-9	ACW-11	Total/NA	Water	120.1	
400-196954-10	ACW-12	Total/NA	Water	120.1	
400-196954-11	ACW-13	Total/NA	Water	120.1	
400-196954-12	ACW-14	Total/NA	Water	120.1	
400-196954-13	ACW-15	Total/NA	Water	120.1	
400-196954-14	ACW-16	Total/NA	Water	120.1	
400-196954-15	ACW-17	Total/NA	Water	120.1	
400-196954-16	ACW-18	Total/NA	Water	120.1	
400-196954-17	ACW-19	Total/NA	Water	120.1	
MB 400-514873/1	Method Blank	Total/NA	Water	120.1	
LCS 400-514873/2	Lab Control Sample	Total/NA	Water	120.1	
400-196954-8 DU	ACW-10	Total/NA	Water	120.1	

Analysis Batch: 514896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-18	ACW-20	Total/NA	Water	120.1	

QC Association Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

General Chemistry (Continued)

Analysis Batch: 514896 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-19	ACW-21	Total/NA	Water	120.1	
400-196954-20	ACW-22	Total/NA	Water	120.1	
400-196954-21	ACW-23	Total/NA	Water	120.1	
400-196954-22	ACW-24	Total/NA	Water	120.1	
400-196954-23	ACW-25	Total/NA	Water	120.1	
400-196954-24	ACW-26	Total/NA	Water	120.1	
400-196954-25	ACW-27	Total/NA	Water	120.1	
400-196954-26	ACW-28	Total/NA	Water	120.1	
400-196954-27	ACW-29	Total/NA	Water	120.1	
400-196954-28	ACW-30S	Total/NA	Water	120.1	
400-196954-29	ACW-30D	Total/NA	Water	120.1	
400-196954-30	ACW-32S	Total/NA	Water	120.1	
400-196954-31	ACW-32D	Total/NA	Water	120.1	
400-196954-32	DOOM	Total/NA	Water	120.1	
400-196954-33	ENSR-01	Total/NA	Water	120.1	
400-196954-34	EPNG-01	Total/NA	Water	120.1	
400-196954-35	OXY	Total/NA	Water	120.1	
400-196954-36	PTP-01	Total/NA	Water	120.1	
400-196954-37	DUP-01	Total/NA	Water	120.1	
MB 400-514896/1	Method Blank	Total/NA	Water	120.1	
LCS 400-514896/2	Lab Control Sample	Total/NA	Water	120.1	
400-196954-18 DU	ACW-20	Total/NA	Water	120.1	
400-196954-28 DU	ACW-30S	Total/NA	Water	120.1	

Analysis Batch: 515939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-196954-38	DUP-02	Total/NA	Water	120.1	
400-196954-39	DUP-03	Total/NA	Water	120.1	
400-196954-40	DUP-04	Total/NA	Water	120.1	
MB 400-515939/1	Method Blank	Total/NA	Water	120.1	
LCS 400-515939/2	Lab Control Sample	Total/NA	Water	120.1	

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-515022/5
Matrix: Water
Analysis Batch: 515022

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/20/20 10:06	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/20/20 10:06	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/20/20 10:06	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/20/20 10:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*12/20/20 10:06*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*12/20/20 10:06*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*12/20/20 10:06*	*1*

Lab Sample ID: LCS 400-515022/1002
Matrix: Water
Analysis Batch: 515022

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0552		mg/L		110	70 - 130		
Toluene			0.0500	0.0549		mg/L		110	70 - 130		
Ethylbenzene			0.0500	0.0548		mg/L		110	70 - 130		
Xylenes, Total			0.100	0.108		mg/L		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*115*		*78 - 118*
Dibromofluoromethane	*93*		*81 - 121*
Toluene-d8 (Surr)	*110*		*80 - 120*

Lab Sample ID: 400-196954-3 MS
Matrix: Water
Analysis Batch: 515022

Client Sample ID: ACW-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	0.028		0.0500	0.0823		mg/L		109	56 - 142		
Toluene	0.00070	J	0.0500	0.0543		mg/L		107	65 - 130		
Ethylbenzene	0.0037		0.0500	0.0559		mg/L		104	58 - 131		
Xylenes, Total	0.0056	J	0.100	0.108		mg/L		102	59 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*113*		*78 - 118*
Dibromofluoromethane	*93*		*81 - 121*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 400-196954-3 MSD
Matrix: Water
Analysis Batch: 515022

Client Sample ID: ACW-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.028		0.0500	0.0797		mg/L		103	56 - 142	3	30
Toluene	0.00070	J	0.0500	0.0514		mg/L		101	65 - 130	6	30
Ethylbenzene	0.0037		0.0500	0.0527		mg/L		98	58 - 131	6	30

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-196954-3 MSD
Matrix: Water
Analysis Batch: 515022

Client Sample ID: ACW-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total	0.0056	J	0.100	0.100		mg/L		95	59 - 130	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*78 - 118*
Dibromofluoromethane	*95*		*81 - 121*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: MB 400-515228/5
Matrix: Water
Analysis Batch: 515228

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 11:13	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 11:13	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 11:13	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 11:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*12/22/20 11:13*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*12/22/20 11:13*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/22/20 11:13*	*1*

Lab Sample ID: LCS 400-515228/1002
Matrix: Water
Analysis Batch: 515228

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0563		mg/L		113	70 - 130		
Toluene			0.0500	0.0499		mg/L		100	70 - 130		
Ethylbenzene			0.0500	0.0485		mg/L		97	70 - 130		
Xylenes, Total			0.100	0.0904		mg/L		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*94*		*80 - 120*

Lab Sample ID: MB 400-515232/4
Matrix: Water
Analysis Batch: 515232

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/22/20 14:12	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/22/20 14:12	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/22/20 14:12	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/22/20 14:12	1

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-515232/4
Matrix: Water
Analysis Batch: 515232

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		12/22/20 14:12	1
Dibromofluoromethane	93		81 - 121		12/22/20 14:12	1
Toluene-d8 (Surr)	97		80 - 120		12/22/20 14:12	1

Lab Sample ID: LCS 400-515232/1002
Matrix: Water
Analysis Batch: 515232

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0453		mg/L		91	70 - 130		
Toluene			0.0500	0.0457		mg/L		91	70 - 130		
Ethylbenzene			0.0500	0.0453		mg/L		91	70 - 130		
Xylenes, Total			0.100	0.0917		mg/L		92	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	91		78 - 118
Dibromofluoromethane	95		81 - 121
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: 400-196954-35 MS
Matrix: Water
Analysis Batch: 515232

Client Sample ID: OXY
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00038		0.0500	0.0436		mg/L		87	56 - 142		
Toluene	<0.00041		0.0500	0.0424		mg/L		85	65 - 130		
Ethylbenzene	<0.00050		0.0500	0.0409		mg/L		82	58 - 131		
Xylenes, Total	<0.0016		0.100	0.0820		mg/L		82	59 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	90		78 - 118
Dibromofluoromethane	96		81 - 121
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: 400-196954-35 MSD
Matrix: Water
Analysis Batch: 515232

Client Sample ID: OXY
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00038		0.0500	0.0453		mg/L		91	56 - 142	4	30
Toluene	<0.00041		0.0500	0.0444		mg/L		89	65 - 130	5	30
Ethylbenzene	<0.00050		0.0500	0.0428		mg/L		86	58 - 131	5	30
Xylenes, Total	<0.0016		0.100	0.0867		mg/L		87	59 - 130	6	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	91		78 - 118
Dibromofluoromethane	95		81 - 121

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-196954-35 MSD
Matrix: Water
Analysis Batch: 515232

Client Sample ID: OXY
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 400-515400/4
Matrix: Water
Analysis Batch: 515400

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00038		0.0010	0.00038	mg/L			12/23/20 09:53	1
Toluene	<0.00041		0.0010	0.00041	mg/L			12/23/20 09:53	1
Ethylbenzene	<0.00050		0.0010	0.00050	mg/L			12/23/20 09:53	1
Xylenes, Total	<0.0016		0.010	0.0016	mg/L			12/23/20 09:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*93*		*78 - 118*		*12/23/20 09:53*	*1*
Dibromofluoromethane	*115*		*81 - 121*		*12/23/20 09:53*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*12/23/20 09:53*	*1*

Lab Sample ID: LCS 400-515400/1002
Matrix: Water
Analysis Batch: 515400

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0583		mg/L		117	70 - 130
Toluene	0.0500	0.0427		mg/L		85	70 - 130
Ethylbenzene	0.0500	0.0448		mg/L		90	70 - 130
Xylenes, Total	0.100	0.0850		mg/L		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*94*		*78 - 118*
Dibromofluoromethane	*111*		*81 - 121*
Toluene-d8 (Surr)	*82*		*80 - 120*

Lab Sample ID: 400-196954-17 MS
Matrix: Water
Analysis Batch: 515400

Client Sample ID: ACW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.069		0.0500	0.118		mg/L		98	56 - 142
Toluene	0.0083		0.0500	0.0453		mg/L		74	65 - 130
Ethylbenzene	0.010		0.0500	0.0413		mg/L		62	58 - 131
Xylenes, Total	0.0061	J	0.100	0.0698		mg/L		64	59 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	*97*		*78 - 118*
Dibromofluoromethane	*105*		*81 - 121*
Toluene-d8 (Surr)	*84*		*80 - 120*

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-196954-17 MSD — **Client Sample ID: ACW-19**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515400

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.069		0.0500	0.123		mg/L		107	56 - 142	4	30
Toluene	0.0083		0.0500	0.0453		mg/L		74	65 - 130	0	30
Ethylbenzene	0.010		0.0500	0.0393		mg/L		58	58 - 131	5	30
Xylenes, Total	0.0061	J	0.100	0.0668		mg/L		61	59 - 130	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*78 - 118*
Dibromofluoromethane	*107*		*81 - 121*
Toluene-d8 (Surr)	*86*		*80 - 120*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-515077/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515077

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			12/21/20 11:01	1

Lab Sample ID: LCS 400-515077/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515077

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.13		mg/L		91	90 - 110

Lab Sample ID: LCSD 400-515077/7 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515077

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.16		mg/L		92	90 - 110	0	15

Lab Sample ID: MRL 400-515077/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515077

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.00	<0.89		mg/L		82	50 - 150

Lab Sample ID: 400-196954-1 MS — **Client Sample ID: ACW-01**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515077

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5700	E	10.0	5600	E 4	mg/L		-780	80 - 120

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-196954-1 MSD — **Client Sample ID: ACW-01**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5700	E	10.0	5610	E 4	mg/L		-731	80 - 120	0	20

Lab Sample ID: MB 400-515260/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			12/22/20 11:44	1

Lab Sample ID: LCS 400-515260/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.33		mg/L		93	90 - 110

Lab Sample ID: LCSD 400-515260/7 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515260

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.25		mg/L		93	90 - 110	1	15

Lab Sample ID: MRL 400-515260/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515260

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.00	<0.89		mg/L		83	50 - 150

Lab Sample ID: 400-196954-6 MS — **Client Sample ID: ACW-07**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515260

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2500	E	200	2620	E 4	mg/L		61	80 - 120

Lab Sample ID: 400-196954-6 MSD — **Client Sample ID: ACW-07**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515260

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2500	E	200	2640	E 4	mg/L		68	80 - 120	0	20

Lab Sample ID: MB 400-515268/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			12/22/20 12:52	1

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 400-515268/6
Matrix: Water
Analysis Batch: 515268

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	9.46		mg/L		95	90 - 110		

Lab Sample ID: LCSD 400-515268/7
Matrix: Water
Analysis Batch: 515268

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			10.0	9.30		mg/L		93	90 - 110	2	15

Lab Sample ID: MRL 400-515268/5
Matrix: Water
Analysis Batch: 515268

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			1.00	<0.89		mg/L		82	50 - 150		

Lab Sample ID: 400-196954-7 MS
Matrix: Water
Analysis Batch: 515268

Client Sample ID: ACW-09
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	52000	E	5000	73000	E 4	mg/L		415	80 - 120		

Lab Sample ID: 400-196954-7 MSD
Matrix: Water
Analysis Batch: 515268

Client Sample ID: ACW-09
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	52000	E	5000	81700	E 4	mg/L		589	80 - 120	11	20

Lab Sample ID: MB 400-515471/4
Matrix: Water
Analysis Batch: 515471

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			12/23/20 13:58	1

Lab Sample ID: MB 400-515471/41
Matrix: Water
Analysis Batch: 515471

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			12/24/20 02:31	1

Lab Sample ID: LCS 400-515471/42
Matrix: Water
Analysis Batch: 515471

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	9.73		mg/L		97	90 - 110		

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 400-515471/6
Matrix: Water
Analysis Batch: 515471

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	9.77		mg/L		98	90 - 110		

Lab Sample ID: LCSD 400-515471/43
Matrix: Water
Analysis Batch: 515471

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			10.0	9.78		mg/L		98	90 - 110	1	15

Lab Sample ID: LCSD 400-515471/7
Matrix: Water
Analysis Batch: 515471

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			10.0	9.75		mg/L		98	90 - 110	0	15

Lab Sample ID: MRL 400-515471/5
Matrix: Water
Analysis Batch: 515471

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			1.00	<0.89		mg/L		83	50 - 150		

Lab Sample ID: 400-196954-32 MS
Matrix: Water
Analysis Batch: 515471

Client Sample ID: DOOM
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	30		10.0	40.0		mg/L		97	80 - 120		

Lab Sample ID: 400-196954-32 MSD
Matrix: Water
Analysis Batch: 515471

Client Sample ID: DOOM
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	30		10.0	40.1		mg/L		98	80 - 120	0	20

Lab Sample ID: MB 400-515481/4
Matrix: Water
Analysis Batch: 515481

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			12/23/20 13:57	1

Lab Sample ID: LCS 400-515481/6
Matrix: Water
Analysis Batch: 515481

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	10.3		mg/L		103	90 - 110		

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 400-515481/7
Matrix: Water
Analysis Batch: 515481

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			10.0	10.2		mg/L		102	90 - 110	1	15

Lab Sample ID: MRL 400-515481/5
Matrix: Water
Analysis Batch: 515481

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			1.00	<0.89		mg/L		85	50 - 150		

Lab Sample ID: MB 400-515840/4
Matrix: Water
Analysis Batch: 515840

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.12		1.0	0.12	mg/L			12/28/20 12:26	1

Lab Sample ID: LCS 400-515840/6
Matrix: Water
Analysis Batch: 515840

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	9.53		mg/L		95	90 - 110		

Lab Sample ID: LCSD 400-515840/7
Matrix: Water
Analysis Batch: 515840

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			10.0	9.50		mg/L		95	90 - 110	0	15

Lab Sample ID: MRL 400-515840/5
Matrix: Water
Analysis Batch: 515840

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			1.00	0.911	J	mg/L		91	50 - 150		

Lab Sample ID: 400-196954-32 MS
Matrix: Water
Analysis Batch: 515840

Client Sample ID: DOOM
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	30	F1	10.0	38.4		mg/L		85	80 - 120		

Lab Sample ID: 400-196954-32 MSD
Matrix: Water
Analysis Batch: 515840

Client Sample ID: DOOM
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	30	F1	10.0	44.3	F1	mg/L		144	80 - 120	14	20

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 400-514498/1-A
Matrix: Water
Analysis Batch: 515075

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514498

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	<0.92		2.0	0.92	mg/L		12/16/20 09:59	12/20/20 17:22	1

Lab Sample ID: LCS 400-514498/2-A
Matrix: Water
Analysis Batch: 515075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514498

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	9.55		mg/L		96	80 - 120

Lab Sample ID: 400-196954-1 MS
Matrix: Water
Analysis Batch: 515075

Client Sample ID: ACW-01
Prep Type: Total/NA
Prep Batch: 514498

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	3900		10.0	3980	4	mg/L		574	75 - 125

Lab Sample ID: 400-196954-1 MSD
Matrix: Water
Analysis Batch: 515075

Client Sample ID: ACW-01
Prep Type: Total/NA
Prep Batch: 514498

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	3900		10.0	3900	4	mg/L		-273	75 - 125	2	20

Lab Sample ID: MB 400-514511/1-A
Matrix: Water
Analysis Batch: 515218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514511

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	<0.92		2.0	0.92	mg/L		12/16/20 12:23	12/21/20 20:19	1

Lab Sample ID: LCS 400-514511/2-A
Matrix: Water
Analysis Batch: 515218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514511

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	9.55		mg/L		95	80 - 120

Method: 6010B - Metals (ICP) - DL

Lab Sample ID: 400-196954-21 MS
Matrix: Water
Analysis Batch: 515218

Client Sample ID: ACW-23
Prep Type: Total/NA
Prep Batch: 514511

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium - DL	OVER	E	10.0	276		mg/L		NaN	75 - 125

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 6010B - Metals (ICP) - DL (Continued)

Lab Sample ID: 400-196954-21 MSD
Matrix: Water
Analysis Batch: 515218

Client Sample ID: ACW-23
Prep Type: Total/NA
Prep Batch: 514511

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium - DL	OVER	E	10.0	284		mg/L		NaN	75 - 125	3	20

Method: 120.1 - Conductivity, Specific Conductance

Lab Sample ID: MB 400-514873/1
Matrix: Water
Analysis Batch: 514873

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<5.0		5.0	5.0	umhos/cm			12/16/20 14:43	1

Lab Sample ID: LCS 400-514873/2
Matrix: Water
Analysis Batch: 514873

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	10.0	9.93		umhos/cm		99	98 - 102

Lab Sample ID: 400-196954-8 DU
Matrix: Water
Analysis Batch: 514873

Client Sample ID: ACW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	8500		8460		umhos/cm		0.1	2

Lab Sample ID: MB 400-514896/1
Matrix: Water
Analysis Batch: 514896

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<5.0		5.0	5.0	umhos/cm			12/18/20 13:17	1

Lab Sample ID: LCS 400-514896/2
Matrix: Water
Analysis Batch: 514896

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	10.0	9.96		umhos/cm		100	98 - 102

Lab Sample ID: 400-196954-18 DU
Matrix: Water
Analysis Batch: 514896

Client Sample ID: ACW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	180000		177000		umhos/cm		0.1	2

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: 120.1 - Conductivity, Specific Conductance (Continued)

Lab Sample ID: 400-196954-28 DU — **Client Sample ID: ACW-30S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 514896

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	970			967		umhos/cm				0	2

Lab Sample ID: MB 400-515939/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515939

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<5.0		5.0	5.0	umhos/cm			12/29/20 11:26	1

Lab Sample ID: LCS 400-515939/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 515939

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Conductance			10.0	9.75		umhos/cm		98	98 - 102		

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-514612/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 514612

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<5.0		5.0	5.0	mg/L			12/16/20 20:49	1

Lab Sample ID: LCS 400-514612/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 514612

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			293	294		mg/L		100	78 - 122		

Lab Sample ID: 400-196954-12 DU — **Client Sample ID: ACW-14**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 514612

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	650			650		mg/L				0.3	5

Lab Sample ID: 400-196954-13 DU — **Client Sample ID: ACW-15**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 514612

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	670			690		mg/L				3	5

QC Sample Results

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 400-514614/1
Matrix: Water
Analysis Batch: 514614

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<5.0		5.0	5.0	mg/L			12/16/20 21:02	1

Lab Sample ID: LCS 400-514614/2
Matrix: Water
Analysis Batch: 514614

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			293	262		mg/L		89	78 - 122		

Lab Sample ID: 400-196954-28 DU
Matrix: Water
Analysis Batch: 514614

Client Sample ID: ACW-30S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	550			580		mg/L				5	5

Lab Sample ID: 400-196954-32 DU
Matrix: Water
Analysis Batch: 514614

Client Sample ID: DOOM
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	410			426		mg/L				4	5

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-01

Lab Sample ID: 400-196954-1
Matrix: Water
Date Collected: 12/09/20 12:05
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 13:38	PP1	TAL PEN
Total/NA	Analysis	300.0		500			515077	12/21/20 13:41	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		50			515075	12/20/20 17:32	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-02A

