

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: Todd Wells Date: \_\_\_\_\_

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

### OCD Only

Received by: Jocelyn Harimon Date: 10/14/2022

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: Mike Bratcher Date: 11/03/2022

Printed Name: Mike Bratcher Title: Incident Supervisor

## SITE INFORMATION

### Report Type: Closure Report nKMW0735540161

#### General Site Information:

Site:	Doc BHU State Battery					
Company:	EOG Resources					
Section, Township and Range	Unit O	Sec. 5	T 25S	R 30E		
Lease Number:						
County:	Eddy County					
GPS:	32.15292°			-103.90174°		
Surface Owner:	State					
Mineral Owner:						
Directions:	From intersection of 128 and Buck Jackson Rd, travel south on Buck Jackson for 8.98 miles. Turn right onto Twin Wells rd, follow for 0.10 miles, then take next immediate left turn. Follow for 1.88 miles, turn right onto lease road. Follow for 0.81 miles, then take right onto two track. Follow for 1.29 miles, location on right.					

#### Release Data:

Date Released:	9/14/2007
Type Release:	Produced Water and Oil
Source of Contamination:	Leaking Frac Tank
Fluid Released:	73 bbl produced water, 2 bbl oil
Fluids Recovered:	30 bbl produced water, 0 bbl oil

#### Official Communication:

Name:	Todd Wells		Clair Gonzales
Company:	EOG Resources		Tetra Tech
Address:	5509 Champions Dr.		901 W. Wall St.
			Ste 100
City:	Midland, Texas, 79706		Midland, Texas, 79701
Phone number:	(432) 686-3613		(432) 682-4559
Fax:			
Email:	<a href="mailto:Todd_Wells@eogresources.com">Todd_Wells@eogresources.com</a>		<a href="mailto:clair.gonzales@tetrattech.com">clair.gonzales@tetrattech.com</a>

#### Site Characterization

Depth to Groundwater:	326.53' Below Ground Surface
Karst Potential:	Low

#### Recommended Remedial Action Levels (RRALs)

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



October 13, 2022

New Mexico Oil Conservation Division  
506 W. Texas Ave  
Artesia, New Mexico 88210

**RE: Closure Report  
EOG Resources  
Doc BHU State #1  
Eddy County, New Mexico  
nKMW0735540161**

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess a release that occurred at the Doc BHU State #1, Unit O, Section 5, Township 25 South, Range 30 East, Eddy County, New Mexico (Site). The spill site coordinates are 32.15292°, -103.90174°. 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 Doc BHU State #1 was caused by leak from a frac tank, causing the release of 2 bbls of oil and 73 bbls of produced water, the release flowed onto the pad and onto the pasture, impacting an area of 20' X 30' on the pad, and 10' X 50' off the well pad. Additionally, approximately 30 bbls of fluids were recovered. On September 14, 2007, the release was discovered and on September 15, 2007, was reported to the New Mexico Oil Conservation Division (NMOCD). The C-141 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 two closest water wells within a mile radius of the Site. The well reported on the USGS National Water Information System reports water depth at 294 ft bgs and is approximately 0.62 miles of the Site. The additional well reported on the USGS National Water Information System reports a total depth of 500 ft bgs and measured water level of 326.53 ft bgs and is approximately 0.62 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
0.62 Miles	3/10/1949	USGS	N/A	294'
0.62 Miles	1/28/1998	USGS	500'	326.53'

### **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, the proposed RRAL beyond the top 4.0' of soil, for TPH is 100 mg/kg (GRO + DRO + ORO). Additionally, based on the site characterization, the proposed RRAL beyond the top 4.0' of soil, for chlorides is 600 mg/kg.

### **Previous Consultants Remediation and Sampling Activities**

According to the previous closure report, dated December 27, 2007, submitted to the OCD office in Artesia, the impacted soils were tilled and treated with nitrogen and fertilizer. Following the remediation activities, a single 10-point composite sample was collected on December 6, 2007. The analytical results indicated BTEX concentrations below laboratory reporting limits. Additionally, analytical results reported a chloride concentration of 325 mg/kg and a TPH concentration of 59.6 mg/kg. The previous closure report, including the original initial and final C-141, is shown in **Appendix C**.





## Site Assessment Activities

### Initial Assessment Activities

As requested by the NMOCD in email correspondence dated August 16, 2022, Tetra Tech conducted initial site assessment activities on August 31, 2022. A total of three (3) auger holes (AH-1 through AH-3) were installed to depths ranging from surface to 1.5' bgs throughout the impact before hitting refusal due to dense formation in the area. Additionally, a total of six (6) horizontals (H-1 through H-6) were installed to total depths of 0.5 ft bgs, directly outside of the release area to horizontally delineate the impact. The sample notification was sent to the NMOCD via email, on August 26, 2022, at 3:55 PM, a copy of the notice is shown in **Appendix D**. Additionally, the NMOCD state correspondence is shown in **Appendix D**. The impact and sample locations are shown on **Figure 3**.

The samples were submitted to Eurofins 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 E**.

Referring to Table 1, all auger holes and horizontals indicated BTEX and TPH concentrations below the laboratory reporting limits. Auger holes (AH-1 through AH-3) indicated chloride concentrations below RRALs, with concentrations ranging from 15.2 mg/kg to 269 mg/kg, at depths ranging from surface to 1.5 ft bgs. Additionally, horizontals (H-1 through H-6) reported chloride concentrations below RRALs, with concentrations ranging from 10.4 mg/kg to 37.2 mg/kg.

### Trench Assessment Activities

Due to inadequate depths reached during initial site assessment activities, Tetra Tech conducted additionally trenching assessment activities on September 8, 2022. A total of four (4) trenches (Trench-1 through Trench-4) were installed to depths ranging from surface to 6.0' bgs throughout the release area. The impact and sample locations are shown on **Figure 3**.

The samples were submitted to Eurofins 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 E**.

Referring to Table 1, trenches (Trench-1 through Trench-4) indicated BTEX and TPH concentrations below the laboratory detection limits. Trenches (Trench-1 through Trench-4) indicated chloride concentrations below RRALs, with concentrations ranging from 44.2 mg/kg to 591 mg/kg, at depths ranging from surface to 6.0 ft bgs.

## Conclusions

Based on the C-141 (nKMW0735540161) and information provided by EOG, Tetra Tech performed site characterization and groundwater research to determine groundwater depth,



proximity from significant water features, and proximity from specified populated entities to determine RRALs and assess the impacted area. Based on the OCD *Guidelines for Remediation of Leaks, Spills, and Releases*, updated August 14, 2018, according to the groundwater data found during research activities, the RRALs of 600 mg/kg for chlorides and 100 mg/kg for TPH were followed for soil beyond the top 4.0 ft of soil.

Per the request by the NMOCD on August 16, 2022 as shown in **Appendix D**, Tetra Tech conducted assessment activities. The analytical results indicated all samples reported below the RRALs for all constituents. Based on this information, it is recommended that the Site requires no further action. The final C-141 is included in **Appendix A**.

