

## SITE INFORMATION

### Report Type: Work Plan nGEG0433742034

#### General Site Information:

Site:	Exxon State #003					
Company:	Permian Water Solutions LLC					
Section, Township and Range	Unit N	Sec. 16	T 21S	R 27E		
Lease Number:						
County:	Eddy County					
GPS:	32.4746552			-104.1755371		
Surface Owner:						
Mineral Owner:						
Directions:	From intersection of US-62/180 & George Shoup Relief Rte, head North on George Shoup Relief Rte for 3.41 miles, turn right onto lease road. Follow for 2.10 miles and turn left onto lease road. Follow for 0.21 miles to location.					

#### Release Data:

Date Released:	12/2/2004
Type Release:	Crude Oil
Source of Contamination:	Equipment Failure
Fluid Released:	30 bbls oil
Fluids Recovered:	0 bbls oil

#### Official Communication:

Name:	Dusty McInturff		Clair Gonzales
Company:	Permian Water Solutions		Tetra Tech
Address:	PO BOX 2106		901 W. Wall St.
			Ste 100
City:	Midland, Texas, 79702		Midland, Texas, 79701
Phone number:	432-634-7865		(432) 682-4559
Fax:			
Email:	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>		<a href="mailto:clair.gonzales@tetrattech.com">clair.gonzales@tetrattech.com</a>

#### Site Characterization

Depth to Groundwater:	120' bgs
Karst Potential:	Medium

#### Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	100 mg/kg	100 mg/kg	600 mg/kg



## INFORMATION ONLY

May 25, 2022

New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**RE: Work Plan  
Permian Water Solutions  
Exxon State #003  
Eddy County, New Mexico  
nGEG0433742034**

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by Permian Water Solutions (Permian Water) to assess a release that occurred at the Exxon State #003, Unit N, Section 16, Township 21 South, Range 27 East, Eddy County, New Mexico (Site). The spill site coordinates are 32.4746552°, -104.1755371°. The site location is shown on **Figures 1 and 2**.

### Background

According to the State of New Mexico C-141 Initial Report, the release at the Exxon State #003 was caused by equipment failure at the production tank onsite, causing the release of 30 bbls of oil. However, none of the oil was recovered. On December 02, 2004, the release was discovered and reported to the New Mexico Oil Conservation Division (NMOCD). The incident report is shown in **Appendix A**.

### Site Characterization

#### Significant Water Features

According to the NFHL (National Flood Hazard Layer) Flood Data Application and the USGS (United States Geological Survey) National Water Information System Mapper, there were no watercourses, lakebeds, sinkholes, playa lakes, springs, wetlands, subsurface mines, private domestic water wells, or floodplains located within the specified distances. However, the site is located in a medium karst area. The NFHL Map and USGS Mapper are shown in **Appendix B**.

#### Significant Boundaries

According to Google Earth US Government City Boundaries and US School Districts, the lateral extents of the release were not within an incorporated municipal boundaries, defined municipal fresh water well field, or a school district. Additionally, there were no occupied



permanent residences, schools, hospitals, institution, or churches located within the specified distances of the lateral extents of the release.

### Groundwater Review

Groundwater research was completed for the site through the USGS (United States Geological Survey) National Water Information System and New Mexico Office of the State Engineer (NMOSE) Water Rights Reporting System. Groundwater research conducted through these two resources, show the two closest water wells within a mile radius of the Site. The well reported on the NMOSE Water Rights Reporting System reports a total depth of 255 ft bgs and measured water level of 120 ft bgs and is approximately 0.61 miles of the Site. The well reported on the USGS National Water Information System reports a total depth of 92 ft bgs and measured water level of 77.45 ft bgs and is approximately 1.04 miles of the Site. The groundwater information is shown in **Appendix B**.

Distance from Site	Date of Data	Resource of Information	Depth of Well	Depth to Water
0.61 Miles	4/27/2020	NMOSE	255'	120'
1.04 Miles	2/05/1998	USGS	92'	77.45'

### Regulatory

A risk-based evaluation was performed for the site following the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, for TPH is 100 mg/kg (GRO + DRO + ORO). Additionally, based on the site characterization, for chlorides is 600 mg/kg.

### Site Assessment Activities

Tetra Tech conducted site assessment activities from on May 11, 2022. A total of four (4) auger holes (AH-1 through AH-4) and 4 horizontals (H-1 through H-4) were installed to total depths of 0.5 ft bgs to attempt to assess the impacted the area and provide current data. The observed impact and sample locations are shown on **Figure 3**, these sample locations were determined by reviewing historical aerials and field observations during the onsite walkthrough.

The samples were submitted to Xenco Laboratory in Midland, Texas to be analyzed for TPH method 8015 modified, BTEX method 8021B, and Chloride by EPA Method 300.0. The analytical results are summarized in **Table 1** and the analytical laboratory reports are included in **Appendix C**.



Based on laboratory data from the May 11, 2022 sampling event, auger holes (AH-1 through AH-4) indicated benzene, BTEX, and chloride concentrations below RRALs. Auger holes (AH-1 and AH-2) indicated TPH concentrations above RRALs, with reported concentrations of 6,260 mg/kg and 132 mg/kg, respectively, at depths of 0.5 ft bgs. The remaining auger holes (AH-3 and AH-4) indicated TPH concentrations below laboratory detection limits. Additionally, all horizontals (H-1 through H-4) indicated TPH, benzene, BTEX, and chloride concentrations below RRALs. However, auger holes (AH-1 and AH-2) were not vertically delineated for TPH.

### Work Plan

Based on the information provided in the incident report (nGEG0433742034) and the data collected during the site assessment activities, Tetra Tech proposes to install trenches prior to remediation to vertically delineate the area of auger holes (AH-1 and AH-2) for TPH. Once vertical delineation is found, a remediation plan will be developed based off of collected data.

If you require any additional information or have any questions or comments, please contact us at (432) 682-4559.

Respectfully submitted,  
TETRA TECH

A handwritten signature in blue ink, appearing to read 'Brittany Long'.

Brittany Long,  
Project Manager

A handwritten signature in blue ink, appearing to read 'Clair Gonzales'.

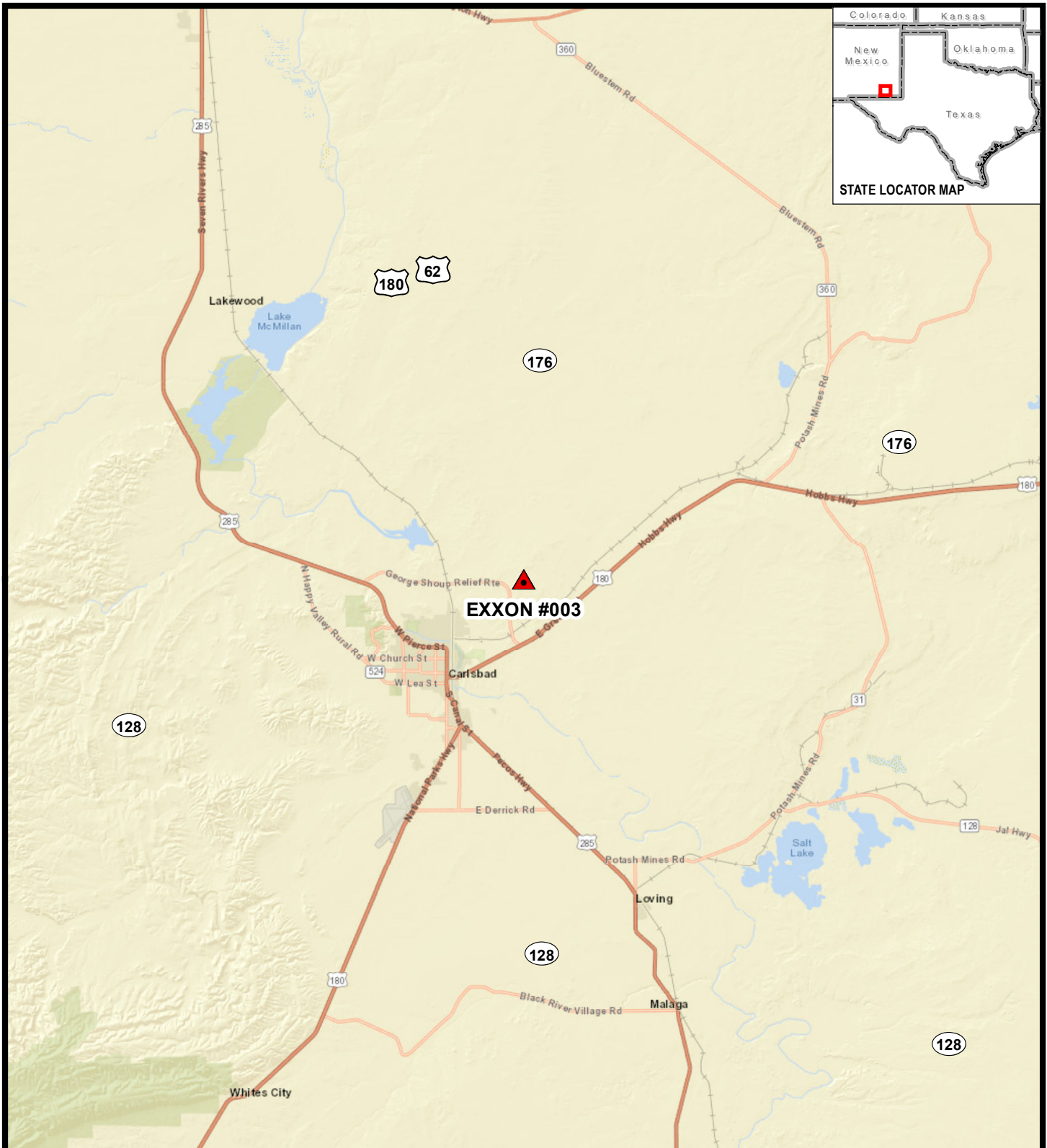
Clair Gonzales, P.G.  
Senior Project Manager



