

## SITE INFORMATION

### Report Type: Work Plan NLWJ1008538662 / NPAC0633335042

#### General Site Information:

Site:	Rice SWD F #029					
Company:	Permian Water Solutions LLC					
Section, Township and Range	Unit F	Sec. 29	T 18S	R 38E		
Lease Number:						
County:	Lea County					
GPS:	32.7205276			-103.1735687		
Surface Owner:						
Mineral Owner:						
Directions:	From intersection W Mahan Dr & 66A, follow 66A North for 0.16 miles to the location.					

#### Release Data:

Date Released:	11/11/2006
Type Release:	Produced Water
Source of Contamination:	Broke Connection
Fluid Released:	80 bbls water
Fluids Recovered:	60 bbls water

#### 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:	55' bgs
Karst Potential:	Low

#### Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	1,000 mg/kg	2,500 mg/kg	10,000 mg/kg

May 25, 2022

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

**RE: Work Plan  
Permian Water Solutions  
Rice SWD F #029  
Lea County, New Mexico  
NLWJ1008538662  
NPAC0633335042**

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by Permian Water Solutions (Permian Water) to assess a release that occurred at the Rice SWD F #029, Unit F, Section 29, Township 18 South, Range 38 East, Lea County, New Mexico (Site). The spill site coordinates are 32.7205276°, -103.1735687°. 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 Rice SWD F #029 was caused by a broke connection at the load line, causing a release of 80 bbls of produced water. Additionally, approximately 60 bbls of water was recovered. On November 11, 2006, 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, subsurfaces mines, private domestic water wells, or floodplains located within the specified distances. Additionally, the site is located in a low 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 three 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 120 ft bgs and measured water level of 55 ft bgs and is approximately 0.13 miles of the Site. The well reported on the USGS National Water Information System reports a depth to groundwater of 55.92 ft bgs and is approximately 0.76 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
0.13 Miles	8/12/2002	NMOSE	120'	55'
0.76 Miles	3/20/1986	USGS	N/A	55.92'

### **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, beyond the top 4.0' of soil, for TPH is 2,500 mg/kg (GRO + DRO + ORO) and 1,000 mg/kg (GRO + DRO). Additionally, based on the site characterization, beyond the top 4.0' of soil, for chlorides is 10,000 mg/kg.

### **Site Assessment Activities**

Tetra Tech conducted site assessment activities from on May 6, 2022. A total of three (3) auger holes (AH-1 through AH-3) were installed to 2.0 ft bgs, 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**.

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 6, 2022 sampling event, auger holes (AH-1 through AH-3) indicated benzene and total BTEX concentrations below laboratory detection limits. Auger holes (AH-1 through AH-3) indicated chloride concentrations above RRALs, with reported concentrations ranging from 809 mg/kg through 1,670 mg/kg, at depths ranging from surface to 2.0 ft bgs. Auger hole (AH-2) indicated TPH concentrations above RRALs, with reported concentrations of 254 mg/kg and 218 mg/kg, at depths of surface to 2.0 ft bgs. The remaining auger holes (AH-1 and AH-3) indicated TPH concentrations below laboratory detection limits. Additionally, all horizontals (H-1 through H-4) indicated benzene, BTEX, and chloride concentrations below RRALs. However, all horizontals (H-1 through H-4) indicated TPH concentrations above RRALS, with reported concentrations of 175 mg/kg to 300 mg/kg, at total depths of 0.5 ft bgs.

### Work Plan

Based on the information provided in the incident reports (NLWJ1008538662 / NPAC0633335042) 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 through AH-3) for chlorides and auger hole (AH-2) for TPH. Additionally, Tetra Tech will extend the horizontal samples due to exceeding TPH concentrations, to locate proper horizontal delineation. Once vertical and horizontal delineation is found, a remediation plan will be developed based off 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



Brittany Long,  
Project Manager



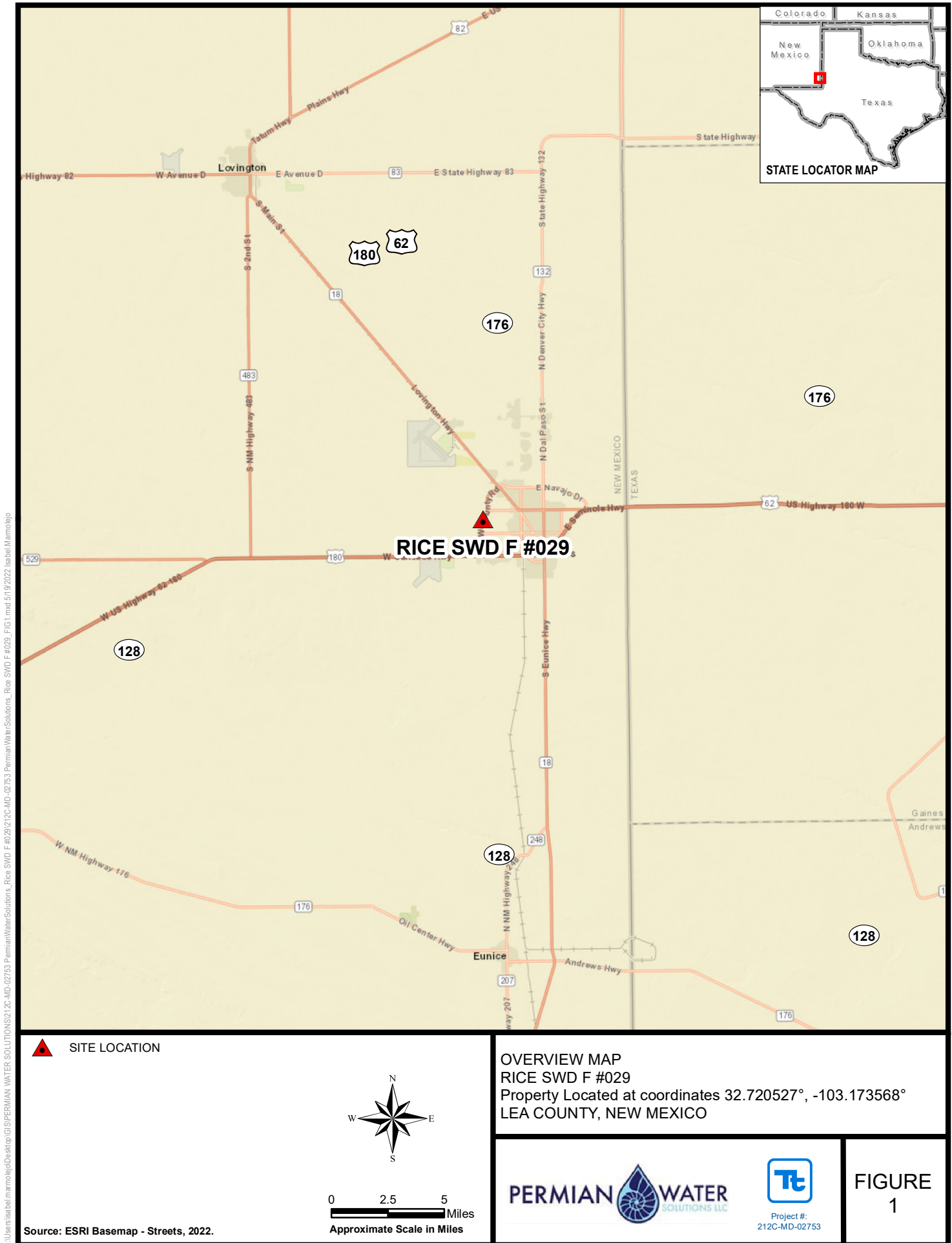
Clair Gonzales, P.G.  
Senior Project Manager



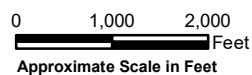
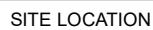
## Figures