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

Respectfully submitted,  
TETRA TECH

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

Brittany Long,  
Project Manager

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

Clair Gonzales, P.G.  
Senior Project Manager



## Figures

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▲ SITE LOCATION

0 10,000 20,000  
Feet  
Approximate Scale



SITE LOCATOR MAP



FIGURE 1  
OVERVIEW MAP  
DOC BHU STATE #1  
EDDY COUNTY, NEW MEXICO  
32.152881°, -103.902193°

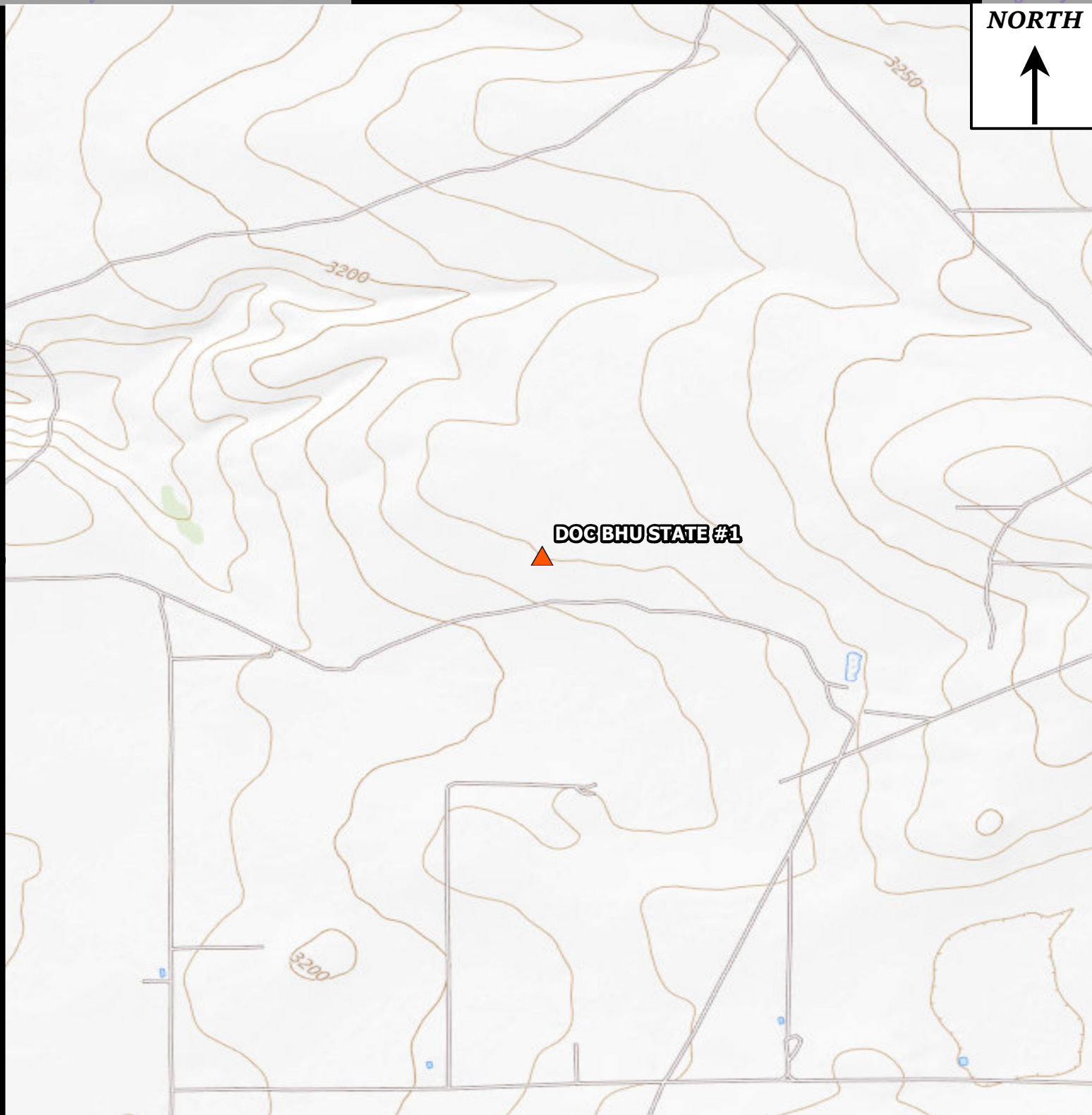
Project: 212C-MD-02833

Date: 9/29/2022

Name: Figure 1 - Doc BHU State #1



NORTH



SITE LOCATION

0 800 1,600  
Feet  
Approximate Scale



FIGURE 2  
TOPOGRAPHIC MAP  
DOC BHU STATE #1  
EDDY COUNTY, NEW MEXICO  
32.152881°, -103.902193°

Project: 212C-MD-02833

Date: 9/29/2022

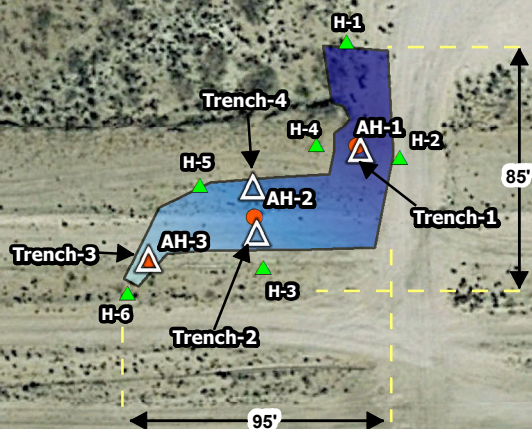
Name: Figure 2 - Doc BHU State #1



Service Layer Credits: USGS, The National Map, 2020.



NORTH



TRENCH LOCATIONS

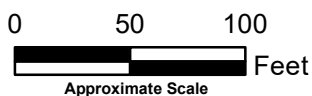


HORIZONTAL SAMPLE LOCATIONS

AUGERHOLE SAMPLE LOCATIONS



SPILL EXTENT



Service Layer Credits: USGS, The National Map, 2020.



FIGURE 3  
SPILL ASSESSMENT MAP  
DOC BHU STATE #1  
EDDY COUNTY, NEW MEXICO  
32.152881°, -103.902193°

Project: 212C-MD-02833

Date: 9/29/2022

Name: Figure 3 - Doc BHU State #1







## Tables

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**Table 1**  
**EOG Resources**  
**Doc BHU State #1 (2007 Release)**  
**Lea County, New Mexico**

Sample ID	Sample Date	Excavtion Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
RRALs			100 mg/kg						10 mg/kg		50 mg/kg			600 mg/kg
Initial Site Assessment														
AH-1	8/31/2022	0-1'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	269
AH-2	8/31/2022	0-1'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	157
	8/31/2022	1-1.5'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	127
AH-3	8/31/2022	0-1'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	17.3
	8/31/2022	1-1.5'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	15.2
H-1	8/31/2022	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	9.15
H-2	8/31/2022	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	14.3
H-3	8/31/2022	0-0.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	15.3
H-4	8/31/2022	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	37.2
H-5	8/31/2022	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	11.1
H-6	8/31/2022	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	10.4



**Table 1**  
**EOG Resources**  
**Doc BHU State #1 (2007 Release)**  
**Lea County, New Mexico**

Sample ID	Sample Date	Excavtion Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)	
			In-Situ	Removed	GRO	DRO	MRO	Total							
RRALs					100 mg/kg				10 mg/kg				50 mg/kg		600 mg/kg
Trenching Assessment															
Trench-1	9/8/2022	0-1'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	591	
	9/8/2022	2	X	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	470	
	9/8/2022	3	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	498	
	9/8/2022	4	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	471	
	9/8/2022	5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	231	
Trench-2	9/8/2022	0-1'	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	352	
	9/8/2022	2	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	112	
	9/8/2022	3	X	-	<5.00	<5.00	<5.00	<5.00	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	84.4	
	9/8/2022	4	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	192	
	9/8/2022	5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	124	
	9/8/2022	6	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	84.4	
Trench-3	9/8/2022	0-1'	X	-	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	142	
	9/8/2022	2	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	116	
	9/8/2022	3	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	105	
	9/8/2022	4	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	298	
	9/8/2022	5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	266	
	9/8/2022	6	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	204	
Trench-4	9/8/2022	0-1'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	51.4	
	9/8/2022	2	X	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	44.2	
	9/8/2022	3	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	128	
	9/8/2022	4	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	124	
	9/8/2022	5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	169	

**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.**


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

ft = feet below ground surface

(-) = not analyzed for respective constituent

TPH = total petroleum hydrocarbons

BTEX = benzene, toluene, ethylbenzene, xylene

 Exceedance



# Photographic Documentation

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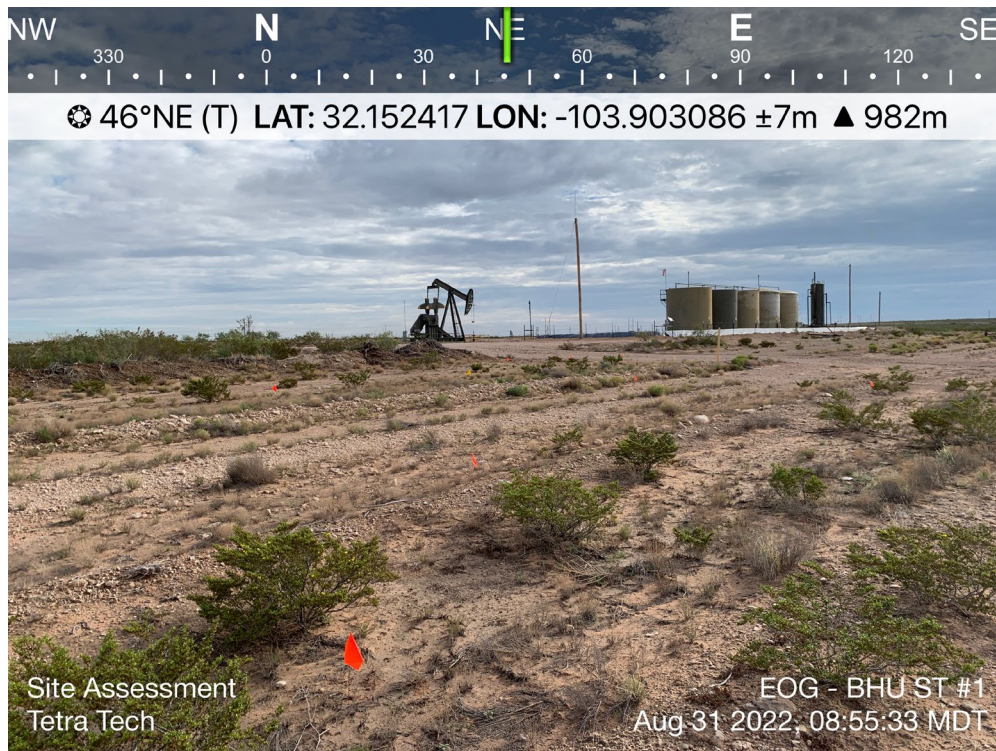
EOG Resources  
Doc BHU State #1  
Eddy County, New Mexico



TETRA TECH



View of Site – View North



View of Site – View Northeast



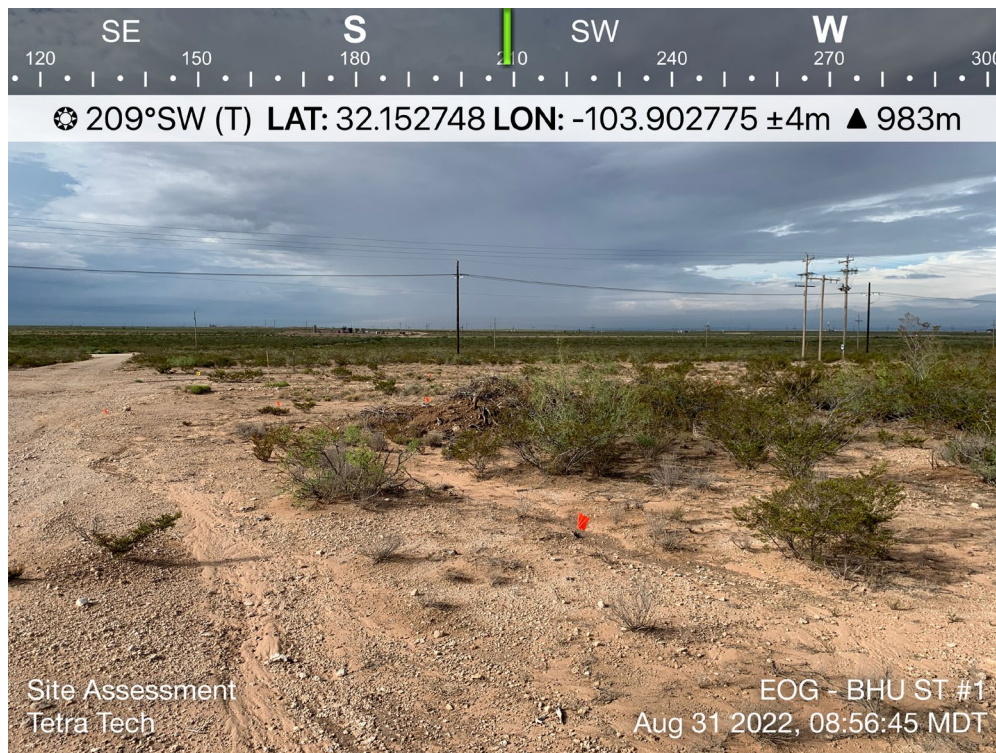
EOG Resources  
Doc BHU State #1  
Eddy County, New Mexico



TETRA TECH



View of Site – View East



View of Site – View Southwest



# Appendix A

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C-141 Document

Page 18 of 191  
Received by OCD: 10/14/2022 9:59:57 AM  
Released to Imaging: 11/3/2022 2:42:50 PM

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003  
Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Yates Petroleum Corporation	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 <sup>TH</sup> Street	Telephone No. 505-748-1471	
Facility Name Doc BHU State #1	API Number 30-015-34552	Facility Type Battery
Surface Owner State	Mineral Owner State	Lease No. VO-6670

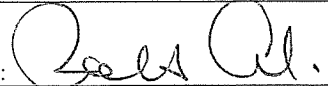
LOCATION OF RELEASE

Unit Letter O	Section 5	Township 25S	Range 30E	Feet from the 33	North/South Line South	Feet from the 2310	East/West Line East	County Eddy
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Latitude 32.15292 Longitude 103.90174

NATURE OF RELEASE

Type of Release Crude Oil & Produced Water	Volume of Release 2 B/O & 73 B/PW	Volume Recovered 0 B/O & 30 B/PW
Source of Release Frac Tank	Date and Hour of Occurrence 9/14/2007 PM	Date and Hour of Discovery 9/14/2007 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/NMOCD District II	
By Whom? Jerry Fanning/YPC Environmental	Date and Hour 9/15/2007 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* Leak in frac tank causing release. Vacuum truck called.		
Describe Area Affected and Cleanup Action Taken.* An approximate area of 20' X 30' on well pad and 10' X 50' off well pad. Produced water picked up and tank replaced. Soils on well pad to be excavated and hauled to OCD approved land disposal facility, nitrogen fertilizer to be applied and tilled into soils on area off of well pad. Vertical and horizontal delineation to be conducted and if needed further corrective action will be taken. Samples taken (12/6/2007). <b>Depth to Ground Water: &gt;100' (approximately 325'), Wellhead Protection Area: No, Distance to Surface Water Body: &gt;1000', SITE RANKING IS 0. With enclosed information, Yates Petroleum Corporation requests closure.</b>		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.		