Lab Sample ID: 400-196954-2
Matrix: Water
Date Collected: 12/09/20 11:20
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 14:03	PP1	TAL PEN
Total/NA	Analysis	300.0		100			515481	12/23/20 23:27	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		20			515075	12/20/20 18:14	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-04

Lab Sample ID: 400-196954-3
Matrix: Water
Date Collected: 12/09/20 10:40
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 10:40	AMB	TAL PEN
Total/NA	Analysis	300.0		10000			515077	12/21/20 15:58	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		500			515075	12/20/20 18:19	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-05

Lab Sample ID: 400-196954-4
Matrix: Water
Date Collected: 12/09/20 11:30
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 12:19	AMB	TAL PEN
Total/NA	Analysis	300.0		200			515077	12/21/20 16:20	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		10			515075	12/20/20 18:30	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-06

Lab Sample ID: 400-196954-5
Matrix: Water
Date Collected: 12/09/20 13:30
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 12:44	AMB	TAL PEN
Total/NA	Analysis	300.0		100			515077	12/21/20 16:43	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		10			515075	12/20/20 18:35	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-07

Lab Sample ID: 400-196954-6
Matrix: Water
Date Collected: 12/09/20 12:15
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 13:08	AMB	TAL PEN
Total/NA	Analysis	300.0		200			515471	12/23/20 17:23	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		20			515075	12/20/20 18:40	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-09

Lab Sample ID: 400-196954-7
Matrix: Water
Date Collected: 12/09/20 14:00
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 13:33	AMB	TAL PEN
Total/NA	Analysis	300.0		5000			515481	12/23/20 23:50	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		50			515075	12/20/20 18:46	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-10

Lab Sample ID: 400-196954-8
Matrix: Water
Date Collected: 12/09/20 11:55
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 13:58	AMB	TAL PEN
Total/NA	Analysis	300.0		200			515268	12/22/20 15:31	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		5			515075	12/20/20 18:51	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-11

Lab Sample ID: 400-196954-9
Matrix: Water
Date Collected: 12/09/20 13:00
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 14:22	AMB	TAL PEN
Total/NA	Analysis	300.0		1000			515268	12/22/20 15:54	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		50			515075	12/20/20 19:12	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-12

Lab Sample ID: 400-196954-10
Matrix: Water
Date Collected: 12/09/20 12:35
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 14:47	AMB	TAL PEN
Total/NA	Analysis	300.0		100			515268	12/22/20 16:17	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		5			515075	12/20/20 19:17	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-13

Lab Sample ID: 400-196954-11
Matrix: Water
Date Collected: 12/09/20 11:10
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 15:12	AMB	TAL PEN
Total/NA	Analysis	300.0		50			515471	12/23/20 18:32	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		1			515075	12/20/20 19:23	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	10 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-14

Lab Sample ID: 400-196954-12
Matrix: Water
Date Collected: 12/09/20 10:10
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 15:37	AMB	TAL PEN
Total/NA	Analysis	300.0		5			515471	12/23/20 18:55	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		1			515075	12/20/20 19:28	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-15

Lab Sample ID: 400-196954-13

Date Collected: 12/09/20 11:00
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 16:01	AMB	TAL PEN
Total/NA	Analysis	300.0		10			515260	12/22/20 16:17	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		1			515075	12/20/20 19:33	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-16

Lab Sample ID: 400-196954-14

Date Collected: 12/09/20 09:55
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 16:26	AMB	TAL PEN
Total/NA	Analysis	300.0		500			515260	12/22/20 17:26	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		50			515075	12/20/20 19:38	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-17

Lab Sample ID: 400-196954-15

Date Collected: 12/09/20 09:35
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 16:51	AMB	TAL PEN
Total/NA	Analysis	300.0		500			515260	12/22/20 18:11	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		10			515075	12/20/20 19:44	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-18

Lab Sample ID: 400-196954-16

Date Collected: 12/09/20 12:50
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 17:15	AMB	TAL PEN
Total/NA	Analysis	300.0		1000			515260	12/22/20 18:34	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		500			515075	12/20/20 19:49	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-19

Lab Sample ID: 400-196954-17

Date Collected: 12/09/20 13:50
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515400	12/23/20 10:19	BEP	TAL PEN
Total/NA	Analysis	300.0		100			515260	12/22/20 20:51	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		10			515075	12/20/20 19:59	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	10 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-20

Lab Sample ID: 400-196954-18

Date Collected: 12/09/20 11:05
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515400	12/23/20 10:46	BEP	TAL PEN
Total/NA	Analysis	300.0		10000			515481	12/24/20 00:36	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		500			515075	12/20/20 20:20	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-21

Lab Sample ID: 400-196954-19

Date Collected: 12/09/20 12:10
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515400	12/23/20 11:12	BEP	TAL PEN
Total/NA	Analysis	300.0		20			515260	12/22/20 22:22	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		1			515075	12/20/20 20:31	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	10 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-22

Lab Sample ID: 400-196954-20

Date Collected: 12/09/20 13:20
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 17:40	AMB	TAL PEN
Total/NA	Analysis	300.0		20			515260	12/22/20 22:45	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		5			515075	12/20/20 20:36	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	10 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-23

Lab Sample ID: 400-196954-21

Date Collected: 12/09/20 10:20
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 18:05	AMB	TAL PEN
Total/NA	Analysis	300.0		50			515268	12/22/20 17:25	CAC	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	5			515464	12/22/20 17:34	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	10 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: ACW-24

Lab Sample ID: 400-196954-22

Date Collected: 12/09/20 12:50
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 14:27	PP1	TAL PEN
Total/NA	Analysis	300.0		10000			515268	12/22/20 18:11	CAC	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	500			515218	12/21/20 21:11	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: ACW-25

Lab Sample ID: 400-196954-23

Date Collected: 12/09/20 10:50
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 14:51	PP1	TAL PEN
Total/NA	Analysis	300.0		1000			515268	12/22/20 18:34	CAC	TAL PEN
Total/NA	Prep	3010A	DL2		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL2	500			515464	12/22/20 19:08	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: ACW-26

Lab Sample ID: 400-196954-24

Date Collected: 12/09/20 11:55
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 15:15	PP1	TAL PEN
Total/NA	Analysis	300.0		20			515268	12/22/20 18:57	CAC	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	2			515464	12/22/20 17:44	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	25 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-27

Lab Sample ID: 400-196954-25

Date Collected: 12/09/20 12:35
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 15:40	PP1	TAL PEN
Total/NA	Analysis	300.0		100			515268	12/22/20 19:19	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B		1			515218	12/21/20 21:27	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	10 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: ACW-28

Lab Sample ID: 400-196954-26

Date Collected: 12/09/20 13:25
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 16:04	PP1	TAL PEN
Total/NA	Analysis	300.0		20			515268	12/22/20 19:42	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B		1			515218	12/21/20 21:32	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: ACW-29

Lab Sample ID: 400-196954-27

Date Collected: 12/09/20 14:10
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 16:28	PP1	TAL PEN
Total/NA	Analysis	300.0		2			515268	12/22/20 20:28	CAC	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	2			515464	12/22/20 17:50	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: ACW-30S

Lab Sample ID: 400-196954-28

Date Collected: 12/09/20 08:25
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 16:52	PP1	TAL PEN
Total/NA	Analysis	300.0		20			515260	12/22/20 23:31	CAC	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	2			515464	12/22/20 17:55	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Job ID: 400-196954-1
Project/Site: Jal #4 Gas Plant

Client Sample ID: ACW-30D
Lab Sample ID: 400-196954-29
Date Collected: 12/09/20 09:05
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 17:17	PP1	TAL PEN
Total/NA	Analysis	300.0		1000			515481	12/24/20 00:59	TAJ	TAL PEN
Total/NA	Prep	3010A	DL2		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL2	500			515464	12/22/20 19:14	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: ACW-32S
Lab Sample ID: 400-196954-30
Date Collected: 12/09/20 08:55
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 17:41	PP1	TAL PEN
Total/NA	Analysis	300.0		100			515481	12/24/20 01:21	TAJ	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	10			515464	12/22/20 18:06	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	10 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: ACW-32D
Lab Sample ID: 400-196954-31
Date Collected: 12/09/20 09:40
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 18:05	PP1	TAL PEN
Total/NA	Analysis	300.0		10			515471	12/23/20 21:34	TAJ	TAL PEN
Total/NA	Prep	3010A	DL2		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL2	20			515464	12/22/20 19:19	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	25 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: DOOM
Lab Sample ID: 400-196954-32
Date Collected: 12/09/20 08:55
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 18:29	PP1	TAL PEN
Total/NA	Analysis	300.0		1			515471	12/24/20 03:39	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B		1			515218	12/21/20 22:20	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Job ID: 400-196954-1
Project/Site: Jal #4 Gas Plant

Client Sample ID: ENSR-01
Lab Sample ID: 400-196954-33
Date Collected: 12/09/20 08:55
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 18:54	PP1	TAL PEN
Total/NA	Analysis	300.0		500			515840	12/28/20 15:29	CAC	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B		1			515218	12/21/20 22:25	LDC	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: EPNG-01
Lab Sample ID: 400-196954-34
Date Collected: 12/09/20 10:10
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 19:18	PP1	TAL PEN
Total/NA	Analysis	300.0		10			515471	12/23/20 23:05	TAJ	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	2			515464	12/22/20 18:16	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: OXY
Lab Sample ID: 400-196954-35
Date Collected: 12/09/20 09:25
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 14:38	AMB	TAL PEN
Total/NA	Analysis	300.0		10			515471	12/23/20 23:28	TAJ	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	2			515464	12/22/20 18:21	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	25 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: PTP-01
Lab Sample ID: 400-196954-36
Date Collected: 12/09/20 10:20
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 16:18	AMB	TAL PEN
Total/NA	Analysis	300.0		10			515471	12/23/20 23:51	TAJ	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	2			515572	12/23/20 17:24	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	25 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: DUP-01

Lab Sample ID: 400-196954-37
Matrix: Water
Date Collected: 12/09/20 11:00
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 16:43	AMB	TAL PEN
Total/NA	Analysis	300.0		50	10 mL	1.0 mL	515840	12/28/20 15:52	CAC	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	10			515572	12/23/20 17:27	GESP	TAL PEN
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	10 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: DUP-02

Lab Sample ID: 400-196954-38
Matrix: Water
Date Collected: 12/09/20 11:00
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 17:08	AMB	TAL PEN
Total/NA	Analysis	300.0		500			515840	12/28/20 17:00	CAC	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	5			515572	12/23/20 17:31	GESP	TAL PEN
Total/NA	Analysis	120.1		1			515939	12/29/20 11:26	DEK	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: DUP-03

Lab Sample ID: 400-196954-39
Matrix: Water
Date Collected: 12/09/20 11:30
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 17:33	AMB	TAL PEN
Total/NA	Analysis	300.0		5000			515840	12/28/20 17:23	CAC	TAL PEN
Total/NA	Prep	3010A	DL2		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL2	500			515572	12/23/20 17:39	GESP	TAL PEN
Total/NA	Analysis	120.1		1			515939	12/29/20 11:26	DEK	TAL PEN
Total/NA	Analysis	SM 2540C		1	5 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: DUP-04

Lab Sample ID: 400-196954-40
Matrix: Water
Date Collected: 12/09/20 12:00
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 17:59	AMB	TAL PEN
Total/NA	Analysis	300.0		1			515471	12/24/20 00:59	TAJ	TAL PEN
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	2			515464	12/22/20 19:03	GESP	TAL PEN
Total/NA	Analysis	120.1		1			515939	12/29/20 11:26	DEK	TAL PEN
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: TRIP BLANK-01
Lab Sample ID: 400-196954-41
Date Collected: 12/09/20 00:00
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 18:24	AMB	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-514498/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		1			515075	12/20/20 17:22	LDC	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-514511/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B		1			515218	12/21/20 20:19	LDC	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-514612/1
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-514614/1
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-514873/1
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-514896/1
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515022/5

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 10:06	AMB	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515077/4

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515077	12/21/20 11:01	TAJ	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515228/5

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 11:13	PP1	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515232/4

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 14:12	AMB	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515260/4

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515260	12/22/20 11:44	CAC	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515268/4

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515268	12/22/20 12:52	CAC	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515400/4

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515400	12/23/20 09:53	BEP	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515471/4

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515471	12/23/20 13:58	TAJ	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515471/41

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515471	12/24/20 02:31	TAJ	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515481/4

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515481	12/23/20 13:57	TAJ	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515840/4

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515840	12/28/20 12:26	CAC	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-515939/1

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	120.1		1			515939	12/29/20 11:26	DEK	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-514498/2-A

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		1			515075	12/20/20 17:27	LDC	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-514511/2-A

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B		1			515218	12/21/20 20:25	LDC	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-514612/2
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-514614/2
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-514873/2
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-514896/2
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-515022/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 09:00	AMB	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-515077/6
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515077	12/21/20 11:47	TAJ	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-515228/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515228	12/22/20 10:15	PP1	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-515232/1002

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 13:11	AMB	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-515260/6

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515260	12/22/20 12:29	CAC	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-515268/6

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515268	12/22/20 13:38	CAC	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-515400/1002

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515400	12/23/20 08:53	BEP	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-515471/42

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515471	12/24/20 02:53	TAJ	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-515471/6

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515471	12/23/20 14:43	TAJ	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-515481/6

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515481	12/23/20 14:43	TAJ	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-515840/6

Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515840	12/28/20 13:12	CAC	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-515939/2

Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	120.1		1			515939	12/29/20 11:26	DEK	TAL PEN

Client Sample ID: Lab Control Sample Dup — Lab Sample ID: LCSD 400-515077/7

Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515077	12/21/20 12:09	TAJ	TAL PEN

Client Sample ID: Lab Control Sample Dup — Lab Sample ID: LCSD 400-515260/7

Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515260	12/22/20 12:52	CAC	TAL PEN

Client Sample ID: Lab Control Sample Dup — Lab Sample ID: LCSD 400-515268/7

Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515268	12/22/20 14:00	CAC	TAL PEN

Client Sample ID: Lab Control Sample Dup — Lab Sample ID: LCSD 400-515471/43

Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515471	12/24/20 03:16	TAJ	TAL PEN

Client Sample ID: Lab Control Sample Dup — Lab Sample ID: LCSD 400-515471/7

Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515471	12/23/20 15:06	TAJ	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: Lab Control Sample Dup — Lab Sample ID: LCSD 400-515481/7

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515481	12/23/20 15:06	TAJ	TAL PEN

Client Sample ID: Lab Control Sample Dup — Lab Sample ID: LCSD 400-515840/7

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515840	12/28/20 13:35	CAC	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: MRL 400-515077/5

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515077	12/21/20 11:24	TAJ	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: MRL 400-515260/5

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515260	12/22/20 12:06	CAC	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: MRL 400-515268/5

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515268	12/22/20 13:15	CAC	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: MRL 400-515471/5

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515471	12/23/20 14:20	TAJ	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: MRL 400-515481/5

Date Collected: N/A
Date Received: N/A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515481	12/23/20 14:20	TAJ	TAL PEN

Lab Chronicle

Client: AECOM
Job ID: 400-196954-1
Project/Site: Jal #4 Gas Plant

Client Sample ID: Lab Control Sample
Lab Sample ID: MRL 400-515840/5
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515840	12/28/20 12:49	CAC	TAL PEN

Client Sample ID: ACW-01
Lab Sample ID: 400-196954-1 MS
Date Collected: 12/09/20 12:05
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515077	12/21/20 12:55	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		50			515075	12/20/20 18:04	LDC	TAL PEN

Client Sample ID: ACW-01
Lab Sample ID: 400-196954-1 MSD
Date Collected: 12/09/20 12:05
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515077	12/21/20 13:18	TAJ	TAL PEN
Total/NA	Prep	3010A			50 mL	50 mL	514498	12/16/20 09:59	NET	TAL PEN
Total/NA	Analysis	6010B		50			515075	12/20/20 18:09	LDC	TAL PEN

Client Sample ID: ACW-04
Lab Sample ID: 400-196954-3 MS
Date Collected: 12/09/20 10:40
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 11:05	AMB	TAL PEN

Client Sample ID: ACW-04
Lab Sample ID: 400-196954-3 MSD
Date Collected: 12/09/20 10:40
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515022	12/20/20 11:29	AMB	TAL PEN

Client Sample ID: ACW-07
Lab Sample ID: 400-196954-6 MS
Date Collected: 12/09/20 12:15
Matrix: Water
Date Received: 12/10/20 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20			515260	12/22/20 13:38	CAC	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-07
Date Collected: 12/09/20 12:15
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-6 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20			515260	12/22/20 14:01	CAC	TAL PEN

Client Sample ID: ACW-09
Date Collected: 12/09/20 14:00
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-7 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		500			515268	12/22/20 14:46	CAC	TAL PEN

Client Sample ID: ACW-09
Date Collected: 12/09/20 14:00
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-7 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		500			515268	12/22/20 15:09	CAC	TAL PEN

Client Sample ID: ACW-19
Date Collected: 12/09/20 13:50
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-17 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515400	12/23/20 13:23	BEP	TAL PEN

Client Sample ID: ACW-19
Date Collected: 12/09/20 13:50
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-17 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515400	12/23/20 13:49	BEP	TAL PEN

Client Sample ID: ACW-23
Date Collected: 12/09/20 10:20
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-21 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	5			515218	12/21/20 21:01	LDC	TAL PEN

Client Sample ID: ACW-23
Date Collected: 12/09/20 10:20
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-21 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A	DL		50 mL	50 mL	514511	12/16/20 12:23	KWN	TAL PEN
Total/NA	Analysis	6010B	DL	5			515218	12/21/20 21:06	LDC	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: DOOM
Date Collected: 12/09/20 08:55
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-32 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515471	12/24/20 04:02	TAJ	TAL PEN
Total/NA	Analysis	300.0		1			515840	12/28/20 14:20	CAC	TAL PEN

Client Sample ID: DOOM
Date Collected: 12/09/20 08:55
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-32 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			515471	12/24/20 04:25	TAJ	TAL PEN
Total/NA	Analysis	300.0		1			515840	12/28/20 14:43	CAC	TAL PEN

Client Sample ID: OXY
Date Collected: 12/09/20 09:25
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-35 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 15:03	AMB	TAL PEN

Client Sample ID: OXY
Date Collected: 12/09/20 09:25
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-35 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	515232	12/22/20 15:28	AMB	TAL PEN

Client Sample ID: ACW-10
Date Collected: 12/09/20 11:55
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-8 DU
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	120.1		1			514873	12/16/20 14:43	CAC	TAL PEN

Client Sample ID: ACW-14
Date Collected: 12/09/20 10:10
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-12 DU
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Client Sample ID: ACW-15
Date Collected: 12/09/20 11:00
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-13 DU
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514612	12/16/20 20:49	DEK	TAL PEN

Lab Chronicle

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Client Sample ID: ACW-20

Date Collected: 12/09/20 11:05
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-18 DU

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN

Client Sample ID: ACW-30S

Date Collected: 12/09/20 08:25
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-28 DU

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	120.1		1			514896	12/18/20 13:17	CAC	TAL PEN
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Client Sample ID: DOOM

Date Collected: 12/09/20 08:55
Date Received: 12/10/20 09:06

Lab Sample ID: 400-196954-32 DU

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	50 mL	50 mL	514614	12/16/20 21:02	DEK	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Method Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6010B	Metals (ICP)	SW846	TAL PEN
120.1	Conductivity, Specific Conductance	MCAWW	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
3010A	Preparation, Total Metals	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN

Protocol References:

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

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

Client: AECOM
Project/Site: Jal #4 Gas Plant

Job ID: 400-196954-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-21
Florida	NELAP	E81010	06-30-21
Georgia	State	E81010(FL)	06-30-21
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-21
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-21
Tennessee	State	TN02907	06-30-21
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-21
West Virginia DEP	State	136	12-31-20