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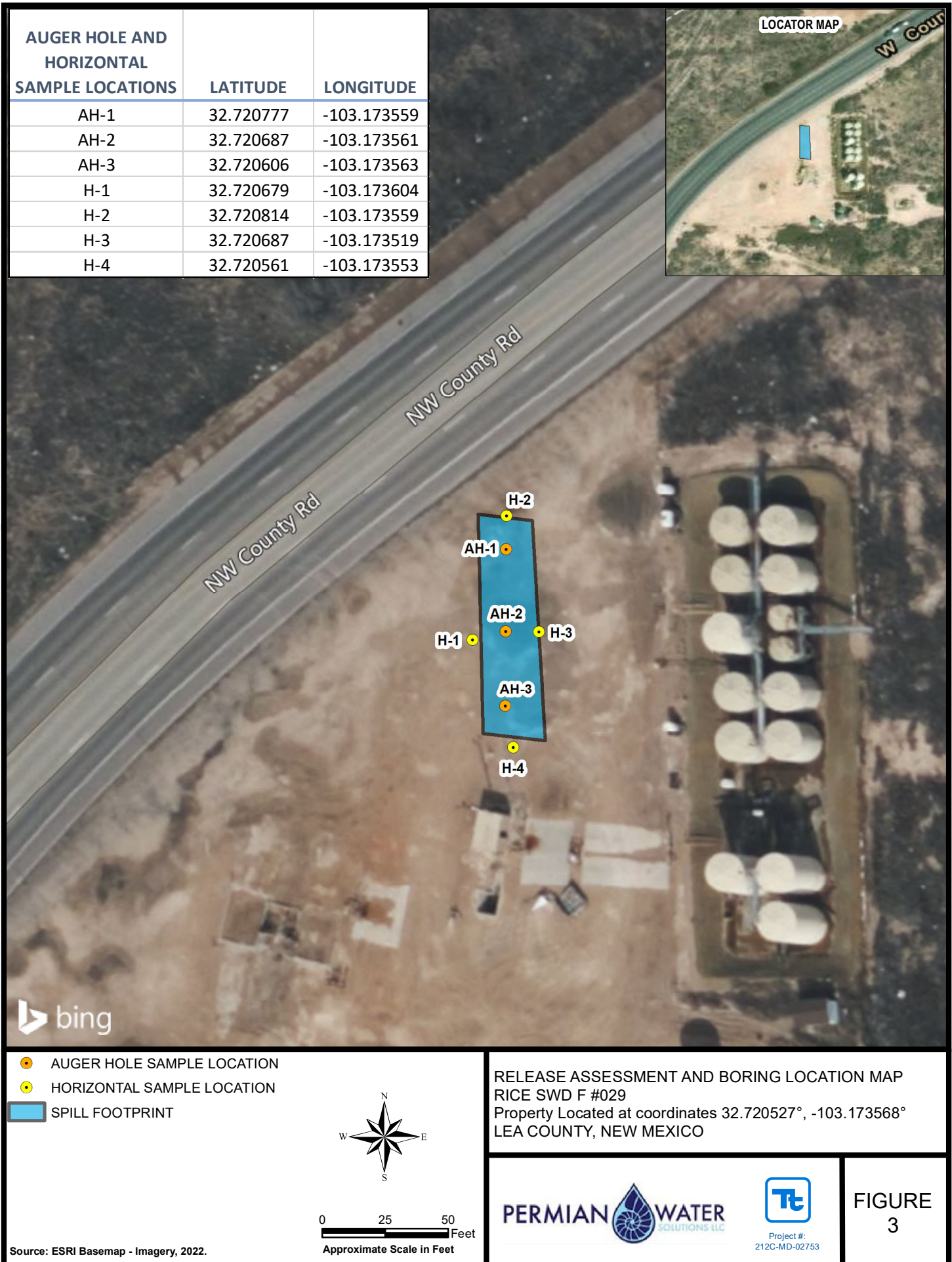
**Source: USGS, The National Map, Topo Base, 2022.**

Property Located at coordinates 32.720527°, -103.173568°  
LEA COUNTY, NEW MEXICO



Project #:  
212C-MD-02753

FIGURE  
2







## Tables

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Table 1  
Permian Water Solutions  
Rice SWD F #029  
Lea 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 (Top 4.0' of Soil)								100 mg/kg	10 mg/kg				50 mg/kg	600 mg/kg
RRALs (Beyond Top 4.0' of Soil)								2,500 mg/kg	10 mg/kg				50 mg/kg	10,000 mg/kg
AH-1	5/6/2022	0-1.0	X	-	<50.0	67.1	<50.0	67.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,600
	5/6/2022	1.5-2.0	X	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	846
AH-2	5/6/2022	0-1.0	X	-	<50.0	197	56.7	254	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	346
	5/6/2022	1.5-2.0	X	-	<49.9	165	52.6	218	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	809
AH-3	5/6/2022	0-1.0	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	1,670
	5/6/2022	1.5-2.0	X	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	840
H-1	5/6/2022	0-0.5	X	-	<50.0	175	<50.0	175	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	430
H-2	5/6/2022	0-0.5	X	-	<49.9	247	53.4	300	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	421
H-3	5/6/2022	0-0.5	X	-	<50.0	227	<50.0	227	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	435
H-4	5/6/2022	0-0.5	X	-	<50.0	284	<50.0	284	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	424

**NOTES**  
RRALs (Recommended Remediation Action Levels) are based on NMOCD (New Mexico Oil Conservation Devision) *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.**  
< = 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

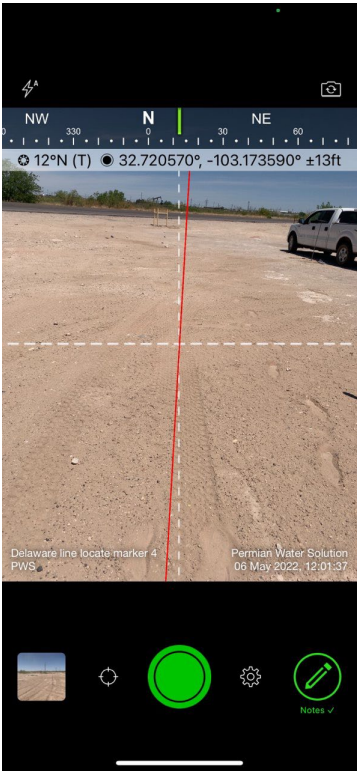


# Photographic Documentation

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Permian Water Solutions  
Rice SWD F #029  
Lea County, New Mexico



View of Impacted Area – View North



View of Impacted Area – View North

Permian Water Solutions  
Rice SWD F #029  
Lea County, New Mexico



View of Impacted Area – View South



View of Impacted Area – View South





# Appendix A

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C-141 Document



OCD Permitting

Home > Searches > Incidents > Incident Details

NLWJ1008538662 2006 MAJOR A OTH @ 30-025-12802

General Incident Information

Site Name:

Well:

Facility:

Operator:

Status:

Type:

District:

Incident Location:

Lat/Long:

Directions:

[30-025-12802] RICE SWD F #029

CAMBRIAN MANAGEMENT LTD

Closure Not Approved

Other

Hobbs

F-29-18S-38E    1880 FNL    1745 FWL

32.7205276,-103.1735687 NAD83

Severity:

Surface Owner:

County:

Major

Lea (25)

Notes

Source of Referral:

Action / Escalation:

Industry Rep

Referred to Environmental Inspector

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:

11/11/2006

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 (49)
- 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	Other (Specify)	Produced Water	<input type="checkbox"/>	80	60	20	BBL

Incident Events

Date	Detail
03/26/2010	Load line connection broke spilling produced wtr. Areal 20'X 100'. PR#1131



OCD Permitting

Home > Searches > Incidents > Incident Details

NPAC0633335042 2006 MAJOR A SWS @ 30-025-12802

General Incident Information

Site Name:

Well:

Facility:

Operator:

Status:

Type:

District:

Incident Location:

Lat/Long:

Directions:

[30-025-12802] RICE SWD F #029

[NPAC0633334726]

[239926] EAGLE DISPOSAL LLC

Closure Not Approved

Produced Water Release

Hobbs

F-29-18S-38E    1880 FNL    1745 FWL

32.7205276,-103.1735687 NAD83

Severity:

Surface Owner:

County:

Major

Lea (25)

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:

11/11/2006

11/15/2018

OCD Notified of Release:

Cancelled Date:

Characterization Report Approved:

Remediation Plan Approved:

Remediation Due:

Closure Report Approved:

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

Incidents Materials

Cause	Source	Material	Volume				Units
			Unk.	Released	Recovered	Lost	
	Pipeline (Any)	Produced Water	<input type="checkbox"/>	80	60	20	BBL

Incident Events

Date	Detail
11/29/2006	C-141: Broken connection

- Quick Links
- General Incident Information
  - Materials
  - Events
  - Orders
- Associated Images
- Facility Files (0)
  - Incident Files (0)
  - Well Files (49)
- New Searches
- New Facility Search
  - New Incident Search
  - New Operator Search
  - New Pit Search
  - New Spill Search
  - New Tank Search
  - New Well Search

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

State of New Mexico  
Oil Conservation Division

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)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tw	Rng	X	Y
L	11365	4	4	1	29	18S	38E	671337	3621642* 

Driller License:	571	Driller Company:	"GLASSPOOLE, GEORGE ""BILL"" W.E "						
Driller Name:	GLASSPOOLE, GEORGE W.								
Drill Start Date:	08/11/2002	Drill Finish Date:	08/12/2002				Plug Date:		
Log File Date:	08/23/2002	PCW Rev Date:					Source:	Shallow	
Pump Type:		Pipe Discharge Size:					Estimated Yield:	60 GPM	
Casing Size:	5.50	Depth Well:	120 feet				Depth Water:	55 feet	

Water Bearing Stratifications:				Top	Bottom	Description
				55	120	Other/Unknown

Casing Perforations:				Top	Bottom
				80	120

\*UTM location was derived from PLSS - see Help

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 1:48 PM

POINT OF DIVERSION SUMMARY



[USGS Home](#)  
[Contact USGS](#)  
[Search USGS](#)


**National Water Information System: Web Interface**[USGS Water Resources](#)

**Data Category:**  
Groundwater

**Geographic Area:**  
New Mexico

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#) 

Groundwater levels for New Mexico

Click to hide state-specific text

**i** Important: [Next Generation Monitoring Location Page](#)

## Search Results -- 1 sites found

**Agency code** = usgs  
**site\_no list** =

- 324248103094901

**Minimum number of levels** = 1

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

## USGS 324248103094901 18S.38E.29.421222

Lea County, New Mexico

Latitude 32°42'48", Longitude 103°09'49" NAD27

Land-surface elevation 3,646 feet above NAVD88

This well is completed in the High Plains aquifer (N100HGHLN) national aquifer.