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Robert Asher	Approved by District Supervisor:	
Title: Environmental Regulatory Agent	Approval Date:	Expiration Date:
E-mail Address: boba@ypcnm.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: Thursday, December 27, 2007	Phone: 505-748-1471	

Attach Additional Sheets If Necessary



Page 19 of 191  
Received by OCD: 10/14/2022 9:59:57 AM  
Released to Imaging: 11/3/2022 2:42:50 PM

District I  
625 N. French Dr., Hobbs, NM 88240  
District II  
301 W. Grand Avenue, 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  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003  
Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Yates Petroleum Corporation	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 <sup>TH</sup> Street	API Number 30-015-34552	Telephone No. 505-748-1471
Facility Name Doc BHU State #1		Facility Type Battery

Surface Owner State	Mineral Owner State	Lease No. VO-6670
------------------------	------------------------	----------------------

LOCATION OF RELEASE

Unit Letter O	Section 5	Township 25S	Range 30E	Feet from the 33	North/South Line South	Feet from the 2310	East/West Line East	County Eddy
------------------	--------------	-----------------	--------------	---------------------	---------------------------	-----------------------	------------------------	----------------

Latitude 32.15292 Longitude 103.90174

NATURE OF RELEASE

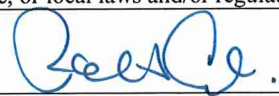
Type of Release Crude Oil & Produced Water	Volume of Release 2 B/O & 73 B/PW	Volume Recovered 0 B/O & 30 B/PW
Source of Release Frac Tank	Date and Hour of Occurrence 9/14/2007 PM	Date and Hour of Discovery 9/14/2007 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/NMOCD District II	
By Whom? Jerry Fanning/YPC Environmental	Date and Hour 9/15/2007 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.\*  
N/A

Describe Cause of Problem and Remedial Action Taken.\*  
Leak in frac tank causing release. Vacuum truck called.

Describe Area Affected and Cleanup Action Taken.\*  
An approximate area of 20' X 30' on well pad and 10' X 50' off well pad. Produced water picked up and tank replaced. Soils on well pad to be excavated and hauled to OCD approved land disposal facility, nitrogen fertilizer to be applied and tilled into soils on area off of well pad. Vertical and horizontal delineation to be conducted and if needed further corrective action will be taken. **Depth to Ground Water: >100' (approximately 325'), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Robert Asher	Approved by District Supervisor:		
Title: Environmental Regulatory Agent	Approval Date:	Expiration Date:	
E-mail Address: boba@ypcnm.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: Thursday, September 27, 2007 Phone: 505-748-1471			

Attach Additional Sheets If Necessary



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: Todd Wells Date: \_\_\_\_\_

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

**OCD Only**Received by: Jocelyn Harimon Date: 10/14/2022

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: Todd Wells Date: \_\_\_\_\_

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

**OCD Only**

Received by: Jocelyn Harimon Date: 10/14/2022

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



[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

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 
- **NOTICE: Feb 10, 2021 17:30ET - 18:23ET Data Transmissions were impacted by an unplanned system maintenance outage. Data are now processing.**

Groundwater levels for New Mexico

Click to hide state-specific text

\* IMPORTANT: [Next Generation Station Page](#)

## Search Results -- 1 sites found

Agency code = usgs

site\_no list =

- 320849103533901

Minimum number of levels = 1

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

## USGS 320849103533901 25S.30E.08.242221

Eddy County, New Mexico

Latitude 32°08'49", Longitude 103°53'39" NAD27

Land-surface elevation 3,230 feet above NAVD88

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) 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
1949-03-10		D	62610		2934.35	NGVD29	1	Z
1949-03-10		D	62611		2936.00	NAVD88	1	Z
1949-03-10		D	72019	294.00			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: 2021-02-12 12:26:32 EST

0.35 0.32 nadww01



[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

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 
- NOTICE: Feb 10, 2021 17:30ET - 18:23ET Data Transmissions were impacted by an unplanned system maintenance outage. Data are now processing.**

Groundwater levels for New Mexico

Click to hide state-specific text

\* IMPORTANT: [Next Generation Station Page](#)

## Search Results -- 1 sites found

Agency code = usgs

site\_no list =

- 320849103533902

Minimum number of levels = 1

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

## USGS 320849103533902 25S.30E.08.242221A

Eddy County, New Mexico

Latitude 32°08'49", Longitude 103°53'39" NAD27

Land-surface elevation 3,230 feet above NAVD88

The depth of the well is 500 feet below land surface.

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) 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
1961-06-14		D	62610		2896.80	NGVD29	3	Z
1961-06-14		D	62611		2898.45	NAVD88	3	Z

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
1961-06-14		D	72019	331.55			3	Z
1998-01-28		D	62610		2901.82	NGVD29	1	S
1998-01-28		D	62611		2903.47	NAVD88	1	S
1998-01-28		D	72019	326.53			1	S

## Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	3	Above
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)

[Feedback on this web site](#)

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**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: 2021-02-12 12:28:05 EST

0.35 0.32 nadww01



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,  
C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<a href="#">C 01379</a>	C	ED		4	4	3	10	25S	30E	606571	3556355*	400		
<a href="#">C 03716 POD1</a>	CUB	ED		4	2	2	02	25S	30E	609069	3559211	600	425	175
<a href="#">C 03781 POD1</a>	CUB	ED		3	3	3	13	25S	30E	609306	3554761	720	325	395
<a href="#">C 03782 POD1</a>	CUB	ED		4	3	3	28	25S	30E	604526	3551444	805	277	528
<a href="#">C 03891 POD1</a>	CUB	ED		4	4	2	01	25S	30E	610608	3558890	635	429	206

Average Depth to Water: **364 feet**

Minimum Depth: **277 feet**

Maximum Depth: **429 feet**

Record Count: 5

Basin/County Search:

**County:** Eddy

PLSS Search:

**Township:** 25S

**Range:** 30E

\*UTM location was derived from PLSS - see Help

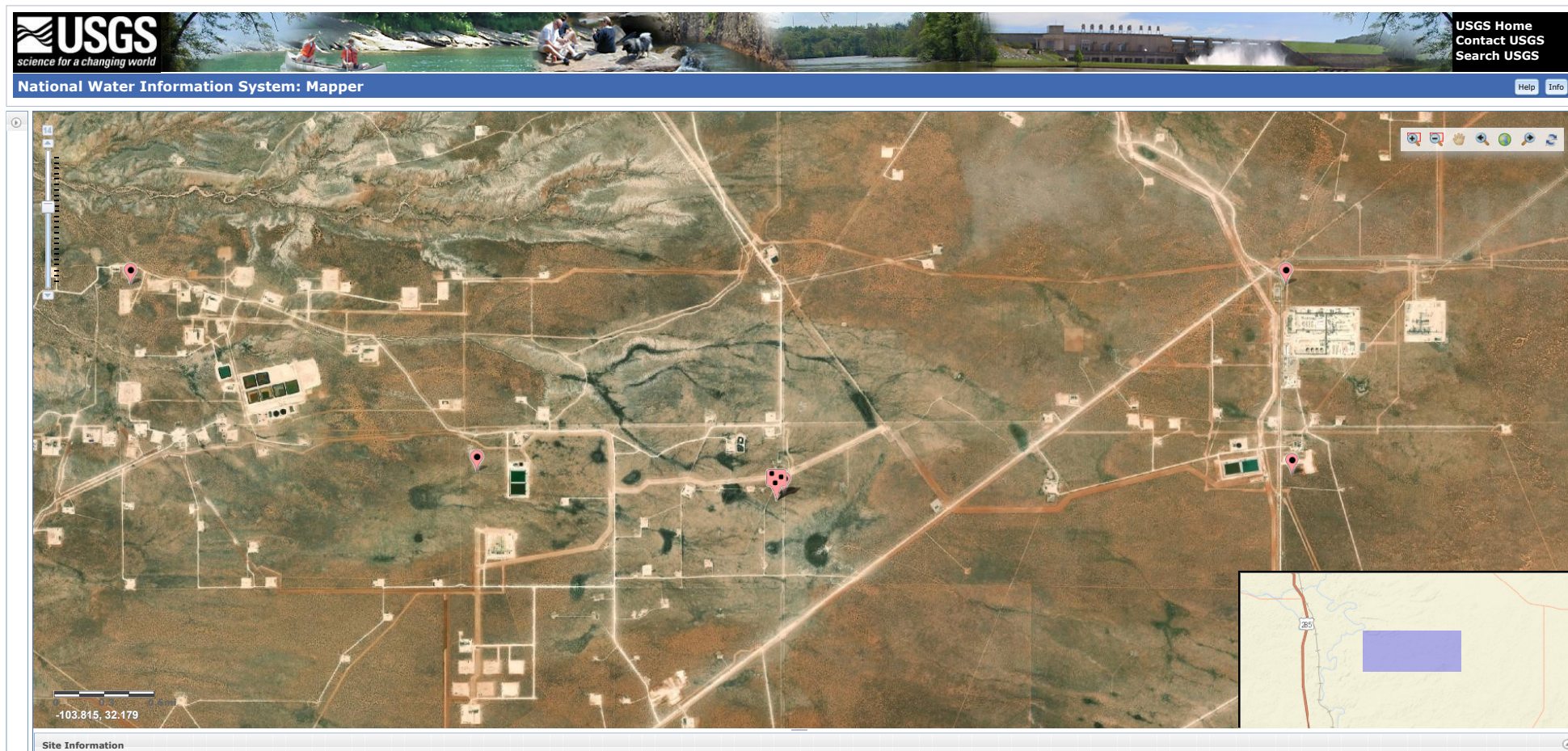
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/12/21 10:32 AM