# Figures

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 SITE LOCATION



0 2.5 5 Miles  
Approximate Scale in Miles

OVERVIEW MAP

EXXON #003

Property Located at coordinates 32.474655°, -104.175537°  
EDDY COUNTY, NEW MEXICO

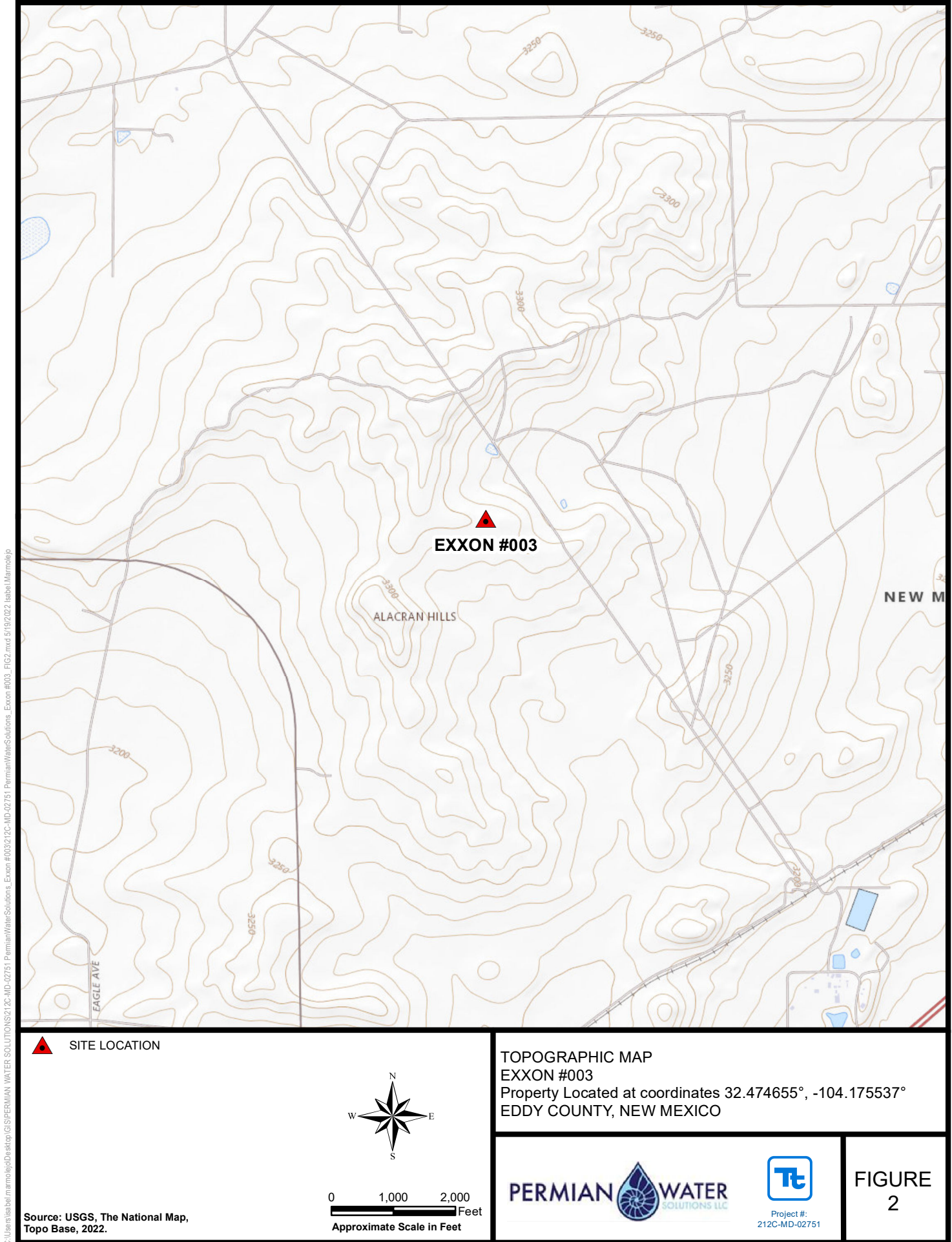


Project #:  
212C-MD-02751

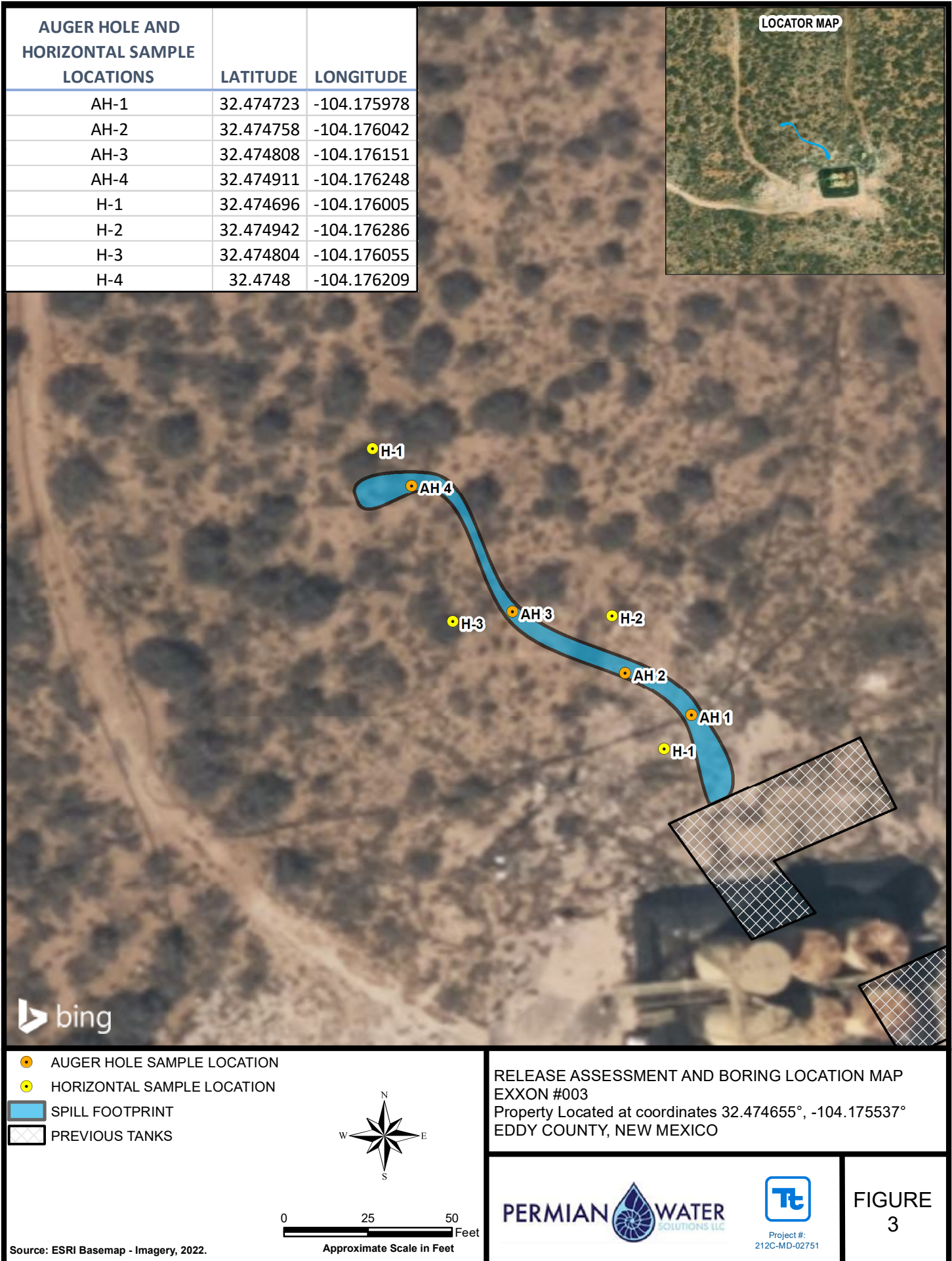
FIGURE  
1

Source: ESRI Basemap - Streets, 2022.