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Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Cameron Haber + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-75501-20410.1
Client Contact: Mr. Wallace Gilmore	Phone: 469-223-8082	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 4
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

400-196954 COC

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - 6010-Ca	8260B_LL - BTEX Only	120.1-Turbidity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl only	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N		
ACW-01	12.9.20	1205	G	Water			✓	✓	✓		
ACW-02A		1120		Water			✓	✓	✓		
ACW-04		1040		Water			✓	✓	✓		
ACW-05		1130		Water			✓	✓	✓		
ACW-06		1330		Water			✓	✓	✓		
ACW-07		1215		Water			✓	✓	✓		
ACW-09		1400		Water			✓	✓	✓		
ACW-10		1155		Water			✓	✓	✓		
ACW-11		1300		Water			✓	✓	✓		
ACW-12		1235		Water			✓	✓	✓		
ACW-13	↓	1110	↓	Water			✓	✓	✓		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Cameron Haber	12.9.20 1500	HMI			
2						
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: IR9 1.2, 4.5, 0.3, 2.2, 2.5

Released to Imaging: 10/28/2022 9:54:55 AM
Received by OCD: 4/19/2021 1:26:48 PM

Eurofins TestAmerica, Houston
[illegible] Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Cameron Haber + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-75501-20410.1
Client Contact: Mr. Wallace Gilmore	Phone: 469-223-8082	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 2 of 4
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - 6010-Ca	8260B_LL - BTEX Only	120.1-Turbidity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl only	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N		
ACW-14	12.9.20	1010	G	Water			✓	✓	✓		
ACW-15		1100		Water			✓	✓	✓		
ACW-16		955		Water			✓	✓	✓		
ACW-17		935		Water			✓	✓	✓		
ACW-18		1250		Water			✓	✓	✓		
ACW-19		1350		Water			✓	✓	✓		
ACW-20		1105		Water			✓	✓	✓		
ACW-21		1210		Water			✓	✓	✓		
ACW-22		1320		Water			✓	✓	✓		
ACW-23		1020		Water			✓	✓	✓		
ACW-24		1250		Water			✓	✓	✓		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Cameron Haber	12.9.20 1500	HMI			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12-10-20 9:06	Company

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

Released to Imaging: 10/28/2022 9:54:55 AM
Received by OCD: 4/19/2021 1:26:48 PM

TestAmerica, Houston
[illegible] Rollway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Cameron Haber + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-75501-20410.1
Client Contact: Mr. Wallace Gilmore	Phone: 469-223-8082	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 3 of 4
Company: AECOM				Job #:

Address: 19219 Katy Freeway Suite 100	Due Date Requested:	Analysis Requested
City: Houston	TAT Requested (days):	
State, Zip: TX, 77094		
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914	
Email: wallace.gilmore@aecom.com	WO #:	
Project Name: JAL#4 Gas Plant	Project #: 60008415	
Site:	SSOW#:	

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - 6010-Ca	8260B_LL - BTEX Only	120.1-Turbidity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl only	Total Number of containers	Special Instructions/Note:
Preservation Code:							D	A	N		
ACW-25	12.9.20	1050	G	Water			✓	✓	✓		
ACW-26		1155		Water			✓	✓	✓		
ACW-27		1235		Water			✓	✓	✓		
ACW-28		1325		Water			✓	✓	✓		
ACW-29		1410		Water			✓	✓	✓		
ACW-30s		825		Water			✓	✓	✓		
ACW-30D		905		Water			✓	✓	✓		
ACW-32s		855		Water			✓	✓	✓		
ACW-32D		940		Water			✓	✓	✓		
Doom		855		Water			✓	✓	✓		
ENSR-01		855		Water			✓	✓	✓		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Cameron Haber	12.9.20 1500	HMI			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12-10-20 9:06	Company

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

Released to Imaging: 10/28/2022 9:54:55 AM
Received by OCD: 4/19/2021 1:26:48 PM

...is TestAmerica, Houston
...10 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Cameron Haber + HMI Team	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-75501-20410.1
Client Contact: Mr. Wallace Gilmore	Phone: 469-273-60982	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 4 of 4
Company: AECOM				Job #:
Address: 19219 Katy Freeway Suite 100	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77094				
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914			
Email: wallace.gilmore@aecom.com	WO #:			
Project Name: JAL#4 Gas Plant	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - 6010-Ca	8260B_LL - BTEX Only	120.1-Turbidity, 2540C_Calcd-TDS, 300_ORGFM_28D-Cl only	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N		
EPNG-01	12.9.20	1010	G	Water			✓	✓	✓		
Oxy		925		Water			✓	✓	✓		
PTP-01		1020		Water			✓	✓	✓		
Dup-01		1100		Water			✓	✓	✓		
Dup-02		1100		Water			✓	✓	✓		
Dup-03		1130		Water			✓	✓	✓		
Dup-04		1200		Water			✓	✓	✓		
Trip Blank-01		—		Water				✓			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Cameron Haber	12.9.20 1500	HMI			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12-10-20 9:06	Company

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

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: AECOM Job Number: 400-196954-1

Login Number: 196954 **List Source: Eurofins TestAmerica, Pensacola**
List Number: 1
Creator: Whitley, Adrian

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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	1.2, 4.5, 0.3, 2.2, 2.5°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Data Usability Summary

Date: February 18, 2021

To: Wally Gilmore, AECOM

CC: Robert Jones, AECOM

From: Ruth Parks, AECOM

Subject: Data Usability Summary for Review of Groundwater Data
Laboratory Report Number 400-196954
Jal #4 Gas Plant, Jal, New Mexico

Data Usability Summary

Data from Eurofins TestAmerica in Pensacola, Florida were reviewed for the analysis of samples collected December 9, 2020 at the Jal #4 Gas Plant in Jal, New Mexico.

Data were reviewed for conformance to the requirements of *SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods* (SW-846). The purpose of this sampling event was to provide current data on concentrations of potential chemicals of concern (COCs) in groundwater for the Jal #4 Gas Plant property.

Samples were analyzed using:

- SW-846 6010B – Inductively Coupled Plasma – Atomic Emission Spectrometry,
- SW-846 8260B - Volatile Organic Compounds by Gas Chromatography-Mass Spectrometry (GC/MS),
- SW-846 300.0 – Determination of Inorganic Anions by Ion Chromatograph,
- SW-846 120.1 – Conductivity, Specific Conductance, and
- SW-846 2540 C-1997 – Total Dissolved Solids (Dried at 180 C).

Data were reviewed and the results are discussed in this Data Usability Summary (DUS). The reportable data, quality control results, sample receipt checklist and chain-of-custody (C-O-C) records were examined for laboratory report 400-196954.

Introduction

Groundwater samples, a field duplicate, and a trip blank were analyzed for site-specific metals, volatile organic compounds (VOCs), inorganic anions, specific conductivity, and total dissolved solids (TDS) as requested on the chain-of-custodies (C-O-C). **Table B-1** lists the sample identifications cross-referenced to the laboratory identifications.

Analytical Results

Qualified data are listed in **Table B-2**.

Reviewed by
Robert G. Jones
2/12/2021
Robert G. Jones

Preservation and Holding Times

All samples were evaluated for agreement with the chain-of-custody (C-O-C). Sample bottles were received in good condition and within the temperature acceptance criteria of ≤ 6 °C. Samples were prepared and analyzed within the holding times specified in SW-846 Table 2-40.

Calibrations

Method 300.0 had continuing calibration verification (CCV) samples which were noted as recovered outside of the laboratory acceptance criteria. However, the associated batches had acceptable laboratory control sample recoveries; therefore, sample results were not qualified. Standard Method 2540C had sample results which exceeded the calibration range and therefore associated sample results were qualified as "J" and listed in **Table B-2.**

Blanks

Target analytes were not detected in trip or method blanks. However, the continuing calibration blank for batch 400-515260 contained chloride above the reporting limit and therefore associated sample results were qualified as "J" and listed in **Table B-2**.

Internal Standards and Surrogate Recoveries

Results with internal standard area counts above the laboratory specifications are qualified as "JL" and below specifications are qualified as "JH" for detected results and "UJL" for non-detected results and listed in **Table B-2**.

Laboratory Control Samples

Samples with laboratory control sample (LCS) recoveries (%R) outside of laboratory specifications are qualified as "JL" and "UJL" when below specifications and as "JH" when above specifications and listed in **Table B-2**. If a laboratory control sampled duplicate (LCSD) was analyzed, data with duplicate precision (as relative percent difference [RPD]) outside of laboratory acceptance criteria is qualified as "J" for LCS precision and listed in **Table B-2.**

Matrix Spike (MS)/Matrix Spike Duplicates (MSD)

Non-project sample data were not evaluated. Data with MS/MSD recoveries outside of laboratory specifications are qualified as "JL" for detections and "UJ" for non-detects when below specifications and "JH" when above specifications and listed in **Table B-2**. Sample data with MS/MSD precision (RPD) outside of the laboratory acceptance criteria are qualified as "J" for MS/MSD precision and listed in **Table B-2**.

Field Precision

Precision results for replicate and duplicate samples are summarized in **Table B-3.** Duplicate precision was not calculated for analytes which were reported as non-detect (U) or qualified as "U" in **Table B-2**. Analytes with non-detect results for both replicate and duplicate were not listed in the table. Field sample and sample duplicate analytes with RPD results outside of the project quality acceptance criteria of ≤ 30 % RPD are qualified as estimated "J" and listed in **Table B-2**.

Reviewed by
Robert G. Jones
2/12/2021

AECOM

Data Usability Summary

Summary

Groundwater analytical data are usable for the purpose of determining concentrations of metals, VOCs, inorganics anions, specific conductivity, and TDS in samples.

Tables

Table B-1. Cross-Reference Field Sample Identifications and Laboratory Identifications

Field Identification	Laboratory Identification	Comment
ACW-01	400-196954-1	MS/MSD Chloride
ACW-02A	400-196954-2	
ACW-04	400-196954-3	MS/MSD VOC
ACW-05	400-196954-4	
ACW-06	400-196954-5	
ACW-07	400-196954-6	MS/MSD Chloride
ACW-09	400-196954-7	
ACW-10	400-196954-8	
ACW-11	400-196954-9	
ACW-12	400-196954-10	
ACW-13	400-196954-11	
ACW-14	400-196954-12	
ACW-15	400-196954-13	
ACW-16	400-196954-14	
ACW-17	400-196954-15	
ACW-18	400-196954-16	
ACW-19	400-196954-17	MS/MSD VOC
ACW-20	400-196954-18	
ACW-21	400-196954-19	
ACW-22	400-196954-20	
ACW-23	400-196954-21	MS/MSD Sodium
ACW-24	400-196954-22	

Reviewed by
Robert G. Jones
2/12/2021

ACW-25	400-196954-23	
ACW-26	400-196954-24	
ACW-27	400-196954-25	
ACW-28	400-196954-26	
ACW-29	400-196954-27	
ACW-30S	400-196954-28	
ACW-30D	400-196954-29	
ACW-32S	400-196954-30	
ACW-32D	400-196954-31	
DOOM	400-196954-32	MS/MSD Chloride
ENSR-01	400-196954-33	
EPNG-01	400-196954-34	
OXY	400-196954-35	MS/MSD VOC
PTP-01	400-196954-36	
DUP-01	400-196954-37	Duplicate of ACW-32S
DUP-02	400-196954-38	Duplicate of ACW-30D
DUP-03	400-196954-39	Duplicate of ACW-20
DUP-04	400-196954-40	Duplicate of ACW-29
TRIP BLANK-01	400-196954-41	Trip Blank

Table B-2. Qualified Analytical Data

Field Identification	Analyte	Qualification	Reason for Qualification
ACW-20	Benzene	J	Field Precision RPD
DUP-03	Benzene	J	Field Precision RPD
ACW-29	Chloride	J	Field Precision RPD
DUP-04	Chloride	J	Field Precision RPD
ACW-19	Chloride	J	Chloride Detected in CCB
ACW-21	Chloride	J	Chloride Detected in CCB

Reviewed by
Robert G. Jones
2/12/2021

ACW-22	Chloride	J	Chloride Detected in CCB
ACW-30S	Chloride	J	Chloride Detected in CCB
ACW-04	TDS	J	Result Exceeded Calibration
ACW-11	TDS	J	Result Exceeded Calibration
ACW-18	TDS	J	Result Exceeded Calibration
ACW-20	TDS	J	Result Exceeded Calibration
ACW-24	TDS	J	Result Exceeded Calibration
DUP-03	TDS	J	Result Exceeded Calibration

J – Estimated data; the sample concentration is approximated.
L – Bias in sample result is likely low.
U – Not detected.

Table B-3. Field Precision

Field Identification	Analyte	Sample Result	Duplicate Result	RPD	Qualified
ACW-32S / DUP-01	Chloride	1000	1000	0	A
	Sodium	260	250	3.9	A
	Specific Conductance	3900	3900	0	A
	TDS	2900	3100	6.7	A
ACW-30D / DUP-02	Benzene	0.0014	0.0010	33.3	A*
	Chloride	16000	17000	6.1	A
	Sodium	5500	4000	31.6	A*
	Specific Conductance	46000	42000	9.1	A
	TDS	33000	33000	0	A
ACW-20 / DUP-03	Benzene	0.088	0.054	47.9	J
	Toluene	0.0084	0.0071	16.8	A
	Ethylbenzene	0.0059	0.0054	8.8	A
	Xylenes	0.0037 J	0.0040 J	7.8	A
	Chloride	72000	74000	2.7	A
	Sodium	44000	35000	22.8	A
	Specific Conductance	180000	170000	5.7	A
	TDS	120000	120000	0	A

Reviewed by
Robert G. Jones
2/12/2021

AECOM

Data Usability Summary

ACW-29 / DUP-04	Chloride	61	39	44.0	J
	Sodium	73	71	2.8	A
	Specific Conductance	780	720	8.0	A
	TDS	500	500	0	A

RPD = ((SR-DR)*200)/(SR+DR)
A – Acceptable data
A* - Acceptable data since absolute difference is <2X MQL
J – Estimated data due to inability to meet QC criteria

Reviewed by
Robert G. Jones
2/12/2021

Appendix D

Memorandum – Results for Sieve Analysis – Jal No. 4 Plant

AECOM

Memorandum

Date: March 29, 2021

To: Joseph Wiley, P.G., Kinder Morgan, Inc.

From: Wally Gilmore, P.G., Andrew Messer, P.G., AECOM

Subject: **Results for Sieve Analyses - Former Jal No. 4 Plant Site**

INTRODUCTION

At the request of El Paso Natural Gas Company, LLC, (EPNG), a subsidiary of Kinder Morgan, Inc., AECOM Technical Services Inc. (AECOM) conducted exploration drilling near the Jal No. 4 Plant ("the Site") for lithologic inspection and soil grain size analysis to facilitate design of remediation extraction wells. The Site is located approximately 9 miles north of Jal, Lea County, New Mexico as shown on **Figure 1**.

This Memorandum includes soil boring logs and grain size analyses results for three soil borings that were drilled and sampled in October and November of 2020 using roto-sonic drilling equipment. Results for samples collected using roto-sonic equipment during 2018 monitoring well installation are also included.

BACKGROUND

Groundwater at the site is impacted by chloride and benzene at concentrations that exceed the regulatory standards established within New Mexico Administrative Code (NMAC) 20.6.2.3103. The site investigation and remediation are being conducted under the regulatory authority of the New Mexico Oil Conservation Division (NMOCD) according to Abatement Plan #AP-101.

The depth to groundwater in the Site area is approximately 100 feet below ground surface (ft bgs) and the saturated thickness of the uppermost groundwater-bearing unit is approximately 60 to 80 ft. The direction of groundwater flow is generally to the southeast.

SCOPE OF WORK

AECOM provided support to amend the Water Easement permit and terms of access with the New Mexico State Land Office. AECOM prepared a work plan, Health and Safety plan, and subcontracted Cascade Drilling, Peoria Arizona (Cascade) to conduct drilling and sampling using roto-sonic drilling methods. AECOM coordinated with Cascade to conduct utility clearances through the New Mexico One-Call system, and to submit to the New Mexico Office of the State Engineer (NMOSE) an *Application for Permit to Drill a Well with No Consumptive Use* (NMOSE

Form WR-07) and a *Well Plugging Plan of Operations* (NMOSE Form WD-08), which were approved by the NMOSE prior to initiation of field activities (**Attachment 1**).

In October and November of 2020, Cascade advanced boreholes BH-1 through BH-3 at the locations described below and shown on **Figure 2**.

Boring	Latitude	Longitude	Total Depth of Boring (ft bgs)
BH-1	32.253825° North	103.18714° West	170
BH-2	32.254661° North	103.186797° West	165
BH-3	32.255314° North	103.1868° West	167.5

The upper 15 feet of the exploratory soil borings were advanced using a hydrovac to clear for potential subsurface obstructions. Below a depth of 15 ft bgs, the borings were advanced using roto-sonic drilling methods, which use rotation and vibration to drill into the soil. The borings were advanced using a 6-inch diameter drive casing and a 4-inch diameter core barrel to collect continuous core samples in a series of approximately 2.5-foot sections of plastic bags, labeled with the corresponding sample depth interval and orientation. The borings were logged from the surface to total depth by an AECOM Geologist. Soil boring logs are provided in **Attachment 2**.

Vadose zone soil samples were collected at 20-ft intervals starting at 20 ft bgs in BH-1, 25 ft bgs in BH-2 and 30 ft bgs in BH-3. Below a depth of 105 ft bgs, saturated zone soil samples were collected at 10 ft depth intervals to the total depth of the boreholes. The soil samples were submitted to the Western Technologies Inc. geotechnical laboratory in Tucson, Arizona for sieve analysis using American Society for Testing and Materials (ASTM) C136. The Western Technologies Inc. reports are provided in **Attachment 3**.

At the conclusion of drilling and soil sampling, the boreholes were abandoned in accordance with the *Well Plugging Plan of Operations* approved by the NMOSE. Sample core not submitted for grain size analysis was transferred to a lined roll-off bin pending offsite disposal. A composite soil sample was collected from the roll-off bin and submitted to Eurofins TestAmerica, Houston for waste characterization analysis. The waste characterization laboratory report is included in **Attachment 4**. Upon receipt of waste characterization sample results and waste profile approval, the soil was transported offsite for disposal as a Class I non-hazardous waste at the Republic Services Charter Waste Landfill in Odessa, Texas. Soil profiling and disposal documentation is provided in **Attachment 5**.

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SUMMARY OF RESULTS

Results of laboratory sieve analyses for samples collected in 2020 and 2018 are summarized in **Table 1** and **Table 2**, respectively. The results for each borehole are presented in semilog graphs and stacked bar charts provided as **Figure 3** and **Figure 4**, respectively.

The sieve analysis results indicate that, for samples collected in the saturated part of the aquifer below a depth of approximately 100 feet, more than 80 percent of the material is very fine sand less than 0.3 millimeters (mm) in diameter. Samples from the saturated zone but above the clay beds in the base of the unit typically contained less than 15 percent silt and clay particles smaller than 0.075 mm (#200 sieve). These results should be considered during future design of remediation extraction wells for the site.

Limitations: This memo summarizes results of a limited investigation and is not to be used as the sole basis for final design, construction, or remedial action, or as a basis for major capital decisions.