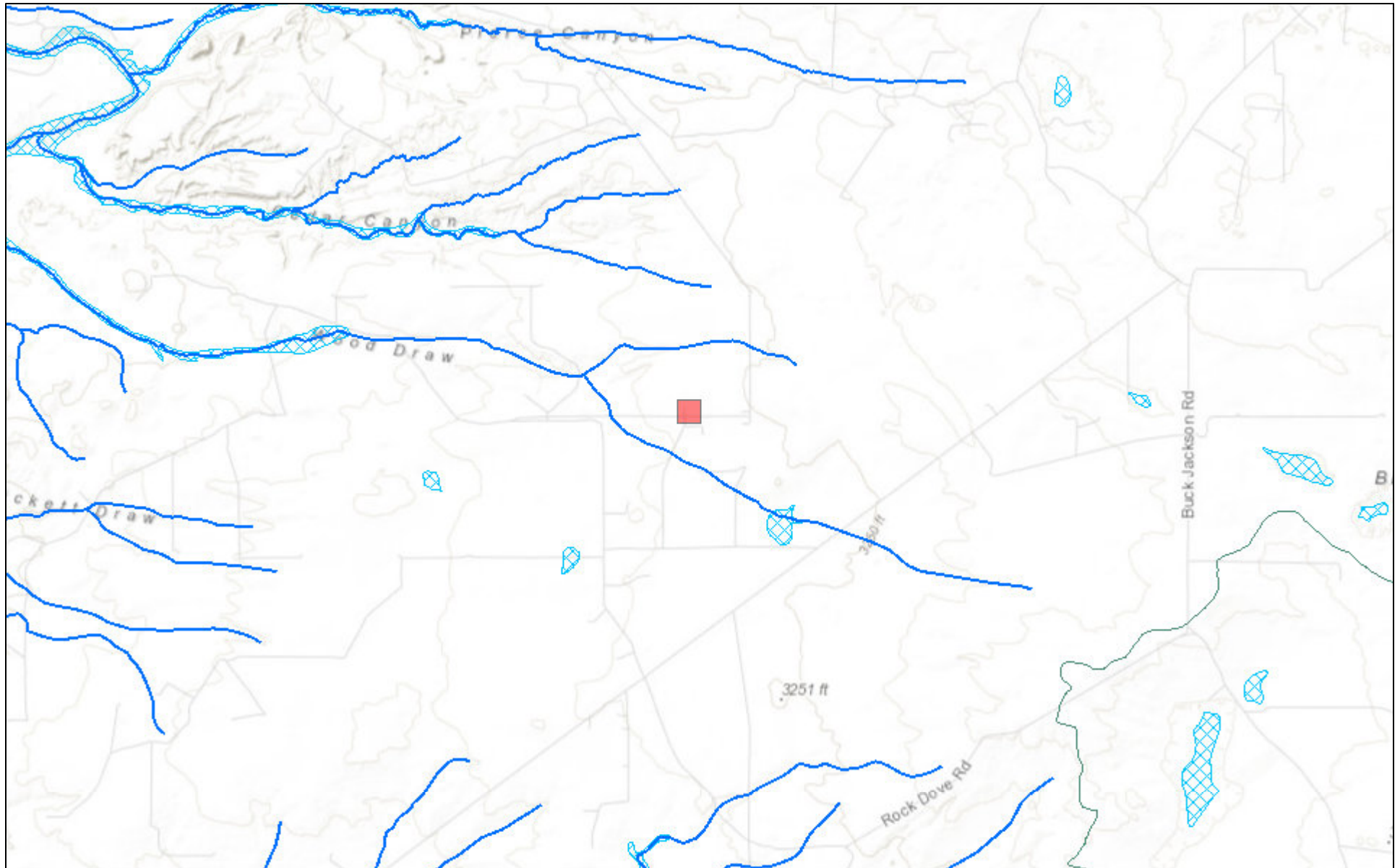
Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

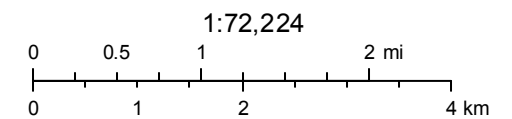




# New Mexico NFHL Data



March 16, 2021



FEMA  
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,



**Water Well Data**  
**Average Depth to Groundwater (ft)**  
**DOC BHU STATE #1 BATTERY**  
**Eddy County, New Mexico**

**24 South      29 East**

6	5	4	3	2	1
7	8	9	10	11	12
160	17	4	16	15	14
18	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**24 South      30 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**24 South      31 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**25 South      29 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**25 South      30 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**25 South      31 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**26 South      29 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**26 South      30 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**26 South      31 East**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**88** New Mexico State Engineers Well Reports

**105** USGS Well Reports

**90** Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)


**34** NMOCD - Groundwater Data


**123** Tetra Tech installed temporary wells and field water level


**143** NMOCD Groundwater map well location


Malaga

Legend

 EOG Doc BHU State #1 Tank Battery

 High

 Low

 Medium

EOG Doc BHU State #1 Tank Battery



128

Jail Hwy



## Appendix C

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Previous Consultants Data

MARTIN YATES, III

1912-1985

FRANK W. YATES

1936-1986



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (505) 748-1471

S.P. YATES  
CHAIRMAN EMERITUS

JOHN A. YATES  
CHAIRMAN OF THE BOARD

PEYTON YATES  
PRESIDENT

FRANK YATES, JR.  
EXECUTIVE VICE PRESIDENT

JOHN A. YATES, JR.  
SENIOR VICE PRESIDENT

December 27, 2007

Mr. Mike Bratcher  
NMOCD District II  
1301 West Grand  
Artesia, NM 88210

Re: Doc BHU State #1  
30-015-34552  
Section 5, T25S-R30E  
Eddy County, New Mexico

DEC 27 2007  
OCD-ARTESIA

Dear Mr. Bratcher,

Per our discussion on December 21, 2007, enclosed please find a Form C-141, Final Report for the above captioned site regarding the release on September 14, 2007 (2 B/O & 73 B/PW with 0 B/O & 30 B/PW recovered). Impacted soils were tilled and nitrogen fertilizer applied. Samples were taken on December 6, 2007 and sent to an OCD approved laboratory (analytical reports were submitted to your office on 12/17/2007). Site ranking is zero (0), with the depth to ground water >100' (approximately 325'). Yates Petroleum Corporation requests closure.

If you have any questions, please call me at 505-748-4217.

Thank you.

YATES PETROLEUM CORPORATION

Robert Asher  
Environmental Regulatory Agent

/rca  
Enclosure(s)

RANDY G. PATTERSON  
VICE PRESIDENT

DAVID L. LANNING  
ASSISTANT VICE PRESIDENT

DENNIS G. KINSEY  
TREASURER

Page 35 of 191  
Received by OCD: 10/14/2022 9:59:57 AM  
Released to Imaging: 11/3/2022 2:42:50 PM

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003  
Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Yates Petroleum Corporation	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 <sup>TH</sup> Street	Telephone No. 505-748-1471	
Facility Name Doc BHU State #1	API Number 30-015-34552	Facility Type Battery
Surface Owner State	Mineral Owner State	Lease No. VO-6670

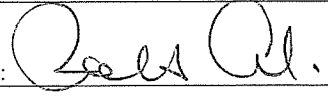
LOCATION OF RELEASE

Unit Letter O	Section 5	Township 25S	Range 30E	Feet from the 33	North/South Line South	Feet from the 2310	East/West Line East	County Eddy
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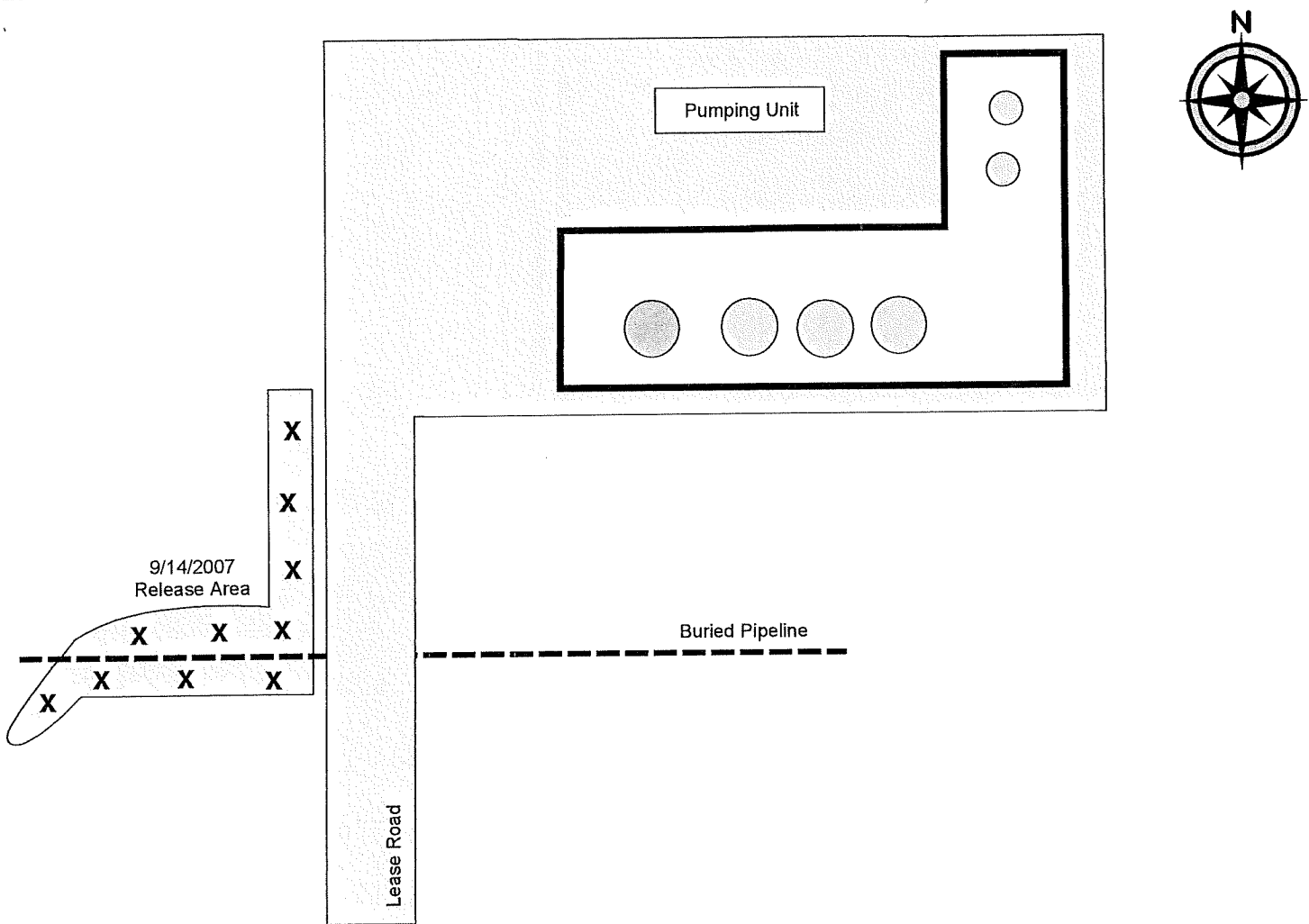
Latitude 32.15292 Longitude 103.90174

NATURE OF RELEASE

Type of Release Crude Oil & Produced Water	Volume of Release 2 B/O & 73 B/PW	Volume Recovered 0 B/O & 30 B/PW
Source of Release Frac Tank	Date and Hour of Occurrence 9/14/2007 PM	Date and Hour of Discovery 9/14/2007 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/NMOCD District II	
By Whom? Jerry Fanning/YPC Environmental	Date and Hour 9/15/2007 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* Leak in frac tank causing release. Vacuum truck called.		
Describe Area Affected and Cleanup Action Taken.* An approximate area of 20' X 30' on well pad and 10' X 50' off well pad. Produced water picked up and tank replaced. Soils on well pad to be excavated and hauled to OCD approved land disposal facility, nitrogen fertilizer to be applied and tilled into soils on area off of well pad. Vertical and horizontal delineation to be conducted and if needed further corrective action will be taken. Samples taken (12/6/2007). <b>Depth to Ground Water: &gt;100' (approximately 325'), Wellhead Protection Area: No, Distance to Surface Water Body: &gt;1000', SITE RANKING IS 0. With enclosed information, Yates Petroleum Corporation requests closure.</b>		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.		