## Tables

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**Table 1**  
**Permian Water Solutions**  
**Exxon State #003**  
**Eddy County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
RRALs								100 mg/kg	10 mg/kg				50 mg/kg	600 mg/kg
AH-1	5/11/2022	0-0.5	X	-	510	5,750	<49.9	6,260	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	18.0
AH-2	5/11/2022	0-0.5	X	-	<50.0	132	<50.0	132	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	5.12
AH-3	5/11/2022	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<5.04
AH-4	5/11/2022	0-0.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<4.97
H-1	5/11/2022	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	6.01
H-2	5/11/2022	0-0.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<4.95
H-3	5/11/2022	0-0.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	7.82
H-4	5/11/2022	0-0.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<5.00

**NOTES**RRALs (Recommended Remediation Action Levels) are based on NMOCD (New Mexico Oil Conservation Division) *Guidelines for Remediation of Leaks, Spills, and Releases*.

All screening values and results are presented in milligrams per kilogram (mg/kg)

**Bolded cells represent a detected concentration above the respective screening value.**

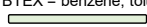
&lt; = analyte was not detected above the respective sample detection limit

ft = feet below ground surface

(-) = not analyzed for respective constituent

TPH = total petroleum hydrocarbons

BTEX = benzene, toluene, ethylbenzene, xylene

 Exceedance



# Photographic Documentation

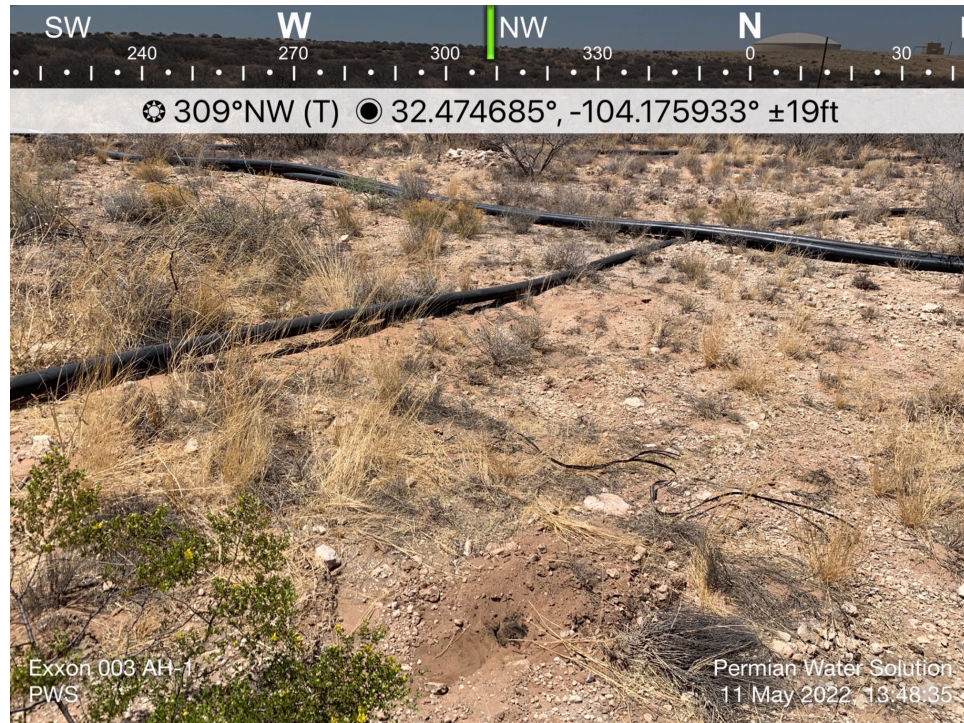
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Permian Water Solutions  
Exxon #003  
Eddy County, New Mexico



TETRA TECH



View of Impacted Area – View Northwest



View of Impacted Area – View North





# Appendix A

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Incident Report



OCD Permitting

Home > Searches > Incidents > Incident Details

NGEG0433742034 2004 MAJOR A INIT @ 30-015-01096

General Incident Information

Site Name:

Well:

Facility:

Operator:

Status:

Type:

District:

Incident Location:

Lat/Long:

Directions:

[30-015-01096] EXXON STATE #003

BLUE COLLAR OIL & GAS LLC

Closure Not Approved

Artesia

O-15-21S-27E    660 FSL    1980 FEL

32.4746552,-104.1755371 NAD83

Severity:

Surface Owner:

County:

Major

Eddy (15)

Notes

Source of Referral:

Action / Escalation:

Resulted In Fire:

Will or Has Reached Watercourse:

Endangered Public Health:

Property Or Environmental Damage:

Fresh Water Contamination:

Contact Details

Contact Name:

Contact Title:

Event Dates

Date of Discovery:

Extension Date:

Initial C-141 Received:

Characterization Report Received:

Remediation Plan Received:

Closure Report Received:

12/02/2004

11/15/2018

OCD Notified of Release:

Cancelled Date:

Characterization Report Approved:

Remediation Plan Approved:

Remediation Due:

Closure Report Approved:

- Quick Links
- General Incident Information
  - Materials
  - Events
  - Orders
- Associated Images
- Incident Files (0)
  - Well Files (28)
- New Searches
- New Facility Search
  - New Incident Search
  - New Operator Search
  - New Pit Search
  - New Spill Search
  - New Tank Search
  - New Well Search

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

Incidents Materials

Cause	Source	Material	Volume				Units
			Unk.	Released	Recovered	Lost	
Equipment Failure	Production Tank	Crude Oil	<input type="checkbox"/>	30	0	30	BBL

Incident Events

No events Found

Orders

No Orders Found

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural  
Resources Department  
  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

### Location of Release Source

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input type="checkbox"/> The source of the release has been stopped.	
<input type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: _____	Title: _____
Signature: <u>Jenni Usher</u>	Date: _____
email: _____	Telephone: _____
<b><u>OCD Only</u></b>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>05/27/2022</u>



Incident ID	
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### **Characterization Report Checklist:** *Each of the following items must be included in the report.*

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: Jenni Usher Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: Jenni Usher Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
District RP	
Facility ID	
Application ID	

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist: Each of the following items must be included in the closure report.**

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_





## Appendix B

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Site Characterization Documents



# New Mexico Office of the State Engineer

## Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

<b>Well Tag</b>	<b>POD Number</b>	<b>Q64</b>	<b>Q16</b>	<b>Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
22408	C 04414 POD1	1	2	2	20	21S	27E	574575	3593118

<b>Driller License:</b>	1753	<b>Driller Company:</b>	VANGUARD WATER WELLS	
<b>Driller Name:</b>	FRIESSEN, JACOBONTEE.NER			
<b>Drill Start Date:</b>	04/27/2020	<b>Drill Finish Date:</b>	04/27/2020	<b>Plug Date:</b>
<b>Log File Date:</b>	05/28/2020	<b>PCW Rev Date:</b>		<b>Source:</b> Shallow
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b>
<b>Casing Size:</b>	5.00	<b>Depth Well:</b>	255 feet	<b>Depth Water:</b> 120 feet

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	120	152	Sandstone/Gravel/Conglomerate
	152	159	Sandstone/Gravel/Conglomerate

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	135	255

<b>Meter Number:</b>	19606	<b>Meter Make:</b>	BADGER
<b>Meter Serial Number:</b>	20732111	<b>Meter Multiplier:</b>	1.0000
<b>Number of Dials:</b>	6	<b>Meter Type:</b>	Diversion
<b>Unit of Measure:</b>	Gallons	<b>Return Flow Percent:</b>	
<b>Usage Multiplier:</b>		<b>Reading Frequency:</b>	Quarterly

### Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
08/30/2021	2021	258870	A	ds		0
09/30/2021	2021	304750	A	ds		0.141
10/30/2021	2021	328990	A	ds		0.074
11/30/2021	2021	355580	A	ds		0.082
12/30/2021	2021	383690	A	ds		0.086

<b>**YTD Meter Amounts:</b>	<b>Year</b>	<b>Amount</b>
	2021	0.383

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

3/15/22 1:56 PM

POINT OF DIVERSION SUMMARY



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Groundwater levels for New Mexico

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## Search Results -- 1 sites found

**Agency code** = usgs

**site\_no list** =

- 322917104120102

**Minimum number of levels** = 1

[Save file of selected sites](#) to local disk for future upload

## USGS 322917104120102 21S.27E.09.33433 A

Eddy County, New Mexico

Latitude 32°29'17", Longitude 104°12'01" NAD27

Land-surface elevation 3,228 feet above NAVD88

The depth of the well is 92 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

### Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1978-01-27		D	62610		3150.73	NGVD29	P	Z		
1978-01-27		D	62611		3152.31	NAVD88	P	Z		
1978-01-27		D	72019	75.69			P	Z		
1983-01-06		D	62610		3154.51	NGVD29	1	Z		
1983-01-06		D	62611		3156.09	NAVD88	1	Z		
1983-01-06		D	72019	71.91			1	Z		
1987-10-16		D	62610		3149.96	NGVD29	1	Z		
1987-10-16		D	62611		3151.54	NAVD88	1	Z		
1987-10-16		D	72019	76.46			1	Z		
1988-03-18		D	62610		3149.51	NGVD29	1	Z		
1988-03-18		D	62611		3151.09	NAVD88	1	Z		
1988-03-18		D	72019	76.91			1	Z		
1993-01-13		D	62610		3144.00	NGVD29	1	S		
1993-01-13		D	62611		3145.58	NAVD88	1	S		

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source measurement
1993-01-13			D	72019	82.42		1	S		
1998-02-05			D	62610		3148.97	1	S		
1998-02-05			D	62611		3150.55	1	S		
1998-02-05			D	72019	77.45		1	S		

## Explanation

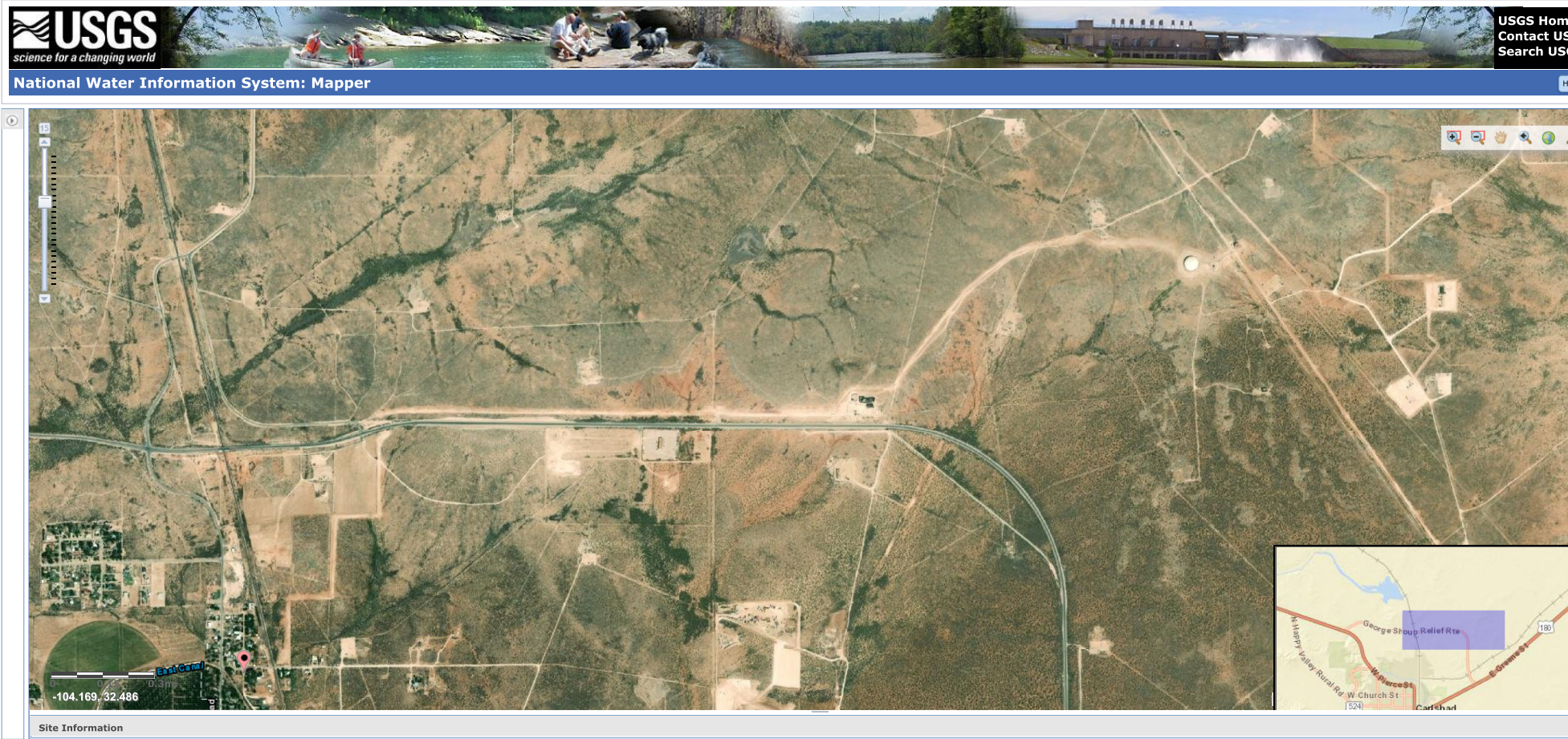
Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	P	Pumping
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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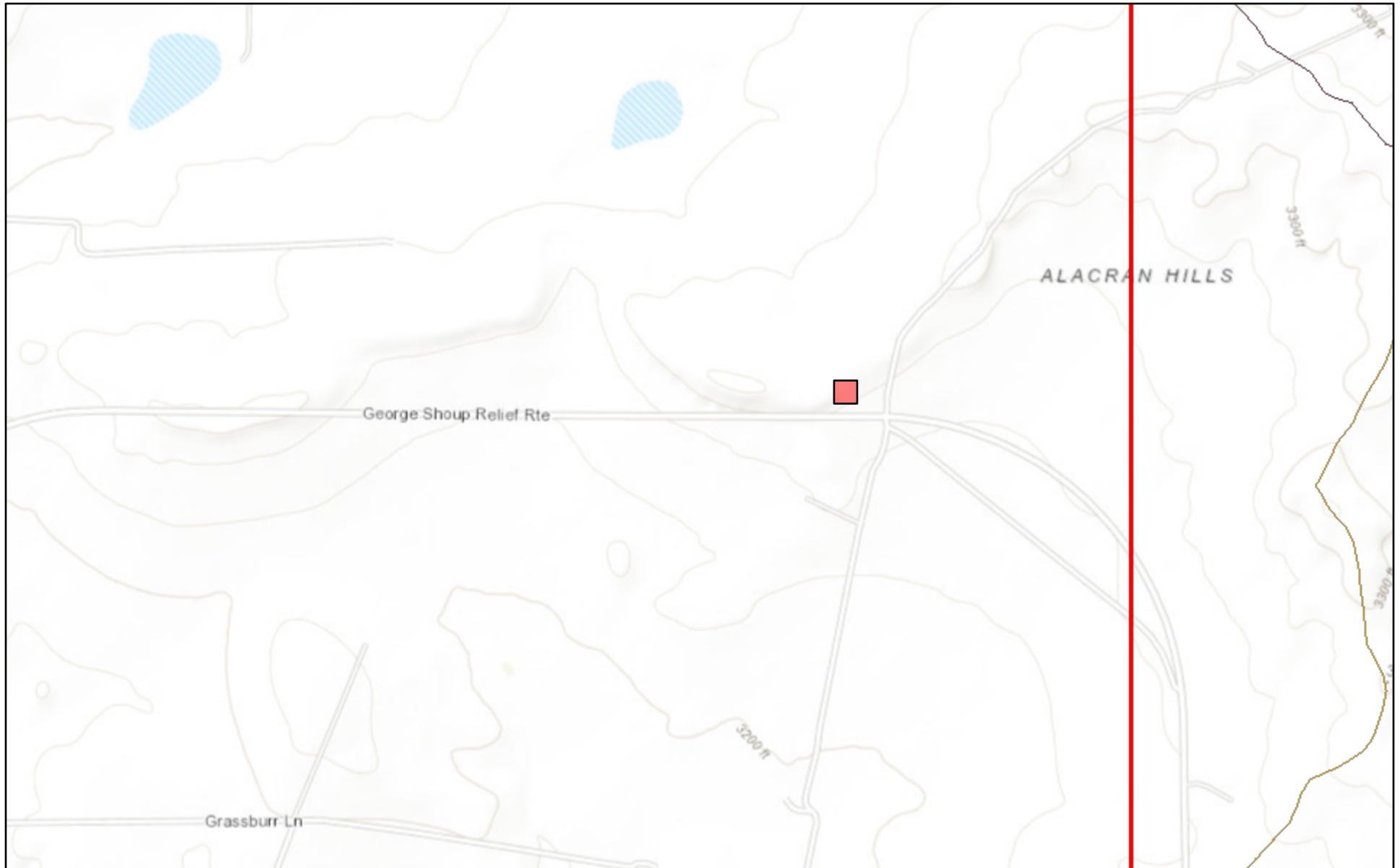
Page Last Modified: 2022-03-15 17:21:57 EDT