List of Tables

Table 1	Summary of Results for Sieve Analyses for BH-1, BH-2, and BH-3
Table 2	Summary of Results for Sieve Analyses for ACW-30 and ACW-32

List of Figures

Figure 1	Site Location Map
Figure 2	Grain Size Sieve Analyses Data Locations
Figure 3	Results of Sieve Analyses for BH-1, BH-2, and BH-3
Figure 4	Results of Sieve Analyses for ACW-30 and ACW-32

List of Attachments

Attachment 1	NMOSE Well Permit and Plugging Plan of Operations
Attachment 2	2020 Soil Boring Logs
Attachment 3	Western Technologies Inc. Sieve Analysis Reports
Attachment 4	Eurofins TestAmerica, Houston Laboratory Report
Attachment 5	Soil Disposal Documentation

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Tables

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Table 1.
Summary of Sieve Analysis Results for BH-1, BH-2, and BH-3
near Former Jal #4 Compressor Station, Lea County, New Mexico

Location ID	Lab ID	Particle Size	Gravel										Coarse Sand		Medium Sand		Fine Sand	Very Fine Sand	Silt & Clay
		Sieve Number	**3"**	**2"**	**1-1/2"**	**1"**	**3/4"**	**1/2"**	**3/8"**	**1/4"**	**#4**	**#8**	**#10**	**#16**	**#30**	**#40**	**#50**	**#100**	**#200**
		inches	3	2	1.5	1	0.75	0.5	0.375	0.25	0.187	0.0929	0.0787	0.0465	0.0236	0.0167	0.0118	0.00591	0.00295
		millimeters	76.2	50.8	38.1	25.4	19	12.7	9.52	6.35	4.75	2.36	2	1.18	0.6	0.425	0.3	0.15	0.075
		Depth to base of interval (ft bgs)	Accumulative Percent Passing																
BH-1	16268	20	1	1	1	1	0.99	0.96	0.94	0.91	0.89	0.86	0.85	0.84	0.82	0.77	0.69	0.34	0.2
	16269	40	1	1	1	1	0.99	0.98	0.96	0.94	0.92	0.89	0.89	0.88	0.86	0.83	0.77	0.42	0.24
	16270	60	1	1	1	0.95	0.94	0.86	0.82	0.78	0.75	0.7	0.69	0.67	0.65	0.63	0.6	0.4	0.27
	16271	80	1	1	1	1	1	1	1	0.99	0.99	0.99	0.99	0.98	0.98	0.96	0.88	0.49	0.12
	16272	100	1	1	1	1	1	1	1	1	1	1	1	1	0.99	0.95	0.84	0.4	0.1
	16354	110	1	1	1	1	1	0.99	0.99	0.99	0.98	0.96	0.96	0.96	0.96	0.95	0.89	0.44	0.078
	16273	120	1	1	1	1	1	0.99	0.97	0.95	0.94	0.93	0.93	0.93	0.92	0.91	0.87	0.58	0.12
	16274	130	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	0.32	0.029
	16275	140	1	1	1	1	1	1	1	1	1	1	1	1	1	0.98	0.86	0.68	0.13
	16276	150	1	1	1	1	1	1	1	1	1	1	1	1	1	0.99	0.91	0.68	0.13
	16287	160	1	1	1	1	1	1	1	1	1	1	1	1	0.99	0.99	0.97	0.89	0.44
BH-2	16277	25	1	1	0.98	0.95	0.93	0.88	0.83	0.79	0.76	0.72	0.71	0.69	0.66	0.63	0.57	0.31	0.19
	16278	45	1	1	1	1	1	1	1	0.97	0.95	0.91	0.9	0.89	0.88	0.85	0.78	0.4	0.23
	16279	65	1	1	0.95	0.88	0.83	0.8	0.77	0.74	0.72	0.68	0.68	0.66	0.64	0.62	0.57	0.34	0.16
	16280	85	1	1	1	1	1	1	1	1	1	0.99	0.99	0.99	0.98	0.96	0.89	0.51	0.21
	16281	106	1	1	1	1	1	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.96	0.86	0.39	0.09
	16282	125	1	1	1	1	1	1	1	1	1	1	1	1	1	0.98	0.93	0.51	0.052
	16283	135	1	1	1	1	1	1	1	1	1	1	1	1	1	0.98	0.88	0.63	0.11
	16284	146	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.94	0.72	0.1
	16285	155	1	1	1	1	1	1	1	1	1	1	1	1	1	0.99	0.96	0.91	0.28
	16286	165	1	1	1	1	1	1	1	1	1	1	1	1	0.99	0.98	0.97	0.92	0.47
BH-3	16288	30	1	1	0.98	0.94	0.9	0.88	0.88	0.84	0.83	0.76	0.76	0.75	0.74	0.72	0.67	0.4	0.25
	16289	50	1	1	1	1	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.89	0.81	0.41	0.24
	16290	70	1	0.81	0.78	0.69	0.67	0.63	0.61	0.59	0.58	0.56	0.56	0.55	0.54	0.52	0.49	0.34	0.2
	16291	90	1	1	1	1	1	1	1	1	0.99	0.99	0.99	0.99	0.98	0.95	0.88	0.42	0.033
	16292	110	1	1	1	1	0.99	0.99	0.99	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.88	0.35	0.13
	16293	120	1	1	1	1	1	1	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.91	0.13	0.015
	16294	130	1	1	1	0.99	0.99	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.97	0.95	0.9	0.49	0.081
	16295	140	1	1	1	1	1	1	1	1	1	1	1	1	1	0.97	0.85	0.62	0.1
	16296	150	1	1	1	1	1	1	1	1	1	1	1	1	1	0.98	0.88	0.74	0.12
	16297	160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.98	0.91	0.22

Notes:

Unsaturated Soils
Saturated Soils

Sieve analyses connducted by Western Technologies, Tucson, AZ in November 2020.

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Table 2.
Summary of Sieve Analysis Results for ACW-30 and ACW-32
near Former Jal #4 Compressor Station, Lea County, New Mexico

Location ID	Particle Size	Cobbles	Gravel							Coarse Sand		Medium Sand	Fine Sand	Very Fine Sand		Silt & Clay
	Sieve Number	**3"**	**2"**	**1-1/2"**	**1"**	**3/4"**	**1/2"**	**3/8"**	**#4**	**#10**	**#20**	**#40**	**#60**	**#80**	**#100**	**#200**
	millimeters	76.2	50.8	38.1	25.4	19	12.7	9.52	4.75	2	0.85	0.425	0.25	0.18	0.15	0.075
	Depth to base of interval (ft bgs)	Accumulative Percent Passing														
ACW-30	110	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	75%	56%	42%	7%
	185	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	96%	93%	91%	89%	75%
ACW-32	100	100%	100%	100%	100%	100%	100%	100%	100%	99%	98%	94%	79%	62%	51%	17%
	130	100%	100%	100%	100%	100%	100%	100%	95%	93%	93%	90%	74%	56%	44%	12%
	165	100%	100%	100%	100%	100%	100%	100%	98%	95%	92%	90%	88%	87%	86%	71%
	172	100%	100%	100%	100%	100%	100%	100%	98%	96%	96%	95%	92%	91%	90%	81%

Notes:

Saturated Soils

Sieve analyses for ACW-30 and ACW-32 were conducted by Test America Laboratories 7-17-2018

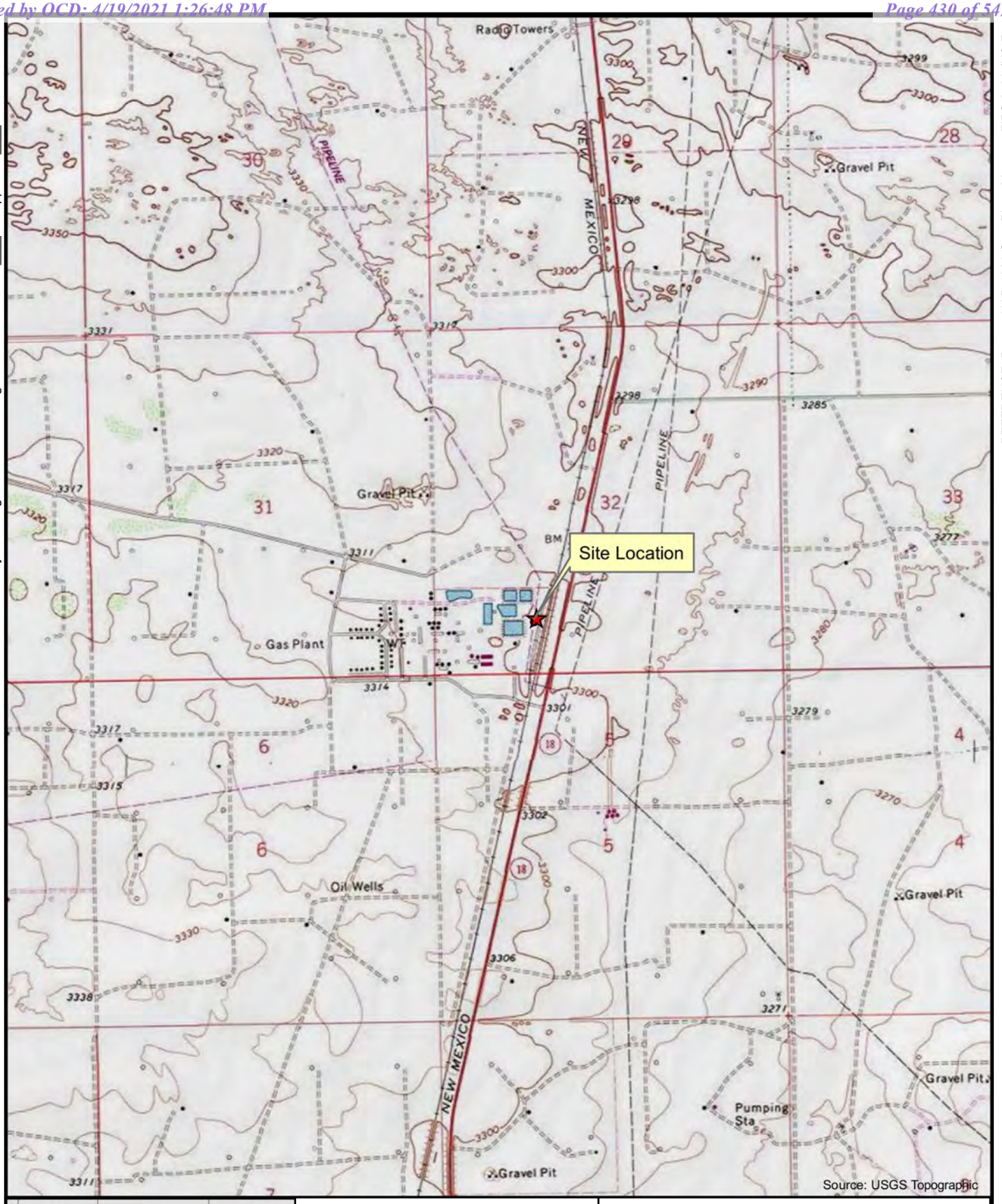
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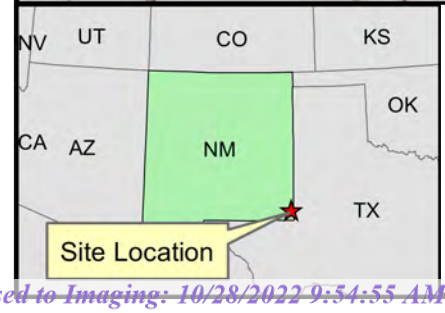
Figures

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ANSI 8.5" x 11" Approved:____ Designer:BB/BIL Checked:____ Project Manager Initials:____

REFERENCE: Datum; NAD 1983 StatePlane Montana FIPS 2500 (US Feet)





N

Feet
0 1,000 2,000

1 inch = 2,000 feet

AECOM

Title: **Site Location Map**

Project:
EL PASO NATUAL GAS COMPANY
JAL #4 GAS PLANT - LEA COUNTY, NEW MEXICO
2019 ANNUAL GROUNDWATER REMEDIATION REPORT

Date: **2/23/2021** Figure **1**



LEGEND

SHELL STATE #13	DISPOSAL WELL
ACW-5	GROUNDWATER MONITOR WELL, SCREENED IN THE UPPER PORTION OF THE AQUIFER
ACW-14	GROUNDWATER MONITOR WELL, SCREENED IN THE LOWER PORTION OF THE AQUIFER
RW-2	GROUNDWATER RECOVERY WELL
EPNG-1	WATER SUPPLY WELL
EPNG-6	PLUGGED/ABANDONED WATER SUPPLY WELL
OXY	WATER SUPPLY WELL
ACW-8	GROUNDWATER MONITOR WELL CONVERTED TO GROUNDWATER RECOVERY WELL
ENSR-2	PLUGGED/ABANDONED MAY 2012
BH-1	SOIL BORING
	GRAIN SIZE DATA COLLECTION POINT
	APPROXIMATE PROPERTY BOUNDARY
	INJECTION WELL (WATER FLOOD)
	OIL WELL
	GAS WELL
	LPG STORAGE WELL
4	FORMER POND LOCATION WITH POND NUMBER

NOTES

1) JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO.
2) SITE BASE AREA DIGITIZED FROM 11/04/76 AERIAL PHOTOGRAPH WITH PLANT PROPERTY BOUNDARY, WELLS INSERTED FROM VARIOUS OTHER SOURCES, AND DRAWING FILES PROVIDED BY SAIC ENERGY, ENVIRONMENT & INFRASTRUCTURE, LLC OF TULSA, OKLAHOMA.
3) RECOVERY SYSTEM WAS NOT OPERATED IN 2018.
4) AERIAL PHOTO SOURCED FROM GOOGLE PRO, DATED 2/20/2019.
5) SOURCE OF LAND OWNERSHIP IS THE LEA COUNTY APPRAISAL DISTRICT.
6) SOURCE OF INDUSTRY-RELATED WELLS IS NMOCD OIL & GAS MAP.
7) MONITORING WELLS ACW-26, ACW-27, ACW-28, AND ACW-29 WERE INSTALLED IN DECEMBER 2019.

0 300 600
SCALE IN FEET

AECOM
19219 KATY FREEWAY SUITE 100
HOUSTON, TEXAS 77094
PH: (281) 646-2400
FAX: (281) 646-2401

Title: **Grain Size Data Locations**

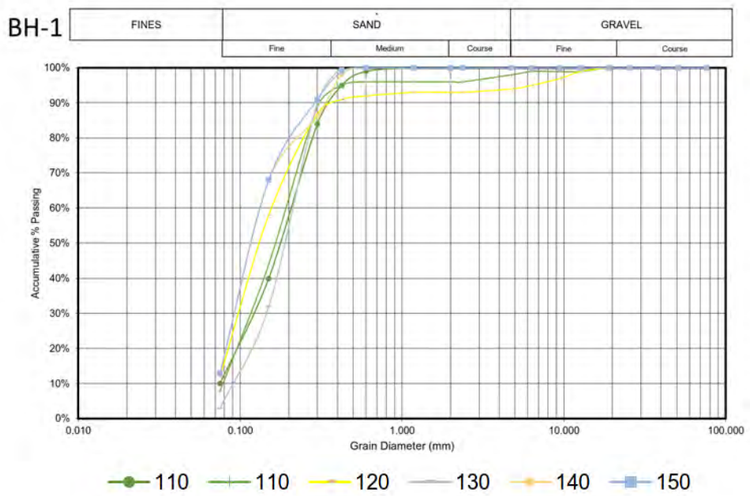
Project:
EL PASO NATUAL GAS COMPANY
JAL #4 GAS PLANT - LEA COUNTY, NEW MEXICO
2020 ANNUAL GROUNDWATER REMEDIATION REPORT

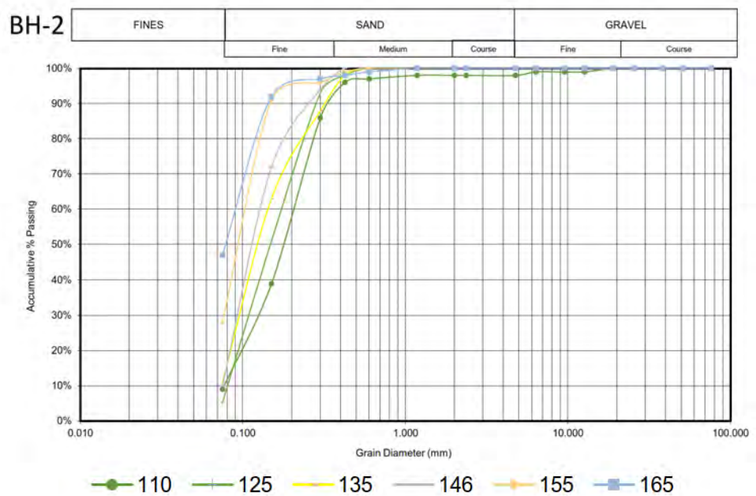
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	Chk'd by: WG	Date: 2/26/2021		

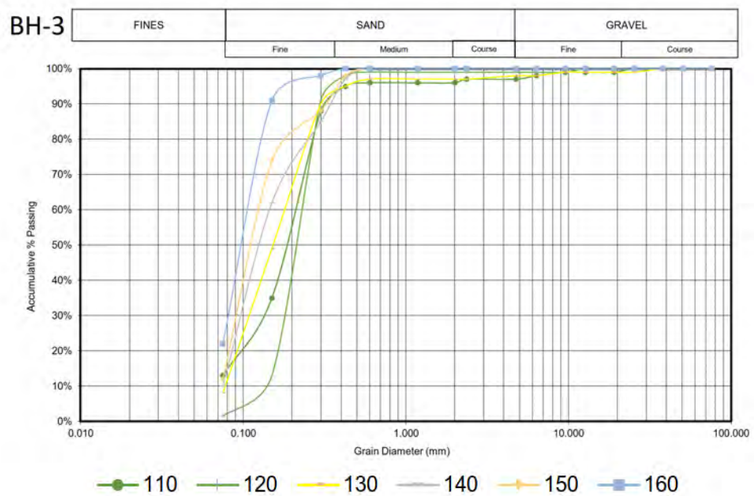
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Figure 3

Results of Sieve Analyses for BH-1, BH-2, and BH-3







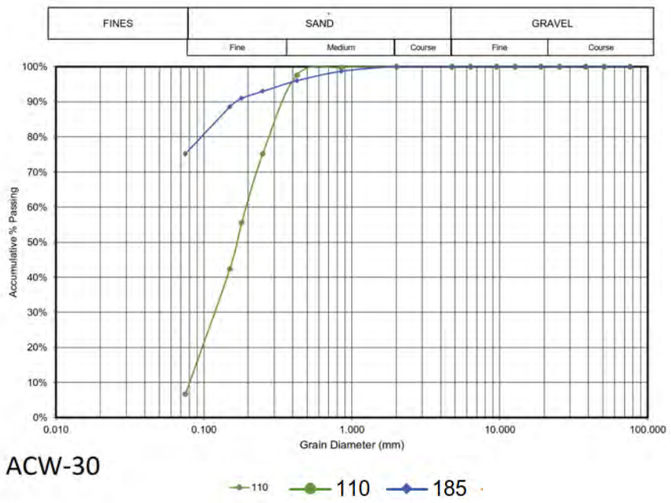
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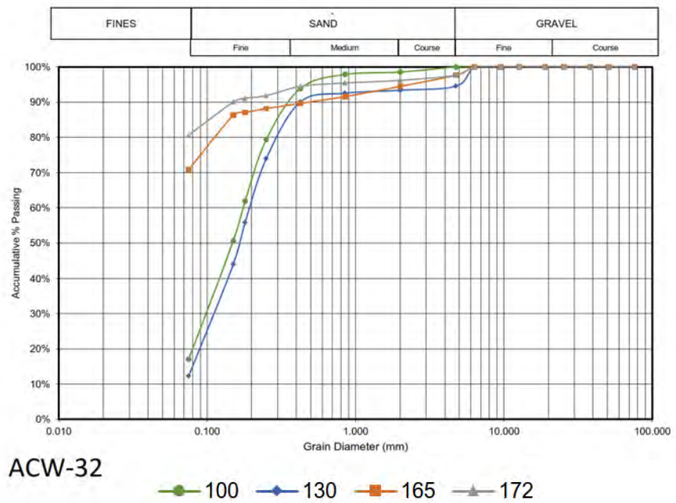
BH-2