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Robert Asher	Approved by District Supervisor:	
Title: Environmental Regulatory Agent	Approval Date:	Expiration Date:
E-mail Address: boba@ypcnm.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: Thursday, December 27, 2007	Phone: 505-748-1471	

Attach Additional Sheets If Necessary



Sample ID	Sample Date	Sample Type	Depth	BTEX	TPH (GRO)	TPH (DRO)	TPH (TOTAL)	Chlorides
GS/Comp-001	12/6/2007	Grab/Auger	6"-12"	ND	ND	59.6	59.6	325

Site Ranking is Zero (0). Depth to Ground Water >100' (approx. 325'). Because of rocky subsurface could auger no deeper. Analytical testing performed at Environmental Lab of Texas. All results are ppm.



Doc BHU State #1  
Section 5, T25S-R30E  
Eddy County, NM

**SAMPLE DIAGRAM EXHIBIT**  
(Not to Scale)  
  
Prepared by Robert Asher  
Environmental Regulatory Agent  
December 27, 2007



# **Analytical Report 294160**

**for**

## **Yates Petroleum Corporation**

**Project Manager: Robert Asher**

**Doc BHU State#1**

**30-015-34552**

**14-DEC-07**



**12600 West I-20 East Odessa, Texas 79765**

**A Xenco Laboratories Company**

Texas certification numbers:  
Houston, TX T104704215

Florida certification numbers:  
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America  
Midland - Corpus Christi - Atlanta



14-DEC-07

Project Manager: **Robert Asher**  
**Yates Petroleum Corporation**  
105 South Fourth St.  
Ariesia, NM 88210

Reference: XENCO Report No: **294160**  
**Doc BHU State#1**  
Project Address: Eddy County

**Robert Asher:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 294160. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 294160 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

**Brent Barron, II**

Odessa Laboratory Manager

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**Sample Cross Reference 294160**

**Yates Petroleum Corporation, Artesia, NM**

Doc BHU State#1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
GS/Comp-001	S	Dec-06-07 10:46	6" - 12" In	294160-001



# Certificate of Analysis Summary 294160

Yates Petroleum Corporation, Artesia, NM

Project Name: Doc BHU State#1


Project Id: 30-015-34552  
Contact: Robert Asher  
Project Location: Eddy County

Date Received in Lab: Fri Dec-07-07 10:30 am  
Report Date: 14/DEC-07  
Project Manager: Brent Barron, II

Analysis Requested		Lab Id:	294160-001				
	Field Id:	GS/Comp-001					
	Depth:	6'-12" In					
	Matrix:	SOIL					
	Sampled:	Dec-06-07 10:46					
BTX by EPA 8021B		Extracted:	Dec-10-07 17:21				
	Analyzed:	Dec-11-07 02:55					
	Units: RL						
Benzene		mg/kg	ND 0.0011				
Toluene		ND 0.0021					
Ethylbenzene		ND 0.0011					
m,p-Xylenes		ND 0.0021					
o-Xylene		ND 0.0011					
Xylenes, Total		ND					
Total BTX		ND					
Inorganic Anions by EPA 300		Extracted:	Dec-07-07 14:32				
	Analyzed:						
	Units: RL						
Chloride		mg/kg	325				
Percent Moisture		RL	107				
Extracted:		Dec-07-07 13:26					
Analyzed:		%					
Units: RL							
TPH by SW 8015B		Dec-11-07 14:45					
	Analyzed:	Dec-12-07 20:09					
	Units: RL						
C6-C10 Gasoline Range Hydrocarbons		mg/kg	ND				
C10-C25 Diesel Range Hydrocarbons		RL	16.1				
Total TPH		59.6					
		59.6					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of MDCO Laboratories. MDCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work, order unless otherwise agreed to in writing.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

  
Brent Barron  
Odessa Laboratory Director



Flagging Criteria

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

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11381 Meadowglen Lane Suite I, Houston, Tx 77082-2647	Phone	Fax
9701 Harry Hines Blvd , Dallas, TX 75220	(281) 589-0692	(281) 589-0695
5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(214) 902 0300	(214) 351-9139
2505 N. Falkenburg Rd., Tampa, FL 33619	(210) 509-3334	(201) 509-3335
5757 NW 158th St, Miami Lakes, FL 33014	(813) 620-2000	(813) 620-2033
	(305) 823-8500	(305) 823-8555



# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client Yates  
 Date/ Time 12/10/07 10:00  
 Lab ID # 294160  
 Initials QMAX

### Sample Receipt Checklist

Client Initials

#1	Temperature of container/ cooler?	<u>Yes</u>	No	<u>4.0</u> °C	
#2	Shipping container in good condition?	<u>Yes</u>	No		
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present	
#5	Chain of Custody present?	<u>Yes</u>	No		
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No		
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
#11	Containers supplied by ELDT?	<u>Yes</u>	No		
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
#13	Samples properly preserved?	<u>Yes</u>	No	See Below	
#14	Sample bottles intact?	<u>Yes</u>	No		
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No		
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No		
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
#19	Subcontract of sample(s)?	<u>Yes</u>	No	Not Applicable	
#20	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable	

### Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

- Check all that Apply:
- ☐ See attached e-mail/ fax
  - ☐ Client understands and would like to proceed with analysis
  - ☐ Cooling process had begun shortly after sampling event

# Approved for Release

A Xerox Laboratories Company

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West 120 East  
Odessa, Texas 79736

Phone: 402-615-4100  
Fax: 402-615-4719

Project Manager: Robert Askey

Project Name: Doc BHL State #1

Company Name	Types Petroleum Corporation

Project #: 11-015-34932

Company Address: 105 South 4th Street

Project Lead: Roby County

City/State/Zip: Artesia, NJ 07004

1522

Telefona No: 305.748.4277

Fax No. 502-734-0322

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**Samuel Sigmund**

[illegible][illegible]

MARTIN YATES, III

1912-1985

FRANK W. YATES

1936-1986



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (505) 748-1471

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EXECUTIVE VICE PRESIDENT

JOHN A. YATES, JR.  
SENIOR VICE PRESIDENT

December 17, 2007

DEC 17 2007  
OCD-ARTESIA

Mr. Mike Bratcher  
NMOCD District II  
1301 West Grand  
Artesia, NM 88210

Re: Doc BHU State #1  
30-015-34552  
Section 5, T25S-R30E  
Eddy County, New Mexico

Dear Mr. Bratcher:

Enclosed, is a sample diagram for the above location for the release on September 14, 2007. Yates Petroleum Corporation had a contractor apply nitrogen fertilizer, water and till the soils of the release area (9/28/2007). Samples were taken on December 6, 2007. Based on analytical results being within NMOCD Guidelines and the site ranking is zero (0), Yates would like to request the results be accepted by the OCD. Upon your approval, Yates would submit a Final Report, C-141 and analytical information to your office for final approval. If you would prefer a sampling event can be scheduled before final approval is granted.

If you have any questions call me at (505) 748-4217

Thank you.