0.33 0.31 nadww01

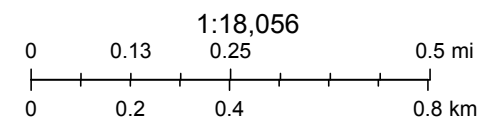




# New Mexico NFHL Data



March 14, 2022



FEMA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

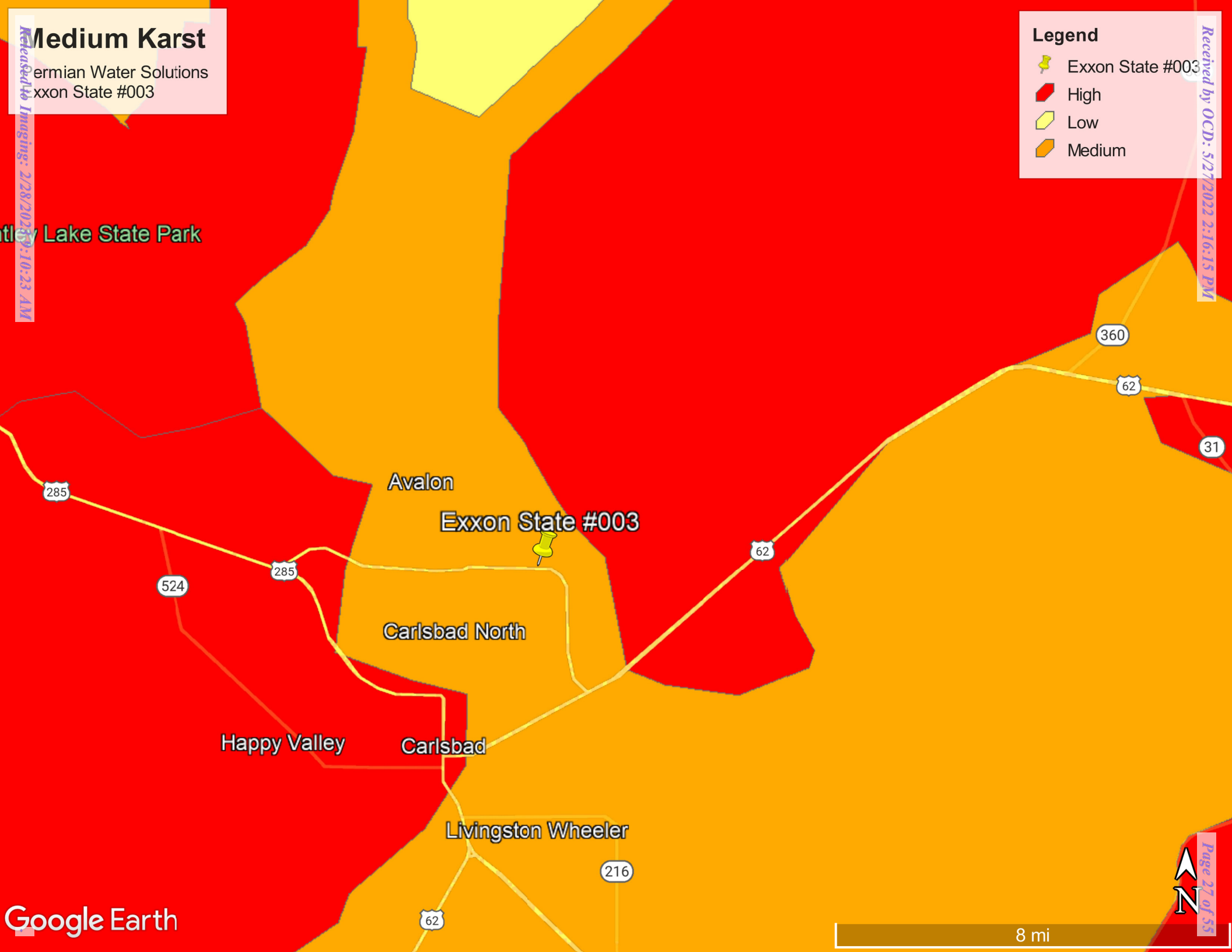
[nmflood.org](http://nmflood.org) is made possible through a collaboration with NMDHSEM,

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**Medium Karst**  
Permian Water Solutions  
Exxon State #003

**Legend**

-  Exxon State #003
-  High
-  Low
-  Medium







# Appendix C

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---

## Laboratory Reports



## Environment Testing America

### ANALYTICAL REPORT

Eurofins Midland  
1211 W. Florida Ave  
Midland, TX 79701  
Tel: (432)704-5440

Laboratory Job ID: 880-14740-1

Laboratory Sample Delivery Group: Lea County New Mexico  
Client Project/Site: PWS-Exxon #003

**For:**

Tetra Tech, Inc.  
901 W Wall  
Ste 100  
Midland, Texas 79701

Attn: Brittany Long

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

5/18/2022 8:33:24 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

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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: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Laboratory Job ID: 880-14740-1  
SDG: Lea County New Mexico

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

## Qualifiers

## GC VOA

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

## GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

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

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

**Job ID: 880-14740-1****Laboratory: Eurofins Midland****Narrative****Job Narrative  
880-14740-1****Receipt**

The samples were received on 5/12/2022 12:14 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C

**GC VOA**

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

**GC Semi VOA**

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-25531 and analytical batch 880-25492 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

**HPLC/IC**

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

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

Client Sample ID: AH1 (0-0.5')

Lab Sample ID: 880-14740-1

Date Collected: 05/11/22 08:00

Matrix: Solid

Date Received: 05/12/22 12:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:46	05/17/22 18:05	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:46	05/17/22 18:05	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:46	05/17/22 18:05	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/16/22 13:46	05/17/22 18:05	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:46	05/17/22 18:05	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/16/22 13:46	05/17/22 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	05/16/22 13:46	05/17/22 18:05	1
1,4-Difluorobenzene (Surr)	97		70 - 130	05/16/22 13:46	05/17/22 18:05	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/18/22 09:14	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6260		49.9		mg/Kg			05/16/22 12:00	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	510	*1	49.9		mg/Kg		05/13/22 11:17	05/14/22 10:36	1
Diesel Range Organics (Over C10-C28)	5750		49.9		mg/Kg		05/13/22 11:17	05/14/22 10:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/13/22 11:17	05/14/22 10:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	05/13/22 11:17	05/14/22 10:36	1
o-Terphenyl	104		70 - 130	05/13/22 11:17	05/14/22 10:36	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.0		4.95		mg/Kg			05/16/22 18:57	1

Client Sample ID: AH2 (0-0.5')

Lab Sample ID: 880-14740-2

Date Collected: 05/11/22 08:30

Matrix: Solid

Date Received: 05/12/22 12:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 18:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 18:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 18:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/16/22 13:46	05/17/22 18:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 18:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/16/22 13:46	05/17/22 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/16/22 13:46	05/17/22 18:25	1
1,4-Difluorobenzene (Surr)	96		70 - 130	05/16/22 13:46	05/17/22 18:25	1

Eurofins Midland

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

Client Sample ID: AH2 (0-0.5')