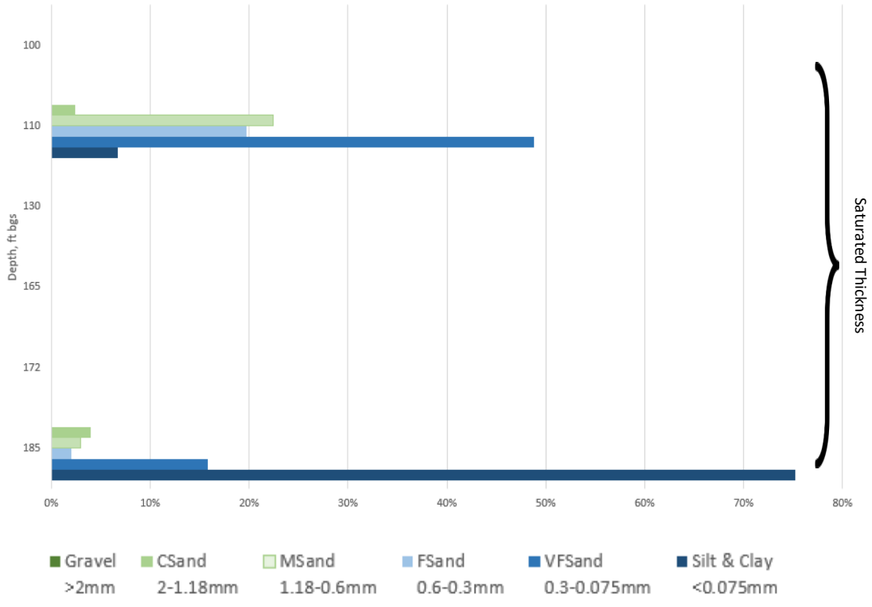
BH-3

Figure 4

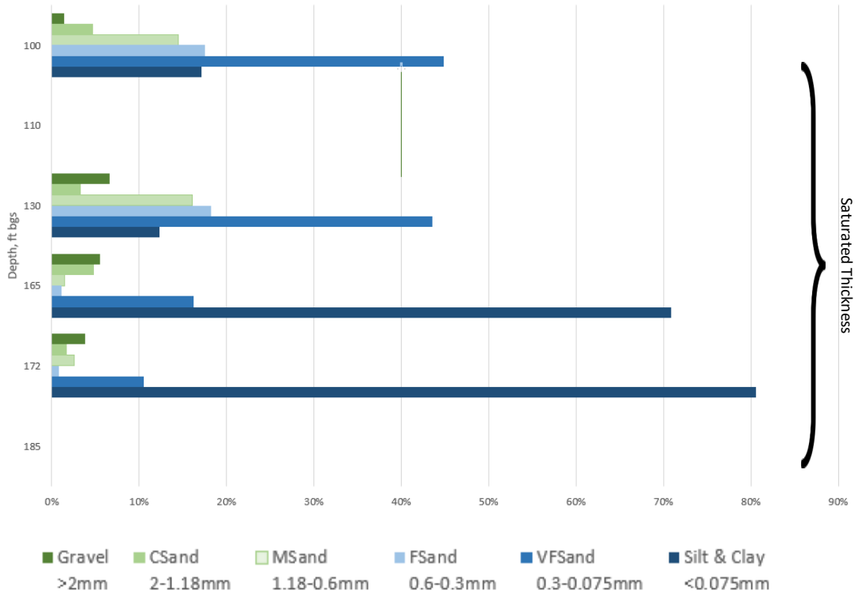
Results of Sieve Analyses for ACW-30 and ACW-32







ACW-30



ACW-32

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Attachment 1

NMOSE Well Permit and Plugging Plan of Operations

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John R. D Antonio, Jr., P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 680752
File Nbr: CP 01431 POD12-15

Oct. 27, 2020

EL PASO NATURAL GAS COMPANY LLC
MR JOSEP WILEY
1001 LOUISIANA STREET, ROOM 757A
HOUSTON, TX 77002

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.

* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.

* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.

* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us.

Sincerely,

JUAN HERNANDEZ
(575)622-6521

Enclosure

explore

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File No. CP-1431

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	☐ Construction Site/Public Works Dewatering	☒ Other(Describe): Exploratory Soil Boring
☐ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

☐ Temporary Request - Requested Start Date: Requested End Date:

Plugging Plan of Operations Submitted? ☒ Yes ☐ No

1. APPLICANT(S)

Name: El Paso Natural Gas Company, LLC	Name:
Contact or Agent: check here if Agent ☐ Mr. Joseph Wiley	Contact or Agent: check here if Agent ☐
Mailing Address: 1001 Louisiana Street, Room 757A	Mailing Address:
City: Houston	City:
State: TX Zip Code: 77002	State: Zip Code:
Phone: (832) 279-1610 ☐ Home ☒ Cell Phone (Work):	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional): Joe_wiley@kindermorgan.com	E-mail (optional):

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FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 11/17/16

File No.: CP-1431	Trn. No.: 680752	Receipt No.: Z 42629
Trans Description (optional): POD-12-15		
Sub-Basin: CP	PCW/LOG Due Date: 10-27-21	

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2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

■ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
CP-1431 POD12 BH-1	-103.187103	32.253958	SE1/4SW1/4 S32 T23S R37E
13 BH-2	-103.186956	32.254469	SE1/4SW1/4 S32 T23S R37E
14 BH-3	-103.186764	32.255289	SE1/4SW1/4 S32 T23S R37E
15 BH-4	-103.186472	32.255842	SE1/4SW1/4 S32 T23S R37E

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ■ No **If yes, how many**_____

Other description relating well to common landmarks, streets, or other:
The site is located near the intersection of NM Highway 18 and Deep Wells Road in Lea County.

Well is on land owned by: New Mexico State Land Trust - Water Monitoring Easement WM-32.

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. **Attached?** ☐ Yes ■ No
If yes, how many_____

Approximate depth of well (feet): 180	Outside diameter of well casing (inches): N/A
Driller Name: Shawn Cain	Driller License Number: #1664

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

OSE DIT OCT 13 2020 PM 1:23

NMOCD Abatement Plan #AP-101

Four exploratory borings will be drilled and soil samples will be collected for geotechnical laboratory sieve analysis. At the conclusion of drilling and sampling, the borings will be plugged with neat cement, placed bottom to top with a tremie pipe. The upper two feet of the boreholes will be backfilled with soil.

FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No.: CP-1431	Trn No.: 680752

Received by OCD: 4/19/2021 1:26:48 PM
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4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
☒ Include a description of any proposed pump test, if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge. ☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ☐ Include the reason for the monitoring well, and, ☐ The duration of the planned monitoring.		**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Joseph Wiley
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Joseph Wiley
Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

OSE DIT OCT 13 2020 PM 1:23

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 27 day of October 20 20, for the State Engineer,

John R. D'Antonio, Jr., P.E., State Engineer

By:
Signature

Print

Title: Juan Hernandez, Water Resource Manager 1
Print

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.: CP-1431 Trn No.: 680752

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NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

17-1A Depth of the well shall not exceed the thickness of the valley fill.

17-4 No water shall be appropriated and beneficially used under this permit.

17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.

17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

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NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.

17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record.
The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.

17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.

17-Q The State Engineer retains jurisdiction over this permit.

17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

LOG The Point of Diversion CP 01431 POD12 must be completed and the Well Log filed on or before 10/27/2021.

LOG The Point of Diversion CP 01431 POD13 must be completed and the Well Log filed on or before 10/27/2021.

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NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

LOG The Point of Diversion CP 01431 POD14 must be completed and the Well Log filed on or before 10/27/2021.

LOG The Point of Diversion CP 01431 POD15 must be completed and the Well Log filed on or before 10/27/2021.

IT IS THE PERMITTEES RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

SHOULD THE PERMITTEE CHANGE THE PURPOSE OF USE TO OTHER THAN MONITORING PURPOSES, AN APPLICATION SHALL BE ACQUIRED FROM THE OFFICE OF THE STATE ENGINEER.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 10/13/2020	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 27 day of Oct A.D., 2020

John R. D Antonio, Jr., P.E. , State Engineer

By: JUAN HERNANDEZ

Trn Desc: CP 01431 POD12-15

File Number: CP 01431
Trn Number: 680752

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NEW MEXICO OFFICE OF THE STATE ENGINEER

Coordinates

UTM - NAD 83 (m) - Zone 13

Easting 670777.366

Northing 3570027.164

State Plane - NAD 83 (f) - Zone E

Easting 895685.437

Northing 458012.994

Degrees Minutes Seconds

Latitude 32 : 15 : 14.248800

Longitude -103 : 11 : 13.570800

Location pulled from Coordinate Search

N

1:4,514

ft

0 90 180 360

Image Info
Source: Maxar
Date: 10/19/2019
Resolution (m):0.46
Accuracy (m): 5

Spatial Information

OSE Administrative Area: Lea
County: Lea
Groundwater Basin: Capitan
Abstract Area:CP

Sub-Basin: Landreth-Monumnet Draws

Land Grant: Not in Land Grant
Restrictions:
NA

PLSS Description

SWSESESW Qtr of Sec 32 of 023S 037E

Derived from CADNSDI- Qtr Sec. locations are calculated and are only approximations

POD Information

Owner: EL PASO NAT GAS
File Number: CP-1431 POD12
POD Status: NoData
Permit Status: NoData
Permit Use: NoData
Purpose: SOIL BORING - BH-1

- Coord Search Location
- Incomplete
- OSE District Boundary
- WRAB Abstract Project Areas
- SiteBoundaries

S WATERS
ODs

- Active
- Pending
- Capped

YM 10/27/2

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Coordinates

UTM - NAD 83 (m) - Zone 13

Easting 670790.258

Northing 3570084.053

State Plane - NAD 83 (f) - Zone E

Easting 895728.897

Northing 458199.388

Degrees Minutes Seconds

Latitude 32 : 15 : 16.088400

Longitude -103 : 11 : 13.041600

Location pulled from Coordinate Search

NEW MEXICO OFFICE OF THE STATE ENGINEER

N

1:4,514

ft

0 90 180 360

Image Info
Source: Maxar
Date: 10/19/2019
Resolution (m):0.46
Accuracy (m): 5

Spatial Information

OSE Administrative Area: Lea
County: Lea
Groundwater Basin: Capitan
Abstract Area:CP

Sub-Basin: Landreth-Monumnet Draws

Land Grant: Not in Land Grant
Restrictions:
NA

PLSS Description

SWSESESW Qtr of Sec 32 of 023S 037E

Derived from CADNSDI- Qtr Sec. locations are calculated and are only approximations

◆ Coord Search Location

S WATERS
Ds

● Active

○ Pending

○ Capped

○ Incomplete

OSE District Boundary

WRAB Abstract Project Areas

SiteBoundaries

POD Information

Owner: EL PASO NAT GAS
File Number: CP-1431 POD13
POD Status: NoData
Permit Status: NoData
Permit Use: NoData
Purpose: SOIL BORING - BH-2

YM 10/27/2

Received by OCD: 10/24/2021 12:26:48 PM

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Coordinates

UTM - NAD 83 (m) - Zone 13

Easting 670806.811

Northing 3570175.273

State Plane - NAD 83 (f) - Zone E

Easting 895785.069

Northing 458498.350

Degrees Minutes Seconds

Latitude 32 : 15 : 19.040400

Longitude -103 : 11 : 12.350400

Location pulled from Coordinate Search

NEW MEXICO OFFICE OF THE STATE ENGINEER

N

1:4,514

ft

0 90 180 360

Image Info
Source: Maxar
Date: 10/19/2019
Resolution (m):0.46
Accuracy (m): 5

Spatial Information

OSE Administrative Area: Lea
County: Lea
Groundwater Basin: Capitan
Abstract Area:CP

Sub-Basin: Landreth-Monumnet Draws

Land Grant: Not in Land Grant
Restrictions:
NA

PLSS Description

NWSESESW Qtr of Sec 32 of 023S 037E

Derived from CADNSDI- Qtr Sec. locations are calculated and are only approximations

◆ Coord Search Location

S WATERS
Ds

● Active

○ Pending

○ Capped

○ Incomplete

OSE District Boundary

WRAB Abstract Project Areas

SiteBoundaries

POD Information

Owner: EL PASO NAT GAS
File Number: CP-1431 POD14
POD Status: NoData
Permit Status: NoData
Permit Use: NoData
Purpose: SOIL BORING - B-3

YM 10/27/2

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NEW MEXICO OFFICE OF THE STATE ENGINEER

Coordinates

UTM - NAD 83 (m) - Zone 13

Easting 670833.285

Northing 3570237.049

State Plane - NAD 83 (f) - Zone E

Easting 895873.192

Northing 458700.503

Degrees Minutes Seconds

Latitude 32 : 15 : 21.031200

Longitude -103 : 11 : 11.299200

Location pulled from Coordinate Search

N

1:4,514

ft

0 90 180 360

Image Info
Source: Maxar
Date: 10/16/2019
Resolution (m):0.46
Accuracy (m): 5

Spatial Information

OSE Administrative Area: Lea
County: Lea
Groundwater Basin: Capitan
Abstract Area:CP

Sub-Basin: Landreth-Monumnet Draws

Land Grant: Not in Land Grant
Restrictions:
NA

PLSS Description

SWNESESW Qtr of Sec 32 of 023S 037E

Derived from CADNSDI- Qtr Sec. locations are calculated and are only approximations

POD Information

Owner: EL PASO NAT GAS
File Number: CP-1431 POD15
POD Status: NoData
Permit Status: NoData
Permit Use: NoData
Purpose: SOIL BORING - BH-4

◆ Coord Search Location

S WATERS
Ds

● Active

○ Pending

○ Capped

○ Incomplete

OSE District Boundary

WRAB Abstract Project Areas

SiteBoundaries

YM 10/27/2

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KINDER MORGAN

Delivering Energy to Improve Lives

October 9, 2020

New Mexico Office of the State Engineer - District 2
1900 West Second
Roswell, NM 88201

RE: WR-07 APPLICATION FOR PERMIT TO DRILL A WELL WITH NO WATER RIGHT
Jal No. 4 Plant, Lea County, NM
New Mexico Oil Conservation Division Abatement Plan #AP-101

New Mexico State Engineer:

Enclosed please find three signed copies of the above referenced permit application for four proposed soil borings to be drilled for collection of soil samples to be submitted for geotechnical analysis. At the conclusion of drilling and sampling, the borings will be plugged with cement.

This activity is being conducted under New Mexico Water Monitoring Easement WM-32.

Scanned copies of the Plugging Plan of Operations have been provided for reference. The signed originals of these documents are being mailed to your office by our driller, Cascade Drilling.

A check in the amount of $20.00 is also attached.

If you have any questions or require additional information, please do not hesitate to call me at (832) 279-1610.

Sincerely,

Joseph L. Wiley

Joseph Wiley, P.G.
Project Manager – Pipeline Remediation
Kinder Morgan

1001 Louisiana Street, Suite 1000, Houston, TX 77002

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OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – ROSWELL OFFICE

OFFICIAL RECEIPT NUMBER: 2 - 42629 DATE: 10/13/20 FILE NO.: New #

TOTAL: $20.00 RECEIVED: Twenty DOLLARS CHECK NO.: 2368 CASH: _____

PAYOR: Joseph A. Wiley, Teresa Wiley ADDRESS: 1202 Canfield Dr CITY: League City STATE: TX

ZIP: 77573 RECEIVED BY: CM

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; and **yellow** copy for Water Rights. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of your daily deposit.

A. Ground Water Filing Fees

___	1.	Change of Ownership of Water Right	$ 2.00
___	2.	Application to Appropriate or Supplement Domestic 72-12-1 Well	$ 125.00
___	3.	Application to Repair or Deepen 72-12-1 Well	$ 75.00
___	4.	Application for Replacement 72-12-1 Well	$ 75.00
___	5.	Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___	6.	Application for Stock Well/Temp. Use	$ 5.00
___	7.	Application to Appropriate Irrigation, Municipal, or Commercial Use	$ 25.00
___	8.	Declaration of Water Right	$ 1.00
___	9.	Application for Additional Point of Diversion Non 72-12-1 Per Well	$ 25.00
___	10.	Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___	11.	Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
___	12.	Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water	$ 50.00
___	13.	Application to Change Point of Diversion of Non 72-12-1 Well	$ 25.00
___	14.	Application to Repair or Deepen Non 72-12-1 Well	$ 5.00
4	15.	Application for Test, Expl. Observ. Well	$ 5.00
___	16.	Application for Extension of Time	$ 25.00
___	17.	Proof of Application to Beneficial Use	$ 25.00
___	18.	Notice of Intent to Appropriate	$ 25.00

B. Surface Water Filing Fees

___	1.	Change of Ownership of a Water Right	$ 5.00
___	2.	Declaration of Water Right	$ 10.00
___	3.	Amended Declaration	$ 25.00
___	4.	Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Surface Water	$ 200.00
___	5.	Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$ 200.00
___	6.	Application to Change Point of Diversion	$ 100.00
___	7.	Application to Change Place and/or Purpose of Use	$ 100.00
___	8.	Application to Appropriate	$ 25.00
___	9.	Notice of Intent to Appropriate	$ 25.00
___	10.	Application for Extension of Time	$ 50.00
___	11.	Supplemental Well to a Surface Right	$ 100.00
___	12.	Return Flow Credit	$ 100.00
___	13.	Proof of Completion of Works	$ 25.00
___	14.	Proof of Application of Water to Beneficial Use	$ 25.00
___	15.	Water Development Plan	$ 100.00
___	16.	Declaration of Livestock Water Impoundment	$ 10.00
___	17.	Application for Livestock Water Impoundment	$ 10.00

All fees are non-refundable.

C. Well Driller Fees

___	1.	Application for Well Driller's License	$ 50.00
___	2.	Application for Renewal of Well Driller's License	$ 50.00
___	3.	Application to Amend Well Driller's License	$ 50.00

D. Reproduction of Documents

___ @ 0.25¢ $_____

___ Map(s) $_____

E. Certification $_____

F. Other $_____

G. Comments:

* Mail

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STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
District 2 Office, Roswell, NM

John R. D'Antonio Jr., P.E.
State Engineer

1900 West Second Street
Roswell, New Mexico 88201
(575) 622-6521
FAX: (575) 623-8559

October 27, 2020

El Paso Natural Gas Company, LLC
c/o Joseph Wiley
1001 Louisiana Street, Room 757A
Houston, Texas 77002

RE: *Well Plugging Plan of Operations for CP-1431-POD 12 through POD-15*

Greetings:

Enclosed is your copy of Well Plugging Plan of Operations for the above referenced project, which has been approved subject to the attached Specific Conditions of Approval. The following conditions of approval have been developed to ensure compliance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 13, 2017, by the State Engineer.

Aggrieval of this permit, or any of the conditions of approval therein, suspends the permit. No plugging operations shall occur while a permit is aggrieved.

Sincerely,

Christopher Angel, PG
Water Resources Professional II
Water Resource Allocation Program

encl

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WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

Alert! Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo.nmt.edu/resources/water/ cgmn/ if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email nmbg-waterlevels@nmt.edu, prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP: ☑ Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: ~~N/A~~ CP. 1431 POD12-15

Name of well owner: El Paso Natural Gas Company, LLC (Contact - Joseph Wiley)

Mailing address: 1001 Louisiana Street, Room 757A County: _____

City: Houston State: TX Zip code: 77002

Phone number: (832) 279-1610 (cell) E-mail: Joe_Wiley@kindermorgan.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Shawn Cain - Cascade Drilling

New Mexico Well Driller License No.: #1664 Expiration Date: 1/31/2021

IV. WELL INFORMATION: ☑ **Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.**

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: _____ deg, _____ min, _____ sec
Longitude: _____ deg, _____ min, _____ sec, NAD 83

2) Reason(s) for plugging well(s):

Four exploratory borings will be drilled and soil samples will be collected for geotechnical laboratory sieve analysis. At the conclusion of drilling and sampling, the borings will be plugged according to this Well Plugging Plan of Operations.