This well is completed in the Ogallala Formation (121OGLL) 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 measurement
1961-02-03			D	62610	3602.08	NGVD29	1	Z		
1961-02-03			D	62611	3603.31	NAVD88	1	Z		
1961-02-03			D	72019	42.69		1	Z		
1966-03-03			D	62610	3598.68	NGVD29	1	Z		
1966-03-03			D	62611	3599.91	NAVD88	1	Z		
1966-03-03			D	72019	46.09		1	Z		
1976-02-20			D	62610	3592.02	NGVD29	1	Z		
1976-02-20			D	62611	3593.25	NAVD88	1	Z		
1976-02-20			D	72019	52.75		1	Z		
1981-04-02			D	62610	3586.32	NGVD29	1	Z		
1981-04-02			D	62611	3587.55	NAVD88	1	Z		
1981-04-02			D	72019	58.45		1	Z		
1986-03-20			D	62610	3588.85	NGVD29	1	Z		
1986-03-20			D	62611	3590.08	NAVD88	1	Z		
1986-03-20			D	72019	55.92		1	Z		

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
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.

- [Questions about sites/data?](#)  
[Feedback on this web site](#)  
[Automated retrievals](#)  
[Help](#)  
[Data Tips](#)  
[Explanation of terms](#)  
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[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)  
**Title: Groundwater for New Mexico: Water Levels**  
**URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>**



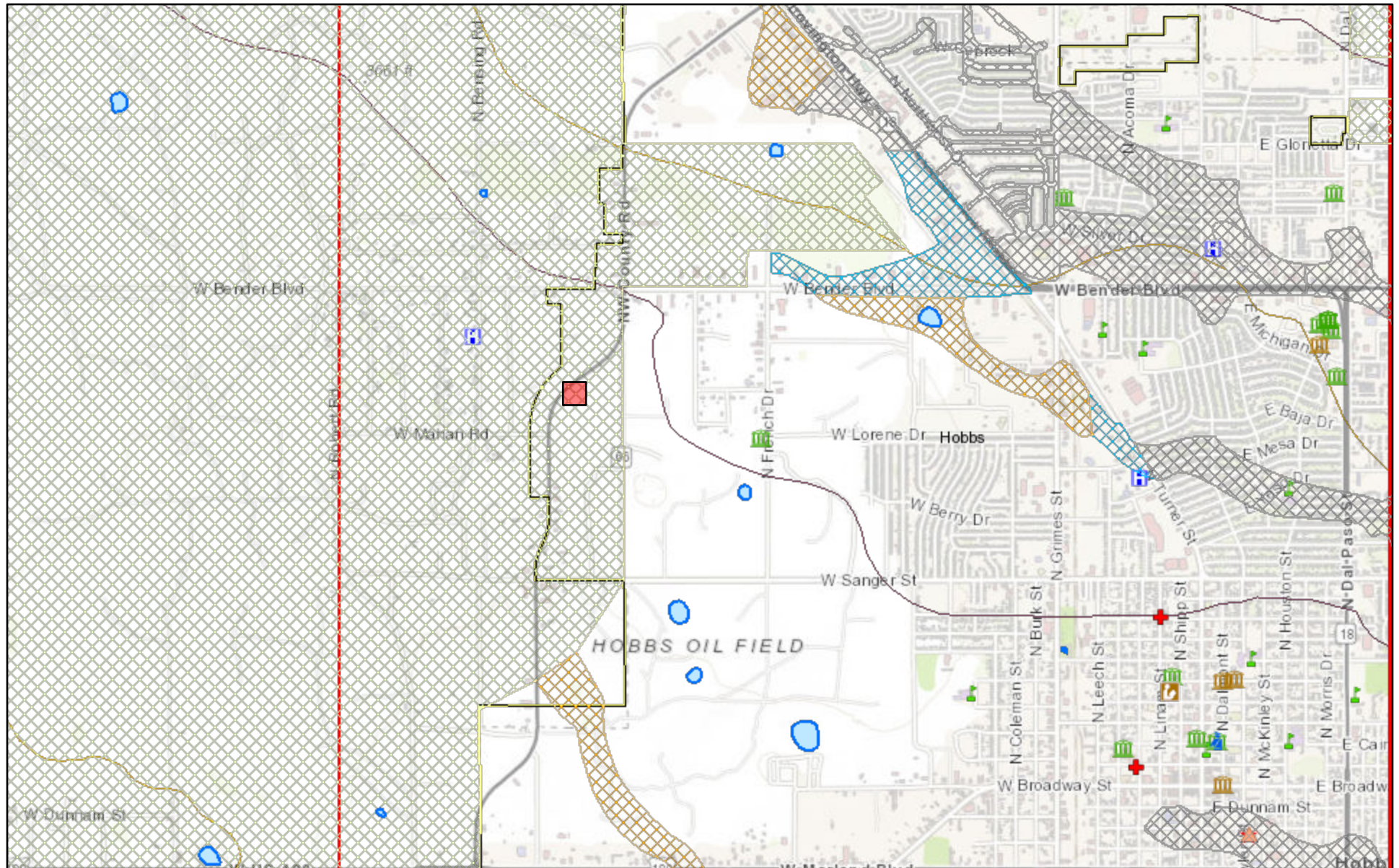
Page Contact Information: [New Mexico Water Data Maintainer](#)  
Page Last Modified: 2022-03-15 16:37:26 EDT  
0.33   0.3 nadww01



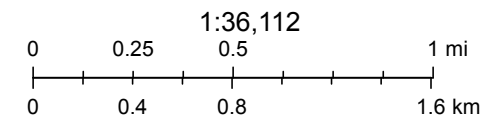




## New Mexico NFHL Data



March 14, 2022







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

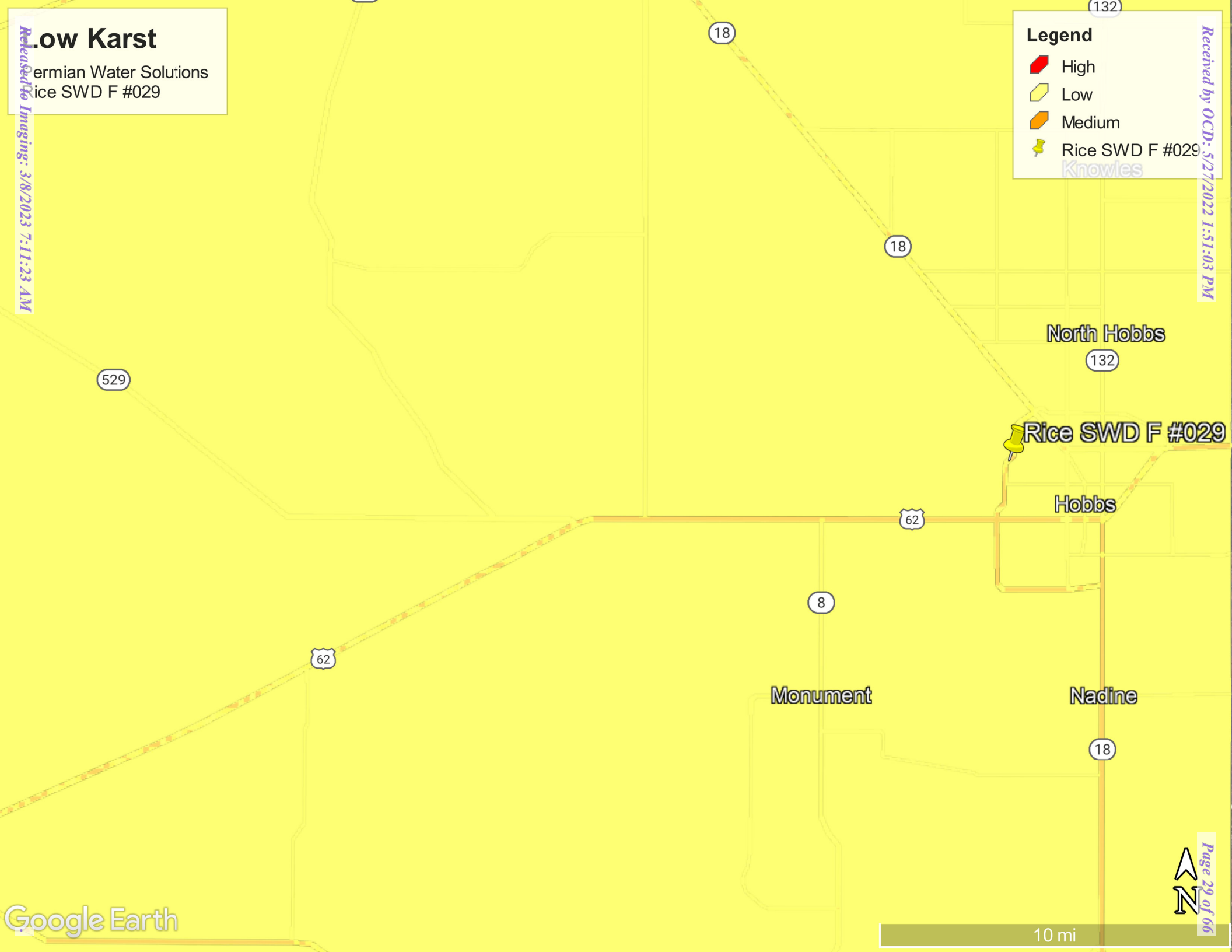
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**Legend**