Lab Sample ID: 880-14740-2

Date Collected: 05/11/22 08:30

Matrix: Solid

Date Received: 05/12/22 12:14

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/18/22 09:14	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	132		50.0		mg/Kg			05/16/22 12:00	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		05/13/22 11:17	05/14/22 04:26	1
Diesel Range Organics (Over C10-C28)	132		50.0		mg/Kg		05/13/22 11:17	05/14/22 04:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/14/22 04:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				05/13/22 11:17	05/14/22 04:26	1
o-Terphenyl	90		70 - 130				05/13/22 11:17	05/14/22 04:26	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.12		4.98		mg/Kg			05/16/22 19:03	1

Client Sample ID: AH3 (0-0.5')

Lab Sample ID: 880-14740-3

Date Collected: 05/11/22 09:00

Matrix: Solid

Date Received: 05/12/22 12:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 18:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 18:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 18:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/16/22 13:46	05/17/22 18:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 18:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/16/22 13:46	05/17/22 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				05/16/22 13:46	05/17/22 18:46	1
1,4-Difluorobenzene (Surr)	97		70 - 130				05/16/22 13:46	05/17/22 18:46	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			05/18/22 09:14	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			05/16/22 12:00	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		05/13/22 11:17	05/14/22 04:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/13/22 11:17	05/14/22 04:48	1

Eurofins Midland



## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

Client Sample ID: AH3 (0-0.5')

Lab Sample ID: 880-14740-3

Date Collected: 05/11/22 09:00

Matrix: Solid

Date Received: 05/12/22 12:14

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/13/22 11:17	05/14/22 04:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				05/13/22 11:17	05/14/22 04:48	1
o-Terphenyl	91		70 - 130				05/13/22 11:17	05/14/22 04:48	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04		mg/Kg			05/16/22 19:22	1

Client Sample ID: AH4 (0-0.5')

Lab Sample ID: 880-14740-4

Date Collected: 05/11/22 09:30

Matrix: Solid

Date Received: 05/12/22 12:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 19:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 19:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 19:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/16/22 13:46	05/17/22 19:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 19:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/16/22 13:46	05/17/22 19:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				05/16/22 13:46	05/17/22 19:06	1
1,4-Difluorobenzene (Surr)	98		70 - 130				05/16/22 13:46	05/17/22 19:06	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			05/18/22 09:14	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/16/22 12:00	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		05/13/22 11:17	05/14/22 05:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/14/22 05:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/14/22 05:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				05/13/22 11:17	05/14/22 05:09	1
o-Terphenyl	87		70 - 130				05/13/22 11:17	05/14/22 05:09	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			05/16/22 19:28	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

Client Sample ID: H-1 (0-0.5')

Lab Sample ID: 880-14740-5

Date Collected: 05/11/22 10:00

Matrix: Solid

Date Received: 05/12/22 12:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:46	05/17/22 19:27	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:46	05/17/22 19:27	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:46	05/17/22 19:27	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/16/22 13:46	05/17/22 19:27	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:46	05/17/22 19:27	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/16/22 13:46	05/17/22 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/16/22 13:46	05/17/22 19:27	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/16/22 13:46	05/17/22 19:27	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/18/22 09:14	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			05/16/22 12:00	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		05/13/22 11:17	05/14/22 05:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/13/22 11:17	05/14/22 05:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/13/22 11:17	05/14/22 05:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	05/13/22 11:17	05/14/22 05:31	1
o-Terphenyl	85		70 - 130	05/13/22 11:17	05/14/22 05:31	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.01		4.96		mg/Kg			05/16/22 19:34	1

Client Sample ID: H-2 (0-0.5')

Lab Sample ID: 880-14740-6

Date Collected: 05/11/22 10:30

Matrix: Solid

Date Received: 05/12/22 12:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:46	05/17/22 19:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:46	05/17/22 19:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:46	05/17/22 19:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/16/22 13:46	05/17/22 19:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:46	05/17/22 19:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/16/22 13:46	05/17/22 19:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	05/16/22 13:46	05/17/22 19:48	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/16/22 13:46	05/17/22 19:48	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

Client Sample ID: H-2 (0-0.5')

Lab Sample ID: 880-14740-6

Date Collected: 05/11/22 10:30

Matrix: Solid

Date Received: 05/12/22 12:14

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/18/22 09:14	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/16/22 12:00	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		05/13/22 11:17	05/14/22 05:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/14/22 05:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/14/22 05:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130				05/13/22 11:17	05/14/22 05:53	1
o-Terphenyl	85		70 - 130				05/13/22 11:17	05/14/22 05:53	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			05/16/22 19:41	1

Client Sample ID: H-3 (0-0.5')

Lab Sample ID: 880-14740-7

Date Collected: 05/11/22 11:00

Matrix: Solid

Date Received: 05/12/22 12:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 20:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 20:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 20:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/16/22 13:46	05/17/22 20:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 20:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/16/22 13:46	05/17/22 20:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				05/16/22 13:46	05/17/22 20:08	1
1,4-Difluorobenzene (Surr)	96		70 - 130				05/16/22 13:46	05/17/22 20:08	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/18/22 09:14	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/16/22 12:00	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		05/13/22 11:17	05/14/22 06:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/14/22 06:14	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

Client Sample ID: H-3 (0-0.5')

Lab Sample ID: 880-14740-7

Date Collected: 05/11/22 11:00

Matrix: Solid

Date Received: 05/12/22 12:14

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/14/22 06:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				05/13/22 11:17	05/14/22 06:14	1
o-Terphenyl	83		70 - 130				05/13/22 11:17	05/14/22 06:14	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.82		4.98		mg/Kg			05/16/22 19:47	1

Client Sample ID: H-4 (0-0.5')

Lab Sample ID: 880-14740-8

Date Collected: 05/11/22 11:30

Matrix: Solid

Date Received: 05/12/22 12:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 20:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 20:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 20:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/16/22 13:46	05/17/22 20:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/16/22 13:46	05/17/22 20:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/16/22 13:46	05/17/22 20:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				05/16/22 13:46	05/17/22 20:29	1
1,4-Difluorobenzene (Surr)	96		70 - 130				05/16/22 13:46	05/17/22 20:29	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/18/22 09:14	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/16/22 12:00	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		05/13/22 11:17	05/14/22 06:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/14/22 06:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/14/22 06:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				05/13/22 11:17	05/14/22 06:35	1
o-Terphenyl	99		70 - 130				05/13/22 11:17	05/14/22 06:35	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/16/22 19:53	1

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-14740-1	AH1 (0-0.5')	104	97
880-14740-2	AH2 (0-0.5')	108	96
880-14740-3	AH3 (0-0.5')	111	97
880-14740-4	AH4 (0-0.5')	111	98
880-14740-5	H-1 (0-0.5')	105	95
880-14740-6	H-2 (0-0.5')	109	98
880-14740-7	H-3 (0-0.5')	108	96
880-14740-8	H-4 (0-0.5')	110	96
890-2303-A-1-E MS	Matrix Spike	110	96
890-2303-A-1-F MSD	Matrix Spike Duplicate	104	93
LCS 880-25638/1-A	Lab Control Sample	105	96
LCSD 880-25638/2-A	Lab Control Sample Dup	105	95
MB 880-25638/5-A	Method Blank	102	92
<b>Surrogate Legend</b>			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-14735-A-3-C MS	Matrix Spike	86	83
880-14735-A-3-D MSD	Matrix Spike Duplicate	83	80
880-14740-1	AH1 (0-0.5')	102	104
880-14740-2	AH2 (0-0.5')	89	90
880-14740-3	AH3 (0-0.5')	91	91
880-14740-4	AH4 (0-0.5')	87	87
880-14740-5	H-1 (0-0.5')	83	85
880-14740-6	H-2 (0-0.5')	82	85
880-14740-7	H-3 (0-0.5')	81	83
880-14740-8	H-4 (0-0.5')	97	99
LCS 880-25531/2-A	Lab Control Sample	108	108
LCSD 880-25531/3-A	Lab Control Sample Dup	105	108
MB 880-25531/1-A	Method Blank	102	108
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

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

Lab Sample ID: MB 880-25638/5-A

Matrix: Solid

Analysis Batch: 25671

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25638

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 12:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 12:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 12:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/16/22 13:46	05/17/22 12:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:46	05/17/22 12:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/16/22 13:46	05/17/22 12:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	05/16/22 13:46	05/17/22 12:34	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/16/22 13:46	05/17/22 12:34	1

Lab Sample ID: LCS 880-25638/1-A

Matrix: Solid

Analysis Batch: 25671

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1010		mg/Kg		101	70 - 130
Toluene	0.100	0.1123		mg/Kg		112	70 - 130
Ethylbenzene	0.100	0.1158		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	0.200	0.2346		mg/Kg		117	70 - 130
o-Xylene	0.100	0.1168		mg/Kg		117	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-25638/2-A