3) Was well used for any type of monitoring program? N/A If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? N/A If yes, provide additional detail, including analytical results and/or laboratory report(s): N/A

5) Static water level: about 100 feet below land surface / feet above land surface (circle one)

6) Depth of the well: 180 (soil boring) feet

23.37.32.3

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7) Inside diameter of innermost casing: N/A inches.

8) Casing material: N/A

9) The well was constructed with:

☐ an open-hole production interval, state the open interval: N/A

☐ a well screen or perforated pipe, state the screened interval(s): N/A

10) What annular interval surrounding the artesian casing of this well is cement-grouted? N/A

11) Was the well built with surface casing? N/A If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? _____ If yes, please describe:

12) Has all pumping equipment and associated piping been removed from the well? N/A If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

☐ **If plugging method differs between multiple wells on same site, a separate form must be completed for each method.**

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

Soil borings BH-1 through BH-4 will be plugged with neat cement, placed bottom to top with a tremie pipe. The upper two feet of the borehole will be backfilled with soil.

2) Will well head be cut-off below land surface after plugging? N/A

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recipe from the cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: 260 gallons

4) Type of Cement proposed: Neat Portland II

5) Proposed cement grout mix: 5.5 gallons of water per 94 pound sack of Portland cement. * per conservation w/ Joe Wiley 10/27

6) Will the grout be: _____ batch-mixed and delivered to the site

X mixed on site

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7) Grout additives requested, and percent by dry weight relative to cement:

N/A

8) Additional notes and calculations:

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

VIII. SIGNATURE:

I, Shawn Cain - Cascade Drilling, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Signature of Applicant — Date: 10/7/2020

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

✓ Approved subject to the attached conditions.
_____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 27 day of October, 2020

John R. D'Antonio Jr. P.E., New Mexico State Engineer

By: Christopher Angel, PG
Water Resourced Professional II 2020 PM 1:24

Received by OCD: 4/19/2021 1:26:48 PM

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TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			2
Bottom of proposed interval of grout placement (ft bgl)			175 - 180
Theoretical volume of grout required per interval (gallons)			260 gallons
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			5.5
Mixed on-site or batch-mixed and delivered?			Mixed on site
Grout additive 1 requested			
Additive 1 percent by dry weight relative to cement			
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			

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Specific Conditions of CP-1431-POD-12 through POD-15

1. A Type II neat Portland cement slurry with no more than 6.0 gallons water per 94-pound sack of Portland cement is approved.
2. Grout shall be tremied from the bottom up.
3. A completed Plugging Record form shall be submitted no later than 30 days after completion of the plugging.
4. Before any attempts are made to plug this well, the O.S.E. District II Office shall be notified 48 hours in advance of the anticipated schedule for plugging, so that an O.S.E. representative has the opportunity to witness the procedures, if deemed necessary.
5. Any deviation from this plan must obtain an approved variance from this office prior to implementation.
6. Aggrieval of this permit, or any of the conditions of approval therein, suspends the permit. No plugging operations shall occur while a permit is aggrieved.

Witness my hand and seal this 27th day of October A.D., 2020

John R. D'Antonio Jr., P.E., State Engineer

By: _____
Christopher Angel, PG
Groundwater Resources Professional II

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Attachment 2

2020 Soil Boring Logs

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-01

Sheet 1 of 6

Date(s) Drilled:	10/30/2020 through 11/2/2020	Logged By:	Wally Gilmore	Checked By:	Andy Messer
Drilling Contractor:	Cascade	Drill Rig Type:	Track-Mounted	Total Depth of Borehole:	170 feet
Drilling Method: Bit Size/Type:	6-inch	Hammer Information:	Not Applicable	Surface Elevation:	3299
Sampling Method(s):	4-inch core barrel	Borehole Backfill:	Neat Cement Grout	Groundwater Level and Date Measured:	Not Applicable
Location:	32.253825 (degrees latitude) 103.18714 (degrees longitude)			Survey Datum:	UTM

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	0									Upper 15 feet of boring advanced with hydrovac
3295	5									
3290	10									
3285	15	(SM)	(30)			(35)		(35)		Very light brown (8/2), silty fine sand with caliche fragments, dry, loose
3280	20	SM	15	3	13	35	14	20		
3275	25									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-01

Sheet 2 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	25	(SM)	(20)			(50)		(30)		Very light brown (8/2), silty fine sand with caliche fragments, dry, loose
3270										
	30	(SC)	(10)			(70)		(20)		Grayish brown (5/2), clayey sand with caliche fragments
3265										
	35	(SM)	(5)			(40)		(55)		Pinkish white (8/2) sandy silt with caliche fragments, dry, loose
3260										
	40	SM	11	3	9	35	18	24		Light reddish brown (8/2), silty fine sand with caliche fragments, dry , loose
		(SM)	(5)			(50)		(45)		
3255										
	45									
3250										
	50									Caliche
3245										
	55									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-01

Sheet 3 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	55	(SM)	(25)			(40)		(35)		Light reddish brown (8/2), silty sand with caliche fragments, dry, loose
3240										
	60	SC	31	4	5	20	13	27		Grayish brown (5/2), clayey sand, moist, loose
		(SC)				(70)		(30)		
		(SM)	(10)			(50)		(40)		Light reddish brown (8/2), silty sand with sandstone fragments, dry, loose
3235										
	65									
3230										
	70									
3225										
	75									
3220										
	80	SP-SC	1	1	10	39	37	12		Light reddish brown (6/4), silty sand, dry, loose
		(SP)				(80)		(20)		
3215										
	85									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-01

Sheet 4 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	85									same as above
3210										
	90	(SP)	(30)			(70)				Light reddish brown (6/4), fine sand with poorly cemented sandstone fragments
3205										
	95									
3200										
	100	SP-SC	0	1	15	44	30	10		Reddish brown (5/3), fine sand, moist Wet below 103 feet
3195										
	105	(SP)	(5)			(95)				Reddish brown (5/3), fine sand, wet, loose
3190										
	110	SP-SC	4	0	7	45	36.2	7.8		
3185										
	115									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-01

Sheet 5 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	115									same as above
3180										
	120	SP-SC	7	1	5	29	46	12		
3175										
	125									
3170										
	130	SP-SC	0	0	10	58	29.1	2.9		
3165										
	135									
3160										
	140	SP-SC	0	0	14	18	55	13		
3155										
	145									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-01

Sheet 6 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	145									same as above
3150										
	150	SP-SC	0	0	9	23	55	13		
3145										
	155									
		(SP)				(50)		(50)		Reddish brown (5/3), coarse sand and gravel from 157-157.5 feet
		(SP)				(100)				Reddish brown (5/3), fine sand, wet, loose
3140										
	160	SC	0	1	2	8	45	44		
		(SC)				(70)		(30)		Reddish brown (5/3), clayey fine sand
3135										
	165	(CL)				(10)		(90)		Reddish brown clay
3130										
	170									TOTAL DEPTH IS 170 FEET BELOW GROUND SURFACE
3125										

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-02

Sheet 1 of 6

Date(s) Drilled:	11/3/2020 through 11/9/2020	Logged By:	Wally Gilmore	Checked By:	Andy Messer
Drilling Contractor:	Cascade	Drill Rig Type:	Track-Mounted	Total Depth of Borehole:	165 feet
Drilling Method: Bit Size/Type:	6-inch	Hammer Information:	Not Applicable	Surface Elevation:	3300
Sampling Method(s):	4-inch core barrel	Borehole Backfill:	Neat Cement Grout	Groundwater Level and Date Measured:	Not Applicable
Location:	32.254661 (degrees latitude) 103.186797 (degrees longitude)			Survey Datum:	UTM

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
3300	0									Upper 15 feet of boring advanced with hydrovac
3295	5									
3290	10									
3285	15	(SP)	(10)			(90)				Pinkish white (8/2), very fine sand with caliche fragments, dry, loose
3280	20									
3275	25									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-02

Sheet 2 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
3275	25	SC	29	5	9	26	12	19		Pale red (7/2), clayey sand with caliche fragments, dry, loose
		(SC)	(20)			(75)		(5)		
3270	30	(SP)	(15)			(85)				Pinkish white (8/2), very fine sand with caliche fragments, dry, loose
3265	35	(SP)	(10)			(60)		(30)		Pinkish white (8/2), silty fine sand with caliche fragments, dry, loose
3260	40									
3255	45	SM	10	2	10	38	17	23		
3250	50	(SM)	(5)			(10)		(85)		White (8/1), fine sandy silt with caliche fragments, dry, loose
3245	55									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-02

Sheet 3 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
3245	55									same as above
3240	60	(SP)	(45)			(55)				Pinkish white (8/2), very fine sand with caliche fragments, dry, loose
3235	65	SC	32	4	7	23	18	16		
3230	70									
3225	75									
3220	80	(SC)	(3)			(90)		(7)		Reddish brown (5/4), clayey fine sand with poorly cemented sandstone fragments, dry, loose
3215	85									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-02

Sheet 4 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
3215	85	SC	1	1	9	38	30	21		Grayish brown (5/2), fine sand with poorly cemented sandstone fragments, dry
		(SP)	(40)			(60)				
3210	90	(SC)				(85)		(15)		Reddish brown (5/2), clayey fine sand, dry
		(SC)				(100)				Light reddish brown (6/4), fine sand, moist, loose
3205	95									
3200	100	(SP)				(100)				Reddish brown (5/4), fine sand with poorly cemented sandstone fragments, moist
3195	105	(SP)				(100)				Reddish brown (5/4), fine sand, wet
		SP-SC	2	1	11	47	30	9		Saturated below 105 feet
3190	110									
3185	115									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-02

Sheet 5 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
3185	115									same as above
		(SP)	(45)			(55)				Reddish brown (5/4), fine sand with well cemented sandstone fragments, wet
3180	120	(SP)				(100)				Reddish brown (5/4), fine sand, wet
3175	125	SP	0	0	7	42	45.8	5.2		
3170	130									
3165	135	SP-SC	0	0	12	25	52	11		
3160	140									
3155	145									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-02

Sheet 6 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
3155	145	SP-SC	0	0	6	22	62	10		same as above
3150	150									
3145	155	SC	0	0	4	5	63	28		
3140	160	(SC)				(100)				Reddish brown (5/4), clayey sand
3135	165	SC	0	1	2	5	45	47		
3130										TOTAL DEPTH IS 165 FEET BELOW GROUND SURFACE
3125										

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-03

Sheet 1 of 6

Date(s) Drilled:	11/9/2020 through 11/12/2020	Logged By:	Wally Gilmore	Checked By:	Andy Messer
Drilling Contractor:	Cascade	Drill Rig Type:	Track-Mounted	Total Depth of Borehole:	167.5 feet
Drilling Method: Bit Size/Type:	6-inch	Hammer Information:	Not Applicable	Surface Elevation:	3302
Sampling Method(s):	4-inch core barrel	Borehole Backfill:	Neat Cement Grout	Groundwater Level and Date Measured:	Not Applicable
Location:	32.255314 (degrees latitude) 103.1868 (degrees longitude)			Survey Datum:	UTM

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
3302	0									Upper 15 feet of boring advanced with hydrovac
3300										
	5									
3295										
	10									
3290										
	15	(SP)	(10)			(90)				Very pale brown (7/3), fine sand with caliche fragments, dry, loose
3285										
	20	(SP)	(20)			(80)				Light yellowish brown (6/4), very fine sand with sandstone fragments, dry, loose
3280										
	25									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-03

Sheet 2 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	25	(SP)	(70)			(30)				Pinkish white (8/2), silty fine sand with sandstone fragments, dry, loose
3275		(SP)	(50)			(50)				
	30	SM	24	2	7	27	15	25		Pinkish white (8/2), silty fine sand with caliche fragments, dry, loose
3270		(SM)	(40)			(60)				
	35									
3265										
	40									
3260										
	45									
3255										
	50	SM	8	1	10	40	17	24		
3250		(SM)	(30)			(50)		(20)		Pinkish white (8/2), silty fine sand with poor to well cemented sandstone fragments, dry, loose
	55									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-03

Sheet 3 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	55									same as above
3245		(SM)	(10)			(70)		(20)		
	60									
3240		(SM)	(50)			(30)		(20)		
	65									
3235		(SM)	(70)			(20)		(10)		
	70	SC	44	2	5	15	14	20		Light reddish brown (6/4), fine sand with poorly to well cemented sandstone fragments, dry, loose
		(SP)	(10)			(90)				
3230										
	75									
3225		(SP)	(5)			(95)				
	80	(SP)	(5)			(95)				Light reddish brown (6/4), very fine sand with poorly cemented sandstone fragments, dry, loose
3220										
	85									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-03

Sheet 4 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	85	(SP)	(10)			(90)				Light reddish brown (6/4), fine sand with poorly cemented sandstone fragments, dry, loose
3215										
	90	SP	1	1	10	46	38.7	3.3		
3210										
	95									
3205										
		(SP)	(25)			(75)				
	100	(SP)	(20)			(80)				
3200										
		(SP)				(100)				Reddish brown (5/4), fine sand, very moist, loose
	105	(SP)	(15)			(85)				Brown (5/4), fine sand with poorly to moderately cemented sandstone fragments, wet Saturated below 105 feet
3195										
	110	SP-SC	4	0	8	53	22	13		Brown (4/4), fine sand with well cemented sandstone fragments, wet
		(SP)	(5)			(95)				
3190										
	115									

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Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-03

Sheet 5 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	115									same as above
3185										
	120	SP	1	0	8	78	11.5	1.5		
3180										
	125	(SP)				(100)				Yellowish red (5/6), very fine sand, wet
3175										
	130	SP-SC	3	0	7	41	40.9	8.1		
3170										
	135									
3165										
	140	SP-SC	0	0	15	23	52	10		
3160										
	145									

SLC_GEOTECH_2 C:\USERS\KINGJ3\ONEDRIVE - AECOM DIRECTORY\DOCUMENTS\JKING\PROJECTS\FCX\GINT LOGS\60579141_SILVER BASIN PHASE 3_FEASIBILITY STUDY.GPJ 2015 SLC GEOTEC AECOM.GLB SLCGEOTECH.GDT 2/26/21

Project: 2020 Soil Borings
Project Location: Former Jal #4 CS
Project Number: 60644870

Log of Boring BH-03

Sheet 6 of 6

Elevation feet	Depth, feet	USCS (FIELD)	% SIEVES SAMPLE (% SIEVES FIELD) Gravel >2mm	Course Sand 2.0-1.18mm	Medium Sand 1.18-0.6mm	Fine Sand 0.6-0.3mm	Very Fine Sand 0.3-0.075mm	Silt & Clay <0.075mm	Graphic Log	MATERIAL DESCRIPTION
	145	(SP)				(100)				Yellowish red (5/6), very fine sand
3155										
	150	SP-SC	0	0	12	14	62	12		
3150										
	155									
3145										
	160	SC	0	0	2	7	69	22		
3140										
	165	(SC)				(80)		(20)		Yellowish red (5/6), clayey sand, moist, loose
3135										
										TOTAL DEPTH IS 167.5 FEET BELOW GROUND SURFACE
3130										

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Attachment 3

Western Technologies Inc. Sieve Analysis Reports

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Aggregate Test Report

Client **AECOM**
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Date of Report **12/07/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **1** Lab No. **16268**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB- TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (17.5-20')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.	100	
3/4 in.	99	
1/2 in.	96	
3/8 in.	94	
1/4 in.	91	
No. 4	89	
No. 8	86	
No. 10	85	
No. 16	84	
No. 30	82	
No. 40	77	
No. 50	69	
No. 100	34	
Passing 200	20	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft³		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft³		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

Comments:

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Client **AECOM**
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Date of Report **12/07/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **1** Lab No. **16269**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (37.5-40')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **AASHTO T11, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.	100	
3/4 in.	99	
1/2 in.	98	
3/8 in.	96	
1/4 in.	94	
No. 4	92	
No. 8	89	
No. 10	89	
No. 16	88	
No. 30	86	
No. 40	83	
No. 50	77	
No. 100	42	
Passing 200	24	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft³		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft³		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/07/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **1** Lab No. **16270**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (57.5-60')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **AASHTO T11, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.	100	
1 in.	95	
3/4 in.	94	
1/2 in.	86	
3/8 in.	82	
1/4 in.	78	
No. 4	75	
No. 8	70	
No. 10	69	
No. 16	67	
No. 30	65	
No. 40	63	
No. 50	60	
No. 100	40	
Passing 200	27	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft³		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft³		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/07/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **1** Lab No. **16271**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (77.5-80')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.	100	
3/8 in.	100	
1/4 in.	99	
No. 4	99	
No. 8	99	
No. 10	99	
No. 16	98	
No. 30	98	
No. 40	96	
No. 50	88	
No. 100	49	
Passing 200	12	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/07/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **1** Lab No. **16272**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (97.5-100')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4	**100**	
No. 8	**100**	
No. 10	**100**	
No. 16	**100**	
No. 30	**99**	
No. 40	**95**	
No. 50	**84**	
No. 100	**40**	
Passing 200	**10**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate Aggregate dried		Bulk specific gravity		
			Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate Aggregate dried		Bulk specific gravity		
			Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_C		
			D_f		
Uncompacted Void Content			%		

Comments:

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Client **AECOM**
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Date of Report **12/07/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **1** Lab No. **16354**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/23/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (107.5-110')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.	100	
1/2 in.	99	
3/8 in.	99	
1/4 in.	99	
No. 4	98	
No. 8	96	
No. 10	96	
No. 16	96	
No. 30	96	
No. 40	95	
No. 50	89	
No. 100	44	
Passing 200	7.8	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids	Fine aggregate	Unit weight, lb/ft^3		
		Voids, %		
	Coarse aggregate	Unit weight, lb/ft^3		
		Voids, %		
Specific Gravity & Absorption	Fine Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
	Coarse Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion	Grading	rev., % loss		
	Grading	rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_c		
		D_f		
Uncompacted Void Content		%		

Comments:

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Date of Report **12/07/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **1** Lab No. **16273**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (117.5-120')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.	100	
1/2 in.	99	
3/8 in.	97	
1/4 in.	95	
No. 4	94	
No. 8	93	
No. 10	93	
No. 16	93	
No. 30	92	
No. 40	91	
No. 50	87	
No. 100	58	
Passing 200	12	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft³		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft³		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/07/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **1** Lab No. **16274**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (127.5-130')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.	100	
No. 4	100	
No. 8	100	
No. 10	100	
No. 16	100	
No. 30	100	
No. 40	100	
No. 50	90	
No. 100	32	
Passing 200	2.9	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

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Date of Report **12/07/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **1** Lab No. **16275**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (137.5-140')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4		
No. 8		
No. 10		
No. 16	**100**	
No. 30	**100**	
No. 40	**98**	
No. 50	**86**	
No. 100	**68**	
Passing 200	**13**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

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Date of Report **12/07/20** Page **1** of **1**
Job No. **2940JB189**
Event No. **1** Lab No. **16276**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (148-150')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4		
No. 8		
No. 10		
No. 16	**100**	
No. 30	**100**	
No. 40	**99**	
No. 50	**91**	
No. 100	**68**	
Passing 200	**13**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids	Fine aggregate	Unit weight, lb/ft^3		
		Voids, %		
	Coarse aggregate	Unit weight, lb/ft^3		
		Voids, %		
Specific Gravity & Absorption	Fine Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
	Coarse Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion	Grading	rev., % loss		
	Grading	rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_c		
		D_f		
Uncompacted Void Content		%		

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Date of Report **12/07/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **1** Lab No. **16287**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **CLIENT** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 1 (157.5-160')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4	**100**	
No. 8	**100**	
No. 10	**100**	
No. 16	**100**	
No. 30	**99**	
No. 40	**99**	
No. 50	**97**	
No. 100	**89**	
Passing 200	**44**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids	Fine aggregate	Unit weight, lb/ft^3		
		Voids, %		
	Coarse aggregate	Unit weight, lb/ft^3		
		Voids, %		
Specific Gravity & Absorption	Fine Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
	Coarse Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion	Grading	rev., % loss		
	Grading	rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_c		
		D_f		
Uncompacted Void Content		%		