-  High
-  Low
-  Medium
-  Rice SWD F #029

Knowles





# 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: 880-14535-1

Laboratory Sample Delivery Group: Lea County, New Mexico  
Client Project/Site: PWS-Rice SWD (F-29 SWD)

**For:**

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

Attn: Brittany Long

Authorized for release by:

5/17/2022 1:18:28 PM

Jessica Kramer, Project Manager  
(432)704-5440

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

#### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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



Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Laboratory Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
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
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

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

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

**Job ID: 880-14535-1**

**Laboratory: Eurofins Midland**

**Narrative**

**Job Narrative  
880-14535-1**

**Receipt**

The samples were received on 5/9/2022 12:00 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 3.3°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-25601 and analytical batch 880-25595 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.

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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-25270 and analytical batch 880-25229 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 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-25316 and analytical batch 880-25321 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.

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

**HPLC/IC**

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-25209 and analytical batch 880-25486 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

Client Sample ID: AH1 (0-2')

Lab Sample ID: 880-14535-1

Date Collected: 05/06/22 08:00

Matrix: Solid

Date Received: 05/09/22 12:00

## 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 09:24	05/16/22 16:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/16/22 09:24	05/16/22 16:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/16/22 09:24	05/16/22 16:16	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		05/16/22 09:24	05/16/22 16:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/16/22 09:24	05/16/22 16:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/16/22 09:24	05/16/22 16:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	05/16/22 09:24	05/16/22 16:16	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/16/22 09:24	05/16/22 16:16	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			05/17/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	67.1		50.0		mg/Kg			05/11/22 13:40	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	50.0		mg/Kg		05/10/22 11:04	05/10/22 18:43	1
Diesel Range Organics (Over C10-C28)	67.1		50.0		mg/Kg		05/10/22 11:04	05/10/22 18:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/10/22 11:04	05/10/22 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	05/10/22 11:04	05/10/22 18:43	1
o-Terphenyl	99		70 - 130	05/10/22 11:04	05/10/22 18:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1600	F1	25.0		mg/Kg			05/13/22 03:17	5

Client Sample ID: AH-1 (1.5-2')

Lab Sample ID: 880-14535-2

Date Collected: 05/06/22 08:30

Matrix: Solid

Date Received: 05/09/22 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/16/22 09:24	05/16/22 16:37	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/16/22 09:24	05/16/22 16:37	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/16/22 09:24	05/16/22 16:37	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/16/22 09:24	05/16/22 16:37	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/16/22 09:24	05/16/22 16:37	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/16/22 09:24	05/16/22 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	05/16/22 09:24	05/16/22 16:37	1
1,4-Difluorobenzene (Surr)	104		70 - 130	05/16/22 09:24	05/16/22 16:37	1

Eurofins Midland

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

Client Sample ID: AH-1 (1.5-2')

Lab Sample ID: 880-14535-2

Date Collected: 05/06/22 08:30

Matrix: Solid

Date Received: 05/09/22 12:00

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			05/17/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			05/11/22 13:40	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	<49.8	U	49.8		mg/Kg		05/10/22 11:04	05/10/22 20:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/10/22 11:04	05/10/22 20:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/10/22 11:04	05/10/22 20:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				05/10/22 11:04	05/10/22 20:32	1
o-Terphenyl	111		70 - 130				05/10/22 11:04	05/10/22 20:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	846		5.00		mg/Kg			05/13/22 03:41	1

Client Sample ID: AH-2 (0-1')

Lab Sample ID: 880-14535-3

Date Collected: 05/06/22 09:00

Matrix: Solid

Date Received: 05/09/22 12:00

## 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 09:24	05/16/22 16:58	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/16/22 09:24	05/16/22 16:58	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/16/22 09:24	05/16/22 16:58	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/16/22 09:24	05/16/22 16:58	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/16/22 09:24	05/16/22 16:58	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/16/22 09:24	05/16/22 16:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				05/16/22 09:24	05/16/22 16:58	1
1,4-Difluorobenzene (Surr)	99		70 - 130				05/16/22 09:24	05/16/22 16:58	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			05/17/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	254		50.0		mg/Kg			05/11/22 13:40	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	50.0		mg/Kg		05/10/22 11:04	05/10/22 19:27	1
Diesel Range Organics (Over C10-C28)	197		50.0		mg/Kg		05/10/22 11:04	05/10/22 19:27	1

Eurofins Midland

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

Client Sample ID: AH-2 (0-1')

Lab Sample ID: 880-14535-3

Date Collected: 05/06/22 09:00

Matrix: Solid

Date Received: 05/09/22 12:00

## 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)	56.7		50.0		mg/Kg		05/10/22 11:04	05/10/22 19:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				05/10/22 11:04	05/10/22 19:27	1
o-Terphenyl	93		70 - 130				05/10/22 11:04	05/10/22 19:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	346		5.04		mg/Kg			05/13/22 03:49	1

Client Sample ID: AH-2 (1.5-2')

Lab Sample ID: 880-14535-4

Date Collected: 05/06/22 09:30

Matrix: Solid

Date Received: 05/09/22 12:00

## 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 09:24	05/16/22 17:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:24	05/16/22 17:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:24	05/16/22 17:19	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/16/22 09:24	05/16/22 17:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:24	05/16/22 17:19	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/16/22 09:24	05/16/22 17:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				05/16/22 09:24	05/16/22 17:19	1
1,4-Difluorobenzene (Surr)	91		70 - 130				05/16/22 09:24	05/16/22 17:19	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			05/17/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	218		49.9		mg/Kg			05/11/22 13:40	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	49.9		mg/Kg		05/10/22 11:04	05/10/22 19:05	1
Diesel Range Organics (Over C10-C28)	165		49.9		mg/Kg		05/10/22 11:04	05/10/22 19:05	1
Oil Range Organics (Over C28-C36)	52.6		49.9		mg/Kg		05/10/22 11:04	05/10/22 19:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				05/10/22 11:04	05/10/22 19:05	1
o-Terphenyl	95		70 - 130				05/10/22 11:04	05/10/22 19:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	809		4.98		mg/Kg			05/13/22 03:58	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

Client Sample ID: AH-3 (0-1')

Lab Sample ID: 880-14535-5

Date Collected: 05/06/22 10:00

Matrix: Solid

Date Received: 05/09/22 12:00

## 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 09:24	05/16/22 17:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:24	05/16/22 17:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:24	05/16/22 17:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/16/22 09:24	05/16/22 17:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:24	05/16/22 17:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/16/22 09:24	05/16/22 17:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	05/16/22 09:24	05/16/22 17:39	1
1,4-Difluorobenzene (Surr)	99		70 - 130	05/16/22 09:24	05/16/22 17:39	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			05/17/22 13:45	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			05/11/22 13:40	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	50.0		mg/Kg		05/10/22 11:04	05/10/22 20:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/10/22 11:04	05/10/22 20:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/10/22 11:04	05/10/22 20:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	05/10/22 11:04	05/10/22 20:10	1
o-Terphenyl	90		70 - 130	05/10/22 11:04	05/10/22 20:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1670		24.8		mg/Kg			05/13/22 04:06	5

Client Sample ID: AH-3 (1.5-2')