Matrix: Solid

Analysis Batch: 25671

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25638

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09697		mg/Kg		97	70 - 130	4	35
Toluene	0.100	0.1065		mg/Kg		106	70 - 130	5	35
Ethylbenzene	0.100	0.1108		mg/Kg		111	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2249		mg/Kg		112	70 - 130	4	35
o-Xylene	0.100	0.1119		mg/Kg		112	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-2303-A-1-E MS

Matrix: Solid

Analysis Batch: 25671

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25638

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.101	0.06816	F1	mg/Kg		67	70 - 130
Toluene	<0.00201	U	0.101	0.07512		mg/Kg		74	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

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

Lab Sample ID: 890-2303-A-1-E MS

Matrix: Solid

Analysis Batch: 25671

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25638

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.101	0.07397		mg/Kg		73	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1496		mg/Kg		74	70 - 130
o-Xylene	<0.00201	U	0.101	0.07506		mg/Kg		74	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-2303-A-1-F MSD

Matrix: Solid

Analysis Batch: 25671

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 25638

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.100	0.07943		mg/Kg		79	70 - 130	15	35
Toluene	<0.00201	U	0.100	0.08921		mg/Kg		89	70 - 130	17	35
Ethylbenzene	<0.00201	U	0.100	0.09057		mg/Kg		90	70 - 130	20	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1847		mg/Kg		92	70 - 130	21	35
o-Xylene	<0.00201	U	0.100	0.09235		mg/Kg		92	70 - 130	21	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-25531/1-A

Matrix: Solid

Analysis Batch: 25492

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/13/22 21:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/13/22 21:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/13/22 21:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	05/13/22 11:17	05/13/22 21:34	1
o-Terphenyl	108		70 - 130	05/13/22 11:17	05/13/22 21:34	1

Lab Sample ID: LCS 880-25531/2-A

Matrix: Solid

Analysis Batch: 25492

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	883.9		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1071		mg/Kg		107	70 - 130

Eurofins Midland

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-25531/2-A  
Matrix: Solid  
Analysis Batch: 25492

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 25531

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: LCSD 880-25531/3-A  
Matrix: Solid  
Analysis Batch: 25492

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 25531

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1141	*1	mg/Kg		114	70 - 130	25	20
Diesel Range Organics (Over C10-C28)	1000	1077		mg/Kg		108	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: 880-14735-A-3-C MS  
Matrix: Solid  
Analysis Batch: 25492

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 25531

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	1000	817.2		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	945.2		mg/Kg		95	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	83		70 - 130

Lab Sample ID: 880-14735-A-3-D MSD  
Matrix: Solid  
Analysis Batch: 25492

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 25531

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	998	812.7		mg/Kg		80	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	917.5		mg/Kg		92	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	80		70 - 130

Eurofins Midland

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25455/1-A

Matrix: Solid

Analysis Batch: 25619

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/16/22 16:50	1

Lab Sample ID: LCS 880-25455/2-A

Matrix: Solid

Analysis Batch: 25619

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	255.9		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-25455/3-A

Matrix: Solid

Analysis Batch: 25619

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	271.5		mg/Kg		109	90 - 110	6	20

Lab Sample ID: 880-14735-A-3-F MS

Matrix: Solid

Analysis Batch: 25619

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	78.0		250	347.8		mg/Kg		108	90 - 110

Lab Sample ID: 880-14735-A-3-G MSD

Matrix: Solid

Analysis Batch: 25619

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	78.0		250	340.6		mg/Kg		105	90 - 110	2	20

Eurofins Midland

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

## GC VOA

## Prep Batch: 25638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14740-1	AH1 (0-0.5')	Total/NA	Solid	5035	
880-14740-2	AH2 (0-0.5')	Total/NA	Solid	5035	
880-14740-3	AH3 (0-0.5')	Total/NA	Solid	5035	
880-14740-4	AH4 (0-0.5')	Total/NA	Solid	5035	
880-14740-5	H-1 (0-0.5')	Total/NA	Solid	5035	
880-14740-6	H-2 (0-0.5')	Total/NA	Solid	5035	
880-14740-7	H-3 (0-0.5')	Total/NA	Solid	5035	
880-14740-8	H-4 (0-0.5')	Total/NA	Solid	5035	
MB 880-25638/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25638/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25638/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2303-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2303-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 25671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14740-1	AH1 (0-0.5')	Total/NA	Solid	8021B	25638
880-14740-2	AH2 (0-0.5')	Total/NA	Solid	8021B	25638
880-14740-3	AH3 (0-0.5')	Total/NA	Solid	8021B	25638
880-14740-4	AH4 (0-0.5')	Total/NA	Solid	8021B	25638
880-14740-5	H-1 (0-0.5')	Total/NA	Solid	8021B	25638
880-14740-6	H-2 (0-0.5')	Total/NA	Solid	8021B	25638
880-14740-7	H-3 (0-0.5')	Total/NA	Solid	8021B	25638
880-14740-8	H-4 (0-0.5')	Total/NA	Solid	8021B	25638
MB 880-25638/5-A	Method Blank	Total/NA	Solid	8021B	25638
LCS 880-25638/1-A	Lab Control Sample	Total/NA	Solid	8021B	25638
LCSD 880-25638/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25638
890-2303-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	25638
890-2303-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	25638

## Analysis Batch: 25798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14740-1	AH1 (0-0.5')	Total/NA	Solid	Total BTEX	
880-14740-2	AH2 (0-0.5')	Total/NA	Solid	Total BTEX	
880-14740-3	AH3 (0-0.5')	Total/NA	Solid	Total BTEX	
880-14740-4	AH4 (0-0.5')	Total/NA	Solid	Total BTEX	
880-14740-5	H-1 (0-0.5')	Total/NA	Solid	Total BTEX	
880-14740-6	H-2 (0-0.5')	Total/NA	Solid	Total BTEX	
880-14740-7	H-3 (0-0.5')	Total/NA	Solid	Total BTEX	
880-14740-8	H-4 (0-0.5')	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 25492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14740-1	AH1 (0-0.5')	Total/NA	Solid	8015B NM	25531
880-14740-2	AH2 (0-0.5')	Total/NA	Solid	8015B NM	25531
880-14740-3	AH3 (0-0.5')	Total/NA	Solid	8015B NM	25531
880-14740-4	AH4 (0-0.5')	Total/NA	Solid	8015B NM	25531
880-14740-5	H-1 (0-0.5')	Total/NA	Solid	8015B NM	25531
880-14740-6	H-2 (0-0.5')	Total/NA	Solid	8015B NM	25531

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

## GC Semi VOA (Continued)

## Analysis Batch: 25492 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14740-7	H-3 (0-0.5')	Total/NA	Solid	8015B NM	25531
880-14740-8	H-4 (0-0.5')	Total/NA	Solid	8015B NM	25531
MB 880-25531/1-A	Method Blank	Total/NA	Solid	8015B NM	25531
LCS 880-25531/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25531
LCSD 880-25531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25531
880-14735-A-3-C MS	Matrix Spike	Total/NA	Solid	8015B NM	25531
880-14735-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	25531

## Prep Batch: 25531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14740-1	AH1 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-14740-2	AH2 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-14740-3	AH3 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-14740-4	AH4 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-14740-5	H-1 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-14740-6	H-2 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-14740-7	H-3 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-14740-8	H-4 (0-0.5')	Total/NA	Solid	8015NM Prep	
MB 880-25531/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25531/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14735-A-3-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-14735-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 25632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14740-1	AH1 (0-0.5')	Total/NA	Solid	8015 NM	
880-14740-2	AH2 (0-0.5')	Total/NA	Solid	8015 NM	
880-14740-3	AH3 (0-0.5')	Total/NA	Solid	8015 NM	
880-14740-4	AH4 (0-0.5')	Total/NA	Solid	8015 NM	
880-14740-5	H-1 (0-0.5')	Total/NA	Solid	8015 NM	
880-14740-6	H-2 (0-0.5')	Total/NA	Solid	8015 NM	
880-14740-7	H-3 (0-0.5')	Total/NA	Solid	8015 NM	
880-14740-8	H-4 (0-0.5')	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 25455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14740-1	AH1 (0-0.5')	Soluble	Solid	DI Leach	
880-14740-2	AH2 (0-0.5')	Soluble	Solid	DI Leach	
880-14740-3	AH3 (0-0.5')	Soluble	Solid	DI Leach	
880-14740-4	AH4 (0-0.5')	Soluble	Solid	DI Leach	
880-14740-5	H-1 (0-0.5')	Soluble	Solid	DI Leach	
880-14740-6	H-2 (0-0.5')	Soluble	Solid	DI Leach	
880-14740-7	H-3 (0-0.5')	Soluble	Solid	DI Leach	
880-14740-8	H-4 (0-0.5')	Soluble	Solid	DI Leach	
MB 880-25455/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25455/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25455/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-14735-A-3-F MS	Matrix Spike	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