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Date of Report **12/03/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **2** Lab No. **16277**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 2 (22.5-25')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure A**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.	100	
1-1/2 in.	98	
1 in.	95	
3/4 in.	93	
1/2 in.	88	
3/8 in.	83	
1/4 in.	79	
No. 4	76	
No. 8	72	
No. 10	71	
No. 16	69	
No. 30	66	
No. 40	63	
No. 50	57	
No. 100	31	
Passing 200	19	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids	Fine aggregate	Unit weight, lb/ft³		
		Voids, %		
	Coarse aggregate	Unit weight, lb/ft³		
		Voids, %		
Specific Gravity & Absorption	Fine Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
	Coarse Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion	Grading	rev., % loss		
	Grading	rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_c		
		D_f		
Uncompacted Void Content		%		

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Date of Report **12/03/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **2** Lab No. **16278**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 2 (42.5-45')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.	100	
1/2 in.	100	
3/8 in.	100	
1/4 in.	97	
No. 4	95	
No. 8	91	
No. 10	90	
No. 16	89	
No. 30	88	
No. 40	85	
No. 50	78	
No. 100	40	
Passing 200	23	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_C		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/03/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **2** Lab No. **16279**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 2 (62.5-65')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.	100	
1-1/2 in.	95	
1 in.	88	
3/4 in.	83	
1/2 in.	80	
3/8 in.	77	
1/4 in.	74	
No. 4	72	
No. 8	68	
No. 10	68	
No. 16	66	
No. 30	64	
No. 40	62	
No. 50	57	
No. 100	34	
Passing 200	16	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids	Fine aggregate	Unit weight, lb/ft^3		
		Voids, %		
	Coarse aggregate	Unit weight, lb/ft^3		
		Voids, %		
Specific Gravity & Absorption	Fine Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
	Coarse Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion	Grading	rev., % loss		
	Grading	rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_c		
		D_f		
Uncompacted Void Content		%		

Comments:

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Date of Report **12/03/20** Page **1** of **1**
Job No. **2940JB189**
Event No. **2** Lab No. **16280**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 2 (82.5-85')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.	**100**	
3/8 in.	**100**	
1/4 in.	**100**	
No. 4	**100**	
No. 8	**99**	
No. 10	**99**	
No. 16	**99**	
No. 30	**98**	
No. 40	**96**	
No. 50	**89**	
No. 100	**51**	
Passing 200	**21**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_C		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/03/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **2** Lab No. **16281**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 2 (104-106')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.	100	
1/2 in.	99	
3/8 in.	99	
1/4 in.	99	
No. 4	98	
No. 8	98	
No. 10	98	
No. 16	98	
No. 30	97	
No. 40	96	
No. 50	86	
No. 100	39	
Passing 200	9.0	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/03/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **2** Lab No. **16282**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 2 (122.5-125')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4	**100**	
No. 8	**100**	
No. 10	**100**	
No. 16	**100**	
No. 30	**100**	
No. 40	**98**	
No. 50	**93**	
No. 100	**51**	
Passing 200	**5.2**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/03/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **2** Lab No. **16283**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 2 (132.5-135')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4		
No. 8		
No. 10		
No. 16	**100**	
No. 30	**100**	
No. 40	**98**	
No. 50	**88**	
No. 100	**63**	
Passing 200	**11**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_C		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/03/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **2** Lab No. **16284**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 2 (144-146')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4		
No. 8		
No. 10		
No. 16		
No. 30	**100**	
No. 40	**100**	
No. 50	**94**	
No. 100	**72**	
Passing 200	**10**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_C		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/03/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **2** Lab No. **16285**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 2 (152.5-155')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4		
No. 8		
No. 10		
No. 16	**100**	
No. 30	**100**	
No. 40	**99**	
No. 50	**96**	
No. 100	**91**	
Passing 200	**28**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/03/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **2** Lab No. **16286**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 2 (162.5-165')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure B**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4	**100**	
No. 8	**100**	
No. 10	**100**	
No. 16	**100**	
No. 30	**99**	
No. 40	**98**	
No. 50	**97**	
No. 100	**92**	
Passing 200	**47**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids	Fine aggregate	Unit weight, lb/ft^3		
		Voids, %		
	Coarse aggregate	Unit weight, lb/ft^3		
		Voids, %		
Specific Gravity & Absorption	Fine Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
	Coarse Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion	Grading	rev., % loss		
	Grading	rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_C		
		D_f		
Uncompacted Void Content		%		

Comments:

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Date of Report **12/17/20** Page **1** of **1**
Job No. **2940JB189**
Event No. **3** Lab No. **16288**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 3 (27.5-30')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure A**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.	100	
1-1/2 in.	98	
1 in.	94	
3/4 in.	90	
1/2 in.	88	
3/8 in.	86	
1/4 in.	84	
No. 4	83	
No. 8	76	
No. 10	76	
No. 16	75	
No. 30	74	
No. 40	72	
No. 50	67	
No. 100	40	
Passing 200	25	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids	Fine aggregate	Unit weight, lb/ft^3		
		Voids, %		
	Coarse aggregate	Unit weight, lb/ft^3		
		Voids, %		
Specific Gravity & Absorption — Fine Aggregate		Bulk specific gravity		
Aggregate dried		Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Coarse Aggregate		Bulk specific gravity		
Aggregate dried		Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion	Grading	rev., % loss		
	Grading	rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_c		
		D_f		
Uncompacted Void Content		%		

Comments:

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Date of Report **12/17/20** Page **1** of **1**
Job No. **2940JB189**
Event No. **3** Lab No. **16289**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 3 (47.5-50')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure A**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.	100	
1 in.	100	
3/4 in.	99	
1/2 in.	97	
3/8 in.	96	
1/4 in.	95	
No. 4	94	
No. 8	93	
No. 10	92	
No. 16	92	
No. 30	91	
No. 40	89	
No. 50	81	
No. 100	41	
Passing 200	24	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids		Fine aggregate: Unit weight, lb/ft³		
		Fine aggregate: Voids, %		
		Coarse aggregate: Unit weight, lb/ft³		
		Coarse aggregate: Voids, %		
Specific Gravity & Absorption	Fine Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
	Coarse Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion		Grading: rev., % loss		
		Grading: rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_C		
		D_f		
Uncompacted Void Content		%		

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Date of Report **12/17/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **3** Lab No. **16290**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 3 (67.5-70')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure A**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.	100	
2 in.	81	
1-1/2 in.	78	
1 in.	69	
3/4 in.	67	
1/2 in.	63	
3/8 in.	61	
1/4 in.	59	
No. 4	58	
No. 8	56	
No. 10	56	
No. 16	55	
No. 30	54	
No. 40	52	
No. 50	49	
No. 100	34	
Passing 200	20	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids	Fine aggregate	Unit weight, lb/ft³		
		Voids, %		
	Coarse aggregate	Unit weight, lb/ft³		
		Voids, %		
Specific Gravity & Absorption	Fine Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
	Coarse Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion	Grading	rev., % loss		
	Grading	rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_c		
		D_f		
Uncompacted Void Content		%		

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Date of Report **12/17/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **3** Lab No. **16292**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 3 (107.5-110')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure A**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.	100	
3/4 in.	99	
1/2 in.	99	
3/8 in.	99	
1/4 in.	98	
No. 4	97	
No. 8	97	
No. 10	96	
No. 16	96	
No. 30	96	
No. 40	95	
No. 50	88	
No. 100	35	
Passing 200	13	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids	Fine aggregate	Unit weight, lb/ft^3		
		Voids, %		
	Coarse aggregate	Unit weight, lb/ft^3		
		Voids, %		
Specific Gravity & Absorption	Fine Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
	Coarse Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion	Grading	rev., % loss		
	Grading	rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_c		
		D_f		
Uncompacted Void Content		%		

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Date of Report **12/17/20** Page **1** of **1**
Job No. **2940JB189**
Event No. **3** Lab No. **16293**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 3 (117.5-120')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure A**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.	100	
1/2 in.	100	
3/8 in.	99	
1/4 in.	99	
No. 4	99	
No. 8	99	
No. 10	99	
No. 16	99	
No. 30	99	
No. 40	98	
No. 50	91	
No. 100	13	
Passing 200	1.5	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft³		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft³		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

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Date of Report **12/17/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **3** Lab No. **16294**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 3 (127.5-130')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure A**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.	100	
1 in.	99	
3/4 in.	99	
1/2 in.	99	
3/8 in.	99	
1/4 in.	98	
No. 4	98	
No. 8	97	
No. 10	97	
No. 16	97	
No. 30	97	
No. 40	95	
No. 50	90	
No. 100	49	
Passing 200	8.1	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

			Results	Specs.
Unit Weight & Voids	Fine aggregate	Unit weight, lb/ft^3		
		Voids, %		
	Coarse aggregate	Unit weight, lb/ft^3		
		Voids, %		
Specific Gravity & Absorption	Fine Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
	Coarse Aggregate	Bulk specific gravity		
	Aggregate dried	Bulk specific gravity (SSD)		
		Apparent specific gravity		
		Absorption, %		
Sand Equivalent Value		SE		
Los Angeles (LA) Abrasion	Grading	rev., % loss		
	Grading	rev., % loss		
Lightweight Particles				
Mass of test sample g		Zinc chloride, specific gravity = 2.0, coal & lignite, %		
		Other particles lighter than 2.0, %		
Mass of test sample g		Zinc bromide, specific gravity = 2.4, chert & shale, %		
		Other particles lighter than 2.4, %		
Clay Lumps & Friable Particles		Fine aggregate, %		
		Coarse aggregate, %		
Fractured Faces By Weight		One or more, %		
		Two or more, %		
Cleanness Value		CV		
Durability Index		D_c		
		D_f		
Uncompacted Void Content		%		

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Date of Report **12/17/20** Page **1** of **1**
Job No. **2940JB189**
Event No. **3** Lab No. **16295**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 3 (137.5-140')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure A**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4		
No. 8		
No. 10		
No. 16	**100**	
No. 30	**100**	
No. 40	**97**	
No. 50	**85**	
No. 100	**62**	
Passing 200	**10**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

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Date of Report **12/17/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **3** Lab No. **16296**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 3 (147.5-150')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure A**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4		
No. 8		
No. 10		
No. 16	**100**	
No. 30	**100**	
No. 40	**98**	
No. 50	**88**	
No. 100	**74**	
Passing 200	**12**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

Comments:

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Date of Report **12/17/20** Page **1 of 1**
Job No. **2940JB189**
Event No. **3** Lab No. **16297**
Authorized By **ANDREW MESSER** Date **11/18/20**
Sample Location Designated By **WALLACE GILLMORE** Date **11/18/20**
Sampled By **CLIENT** Date **11/18/20**
Submitted By **NINO & MOORE** Date **11/18/20**

Project **SIEVE ANALYSIS**
Project Address **WT LAB - TUCSON, AZ**
Material Description **SILTY SAND**
Material Use **-**
Material Source **EXISTING**
Sample Location **BH 3 (157.5-160')**
Special Instructions

Sieve Analysis **ASTM C136**
Finer Than No. 200 **ASTM C117, Procedure A**

Sieve	Accumulative % passing	Specification
6 in.		
4 in.		
3 in.		
2 in.		
1-1/2 in.		
1 in.		
3/4 in.		
1/2 in.		
3/8 in.		
1/4 in.		
No. 4		
No. 8		
No. 10		
No. 16		
No. 30	**100**	
No. 40	**100**	
No. 50	**98**	
No. 100	**91**	
Passing 200	**22**	

	Results	Specs.
Fineness Modulus		
Moisture Content, %		
Organic Impurities		

				Results	Specs.
Unit Weight & Voids		Fine aggregate	Unit weight, lb/ft^3		
			Voids, %		
		Coarse aggregate	Unit weight, lb/ft^3		
			Voids, %		
Specific Gravity & Absorption	Fine Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
	Coarse Aggregate		Bulk specific gravity		
	Aggregate dried		Bulk specific gravity (SSD)		
			Apparent specific gravity		
			Absorption, %		
Sand Equivalent Value			SE		
Los Angeles (LA) Abrasion		Grading	rev., % loss		
		Grading	rev., % loss		
Lightweight Particles					
Mass of test sample	g	Zinc chloride, specific gravity = 2.0, coal & lignite, %			
		Other particles lighter than 2.0, %			
Mass of test sample	g	Zinc bromide, specific gravity = 2.4, chert & shale, %			
		Other particles lighter than 2.4, %			
Clay Lumps & Friable Particles			Fine aggregate, %		
			Coarse aggregate, %		
Fractured Faces By Weight			One or more, %		
			Two or more, %		
Cleanness Value			CV		
Durability Index			D_c		
			D_f		
Uncompacted Void Content			%		

Comments:

The services referred to herein were performed in accordance with the standard of care practiced locally for the referenced method(s) and relate only to the condition(s) or sample(s) tested at the time and place stated herein. Western Technologies Inc. (WT) makes no other warranty or representation, express or implied, and has not confirmed information including source or materials submitted by others. This report shall not be reproduced, except in full, without the prior written approval of WT.

Reviewed By **Maggie Bowland, Laboratory Coordinator**
Signed copy on file

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Attachment 4

Eurofins TestAmerica, Houston Laboratory Report

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eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-213767-1
Client Project/Site: JAL#4 Gas Plant

For:
AECOM
19219 Katy Freeway
Suite 100
Houston, Texas 77094

Attn: Mr. Wallace Gilmore

Bethany McDaniel

Authorized for release by:
12/5/2020 2:52:47 PM

Bethany McDaniel, Senior Project Manager
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LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: AECOM
Project/Site: JAL#4 Gas Plant

Laboratory Job ID: 600-213767-1

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Case Narrative

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Job ID: 600-213767-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-213767-1

Comments
No additional comments.

Receipt
The samples were received on 11/13/2020 10:14 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.4º C.

Receipt Exceptions
A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

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

GC Semi VOA
Method TX 1005: The continuing calibration verification (CCV) associated with batch 600-307407 recovered above the upper control limit for C28-C35. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 600-307407/21).

Method TX 1005: The following samples were diluted to bring the concentration of target analytes within the calibration range: (600-213769-D-1-B), (600-213769-D-1-C MS) and (600-213769-D-1-D MSD). Elevated reporting limits (RLs) are provided.

Method TX 1005: The following samples required a dilution due to the nature of the sample matrix: (600-213769-D-1-C MS) and (600-213769-D-1-D MSD). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

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

Subcontract non-Sister
See attached subcontract report.

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

Method Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
Subcontract	Chloride only	None	Xenco
5030B	Purge and Trap for Solids	SW846	TAL HOU
Frozen Preserve	Freezing Samples	None	TAL HOU
TX_1005_S_Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	TAL HOU

Protocol References:

None = None
SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TCEQ = Texas Commission of Environmental Quality

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444
Xenco = Xenco Laboratories, 11381 Meadowglen, Suite L, Houston, TX 77082, TEL (281)589-0692

Sample Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-213767-1	WCS-1	Solid	11/12/20 15:15	11/13/20 10:14	

Client Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Client Sample ID: WCS-1
Date Collected: 11/12/20 15:15
Date Received: 11/13/20 10:14

Lab Sample ID: 600-213767-1
Matrix: Solid
Percent Solids: 84.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0060		0.0060	0.00075	mg/Kg	☼	11/13/20 13:02	11/13/20 13:25	1
Ethylbenzene	<0.0060		0.0060	0.0012	mg/Kg	☼	11/13/20 13:02	11/13/20 13:25	1
Toluene	<0.0060		0.0060	0.0017	mg/Kg	☼	11/13/20 13:02	11/13/20 13:25	1
Xylenes, Total	<0.0060		0.0060	0.0014	mg/Kg	☼	11/13/20 13:02	11/13/20 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*	*11/13/20 13:02*	*11/13/20 13:25*	*1*
Dibromofluoromethane	*89*		*68 - 140*	*11/13/20 13:02*	*11/13/20 13:25*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*11/13/20 13:02*	*11/13/20 13:25*	*1*
4-Bromofluorobenzene	*96*		*57 - 140*	*11/13/20 13:02*	*11/13/20 13:25*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<12		12	4.5	mg/Kg	☼	11/17/20 11:27	11/18/20 16:28	1
>C12-C28	<12		12	4.8	mg/Kg	☼	11/17/20 11:27	11/18/20 16:28	1
>C28-C35	<12		12	4.8	mg/Kg	☼	11/17/20 11:27	11/18/20 16:28	1
C6-C35	<12		12	4.5	mg/Kg	☼	11/17/20 11:27	11/18/20 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*70 - 130*	*11/17/20 11:27*	*11/18/20 16:28*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.5**		1.0	1.0	%			11/16/20 09:22	1
Percent Solids	**84.5**		1.0	1.0	%			11/16/20 09:22	1

Method: Chloride only - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8360**		101	3.56	mg/kg		12/03/20 15:00	12/03/20 19:27	10

Definitions/Glossary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Glossary

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

Surrogate Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-213767-1	WCS-1	85	89	96	96
LCS 600-307214/3	Lab Control Sample	86	93	97	101
LCSD 600-307214/4	Lab Control Sample Dup	89	95	100	100
MB 600-307214/6	Method Blank	85	90	95	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH
Lab Sample ID	Client Sample ID	(70-130)
600-213767-1	WCS-1	119
LCS 600-307372/2-A	Lab Control Sample	126
LCSD 600-307372/3-A	Lab Control Sample Dup	99
MB 600-307372/1-A	Method Blank	117

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-307214/6
Matrix: Solid
Analysis Batch: 307214

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0050		0.0050	0.00063	mg/Kg			11/13/20 11:23	1
Ethylbenzene	<0.0050		0.0050	0.0010	mg/Kg			11/13/20 11:23	1
Toluene	<0.0050		0.0050	0.0014	mg/Kg			11/13/20 11:23	1
Xylenes, Total	<0.0050		0.0050	0.0011	mg/Kg			11/13/20 11:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*		*11/13/20 11:23*	*1*
Dibromofluoromethane	*90*		*68 - 140*		*11/13/20 11:23*	*1*
Toluene-d8 (Surr)	*95*		*50 - 130*		*11/13/20 11:23*	*1*
4-Bromofluorobenzene	*97*		*57 - 140*		*11/13/20 11:23*	*1*

Lab Sample ID: LCS 600-307214/3
Matrix: Solid
Analysis Batch: 307214

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0558		mg/Kg		112	70 - 131		
Ethylbenzene			0.0500	0.0616		mg/Kg		123	66 - 130		
Toluene			0.0500	0.0588		mg/Kg		118	67 - 130		
m-Xylene & p-Xylene			0.0500	0.0575		mg/Kg		115	64 - 130		
o-Xylene			0.0500	0.0603		mg/Kg		121	62 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*
Dibromofluoromethane	*93*		*68 - 140*
Toluene-d8 (Surr)	*97*		*50 - 130*
4-Bromofluorobenzene	*101*		*57 - 140*

Lab Sample ID: LCSD 600-307214/4
Matrix: Solid
Analysis Batch: 307214

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.0577		mg/Kg		115	70 - 131	3	30
Ethylbenzene			0.0500	0.0613		mg/Kg		123	66 - 130	0	30
Toluene			0.0500	0.0595		mg/Kg		119	67 - 130	1	30
m-Xylene & p-Xylene			0.0500	0.0568		mg/Kg		114	64 - 130	1	30
o-Xylene			0.0500	0.0592		mg/Kg		118	62 - 130	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*100*		*50 - 130*
4-Bromofluorobenzene	*100*		*57 - 140*

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 600-307372/1-A
Matrix: Solid
Analysis Batch: 307407