Lab Sample ID: 880-14535-6

Date Collected: 05/06/22 10:30

Matrix: Solid

Date Received: 05/09/22 12:00

## 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 09:24	05/16/22 18:00	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/16/22 09:24	05/16/22 18:00	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/16/22 09:24	05/16/22 18:00	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/16/22 09:24	05/16/22 18:00	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/16/22 09:24	05/16/22 18:00	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/16/22 09:24	05/16/22 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/16/22 09:24	05/16/22 18:00	1
1,4-Difluorobenzene (Surr)	90		70 - 130	05/16/22 09:24	05/16/22 18:00	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

Client Sample ID: AH-3 (1.5-2')

Lab Sample ID: 880-14535-6

Date Collected: 05/06/22 10:30

Matrix: Solid

Date Received: 05/09/22 12:00

## 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			05/17/22 13:45	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			05/11/22 13:40	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	49.9		mg/Kg		05/10/22 11:04	05/10/22 20:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/10/22 11:04	05/10/22 20:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/10/22 11:04	05/10/22 20:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				05/10/22 11:04	05/10/22 20:53	1
o-Terphenyl	105		70 - 130				05/10/22 11:04	05/10/22 20:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	840		5.00		mg/Kg			05/13/22 04:30	1

Client Sample ID: H-1 (0-5')

Lab Sample ID: 880-14535-7

Date Collected: 05/06/22 10:00

Matrix: Solid

Date Received: 05/09/22 12:00

## 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 09:24	05/16/22 18:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/16/22 09:24	05/16/22 18:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/16/22 09:24	05/16/22 18:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/16/22 09:24	05/16/22 18:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/16/22 09:24	05/16/22 18:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/16/22 09:24	05/16/22 18:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				05/16/22 09:24	05/16/22 18:21	1
1,4-Difluorobenzene (Surr)	98		70 - 130				05/16/22 09:24	05/16/22 18:21	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			05/17/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	175		50.0		mg/Kg			05/11/22 13:40	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	50.0		mg/Kg		05/10/22 11:04	05/10/22 19:48	1
Diesel Range Organics (Over C10-C28)	175		50.0		mg/Kg		05/10/22 11:04	05/10/22 19:48	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

## Client Sample ID: H-1 (0-5')

Lab Sample ID: 880-14535-7

Date Collected: 05/06/22 10:00

Matrix: Solid

Date Received: 05/09/22 12:00

## 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		05/10/22 11:04	05/10/22 19:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130				05/10/22 11:04	05/10/22 19:48	1
o-Terphenyl	75		70 - 130				05/10/22 11:04	05/10/22 19:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	430		4.98		mg/Kg			05/13/22 04:38	1

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

Lab Sample ID: 880-14535-8

Date Collected: 05/06/22 11:30

Matrix: Solid

Date Received: 05/09/22 12:00

## 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 09:24	05/16/22 18:42	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/16/22 09:24	05/16/22 18:42	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/16/22 09:24	05/16/22 18:42	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/16/22 09:24	05/16/22 18:42	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/16/22 09:24	05/16/22 18:42	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/16/22 09:24	05/16/22 18:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				05/16/22 09:24	05/16/22 18:42	1
1,4-Difluorobenzene (Surr)	99		70 - 130				05/16/22 09:24	05/16/22 18:42	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			05/17/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	300		49.9		mg/Kg			05/11/22 13:40	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	49.9		mg/Kg		05/11/22 09:33	05/11/22 15:01	1
Diesel Range Organics (Over C10-C28)	247		49.9		mg/Kg		05/11/22 09:33	05/11/22 15:01	1
Oil Range Organics (Over C28-C36)	53.4		49.9		mg/Kg		05/11/22 09:33	05/11/22 15:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				05/11/22 09:33	05/11/22 15:01	1
o-Terphenyl	121		70 - 130				05/11/22 09:33	05/11/22 15:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	421		4.95		mg/Kg			05/13/22 04:47	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-14535-9

Date Collected: 05/06/22 13:30

Matrix: Solid

Date Received: 05/09/22 12:00

## 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 09:33	05/17/22 05:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:33	05/17/22 05:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:33	05/17/22 05:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/16/22 09:33	05/17/22 05:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:33	05/17/22 05:44	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/16/22 09:33	05/17/22 05:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	05/16/22 09:33	05/17/22 05:44	1
1,4-Difluorobenzene (Surr)	89		70 - 130	05/16/22 09:33	05/17/22 05:44	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			05/17/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	227		50.0		mg/Kg			05/11/22 13:40	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	50.0		mg/Kg		05/11/22 09:33	05/11/22 15:23	1
Diesel Range Organics (Over C10-C28)	227		50.0		mg/Kg		05/11/22 09:33	05/11/22 15:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/11/22 09:33	05/11/22 15:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	05/11/22 09:33	05/11/22 15:23	1
o-Terphenyl	109		70 - 130	05/11/22 09:33	05/11/22 15:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	435		4.97		mg/Kg			05/13/22 04:55	1

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

Lab Sample ID: 880-14535-10

Date Collected: 05/06/22 14:00

Matrix: Solid

Date Received: 05/09/22 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/16/22 09:24	05/16/22 20:47	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/16/22 09:24	05/16/22 20:47	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/16/22 09:24	05/16/22 20:47	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/16/22 09:24	05/16/22 20:47	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/16/22 09:24	05/16/22 20:47	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/16/22 09:24	05/16/22 20:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	05/16/22 09:24	05/16/22 20:47	1
1,4-Difluorobenzene (Surr)	101		70 - 130	05/16/22 09:24	05/16/22 20:47	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-14535-10

Date Collected: 05/06/22 14:00

Matrix: Solid

Date Received: 05/09/22 12:00

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			05/17/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	284		50.0		mg/Kg			05/11/22 13:40	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	50.0		mg/Kg		05/11/22 09:33	05/11/22 15:45	1
Diesel Range Organics (Over C10-C28)	284		50.0		mg/Kg		05/11/22 09:33	05/11/22 15:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/11/22 09:33	05/11/22 15:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130				05/11/22 09:33	05/11/22 15:45	1
o-Terphenyl	124		70 - 130				05/11/22 09:33	05/11/22 15:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	424		5.00		mg/Kg			05/13/22 05:03	1

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
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)
880-14535-1	AH1 (0-2')	98	100
880-14535-1 MS	AH1 (0-2')	108	101
880-14535-1 MSD	AH1 (0-2')	106	102
880-14535-2	AH-1 (1.5-2')	98	104
880-14535-3	AH-2 (0-1')	103	99
880-14535-4	AH-2 (1.5-2')	102	91
880-14535-5	AH-3 (0-1')	101	99
880-14535-6	AH-3 (1.5-2')	105	90
880-14535-7	H-1 (0-5')	104	98
880-14535-8	H-2 (0-0.5')	106	99
880-14535-9	H-3 (0-0.5')	103	89
880-14535-10	H-4 (0-0.5')	93	101
LCS 880-25601/1-A	Lab Control Sample	94	101
LCS 880-25603/1-A	Lab Control Sample	97	102
LCSD 880-25601/2-A	Lab Control Sample Dup	103	101
LCSD 880-25603/2-A	Lab Control Sample Dup	114	97
MB 880-25601/5-A	Method Blank	99	98
MB 880-25603/5-A	Method Blank	106	93
<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)
880-14535-1	AH1 (0-2')	93	99
880-14535-2	AH-1 (1.5-2')	102	111
880-14535-3	AH-2 (0-1')	88	93
880-14535-4	AH-2 (1.5-2')	89	95
880-14535-5	AH-3 (0-1')	85	90
880-14535-6	AH-3 (1.5-2')	102	105
880-14535-7	H-1 (0-5')	72	75
880-14535-8	H-2 (0-0.5')	116	121
880-14535-9	H-3 (0-0.5')	103	109
880-14535-10	H-4 (0-0.5')	119	124
880-14580-A-1-F MS	Matrix Spike	81	73
880-14580-A-1-G MSD	Matrix Spike Duplicate	82	74
890-2291-A-1-C MS	Matrix Spike	92	80
890-2291-A-1-D MSD	Matrix Spike Duplicate	82	72
LCS 880-25270/2-A	Lab Control Sample	102	99
LCS 880-25316/2-A	Lab Control Sample	118	113
LCSD 880-25270/3-A	Lab Control Sample Dup	103	101
LCSD 880-25316/3-A	Lab Control Sample Dup	120	116
MB 880-25270/1-A	Method Blank	88	99
MB 880-25316/1-A	Method Blank	97	109
<b>Surrogate Legend</b>			

Eurofins Midland

Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)  
1CO = 1-Chlorooctane  
OTPH = o-Terphenyl