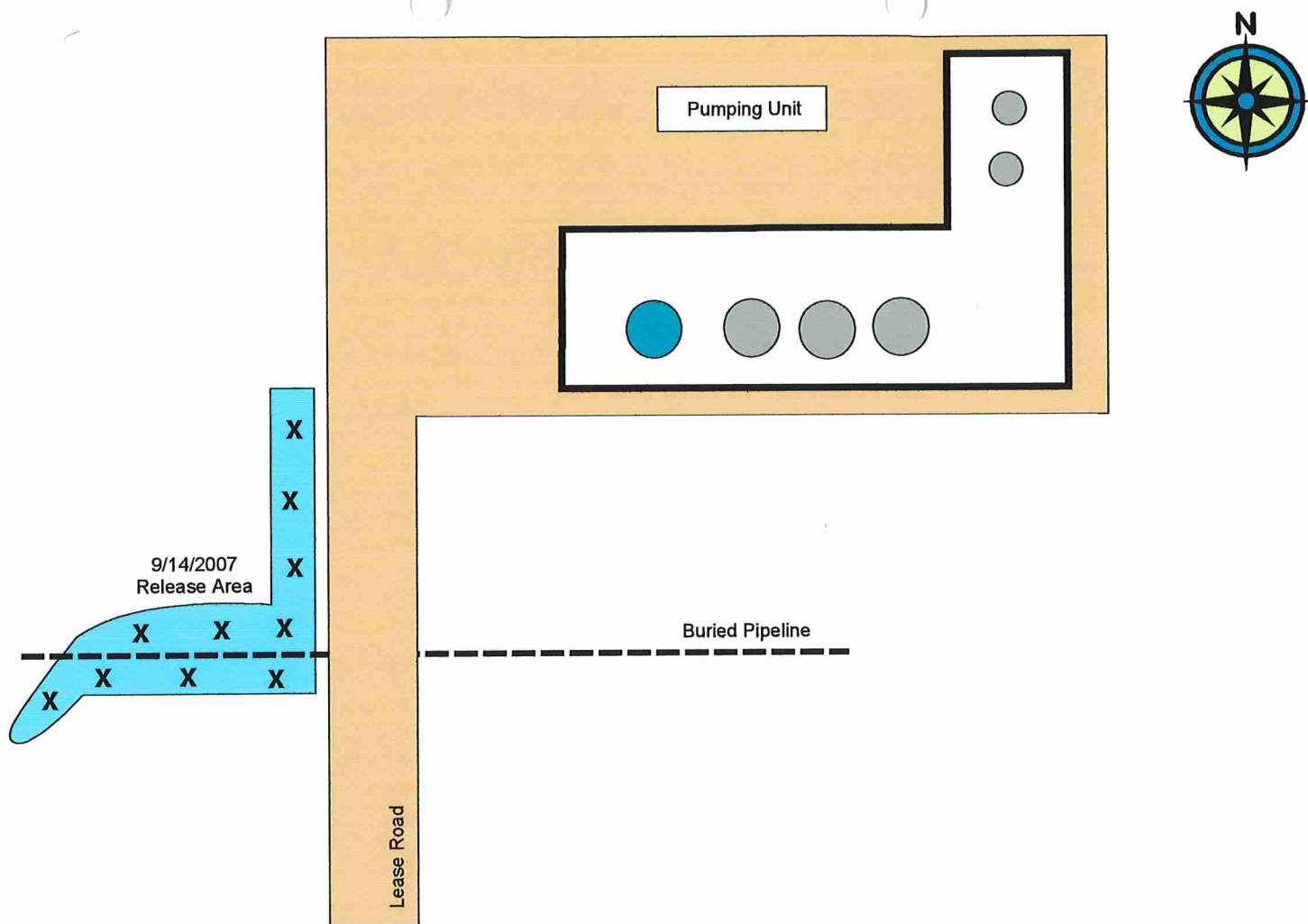
YATES PETROLEUM CORPORATION

Robert Asher  
Environmental Regulatory Agent

RANDY G. PATTERSON  
VICE PRESIDENT

DAVID L. LANNING  
ASSISTANT VICE PRESIDENT

DENNIS G. KINSEY  
TREASURER



Sample ID	Sample Date	Sample Type	Depth	BTEX	TPH (GRO)	TPH (DRO)	TPH (TOTAL)	Chlorides
GS/Comp-001	12/6/2007	Grab/Auger	6"-12"	ND	ND	59.6	59.6	325

Site Ranking is Zero (0). Depth to Ground Water >100' (approx. 325'). Because of rocky subsurface could auger no deeper.  
 Analytical testing performed at Environmental Lab of Texas. All results are ppm.



**Doc BHU State #1**  
**Section 5, T25S-R30E**  
**Eddy County, NM**

**SAMPLE DIAGRAM EXHIBIT**  
**(Not to Scale)**  
  
**Prepared by Robert Asher**  
**Environmental Regulatory Agent**  
**December 17, 2007**

# **Analytical Report 294160**

**for**

**Yates Petroleum Corporation**

**Project Manager: Robert Asher**

**Doc BHU State#1**

**30-015-34552**

**14-DEC-07**



**12600 West I-20 East Odessa, Texas 79765**

**A Xenco Laboratories Company**

Texas certification numbers:

Houston, TX T104704215

Florida certification numbers:

Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America  
Midland - Corpus Christi - Atlanta





14-DEC-07

Project Manager: **Robert Asher**  
**Yates Petroleum Corporation**  
105 South Fourth St.  
Artesia, NM 88210

Reference: XENCO Report No: **294160**  
**Doc BHU State#1**  
Project Address: Eddy County

**Robert Asher:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 294160. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 294160 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

**Brent Barron, II**  
Odessa Laboratory Manager

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**Sample Cross Reference 294160**

**Yates Petroleum Corporation, Artesia, NM**  
Doc BHU State#1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
GS/Comp-001	S	Dec-06-07 10:46	6" - 12" In	294160-001



# Certificate of Analysis Summary 294160

## Yates Petroleum Corporation, Artesia, NM

Project Name: Doc BHU State#1

Project Id: 30-015-34552

Contact: Robert Asher

Project Location: Eddy County

Date Received in Lab: Fri Dec-07-07 10:00 am


Report Date: 14-DEC-07

Project Manager: Brent Barron, II

<i>Analysis Requested</i>		<i>Lab Id:</i>	<i>Field Id:</i>	<i>Depth:</i>	<i>Matrix:</i>	<i>Sampled:</i>	<i>Extracted:</i>	<i>Analyzed:</i>	<i>Units/RL:</i>
<b>BTEX by EPA 8021B</b>		294160-001	GS/Comp-001	6"-12" In	SOIL	Dec-06-07 10:46	Dec-10-07 17:21	Dec-11-07 02:55	mg/kg RL
Benzene									ND 0.0011
Toluene									ND 0.0021
Ethylbenzene									ND 0.0011
m,p-Xylenes									ND 0.0021
o-Xylene									ND 0.0011
Xylenes, Total									ND
Total BTEX									ND
<b>Inorganic Anions by EPA 300</b>									
Chloride									
Percent Moisture									
TPH by SW 8015B									
C6-C10 Gasoline Range Hydrocarbons									
C10-C28 Diesel Range Hydrocarbons									
Total TPH									

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work, order unless otherwise agreed in writing.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

  
Brent Barron  
Odessa Laboratory Director



## Flagging Criteria

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

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 2505 N. Falkenburg Rd., Tampa, FL 33619  
 5757 NW 158th St, Miami Lakes, FL 33014

Phone	Fax
(281) 589-0692	(281) 589-0695
(214) 902 0300	(214) 351-9139
(210) 509-3334	(201) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555



## Environmental Lab of Texas

A Xenco Laboratories Company

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West 1-20 East  
Odessa, Texas 79766

Phone: 432-563-1800  
Fax: 432-563-1713

Project Manager: Robert Asher

Project Name: Doc BHU State #1

Company Name	Yates Petroleum Corporation
--------------	-----------------------------

Project #: 30-015-34552

Company Address: 105 South 4th Street

Project Log: Eddy County

City/State/Zip: Arapahoe, NM 88210

PQ #: 105022

Telephone No: 505-748-4217

Fax No: 505-748-4082

Sampler Signature:

boba@vpcnm.com

[illegible]



## Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: YatesDate/ Time: 12/07/07 10:06Lab ID #: 294160Initials: gmck

## Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	<u>Yes</u>	No	4.0 °C
#2	Shipping container in good condition?	<u>Yes</u>	No	
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	Not Present
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present
#5	Chain of Custody present?	<u>Yes</u>	No	
#6	Sample Instructions complete of Chain of Custody?	<u>Yes</u>	No	
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No	
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No	
#11	Containers supplied by ELOT?	<u>Yes</u>	No	
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below
#13	Samples properly preserved?	<u>Yes</u>	No	See Below
#14	Sample bottles intact?	<u>Yes</u>	No	
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No	
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No	
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below
#19	Subcontract of sample(s)?	<u>Yes</u>	No	Not Applicable
#20	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable

## Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

- Check all that Apply:
- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

# **Analytical Report 294160**

**for**

**Yates Petroleum Corporation**

**Project Manager: Robert Asher**

**Doc BHU State#1**

**30-015-34552**

**14-DEC-07**



**12600 West I-20 East Odessa, Texas 79765**

**A Xenco Laboratories Company**

Texas certification numbers:  
Houston, TX T104704215

Florida certification numbers:  
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Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America  
Midland - Corpus Christi - Atlanta



14-DEC-07

Project Manager: **Robert Asher**  
**Yates Petroleum Corporation**  
105 South Fourth St.  
Artesia, NM 88210

Reference: XENCO Report No: **294160**  
**Doc BHU State#1**  
Project Address: Eddy County

**Robert Asher:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 294160. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 294160 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

**Brent Barron, II**

Odessa Laboratory Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America



**Sample Cross Reference 294160**

**Yates Petroleum Corporation, Artesia, NM**

Doc BHU State#1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
GS/Comp-001	S	Dec-06-07 10:46	6" - 12" In	294160-001





# Certificate of Analysis Summary 294160

## Yates Petroleum Corporation, Artesia, NM

Project Id: 30-015-34552

Contact: Robert Asher

Project Location: Eddy County

Project Name: Doc BHU State#1

Date Received in Lab: Fri Dec-07-07 10:00 am

Report Date: 14-DEC-07

Project Manager: Brent Barron, II

<i>Analysis Requested</i>		Lab Id:	294160-001				
		Field Id:	GS/Comp-001				
		Depth:	6"-12" In				
		Matrix:	SOIL				
		Sampled:	Dec-06-07 10:46				
<b>BTEX by EPA 8021B</b>		Extracted:	Dec-10-07 17:21				
		Analyzed:	Dec-11-07 02:55				
		Units/RL:	mg/kg RL				
Benzene			ND 0.0011				
Toluene			ND 0.0021				
Ethylbenzene			ND 0.0011				
m,p-Xylenes			ND 0.0021				
o-Xylene			ND 0.0011				
Xylenes, Total			ND				
Total BTEX			ND				
<b>Inorganic Anions by EPA 300</b>		Extracted:					
		Analyzed:	Dec-07-07 14:32				
		Units/RL:	mg/kg RL				
Chloride			325 107				
<b>Percent Moisture</b>		Extracted:					
		Analyzed:	Dec-07-07 13:26				
		Units/RL:	% RL				
Percent Moisture			6.83 1.00				
<b>TPH by SW 8015B</b>		Extracted:	Dec-11-07 14:45				
		Analyzed:	Dec-12-07 20:09				
		Units/RL:	mg/kg RL				
C6-C10 Gasoline Range Hydrocarbons			ND 16.1				
C10-C28 Diesel Range Hydrocarbons			59.6 16.1				
Total TPH			59.6				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretation and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work, order unless otherwise agreed to in writing.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

  
Brent Barron  
Odessa Laboratory Director





## Flagging Criteria

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

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9701 Harry Hines Blvd , Dallas, TX 75220  
5332 Blackberry Drive, Suite 104, San Antonio, TX 78238  
2505 N. Falkenburg Rd., Tampa, FL 33619  
5757 NW 158th St, Miami Lakes, FL 33014

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(281) 589-0692	(281) 589-0695
(214) 902 0300	(214) 351-9139
(210) 509-3334	(201) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555



## Form 2 - Surrogate Recoveries

Project Name: Doc BHU State#1

Work Order #: 294160

Project ID: 30-015-34552

Lab Batch #: 710159

Sample: 294160-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 710159

Sample: 502345-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 710159

Sample: 502345-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 710159

Sample: 502345-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 710397

Sample: 294160-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	57.0	50.0	114	70-135	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

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



## Form 2 - Surrogate Recoveries

Project Name: Doc BHU State#1

Work Order #: 294160

Project ID: 30-015-34552

Lab Batch #: 710397

Sample: 294160-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	44.8	50.0	90	70-135	

Lab Batch #: 710397

Sample: 294160-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	49.3	50.0	99	70-135	

Lab Batch #: 710397

Sample: 502459-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	48.7	50.0	97	70-135	

Lab Batch #: 710397

Sample: 502459-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	94.8	100	95	70-135	
o-Terphenyl	47.5	50.0	95	70-135	

Lab Batch #: 710397

Sample: 502459-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY					
TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	50.8	50.0	102	70-135	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

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



# Blank Spike Recovery

Project Name: Doc BHU State#1

Work Order #: 294160

Project ID:

30-015-34552

Lab Batch #: 710063

Sample: 710063-1-BKS

Matrix: Solid

Date Analyzed: 12/07/2007

Date Prepared: 12/07/2007

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

## BLANK /BLANK SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	100	103	103	75-125	

Blank Spike Recovery [D] =  $100 * [C] / [B]$

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





# BS / BSD Recoveries

Project Name: Doc BHU State#1

Work Order #: 294160

Analyst: SHE

Lab Batch ID: 710159

Sample: 502345-1-BKS

Date Prepared: 12/10/2007

Batch #: 1

Project ID: 30-015-34552

Date Analyzed: 12/10/2007

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/kg												
BTEX by EPA 8021B		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		ND	0.1000	0.1060	106	0.1	0.1111	111	5	70-130	35	
Toluene		ND	0.1000	0.1032	103	0.1	0.1083	108	5	70-130	35	
Ethylbenzene		ND	0.1000	0.1004	100	0.1	0.1058	106	5	71-129	35	
m,p-Xylenes		ND	0.2000	0.1958	98	0.2	0.2068	103	5	70-135	35	
o-Xylene		ND	0.1000	0.0982	98	0.1	0.1032	103	5	71-133	35	

Analyst: SHE

Date Prepared: 12/11/2007

Date Analyzed: 12/12/2007

Lab Batch ID: 710397

Sample: 502459-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
TPH by SW 8015B		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
C6-C10 Gasoline Range Hydrocarbons		ND	1000	1180	118	1000	1230	123	4	70-135	35	
C10-C28 Diesel Range Hydrocarbons		ND	1000	961	96	1000	1010	101	5	70-135	35	

Relative Percent Difference RPD =  $200 * (D-F) / (D+F)$

Blank Spike Recovery [D] =  $100 * (C) / (B)$

Blank Spike Duplicate Recovery [G] =  $100 * (F) / (E)$

All results are based on MDL and Validated for QC Purposes





# Form 3 - MS Recoveries

Project Name: Doc BHU State#1

Work Order #: 294160

Lab Batch #: 710063

Date Analyzed: 12/07/2007

QC- Sample ID: 294140-001 S

Reporting Units: mg/kg

Project ID: 30-015-34552

Analyst: LATCOR

Date Prepared: 12/07/2007

Batch #: 1

Matrix: Soil

## MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300						
Analytes		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R
Chloride		2730	500	4260	306	75-125
						X

Matrix Spike Percent Recovery [D] =  $100 \times (C-A)/B$

Relative Percent Difference [E] =  $200 \times (C-A)/(C+B)$

All Results are based on MDL and Validated for QC Purposes



# Form 3 - MS / MSD Recoveries

Project Name: Doc BHU State#1

Work Order #: 294160

Project ID: 30-015-34552

Lab Batch ID: 710397

QC- Sample ID: 294160-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 12/12/2007

Date Prepared: 12/11/2007 Analyst: SHE

Reporting Units: mg/kg

Reporting Units: mg/kg											
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
TPH by SW 8015B	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analyses											
C6-C10 Gasoline Range Hydrocarbons	ND	1070	1180	110	1070	1270	119	8	70-135	35	
C10-C28 Diesel Range Hydrocarbons	59.6	1070	993	87	1070	1070	94	8	70-135	35	

Matrix Spike Percent Recovery  $[D] = 100 \times (C-A)/B$   
Relative Percent Difference  $RPD = 200 \times (D-G)/(D+G)$

Matrix Spike Duplicate Percent Recovery  $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = See Narrative, BQL = Estimated Quantitation Limit



Sample Duplicate Recovery

Project Name: Doc BHU State#1

Work Order #: 294160

Lab Batch #: 710063  
Date Analyzed: 12/07/2007  
QC- Sample ID: 294140-001 D  
Reporting Units: mg/kg

Project ID: 30-015-34552  
Date Prepared: 12/07/2007  
Analyst: LATCOR  
Batch #: 1  
Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Inorganic Anions by EPA 300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	2730	2740	0	20	

Lab Batch #: 710026  
Date Analyzed: 12/07/2007  
QC- Sample ID: 294159-021 D  
Reporting Units: %

Date Prepared: 12/07/2007  
Analyst: JLG  
Batch #: 1  
Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	12.5	12.8	2	20	

Spike Relative Difference RPD  $200 * |(B-A)/(B+A)|$   
All Results are based on MDL and validated for QC purposes.





# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: Yates  
 Date/ Time: 12/07/07 10:06  
 Lab ID #: 294160  
 Initials: gmk

### Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	<u>Yes</u>	No	4.0 °C
#2	Shipping container in good condition?	<u>Yes</u>	No	
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	Not Present
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present
#5	Chain of Custody present?	<u>Yes</u>	No	
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No	
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No	
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No	
#11	Containers supplied by ELDT?	<u>Yes</u>	No	
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below
#13	Samples properly preserved?	<u>Yes</u>	No	See Below
#14	Sample bottles intact?	<u>Yes</u>	No	
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No	
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No	
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below
#19	Subcontract of sample(s)?	<u>Yes</u>	No	Not Applicable
#20	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable

### Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken:

- Check all that Apply:
- ☐ See attached e-mail/ fax
  - ☐ Client understands and would like to proceed with analysis
  - ☐ Cooling process had begun shortly after sampling event



# Environmental Lab of Texas

A Xenco Laboratories Company

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East  
Odessa, Texas 79766

Phone: 432-663-1800  
Fax: 432-663-1713

Project Manager: Robert Asher

Project Name: Doc BHU State #1

Company Name Yates Petroleum Corporation

Project #: 30-015-34552

Company Address: 105 South 4th Street

Project Loc: Eddy County

City/State/Zip: Artesia, NM 88210

PO #: 105632

Telephone No: 505-748-4217

Fax No: 505-748-4662

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: 

e-mail: [boba@ypcnnm.com](mailto:boba@ypcnnm.com)

(lab use only)

ORDER #: 294160

LAB # (lab use only)

FIELD CODE

GS/Comp-001

Beginning Depth

Ending Depth

Date Sampled

Time Sampled

Field Filtered

Total #. of Containers

Ice

HNO<sub>3</sub>

HCl

H<sub>2</sub>SO<sub>4</sub>

NaOH

Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

None

Other (Specify)

DW=Drinking Water SL=Sludge

GW = Groundwater S=Soil/Solid

NP=Non-Potable Specify Other

TPH: 418.1 8015M 8015B

TPH: TX 1005 TX 1006

Cations (Ca, Mg, Na, K)

Anions (Cl, SO<sub>4</sub>, Alkalinity)

SAR / ESP / CEC

Metals: As Ag Ba Cd Cr Pb Hg Se

Volatiles

Semivolatiles

BTEX 8021B/5030 or BTEX 8260

RCI

N.O.R.M.

Chlorides

RUSH TAT (Pre-Schedule) 24, 48, 72 hrs

Standard TAT

Preservation & # of Containers

Matrix

Analyze For:

TCLP:

TOTAL:

Special Instructions: **TPH: 8015B; BTEX: 8021B & Chlorides.** Please show BTEX results as mg/kg. Thank you.

Laboratory Comments: 1-4069C

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by ELOT:

Date

Time

Relinquished by: *Reo/lye*

Date

Time

Received by:

Date

Time

*Quasimodo*

Sample Containers Intact? ☒ N  
VOCs Free of Headspace? ☒ N  
Labels on container(s) ☒ N  
Custody seals on container(s) ☒ N  
Custody seals on cooler(s) ☒ N  
Sample Hand Delivered by Sampler/Client Rep. ? ☒ N  
by Courier? ☒ N  
UPS ☒ N  
DHL ☒ N  
Temperature Upon Receipt: 4.0 °C

## Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: YatesDate/ Time: 12/01/07 10:00Lab ID #: 294160Initials: gmsk

## Sample Receipt Checklist

Client Initials

#1	Temperature of container/ cooler?	<u>Yes</u>	No	4.0 °C	
#2	Shipping container in good condition?	<u>Yes</u>	No		
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present	
#5	Chain of Custody present?	<u>Yes</u>	No		
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No		
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
#11	Containers supplied by ELOT?	<u>Yes</u>	No		
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
#13	Samples properly preserved?	<u>Yes</u>	No	See Below	
#14	Sample bottles intact?	<u>Yes</u>	No		
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No		
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No		
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable	

## Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

Check all that Apply:

☐

See attached e-mail/ fax

☐

Client understands and would like to proceed with analysis

☐

Cooling process had begun shortly after sampling event

Date: 12-06-07 5 lb 8.5 oz

Acct #	: BOB A.	Base :\$	26.73
Cust #	: ENVIRONMENTAL LABS	Spc S:\$	4.68
Zip/Zone:	79765 / 3	Addl :\$	0.00
Trk #	: 798324894043		
Pkg ID #:	718	Total \$	31.41
Service	: FedEx Priority Overnight®		

# Environmental Lab of Texas

A Xenco Laboratories Company

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East  
Odessa, Texas 79765

Phone: 432-563-1800  
Fax: 432-563-1713

Project Manager: Robert Asher

Project Name: Doc BHU State #1

Company Name Yates Petroleum Corporation

Project #: 30-015-34552

Company Address: 105 South 4th Street

Project Loc: Eddy County

City/State/Zip: Artesia, NM 88210

PO #: 105632

Telephone No: 505-748-4217

Fax No: 505-748-4662

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: 

e-mail: boba@ypcnm.com

(lab use only)

ORDER #:

LAB # (lab use only)

FIELD CODE

GS/Comp-001

Beginning Depth

6"

Ending Depth

12"

Date Sampled

12/6/2007

Time Sampled

10:46 AM

Field Filtered

Total #. of Containers

X

Ice

HNO<sub>3</sub>

HCl

H<sub>2</sub>SO<sub>4</sub>

NaOH

Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

None

Other (Specify)

GS

X

DW=Drinking Water SL=Sludge  
GW = Groundwater S=Soil/Solid  
NP=Non-Potable Specify Other

TPH: 418.1 8015M 8015B

TPH: TX 1005 TX 1006

Cations (Ca, Mg, Na, K)

Anions (Cl, SO<sub>4</sub>, Alkalinity)

SAR / ESP / CEC

Metals: As Ag Ba Cd Cr Pb Hg Se

Volatiles

Semivolatiles

BTEX 8021B/5030 or BTEX 8260

RCI

N.O.R.M.

Chlorides

RUSH TAT (Pre-Schedule) 24, 48, 72 hrs

Standard TAT

Special Instructions:

TPH: 8015B; BTEX: 8021B & Chlorides. Please show BTEX results as mg/kg. Thank you.

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by ELDT:

Date

Time

Laboratory Comments:

Sample Containers Intact?

VOCs Free of Headspace?

Labels on container(s)

Custody seals on container(s)

Custody seals on cooler(s)

Sample Hand Delivered

by Sampler/Client Rep.?

by Courier?