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 307372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<10		10	3.8	mg/Kg		11/17/20 11:27	11/18/20 09:27	1
>C12-C28	<10		10	4.1	mg/Kg		11/17/20 11:27	11/18/20 09:27	1
>C28-C35	<10		10	4.1	mg/Kg		11/17/20 11:27	11/18/20 09:27	1
C6-C35	<10		10	3.8	mg/Kg		11/17/20 11:27	11/18/20 09:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*117*		*70 - 130*	*11/17/20 11:27*	*11/18/20 09:27*	*1*

Lab Sample ID: LCS 600-307372/2-A
Matrix: Solid
Analysis Batch: 307407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 307372

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			252	199		mg/Kg		79	75 - 125		
>C12-C28			250	277		mg/Kg		111	75 - 125		
C6-C35			502	476		mg/Kg		95	75 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*126*		*70 - 130*

Lab Sample ID: LCSD 600-307372/3-A
Matrix: Solid
Analysis Batch: 307407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 307372

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			252	197		mg/Kg		78	75 - 125	1	20
>C12-C28			250	246		mg/Kg		98	75 - 125	12	20
C6-C35			502	443		mg/Kg		88	75 - 125	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*99*		*70 - 130*

Method: Chloride only - General Subcontract Method

Lab Sample ID: 7716361-1-BLK
Matrix: SOIL
Analysis Batch: 3143882

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3143882_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	U		10	0.354	mg/kg		12/03/20 15:00	12/03/20 15:48	1

Lab Sample ID: 7716361-1-BKS
Matrix: SOIL
Analysis Batch: 3143882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3143882_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	103		mg/kg		103	80 - 120		

QC Sample Results

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Method: Chloride only - General Subcontract Method (Continued)

Lab Sample ID: 7716361-1-BSD
Matrix: SOIL
Analysis Batch: 3143882

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3143882_P

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	104		mg/kg		104	80 - 120	1	20

QC Association Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

GC/MS VOA

Analysis Batch: 307214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-213767-1	WCS-1	Total/NA	Solid	8260B	307260
MB 600-307214/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-307214/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-307214/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 307260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-213767-1	WCS-1	Total/NA	Solid	5030B	

GC Semi VOA

Pre Prep Batch: 307371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-213767-1	WCS-1	Total/NA	Solid	Frozen Preserve	

Prep Batch: 307372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-213767-1	WCS-1	Total/NA	Solid	TX_1005_S_Prep	307371
MB 600-307372/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Prep	
LCS 600-307372/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Prep	
LCSD 600-307372/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Prep	

Analysis Batch: 307407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-213767-1	WCS-1	Total/NA	Solid	TX 1005	307372
MB 600-307372/1-A	Method Blank	Total/NA	Solid	TX 1005	307372
LCS 600-307372/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	307372
LCSD 600-307372/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	307372

General Chemistry

Analysis Batch: 307298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-213767-1	WCS-1	Total/NA	Solid	2540B	

Subcontract

Analysis Batch: 3143882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-213767-1	WCS-1	Total/NA	Solid	Chloride only	3143882_P
7716361-1-BLK	Method Blank	Total/NA	SOIL	Chloride only	3143882_P
7716361-1-BKS	Lab Control Sample	Total/NA	SOIL	Chloride only	3143882_P
7716361-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	Chloride only	3143882_P

Prep Batch: 3143882_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-213767-1	WCS-1	Total/NA	Solid	E300P	

QC Association Summary

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Subcontract (Continued)

Prep Batch: 3143882_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
7716361-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT PREP***	
7716361-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT PREP***	
7716361-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT PREP***	

Lab Chronicle

Client: AECOM
Project/Site: JAL#4 Gas Plant

Job ID: 600-213767-1

Client Sample ID: WCS-1
Date Collected: 11/12/20 15:15
Date Received: 11/13/20 10:14

Lab Sample ID: 600-213767-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	307298	11/16/20 09:22	A1K	TAL HOU
Total/NA	Prep	E300P		1	3143882_P	12/03/20 15:00		Xenco
Total/NA	Analysis	Chloride only		10	3143882	12/03/20 19:27	JYM	Xenco

Client Sample ID: WCS-1
Date Collected: 11/12/20 15:15
Date Received: 11/13/20 10:14

Lab Sample ID: 600-213767-1
Matrix: Solid
Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			307260	11/13/20 13:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	307214	11/13/20 13:25	WS1	TAL HOU
Total/NA	Pre Prep	Frozen Preserve			307371	11/13/20 12:15	RJV	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			307372	11/17/20 11:27	RJV	TAL HOU
Total/NA	Analysis	TX 1005		1	307407	11/18/20 16:28	W1N	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Xenco = Xenco Laboratories, 11381 Meadowglen, Suite L, Houston, TX 77082, TEL (281)589-0692

Accreditation/Certification Summary

Client: AECOM
Job ID: 600-213767-1
Project/Site: JAL#4 Gas Plant

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-20-28	11-01-21

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

Analysis Method	Prep Method	Matrix	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

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Analytical Report 679438

for

Eurofins TestAmerica - Houston

Project Manager: Bethany McDaniel

Jal #4 Gas Plant

600-213767

12.04.2020

Collected By: Client

4147 Greenbriar Dr.
Stafford, TX 77477

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 (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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12.04.2020

Project Manager: **Bethany McDaniel**
Eurofins TestAmerica - Houston
6310 Rothway St, Ste 130
Houston, TX 77040

Reference: Eurofins Xenco, LLC Report No(s): **679438**
Jal #4 Gas Plant
Project Address:

Bethany McDaniel:

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) 679438. 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. 679438 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,

John Cady
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 679438

Eurofins TestAmerica - Houston, Houston, TX

Jal #4 Gas Plant

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
WCS-1 (600-213767-1)	S	11.12.2020 15:15		679438-001

CASE NARRATIVE

Client Name: Eurofins TestAmerica - Houston

Project Name: Jal #4 Gas Plant

Project ID: *600-213767*
Work Order Number(s): *679438*

Report Date: *12.04.2020*
Date Received: *11.27.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 679438

Eurofins TestAmerica - Houston, Houston, TX

Jal #4 Gas Plant

Sample Id:	**WCS-1 (600-213767-1)**	Matrix:	Solid	Date Received:	11.27.2020 13:05
Lab Sample Id:	679438-001	Date Collected:	11.12.2020 15:15		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM				
Analyst:	JYM	Date Prep:	12.03.2020 15:00	% Moisture: Basis:	Wet Weight
Seq Number:	3143882				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8360**	101	3.56	mg/kg	12.03.2020 19:27		10

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Blank Summary 679438

Eurofins TestAmerica - Houston, Houston, TX

Jal #4 Gas Plant

Sample Id: **7716361-1-BLK** Matrix: SOLID

Lab Sample Id: **7716361-1-BLK**

Analytical Method: **Chloride by EPA 300** Prep Method: E300P

Tech: JYM

Analyst: JYM Date Prep: 12.03.2020 15:00

Seq Number: 3143882

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<0.354	10.0		mg/kg	12.03.2020 15:48	U	1

QC Summary 679438

Eurofins TestAmerica - Houston

Jal #4 Gas Plant

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3143882 — Matrix: Solid — Date Prep: 12.03.2020
MB Sample Id: 7716361-1-BLK — LCS Sample Id: 7716361-1-BKS — LCSD Sample Id: 7716361-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	100	103	103	104	104	80-120	1	20	mg/kg	12.03.2020 16:04	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3143882 — Matrix: Soil — Date Prep: 12.03.2020
Parent Sample Id: 679047-001 — MS Sample Id: 679047-001 S — MSD Sample Id: 679047-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.355	100	104	104	104	104	80-120	0	20	mg/kg	12.03.2020 16:51	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3143882 — Matrix: Soil — Date Prep: 12.03.2020
Parent Sample Id: 679047-002 — MS Sample Id: 679047-002 S — MSD Sample Id: 679047-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	25.7	100	118	92	118	92	80-120	0	20	mg/kg	12.03.2020 17:38	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

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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.

** Surrogate recovered outside laboratory control limit.

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

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Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone: 713-690-4444 Fax: 713-690-5646

Chain of Custody Record

679438

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-47894.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Bethany.McDaniel@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: Xenco Laboratories		Accreditations Required (See note): NELAP - Texas		Job #: 600-213767-1
Address: 11381 Meadowglen, Suite L,	Due Date Requested: 11/30/2020			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77082				
Phone: 281-589-0692(Tel)	PO #:			
Email:	WO #:			
Project Name: JAL#4 Gas Plant	Project #: 60008415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Chloride only)/ Chloride only	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
WCS-1 (600-213767-1)	11/12/20	15:15 Central		Solid			X	1	Chloride only

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		11/27/20 1305	ETA		11/27/20 1305	Xenco
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Eurofins TestAmerica - Houston

Date/ Time Received: 11.27.2020 01.05.00 PM

Work Order #: 679438

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : HOU-188

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.1
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ 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/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/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 test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: Sandra Torres PH Device/Lot#:

Checklist completed by: Sandra Torres Date: 12.01.2020
Sandra Torres

Checklist reviewed by: Bethany McDaniel Date: 12.02.2020
Bethany McDaniel

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Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: W. Gilmore	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-79825-18509.1
Client Contact: Mr. Wallace Gilmore	Phone: 713-542-9523	E-Mail: Bethany.McDaniel@Eurofinset.com		Page: Page 1 of 1
Company: AECOM				Job #:

Address: 19219 Katy Freeway Suite 100	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Houston	TAT Requested (days):		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: TX, 77094			
Phone: 713-520-990(Tel) 713-520-680(Fax)	PO #: WD801914		Other:
Email: wallace.gilmore@aecom.com	WO #:		
Project Name: JAL#4 Gas Plant--Wally Gilmore	Project #: 60008415		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - BTEX Only	9056_ORGFM_28D, Moisture	TX_1005 - Texas - Total Petroleum Hydrocarbon (GC)	chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N			
WCS-1	11/12/20	3:15P	C	Solid			✓	✓	✓	✓		
				Water								

600-213767 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Wally Gilmore	11/12/20 5:20pm	AECOM	YCRO	11/13/20 1014	EA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

'20 NOV 13 10:14

Eurofins TestAmerica Houston

Loc: 600
213767

eurofins | Environment Testing TestAmerica

Sample Receipt Checklist

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: Accom

UNPACKED BY: YR CARRIER/DRIVER: Fed Ex

Custody Seal Present: ☒YES ☐NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
6460	X / N	X / N	5.3	681	0.1	5.4
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				11/13/20
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____ VOA headspace acceptable (5-6mm): ☒YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒YES	☐ NO

COMMENTS:

11/13/20

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: AECOM Job Number: 600-213767-1

Login Number: 213767 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	5.4
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

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Attachment 5

Soil Disposal Documentation

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24-HOUR SERVICE, CALL
LOVINGTON 396-4948
TATUM 398-4960

GANDY MARLEY

P.O. BOX 1658 · ROSWELL, NEW MEXICO 88202

P.O. BOX 2140
LOVINGTON, NEW MEXICO 88260

39529

AUTHORIZATION FOR WORK

Date 1-4-21

YOUR NO. 42

COMPANY _____ LEASE _____

MAIL INVOICE TO El Paso Natural Gas Company WELL _____

DESCRIPTION OF WORK Picked up box of soil cuttings

10 MLS N. of Jal

Equipment Used Rollo	@ $ 110	Hrs. worked 9	Total 990.00
Box Rent -	@ $	Hrs. worked	Total
Liner	@ $	Hrs. worked	Total
Jet Out ✓	@ $	Hrs. worked	Total
Disposal 10 yards	@ $	Hrs. worked	Total
Disposal Facility Chaves Landfill (OD656)	@ $	Hrs. worked	Total
Box No. Delivered	@ $	Hrs. worked	Total
Box No. Picked Up 163	@ $	Hrs. worked	Total
			Sub Total
			Sales Tax
			TOTAL

Driver _____ Approved by _____

Superior Printing Service, Inc. - 104

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Page 535 of 542

CHARTER WASTE LANDFILL 432-381-4722 01 1378028
12025 W MURPHY ST ODESSA, TX

Juliana R.

333779
AECOM
19219 Katy Freeway Ste 100
Houston, TX 77094

1/4/21 2:10 pm 1/4/21 2:50 pm
34122015872
01555308ZFLB JAIME AGUILAR

Contract:34122015872
Generator:EL PASO NATURAL GAS COMPANY, LLC (EPNG)

SCALE IN	GROSS WEIGHT	45,920	NET TONS	2.81	INBOUND
SCALE OUT	TARE WEIGHT	40,300	NET WEIGHT	5,620	INVOICE

10.00	YD	Tracking QTY	
2.81	tn	SW-CONT SOIL	Origin:CLASS I SOLIDS 1006

Signature_____

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-7042UPBL (06/13)

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Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
D0035	1	N/A	015553080 FLE

GENERATOR

5. Generator's Name and Mailing Address

713-420-3475

Generator's Phone:

El Paso Natural Gas Co, LLC (EPNG)
1001 Louisiana, Room 757A
Houston, TX 77002

Generator's Site Address (if different than mailing address)

El Paso Natural Gas Co, LLC (EPNG)
10 Miles N. of Jal, NM On State Highway 18
Jal, NM88252

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

432-381-4722

Facility's Phone:

CHARTER LANDFILL
12035 WEST MURPHY
ODESSA, TX 79763

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. SOIL CUTTING APPROVAL # 34122015872					DUT83021
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

CUST: AECOM CUST # 333779

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Joseph Wiley — Signature: Joseph Wiley — Month 12 Day 28 Year 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month Day Year

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: CHARTER LANDFILL — Signature — Month Day Year

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

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Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
D0035	1	N/A	015553081 FLE

GENERATOR

5. Generator's Name and Mailing Address

713-420-3475

El Paso Natural Gas Co, LLC (EPNG)
1001 Louisiana, Room 757A
Houston, TX 77002

Generator's Site Address (if different than mailing address)

El Paso Natural Gas Co, LLC (EPNG)
10 Miles N. of Jal, NM On State Highway 18
Jal, NM 88252

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

432-381-4722

CHARTER LANDFILL
12035 WEST MURPHY
ODESSA, TX 79763

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. SOIL CUTTING APPROVAL # 34122015872					DUT83021
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

CUST: AECOM CUST # 333779

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Joseph Wiley — Signature: Joseph Wiley — Month 12 Day 28 Year 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month Day Year

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

18b. Alternate Facility (or Generator) — Manifest Reference Number: — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: CHARTER LANDFILL — Signature — Month Day Year

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

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TNM42

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Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number 00035	2. Page 1 of 1	3. Emergency Response Phone N/A	4. Manifest Tracking Number 015553082 FLE

GENERATOR

5. Generator's Name and Mailing Address

El Paso Natural Gas Co, LLC (EPNG)
1001 Louisiana, Room 757A
Houston, TX 77002

Generator's Phone: 713-420-3475

Generator's Site Address (if different than mailing address)

El Paso Natural Gas Co, LLC (EPNG)
10 Miles N. of Jal, NM On State Highway 18
Jal, NM 88252

6. Transporter 1 Company Name: R. Lowe

U.S. EPA ID Number:

7. Transporter 2 Company Name

U.S. EPA ID Number:

8. Designated Facility Name and Site Address

CHARTER LANDFILL
12035 WEST MURPHY
ODESSA, TX 79763

Facility's Phone: 432-381-4722

U.S. EPA ID Number:

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes
	1. SOIL CUTTINGS APPROVAL # 34122015872			4 85		OUT83021
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

CUST: AECOM

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Joseph Wiley

Signature:

Month 12 Day 28 Year 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

Transporter 2 Printed/Typed Name

Signature

Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

18b. Alternate Facility (or Generator) Manifest Reference Number:

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: CHARTER LANDFILL

Signature:

Month 12 Day 29 Year 20

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Special Waste Profile

REPUBLIC SERVICES

Disposal Facility: 3412 Charter Waste Landfill TX

Waste Profile #:

Sales Rep #:

I. Generator Information

Generator Name: El Paso Natural Gas Company, LLC (EPNG)

Generator Site Address: 10 miles north of Jal, NM on State Highway 18

City: Jal County: Lea State: New Mexico Zip: 88252

State ID/Reg No: D0035 State Approval/Waste Code: OUTS3021 NAICS #: 211130

Generator Mailing Address ☐ (if different) 1001 Louisiana, Room 757A

City: Houston County: Harris State: Texas Zip: 77002

Generator Contact Name: Joseph (Joe) Wiley, PG Email: Joe_wiley@kindermorgan.com

Phone Number: (713) 420-3475 Ext: Fax Number: (713) 445-8244

II. Billing Information

Bill To: AECOM Contact Name: Wally Gilmore

Billing Address: 19219 Katy Freeway, Ste 100 Email: wallace.gilmore@aecom.com

City: Houston State: Texas Zip: 77094 Phone: (713) 542-9523

III. Waste Stream Information

Name of Waste: Soil Cuttings

Process Generating Waste: Soil cuttings from exploratory soil borings drilled outside of impacted soil source areas. The purpose of the borings was to collect soil samples for grain size analysis.

Type of Waste: Industrial Process Waste Physical State: Solid Method of Shipment: Bulk

Estimated Volume: 20 Volume Type: Cubic Yards

Frequency: One-time Event (single project) Disposal Consideration: Landfill

IV. Representative Sample Certification

☐ **No Sample Taken**

☑ **Sample Taken** **Type of Sample** Composite Sample

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent? ☑ **Yes** ☐ **No**

Sample Date: 11/12/2020

Sample ID Numbers or SDS: WCS-1

Remember to attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.

Special Waste Profile

REPUBLIC SERVICES

V. Physical Characteristics of Waste

Characteristic Components (must equal 100%:)	% By Weight (out of 100% - ranges acceptable):
1. Soil	84.5
2. Water	15.5
3.	
4.	
5.	

Color:	Odor (describe):	Does Waste Contain Free Liquids?	% Solids:	pH:	Flash Point:
Reddish brown	None	☐ Yes ☑ No	100	N/A	N/A °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.

RCRA Regulatory Questions

1. Does this waste or generating process contain regulated concentrations of the following Pesticides and/ or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes ☑ No
2. Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm) [reference 40 CFR 261.23(a)(5)]?	☐ Yes ☑ No
3. Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes ☑ No
4. Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes ☑ No
5. Has this waste been delisted under 40 CFR 260.20 and 260.22? If yes, attach the final decision to delist the waste as published in the Federal Register.	☐ Yes ☑ No
6. Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations? If Yes, identify the applicable waste code and specify if the waste is hazardous as defined by Federal, State or both?	☐ Yes ☑ No
7. Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes ☑ No
8. Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes ☑ No
9. Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes ☑ No
10. Is this a solid waste that is not a hazardous waste in accordance with 40 CFR 261.4(b)? If yes, please provide the corresponding regulatory citation.	☐ Yes ☑ No

Republic Services Waste Handling Questions

1. Does this waste generate heat or react when contacted with water/moisture?	☐ Yes ☑ No
2. Does the waste contain sulfur or sulfur by-products?	☐ Yes ☑ No
3. Is this waste generated at a State or Federal Superfund cleanup site subject to regulation under CERCLA?	☐ Yes ☑ No
4a. Is this waste from a TSD facility, TSD-like facility or consolidator (i.e. multiple wastes/multiple generators)?	☐ Yes ☑ No

4b. If yes to the above question, please provide clarification.

Special Waste Profile

REPUBLIC SERVICES

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I understand that attaching an electronic signature, I am signing this document, consent to complete this transaction and receive all related communication electronically, and agree this document will be binding as though I had physically signed it. A printout of this document may be accepted with the same authority as the original.

If electronic signature is preferred, please submit completed (unsigned) form to your Special Waste Coordinator or Special Waste Sales Executive to initiate signature process.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services.

Joseph (Joe) Wiley, PG	Project Manager	El Paso Natural Gas, LLC
Authorized Representative Name (Printed)	Title (Printed)	Company Name
Joseph Wiley	12/8/2020	
Representative Signature	Date	

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 24657

CONDITIONS

Operator:	OGRID:
El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	7046
	Action Number: 24657
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. See app ID 94910 for most updated status.	10/28/2022