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-25601/5-A

Matrix: Solid

Analysis Batch: 25595

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25601

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:24	05/16/22 15:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:24	05/16/22 15:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:24	05/16/22 15:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/16/22 09:24	05/16/22 15:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:24	05/16/22 15:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/16/22 09:24	05/16/22 15:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/16/22 09:24	05/16/22 15:54	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/16/22 09:24	05/16/22 15:54	1

Lab Sample ID: LCS 880-25601/1-A

Matrix: Solid

Analysis Batch: 25595

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25601

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09745		mg/Kg		97	70 - 130
Toluene	0.100	0.09612		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.08365		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1726		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08729		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-25601/2-A

Matrix: Solid

Analysis Batch: 25595

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25601

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1059		mg/Kg		106	70 - 130	8	35
Toluene	0.100	0.1041		mg/Kg		104	70 - 130	8	35
Ethylbenzene	0.100	0.09131		mg/Kg		91	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1918		mg/Kg		96	70 - 130	11	35
o-Xylene	0.100	0.09679		mg/Kg		97	70 - 130	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-14535-1 MS

Matrix: Solid

Analysis Batch: 25595

Client Sample ID: AH1 (0-2')

Prep Type: Total/NA

Prep Batch: 25601

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.08773		mg/Kg		87	70 - 130
Toluene	<0.00199	U	0.100	0.08825		mg/Kg		88	70 - 130

Eurofins Midland

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-14535-1 MS

Matrix: Solid

Analysis Batch: 25595

Client Sample ID: AH1 (0-2')

Prep Type: Total/NA

Prep Batch: 25601

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.07500		mg/Kg		75	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.1553		mg/Kg		77	70 - 130
o-Xylene	<0.00199	U	0.100	0.07812		mg/Kg		78	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-14535-1 MSD

Matrix: Solid

Analysis Batch: 25595

Client Sample ID: AH1 (0-2')

Prep Type: Total/NA

Prep Batch: 25601

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.07517		mg/Kg		75	70 - 130	15	35
Toluene	<0.00199	U	0.100	0.07965		mg/Kg		79	70 - 130	10	35
Ethylbenzene	<0.00199	U	0.100	0.07106		mg/Kg		71	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1390	F1	mg/Kg		69	70 - 130	11	35
o-Xylene	<0.00199	U	0.100	0.07011		mg/Kg		70	70 - 130	11	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: MB 880-25603/5-A

Matrix: Solid

Analysis Batch: 25595

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25603

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:33	05/17/22 02:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:33	05/17/22 02:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:33	05/17/22 02:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/16/22 09:33	05/17/22 02:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 09:33	05/17/22 02:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/16/22 09:33	05/17/22 02:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	05/16/22 09:33	05/17/22 02:37	1
1,4-Difluorobenzene (Surr)	93		70 - 130	05/16/22 09:33	05/17/22 02:37	1

Lab Sample ID: LCS 880-25603/1-A

Matrix: Solid

Analysis Batch: 25595

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25603

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1020		mg/Kg		102	70 - 130
Toluene	0.100	0.09657		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.08230		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	0.200	0.1704		mg/Kg		85	70 - 130

Eurofins Midland

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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

Lab Sample ID: LCS 880-25603/1-A

Matrix: Solid

Analysis Batch: 25595

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25603

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.08715		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-25603/2-A

Matrix: Solid

Analysis Batch: 25595

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25603

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09287		mg/Kg		93	70 - 130	9	35
Toluene	0.100	0.09913		mg/Kg		99	70 - 130	3	35
Ethylbenzene	0.100	0.09105		mg/Kg		91	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.1961		mg/Kg		98	70 - 130	14	35
o-Xylene	0.100	0.1006		mg/Kg		101	70 - 130	14	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-25270/1-A

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25270

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		05/10/22 11:04	05/10/22 11:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/10/22 11:04	05/10/22 11:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/10/22 11:04	05/10/22 11:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	05/10/22 11:04	05/10/22 11:21	1
o-Terphenyl	99		70 - 130	05/10/22 11:04	05/10/22 11:21	1

Lab Sample ID: LCS 880-25270/2-A

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25270

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	871.9		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	978.6		mg/Kg		98	70 - 130

Eurofins Midland



## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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

Lab Sample ID: LCS 880-25270/2-A

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25270

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: LCSD 880-25270/3-A

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25270

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	814.5		mg/Kg		81	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	987.6		mg/Kg		99	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 880-14580-A-1-F MS

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1003		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	81.9	F1	1000	747.7	F1	mg/Kg		67	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	73		70 - 130

Lab Sample ID: 880-14580-A-1-G MSD

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 25270

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	998	1026		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	81.9	F1	998	761.4	F1	mg/Kg		68	70 - 130	2	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	74		70 - 130

Eurofins Midland

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-25316/1-A

Matrix: Solid

Analysis Batch: 25321

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25316

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		05/11/22 09:33	05/11/22 10:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/11/22 09:33	05/11/22 10:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/11/22 09:33	05/11/22 10:55	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				05/11/22 09:33	05/11/22 10:55	1
o-Terphenyl	109		70 - 130				05/11/22 09:33	05/11/22 10:55	1

Lab Sample ID: LCS 880-25316/2-A

Matrix: Solid

Analysis Batch: 25321

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25316

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	916.7		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1109		mg/Kg		111	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	118		70 - 130				
o-Terphenyl	113		70 - 130				

Lab Sample ID: LCSD 880-25316/3-A

Matrix: Solid

Analysis Batch: 25321

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25316

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	954.5		mg/Kg		95	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1119		mg/Kg		112	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	120		70 - 130						
o-Terphenyl	116		70 - 130						

Lab Sample ID: 890-2291-A-1-C MS

Matrix: Solid

Analysis Batch: 25321

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25316

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1064		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U F1	1000	804.5		mg/Kg		76	70 - 130

Eurofins Midland

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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

Lab Sample ID: 890-2291-A-1-C MS  
Matrix: Solid  
Analysis Batch: 25321

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 25316

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: 890-2291-A-1-D MSD  
Matrix: Solid  
Analysis Batch: 25321

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 25316

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	998	1056		mg/Kg		103	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	724.0	F1	mg/Kg		68	70 - 130	11	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	72		70 - 130

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25209/1-A  
Matrix: Solid  
Analysis Batch: 25486

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			05/13/22 02:52	1

Lab Sample ID: LCS 880-25209/2-A  
Matrix: Solid  
Analysis Batch: 25486

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	266.1		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-25209/3-A  
Matrix: Solid  
Analysis Batch: 25486

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	265.8		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 880-14535-1 MS  
Matrix: Solid  
Analysis Batch: 25486

Client Sample ID: AH1 (0-2')  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1600	F1	1250	3233	F1	mg/Kg		131	90 - 110

Eurofins Midland

QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-14535-1 MSD							Client Sample ID: AH1 (0-2')					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 25486												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	1600	F1	1250	3037	F1	mg/Kg		115	90 - 110	6	20	

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

## GC VOA

## Analysis Batch: 25595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-1	AH1 (0-2')	Total/NA	Solid	8021B	25601
880-14535-2	AH-1 (1.5-2')	Total/NA	Solid	8021B	25601
880-14535-3	AH-2 (0-1')	Total/NA	Solid	8021B	25601
880-14535-4	AH-2 (1.5-2')	Total/NA	Solid	8021B	25601
880-14535-5	AH-3 (0-1')	Total/NA	Solid	8021B	25601
880-14535-6	AH-3 (1.5-2')	Total/NA	Solid	8021B	25601
880-14535-7	H-1 (0-5')	Total/NA	Solid	8021B	25601
880-14535-8	H-2 (0-0.5')	Total/NA	Solid	8021B	25601
880-14535-9	H-3 (0-0.5')	Total/NA	Solid	8021B	25603
880-14535-10	H-4 (0-0.5')	Total/NA	Solid	8021B	25601
MB 880-25601/5-A	Method Blank	Total/NA	Solid	8021B	25601
MB 880-25603/5-A	Method Blank	Total/NA	Solid	8021B	25603
LCS 880-25601/1-A	Lab Control Sample	Total/NA	Solid	8021B	25601
LCS 880-25603/1-A	Lab Control Sample	Total/NA	Solid	8021B	25603
LCSD 880-25601/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25601
LCSD 880-25603/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25603
880-14535-1 MS	AH1 (0-2')	Total/NA	Solid	8021B	25601
880-14535-1 MSD	AH1 (0-2')	Total/NA	Solid	8021B	25601

## Prep Batch: 25601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-1	AH1 (0-2')	Total/NA	Solid	5035	
880-14535-2	AH-1 (1.5-2')	Total/NA	Solid	5035	
880-14535-3	AH-2 (0-1')	Total/NA	Solid	5035	
880-14535-4	AH-2 (1.5-2')	Total/NA	Solid	5035	
880-14535-5	AH-3 (0-1')	Total/NA	Solid	5035	
880-14535-6	AH-3 (1.5-2')	Total/NA	Solid	5035	
880-14535-7	H-1 (0-5')	Total/NA	Solid	5035	
880-14535-8	H-2 (0-0.5')	Total/NA	Solid	5035	
880-14535-10	H-4 (0-0.5')	Total/NA	Solid	5035	
MB 880-25601/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25601/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25601/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-14535-1 MS	AH1 (0-2')	Total/NA	Solid	5035	
880-14535-1 MSD	AH1 (0-2')	Total/NA	Solid	5035	