## HPLC/IC (Continued)

## Leach Batch: 25455 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-A-3-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 25619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14740-1	AH1 (0-0.5')	Soluble	Solid	300.0	25455
880-14740-2	AH2 (0-0.5')	Soluble	Solid	300.0	25455
880-14740-3	AH3 (0-0.5')	Soluble	Solid	300.0	25455
880-14740-4	AH4 (0-0.5')	Soluble	Solid	300.0	25455
880-14740-5	H-1 (0-0.5')	Soluble	Solid	300.0	25455
880-14740-6	H-2 (0-0.5')	Soluble	Solid	300.0	25455
880-14740-7	H-3 (0-0.5')	Soluble	Solid	300.0	25455
880-14740-8	H-4 (0-0.5')	Soluble	Solid	300.0	25455
MB 880-25455/1-A	Method Blank	Soluble	Solid	300.0	25455
LCS 880-25455/2-A	Lab Control Sample	Soluble	Solid	300.0	25455
LCSD 880-25455/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25455
880-14735-A-3-F MS	Matrix Spike	Soluble	Solid	300.0	25455
880-14735-A-3-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	25455

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

Client Sample ID: AH1 (0-0.5')

Lab Sample ID: 880-14740-1

Date Collected: 05/11/22 08:00

Matrix: Solid

Date Received: 05/12/22 12:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 18:05	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25798	05/18/22 09:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25632	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 10:36	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 18:57	CH	XEN MID

Client Sample ID: AH2 (0-0.5')

Lab Sample ID: 880-14740-2

Date Collected: 05/11/22 08:30

Matrix: Solid

Date Received: 05/12/22 12:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 18:25	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25798	05/18/22 09:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25632	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 04:26	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 19:03	CH	XEN MID

Client Sample ID: AH3 (0-0.5')

Lab Sample ID: 880-14740-3

Date Collected: 05/11/22 09:00

Matrix: Solid

Date Received: 05/12/22 12:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 18:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25798	05/18/22 09:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25632	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 04:48	SM	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 19:22	CH	XEN MID

Client Sample ID: AH4 (0-0.5')

Lab Sample ID: 880-14740-4

Date Collected: 05/11/22 09:30

Matrix: Solid

Date Received: 05/12/22 12:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 19:06	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25798	05/18/22 09:14	AJ	XEN MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

**Client Sample ID: AH4 (0-0.5')****Lab Sample ID: 880-14740-4****Date Collected: 05/11/22 09:30****Matrix: Solid****Date Received: 05/12/22 12:14**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			25632	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 05:09	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 19:28	CH	XEN MID

**Client Sample ID: H-1 (0-0.5')****Lab Sample ID: 880-14740-5****Date Collected: 05/11/22 10:00****Matrix: Solid****Date Received: 05/12/22 12:14**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 19:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25798	05/18/22 09:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25632	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 05:31	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 19:34	CH	XEN MID

**Client Sample ID: H-2 (0-0.5')****Lab Sample ID: 880-14740-6****Date Collected: 05/11/22 10:30****Matrix: Solid****Date Received: 05/12/22 12:14**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 19:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25798	05/18/22 09:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25632	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 05:53	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 19:41	CH	XEN MID

**Client Sample ID: H-3 (0-0.5')****Lab Sample ID: 880-14740-7****Date Collected: 05/11/22 11:00****Matrix: Solid****Date Received: 05/12/22 12:14**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 20:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25798	05/18/22 09:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25632	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 06:14	SM	XEN MID

Eurofins Midland

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

Client Sample ID: H-3 (0-0.5')

Lab Sample ID: 880-14740-7

Date Collected: 05/11/22 11:00

Matrix: Solid

Date Received: 05/12/22 12:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 19:47	CH	XEN MID

Client Sample ID: H-4 (0-0.5')

Lab Sample ID: 880-14740-8

Date Collected: 05/11/22 11:30

Matrix: Solid

Date Received: 05/12/22 12:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 20:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25798	05/18/22 09:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25632	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 06:35	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 19:53	CH	XEN MID

## Laboratory References:

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

Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

Laboratory: Eurofins Midland

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

**Protocol References:**

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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



## Sample Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Exxon #003

Job ID: 880-14740-1  
SDG: Lea County New Mexico

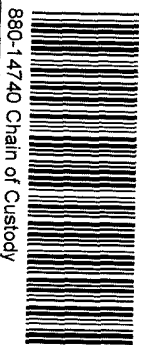
Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-14740-1	AH1 (0-0.5')	Solid	05/11/22 08:00	05/12/22 12:14
880-14740-2	AH2 (0-0.5')	Solid	05/11/22 08:30	05/12/22 12:14
880-14740-3	AH3 (0-0.5')	Solid	05/11/22 09:00	05/12/22 12:14
880-14740-4	AH4 (0-0.5')	Solid	05/11/22 09:30	05/12/22 12:14
880-14740-5	H-1 (0-0.5')	Solid	05/11/22 10:00	05/12/22 12:14
880-14740-6	H-2 (0-0.5')	Solid	05/11/22 10:30	05/12/22 12:14
880-14740-7	H-3 (0-0.5')	Solid	05/11/22 11:00	05/12/22 12:14
880-14740-8	H-4 (0-0.5')	Solid	05/11/22 11:30	05/12/22 12:14

## Analysis Request of Custody Record



# Tetra Tech, Inc.

901 West Wall Street Suite 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946



880-14740 Chain of Custody

1 of 1

Client Name: Permian Water Solutions

Site Manager: Brittany Long

Project Name: PWS - Exxon #003

Contact Info:

Email brittany.long@tetratech.com  
Phone (432) 741-5813

Project Location: Lea County, New Mexico

Project #:

212C-MD-02751

Invoice to: PWS, Dusty McInturf, dmcinturf@dufrane.com

Receiving Laboratory: Eurofins

Sampler Signature: Adrian Garcia

Comments:

LAB #  
(LAB USE ONLY)

## SAMPLE IDENTIFICATION

YEAR 2020	DATE	TIME	MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)
			WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	NONE			
	AH 1 (0-0.5')	5/11/2022	800	X		X				1	N
	AH 2 (0-0.5')	5/11/2022	830	X		X				1	N
	AH 3 (0-0.5')	5/11/2022	900	X		X				1	N
	AH 4 (0-0.5')	5/11/2022	930	X		X				1	N
	H-1 (0-0.5')	5/11/2022	1000	X		X				1	N
	H-2 (0-0.5')	5/11/2022	1030	X		X				1	N
	H-3 (0-0.5')	5/11/2022	1100	X		X				1	N
	H-4 (0-0.5')	5/11/2022	1130	X		X				1	N

BTX 8021B BTX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M ( GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol 8260B / 624

GC/MS Semi Vol 8270C/625

PCB s 8082 / 608

NORM

PLM (Asbestos)

Chloride 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

ANALYSIS REQUEST  
(Circle or Specify Method No.)

Relinquished by:

Date Time

Received by:

Date Time

Adrian Garcia 5/12/22 1211

Brittany Long 5/18/22 1211

Relinquished by:

Date Time

Received by:

Date Time

Relinquished by:

Date Time

Received by:

Date Time

ORIGINAL COPY

LAB USE ONLY

REMARKS:

☒ Standard☐ RUSH Same Day 24 hr 48 hr 72 hr☐ Rush Charges Authorized☐ Special Report Limits or TRRP Report

Sample Temperature

3.9/13.8

-2.108

(Circle) HAND DELIVERED FEDEX UPS Tracking #

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-14740-1

SDG Number: Lea County New Mexico

Login Number: 14740

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

**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 111656

**CONDITIONS**

Operator: Permian Water Solutions, LLC PO Box 2106 Midland, TX 79702	OGRID: 373626
	Action Number: 111656
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
amaxwell	Submitted report accepted as information only.	2/28/2023
amaxwell	Proceed with additional delineation and work plan development.	2/28/2023
amaxwell	Submit work plan via the OCD permitting portal by 6/2/2023.	2/28/2023