## Prep Batch: 25603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-9	H-3 (0-0.5')	Total/NA	Solid	5035	
MB 880-25603/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25603/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25603/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## Analysis Batch: 25746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-1	AH1 (0-2')	Total/NA	Solid	Total BTEX	
880-14535-2	AH-1 (1.5-2')	Total/NA	Solid	Total BTEX	
880-14535-3	AH-2 (0-1')	Total/NA	Solid	Total BTEX	
880-14535-4	AH-2 (1.5-2')	Total/NA	Solid	Total BTEX	
880-14535-5	AH-3 (0-1')	Total/NA	Solid	Total BTEX	
880-14535-6	AH-3 (1.5-2')	Total/NA	Solid	Total BTEX	

Eurofins Midland

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

## GC VOA (Continued)

## Analysis Batch: 25746 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-7	H-1 (0-5')	Total/NA	Solid	Total BTEX	
880-14535-8	H-2 (0-0.5')	Total/NA	Solid	Total BTEX	
880-14535-9	H-3 (0-0.5')	Total/NA	Solid	Total BTEX	
880-14535-10	H-4 (0-0.5')	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 25229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-1	AH1 (0-2')	Total/NA	Solid	8015B NM	25270
880-14535-2	AH-1 (1.5-2')	Total/NA	Solid	8015B NM	25270
880-14535-3	AH-2 (0-1')	Total/NA	Solid	8015B NM	25270
880-14535-4	AH-2 (1.5-2')	Total/NA	Solid	8015B NM	25270
880-14535-5	AH-3 (0-1')	Total/NA	Solid	8015B NM	25270
880-14535-6	AH-3 (1.5-2')	Total/NA	Solid	8015B NM	25270
880-14535-7	H-1 (0-5')	Total/NA	Solid	8015B NM	25270
MB 880-25270/1-A	Method Blank	Total/NA	Solid	8015B NM	25270
LCS 880-25270/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25270
LCSD 880-25270/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25270
880-14580-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	25270
880-14580-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	25270

## Prep Batch: 25270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-1	AH1 (0-2')	Total/NA	Solid	8015NM Prep	
880-14535-2	AH-1 (1.5-2')	Total/NA	Solid	8015NM Prep	
880-14535-3	AH-2 (0-1')	Total/NA	Solid	8015NM Prep	
880-14535-4	AH-2 (1.5-2')	Total/NA	Solid	8015NM Prep	
880-14535-5	AH-3 (0-1')	Total/NA	Solid	8015NM Prep	
880-14535-6	AH-3 (1.5-2')	Total/NA	Solid	8015NM Prep	
880-14535-7	H-1 (0-5')	Total/NA	Solid	8015NM Prep	
MB 880-25270/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25270/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25270/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14580-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-14580-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Prep Batch: 25316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-8	H-2 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-14535-9	H-3 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-14535-10	H-4 (0-0.5')	Total/NA	Solid	8015NM Prep	
MB 880-25316/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25316/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25316/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2291-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2291-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 25321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-8	H-2 (0-0.5')	Total/NA	Solid	8015B NM	25316

Eurofins Midland

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

## GC Semi VOA (Continued)

## Analysis Batch: 25321 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-9	H-3 (0-0.5')	Total/NA	Solid	8015B NM	25316
880-14535-10	H-4 (0-0.5')	Total/NA	Solid	8015B NM	25316
MB 880-25316/1-A	Method Blank	Total/NA	Solid	8015B NM	25316
LCS 880-25316/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25316
LCSD 880-25316/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25316
890-2291-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	25316
890-2291-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	25316

## Analysis Batch: 25357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-1	AH1 (0-2')	Total/NA	Solid	8015 NM	
880-14535-2	AH-1 (1.5-2')	Total/NA	Solid	8015 NM	
880-14535-3	AH-2 (0-1')	Total/NA	Solid	8015 NM	
880-14535-4	AH-2 (1.5-2')	Total/NA	Solid	8015 NM	
880-14535-5	AH-3 (0-1')	Total/NA	Solid	8015 NM	
880-14535-6	AH-3 (1.5-2')	Total/NA	Solid	8015 NM	
880-14535-7	H-1 (0-5')	Total/NA	Solid	8015 NM	
880-14535-8	H-2 (0-0.5')	Total/NA	Solid	8015 NM	
880-14535-9	H-3 (0-0.5')	Total/NA	Solid	8015 NM	
880-14535-10	H-4 (0-0.5')	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 25209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-1	AH1 (0-2')	Soluble	Solid	DI Leach	
880-14535-2	AH-1 (1.5-2')	Soluble	Solid	DI Leach	
880-14535-3	AH-2 (0-1')	Soluble	Solid	DI Leach	
880-14535-4	AH-2 (1.5-2')	Soluble	Solid	DI Leach	
880-14535-5	AH-3 (0-1')	Soluble	Solid	DI Leach	
880-14535-6	AH-3 (1.5-2')	Soluble	Solid	DI Leach	
880-14535-7	H-1 (0-5')	Soluble	Solid	DI Leach	
880-14535-8	H-2 (0-0.5')	Soluble	Solid	DI Leach	
880-14535-9	H-3 (0-0.5')	Soluble	Solid	DI Leach	
880-14535-10	H-4 (0-0.5')	Soluble	Solid	DI Leach	
MB 880-25209/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25209/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25209/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-14535-1 MS	AH1 (0-2')	Soluble	Solid	DI Leach	
880-14535-1 MSD	AH1 (0-2')	Soluble	Solid	DI Leach	

## Analysis Batch: 25486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-1	AH1 (0-2')	Soluble	Solid	300.0	25209
880-14535-2	AH-1 (1.5-2')	Soluble	Solid	300.0	25209
880-14535-3	AH-2 (0-1')	Soluble	Solid	300.0	25209
880-14535-4	AH-2 (1.5-2')	Soluble	Solid	300.0	25209
880-14535-5	AH-3 (0-1')	Soluble	Solid	300.0	25209
880-14535-6	AH-3 (1.5-2')	Soluble	Solid	300.0	25209
880-14535-7	H-1 (0-5')	Soluble	Solid	300.0	25209
880-14535-8	H-2 (0-0.5')	Soluble	Solid	300.0	25209

Eurofins Midland

QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 25486 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14535-9	H-3 (0-0.5')	Soluble	Solid	300.0	25209
880-14535-10	H-4 (0-0.5')	Soluble	Solid	300.0	25209
MB 880-25209/1-A	Method Blank	Soluble	Solid	300.0	25209
LCS 880-25209/2-A	Lab Control Sample	Soluble	Solid	300.0	25209
LCSD 880-25209/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25209
880-14535-1 MS	AH1 (0-2')	Soluble	Solid	300.0	25209
880-14535-1 MSD	AH1 (0-2')	Soluble	Solid	300.0	25209



## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

Client Sample ID: AH1 (0-2')

Lab Sample ID: 880-14535-1

Date Collected: 05/06/22 08:00

Matrix: Solid

Date Received: 05/09/22 12:00

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	25601	05/16/22 09:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25595	05/16/22 16:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25746	05/17/22 13:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25357	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 18:43	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	25209	05/09/22 16:54	SC	XEN MID
Soluble	Analysis	300.0		5			25486	05/13/22 03:17	CH	XEN MID

Client Sample ID: AH-1 (1.5-2')

Lab Sample ID: 880-14535-2

Date Collected: 05/06/22 08:30

Matrix: Solid

Date Received: 05/09/22 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	25601	05/16/22 09:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25595	05/16/22 16:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25746	05/17/22 13:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25357	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 20:32	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	25209	05/09/22 16:54	SC	XEN MID
Soluble	Analysis	300.0		1			25486	05/13/22 03:41	CH	XEN MID

Client Sample ID: AH-2 (0-1')

Lab Sample ID: 880-14535-3

Date Collected: 05/06/22 09:00

Matrix: Solid

Date Received: 05/09/22 12:00

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	25601	05/16/22 09:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25595	05/16/22 16:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25746	05/17/22 13:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25357	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 19:27	SM	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	25209	05/09/22 16:54	SC	XEN MID
Soluble	Analysis	300.0		1			25486	05/13/22 03:49	CH	XEN MID

Client Sample ID: AH-2 (1.5-2')

Lab Sample ID: 880-14535-4

Date Collected: 05/06/22 09:30

Matrix: Solid

Date Received: 05/09/22 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	25601	05/16/22 09:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25595	05/16/22 17:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25746	05/17/22 13:45	AJ	XEN MID

Eurofins Midland

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

## Client Sample ID: AH-2 (1.5-2')

## Lab Sample ID: 880-14535-4

Date Collected: 05/06/22 09:30

Matrix: Solid

Date Received: 05/09/22 12:00

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			25357	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 19:05	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25209	05/09/22 16:54	SC	XEN MID
Soluble	Analysis	300.0		1			25486	05/13/22 03:58	CH	XEN MID

## Client Sample ID: AH-3 (0-1')

## Lab Sample ID: 880-14535-5

Date Collected: 05/06/22 10:00

Matrix: Solid

Date Received: 05/09/22 12:00

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	25601	05/16/22 09:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25595	05/16/22 17:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25746	05/17/22 13:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25357	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 20:10	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	25209	05/09/22 16:54	SC	XEN MID
Soluble	Analysis	300.0		5			25486	05/13/22 04:06	CH	XEN MID

## Client Sample ID: AH-3 (1.5-2')

## Lab Sample ID: 880-14535-6

Date Collected: 05/06/22 10:30

Matrix: Solid

Date Received: 05/09/22 12:00

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	25601	05/16/22 09:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25595	05/16/22 18:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25746	05/17/22 13:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25357	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 20:53	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	25209	05/09/22 16:54	SC	XEN MID
Soluble	Analysis	300.0		1			25486	05/13/22 04:30	CH	XEN MID

## Client Sample ID: H-1 (0-5')

## Lab Sample ID: 880-14535-7

Date Collected: 05/06/22 10:00

Matrix: Solid

Date Received: 05/09/22 12:00

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	25601	05/16/22 09:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25595	05/16/22 18:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25746	05/17/22 13:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25357	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 19:48	SM	XEN MID

Eurofins Midland

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

## Client Sample ID: H-1 (0-5')

## Lab Sample ID: 880-14535-7

Date Collected: 05/06/22 10:00

Matrix: Solid

Date Received: 05/09/22 12:00

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	25209	05/09/22 16:54	SC	XEN MID
Soluble	Analysis	300.0		1			25486	05/13/22 04:38	CH	XEN MID

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

## Lab Sample ID: 880-14535-8

Date Collected: 05/06/22 11:30

Matrix: Solid

Date Received: 05/09/22 12:00

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	25601	05/16/22 09:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25595	05/16/22 18:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25746	05/17/22 13:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25357	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25316	05/11/22 09:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25321	05/11/22 15:01	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25209	05/09/22 16:54	SC	XEN MID
Soluble	Analysis	300.0		1			25486	05/13/22 04:47	CH	XEN MID

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

## Lab Sample ID: 880-14535-9

Date Collected: 05/06/22 13:30

Matrix: Solid

Date Received: 05/09/22 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	25603	05/16/22 09:33	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25595	05/17/22 05:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25746	05/17/22 13:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25357	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25316	05/11/22 09:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25321	05/11/22 15:23	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25209	05/09/22 16:54	SC	XEN MID
Soluble	Analysis	300.0		1			25486	05/13/22 04:55	CH	XEN MID

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

## Lab Sample ID: 880-14535-10

Date Collected: 05/06/22 14:00

Matrix: Solid

Date Received: 05/09/22 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	25601	05/16/22 09:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25595	05/16/22 20:47	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25746	05/17/22 13:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25357	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25316	05/11/22 09:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25321	05/11/22 15:45	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	25209	05/09/22 16:54	SC	XEN MID
Soluble	Analysis	300.0		1			25486	05/13/22 05:03	CH	XEN MID

Eurofins Midland

Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

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

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Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
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.

Job ID: 880-14535-1

Project/Site: PWS-Rice SWD (F-29 SWD)

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

Eurofins Midland

## Sample Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Rice SWD (F-29 SWD)

Job ID: 880-14535-1  
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-14535-1	AH1 (0-2')	Solid	05/06/22 08:00	05/09/22 12:00
880-14535-2	AH-1 (1.5-2')	Solid	05/06/22 08:30	05/09/22 12:00
880-14535-3	AH-2 (0-1')	Solid	05/06/22 09:00	05/09/22 12:00
880-14535-4	AH-2 (1.5-2')	Solid	05/06/22 09:30	05/09/22 12:00
880-14535-5	AH-3 (0-1')	Solid	05/06/22 10:00	05/09/22 12:00
880-14535-6	AH-3 (1.5-2')	Solid	05/06/22 10:30	05/09/22 12:00
880-14535-7	H-1 (0-5')	Solid	05/06/22 10:00	05/09/22 12:00
880-14535-8	H-2 (0-0.5')	Solid	05/06/22 11:30	05/09/22 12:00
880-14535-9	H-3 (0-0.5')	Solid	05/06/22 13:30	05/09/22 12:00
880-14535-10	H-4 (0-0.5')	Solid	05/06/22 14:00	05/09/22 12:00

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

14535

Client Name:	Permian Water Solutions	Site Manager:	Brittany Long
Project Name:	PWS - Rice SWD (F-29 SWD)	Contact Info:	Email brittany.long@tetratech.com Phone (432) 741-5813
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02753

Invoice to: PWS Dusty McInturf dmcinturf@dufrane.com

Receiving Laboratory: Eurofins  
Sampler Signature: Adrian Garcia

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS		FILTERED (Y/N)		BTEX 8021B BTEX 8021C												TPH TX1005 (Ext to C) TPH 8015M ( GRO - D) TPH 8015M ( GRO - D) PAH 8270C												Total Metals Ag As Ba Pb Cu Cr Mn Ni V Zn												TCLP Metals Ag As Ba Pb Cu Cr Mn Ni V Zn												TCLP Volatiles												TCLP Semi Volatiles												RCI												GC/MS Vol 8260B / 6242												GC/MS Semi Vol 8270												PCB's 8082 / 608												NORM												PLM (Asbestos)												Chloride 300 0												Chloride Sulfate Total												General Water Chemistry												Anion/Cation Balance												TPH 8015R												HOLD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
		YEAR 2020		DATE	TIME	WATER	SOIL	HCL	HNO3	ICE	NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8021C												TPH TX1005 (Ext to C) TPH 8015M ( GRO - D) TPH 8015M ( GRO - D) PAH 8270C												Total Metals Ag As Ba Pb Cu Cr Mn Ni V Zn												TCLP Metals Ag As Ba Pb Cu Cr Mn Ni V Zn												TCLP Volatiles												TCLP Semi Volatiles												RCI												GC/MS Vol 8260B / 6242												GC/MS Semi Vol 8270												PCB's 8082 / 608												NORM												PLM (Asbestos)												Chloride 300 0												Chloride Sulfate Total												General Water Chemistry												Anion/Cation Balance												TPH 8015R												HOLD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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	AH 1 (0-1)	5/6/2022	800	X				X			1	N	X	X	BTEX 8021B	BTEX 8021C	TPH TX1005 (Ext to C)	TPH 8015M ( GRO - D)	TPH 8015M ( GRO - D)	PAH 8270C	Total Metals Ag As Ba	TCLP Metals Ag As Ba	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol 8260B / 6242	GC/MS Semi Vol 8270	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300 0	Chloride Sulfate Total	General Water Chemistry	Anion/Cation Balance	TPH 8015R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

Relinquished by:	Date	Time	Received by:	Date	Time
<i>Adrian Garcia</i>	5/6/22	1200	<i>Brittany Long</i>	5/9/22	1200

Relinquished by:	Date	Time

Received by:	Date	Time

LAB USE ONLY	REMARKS:
Sample Temperature	<input checked="" type="checkbox"/> Standard
	<input type="checkbox"/> RUSH Same Day 24 hr 48 hr 72 hr
	<input type="checkbox"/> Rush Charges Authorized
	<input type="checkbox"/> Special Report Limits or TRRP Report

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #



880-14535 Chain of Custody



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-14535-1

SDG Number: Lea County, New Mexico

Login Number: 14535

List Number: 1

Creator: Teel, Brianna

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**

COMMENTS  
  
Action 111643

COMMENTS

Operator: Permian Water Solutions, LLC PO Box 2106 Midland, TX 79702	OGRID: 373626
	Action Number: 111643
	Action Type: [C-141] Release Corrective Action (C-141)

COMMENTS

Created By	Comment	Comment Date
jharimon	Initial to remediation	6/7/2022

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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
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**Santa Fe, NM 87505**

CONDITIONS

Action 111643

CONDITIONS

Operator: Permian Water Solutions, LLC PO Box 2106 Midland, TX 79702	OGRID: 373626
	Action Number: 111643
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Submitted report accepted as information only. Proceed with additional delineation and workplan development. Submit workplan via the OCD permitting portal by 6/9/2023.	3/8/2023