UPS

DHL

FedEx

Lone Star

°C



PROJECT NAME	DOX BHM STATE #1		
FIELD CODE	GS/ Comp-001	GS/ Comp-002	
DATE	12/6/2007		
TIME	1046A		
SOIL TYPE			
SAMPLE TYPE			
SAMPLE DEPTH	6"-1'	3'	
LATITUDE			
LONGITUDE			
TEST TYPE	TPH/BBX/CHLORIDES		
COMMENTS	W SIDE of Lease Road	* - DID	
	3 P/L Row	NOT SAMPLE	
		Could not dig 12"	
FIELD CODE			
DATE			
TIME			
SOIL TYPE			
SAMPLE TYPE			
SAMPLE DEPTH			
LATITUDE			
LONGITUDE			
TEST TYPE			
COMMENTS			



Page 72 of 191  
Received by OCD: 10/14/2022 9:59:57 AM  
Released to Imaging: 11/3/2022 2:42:50 PM

TRANSACTION REPORT

P. 01

SEP-27-2007 THU 04:35 PM

FOR: YATES ENGINEERING

15057484585

SEND

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
SEP-27	04:34 PM	97489720	49"	2	FAX TX	OK	106	

TOTAL : 49S PAGES: 2



FACSIMILE TRANSMITTAL SHEET

TO: Mike Bratcher

FROM: Robert Asher

FAX NUMBER: 9-748-9720

DATE: Thursday, September 27, 2007

COMPANY: NMOCD

TOTAL NO. OF PAGES INCLUDING COVER: 2

PHONE NUMBER:

RE: C-141; Doc BHU State #1

☐ URGENT ☒ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Initial Report.



---

---

**FACSIMILE TRANSMITTAL SHEET**

---

---

TO:  
Mike Bratcher

FROM:  
Robert Asher

FAX NUMBER:  
9-748-9720

DATE:  
Thursday, September 27, 2007

COMPANY:  
NMOCD

TOTAL NO. OF PAGES INCLUDING COVER:  
2

PHONE NUMBER:

RE:  
C-141; Doc BHU State #1

☐ URGENT    ☒ FOR REVIEW    ☐ PLEASE COMMENT    ☐ PLEASE REPLY    ☐ PLEASE RECYCLE

---

---

NOTES/COMMENTS:

Initial Report.

Call me if you have any questions, 505-748-4217.

Thank you.

Robert Asher

Environmental Regulatory Department

105 SOUTH FOURTH STREET • ARTESIA, NEW MEXICO 88210-2118  
PHONE: 505-748-4217 (DIRECT) • FAX: 505-748-4662

Page 74 of 191  
Received by OCD: 10/14/2022 9:59:57 AM  
Released to Imaging: 11/3/2022 2:42:50 PM

District I  
625 N. French Dr., Hobbs, NM 88240  
District II  
301 W. Grand Avenue, 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  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003  
Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Yates Petroleum Corporation	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 <sup>TH</sup> Street		Telephone No. 505-748-1471
Facility Name Doc BHU State #1	API Number 30-015-34552	Facility Type Battery

Surface Owner State	Mineral Owner State	Lease No. VO-6670
------------------------	------------------------	----------------------

LOCATION OF RELEASE

Unit Letter O	Section 5	Township 25S	Range 30E	Feet from the 33	North/South Line South	Feet from the 2310	East/West Line East	County Eddy
------------------	--------------	-----------------	--------------	---------------------	---------------------------	-----------------------	------------------------	----------------

Latitude 32.15292 Longitude 103.90174

NATURE OF RELEASE

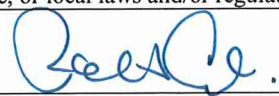
Type of Release Crude Oil & Produced Water	Volume of Release 2 B/O & 73 B/PW	Volume Recovered 0 B/O & 30 B/PW
Source of Release Frac Tank	Date and Hour of Occurrence 9/14/2007 PM	Date and Hour of Discovery 9/14/2007 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/NMOCD District II	
By Whom? Jerry Fanning/YPC Environmental	Date and Hour 9/15/2007 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.\*  
N/A

Describe Cause of Problem and Remedial Action Taken.\*  
Leak in frac tank causing release. Vacuum truck called.

Describe Area Affected and Cleanup Action Taken.\*  
An approximate area of 20' X 30' on well pad and 10' X 50' off well pad. Produced water picked up and tank replaced. Soils on well pad to be excavated and hauled to OCD approved land disposal facility, nitrogen fertilizer to be applied and tilled into soils on area off of well pad. Vertical and horizontal delineation to be conducted and if needed further corrective action will be taken. **Depth to Ground Water: >100' (approximately 325'), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Robert Asher	Approved by District Supervisor:		
Title: Environmental Regulatory Agent	Approval Date:	Expiration Date:	
E-mail Address: boba@ypcnm.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: Thursday, September 27, 2007 Phone: 505-748-1471			

Attach Additional Sheets If Necessary





# BREAKS, SPILLS AND LEAKS REPORT

Person Reporting \_\_\_\_\_

Time Reported: \_\_\_\_\_ am/pm

Person Reported to (Field Supervisor) \_\_\_\_\_

Time Reported: \_\_\_\_\_ am/pm

Environmental Notification Coordinator Jerry Fanning

Time Reported: \_\_\_\_\_ am/pm

## 1. LOCATION:

Name of well or facility: Doc BHU state #1

Location \_\_\_\_\_ Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ County: \_\_\_\_\_

Surface Owner: \_\_\_\_\_ Mineral Owner: Fee ☐ Federal ☐ State ☐

## 2. TIME OF INCIDENT:

Date: 9/14/07

Time: \_\_\_\_\_ am/pm

## 3. SOURCE AND CAUSE:

## 4. TYPE OF DISCHARGE

☒ Crude Oil ☐ Condensate ☒ Produced Water ☐ Gas ☐ Other \_\_\_\_\_

## 5. QUANTITY:

Estimated Volumes Discharged: 2 Barrels of Oil ~~73~~ 73 Barrels of Water

Barrels of \_\_\_\_\_

MCF Gas \_\_\_\_\_

Estimated Volumes Recovered: 0 Barrels of Oil 30 Barrels of Water

Barrels of \_\_\_\_\_

## 6. SITE CHARACTERISTICS:

Weather Conditions: \_\_\_\_\_ Soil Type and Condition: \_\_\_\_\_

Distance & Direction to fresh water wells or watercourse: \_\_\_\_\_

Secondary Containment type & condition: \_\_\_\_\_

Miscellaneous: \_\_\_\_\_

## 7. IMMEDIATE CORRECTIVE ACTION:

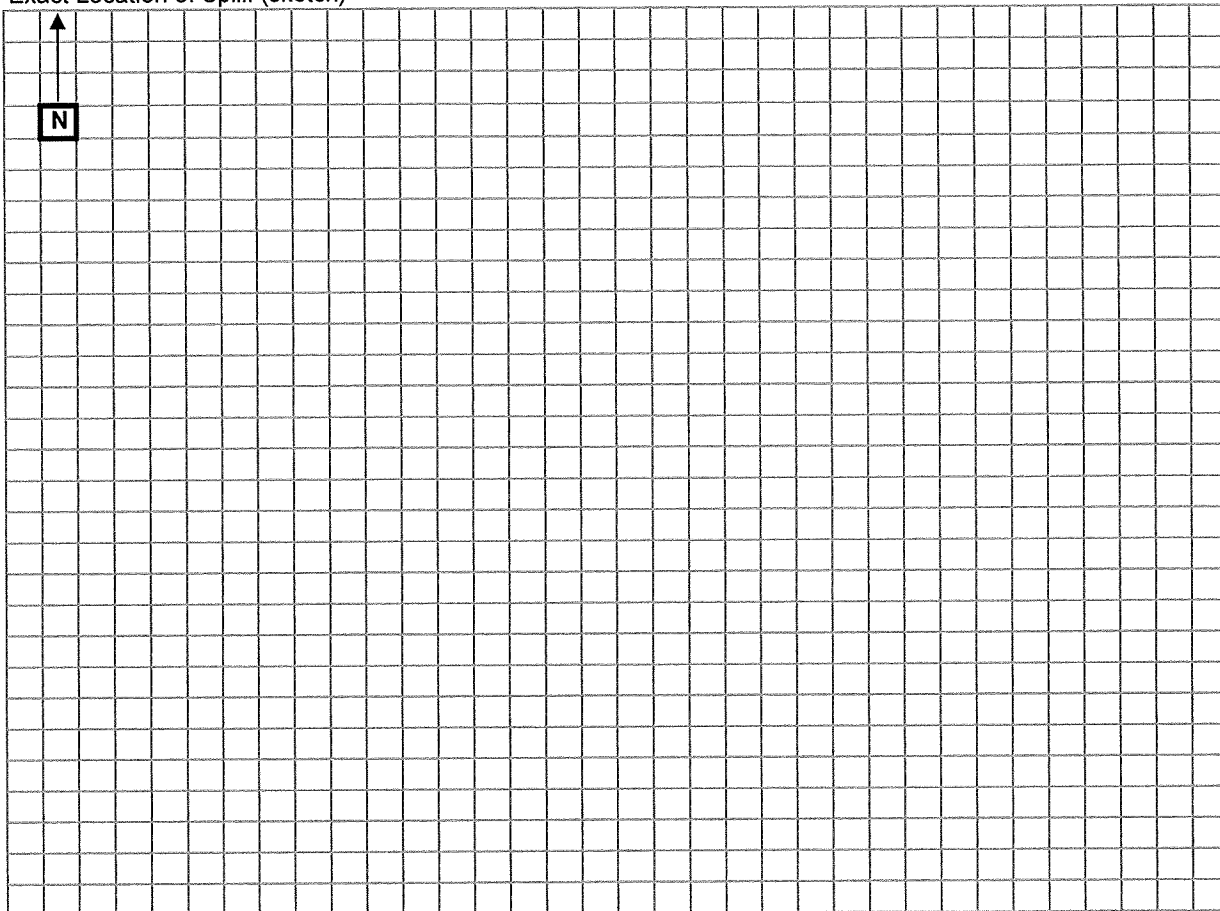
Action and time taken to control incident: COVERED UP.



**BREAKS, SPILLS AND LEAKS REPORT**

**8. SITE ASSESSMENT**

Exact Location of Spill: (sketch)



Horizontal Extent: \_\_\_\_\_ X \_\_\_\_\_ Estimated Vertical Extent: \_\_\_\_\_ feet / inches

Degree of Contamination: ☐ Highly Contaminated/Saturated \_\_\_\_\_  
☐ Unsaturated \_\_\_\_\_

**9. REMEDIAL ACTION:**

☐ Excavate, and landfarm on location \_\_\_\_\_  
\_\_\_\_\_

☐ Excavate, remove and replace \_\_\_\_\_  
\_\_\_\_\_

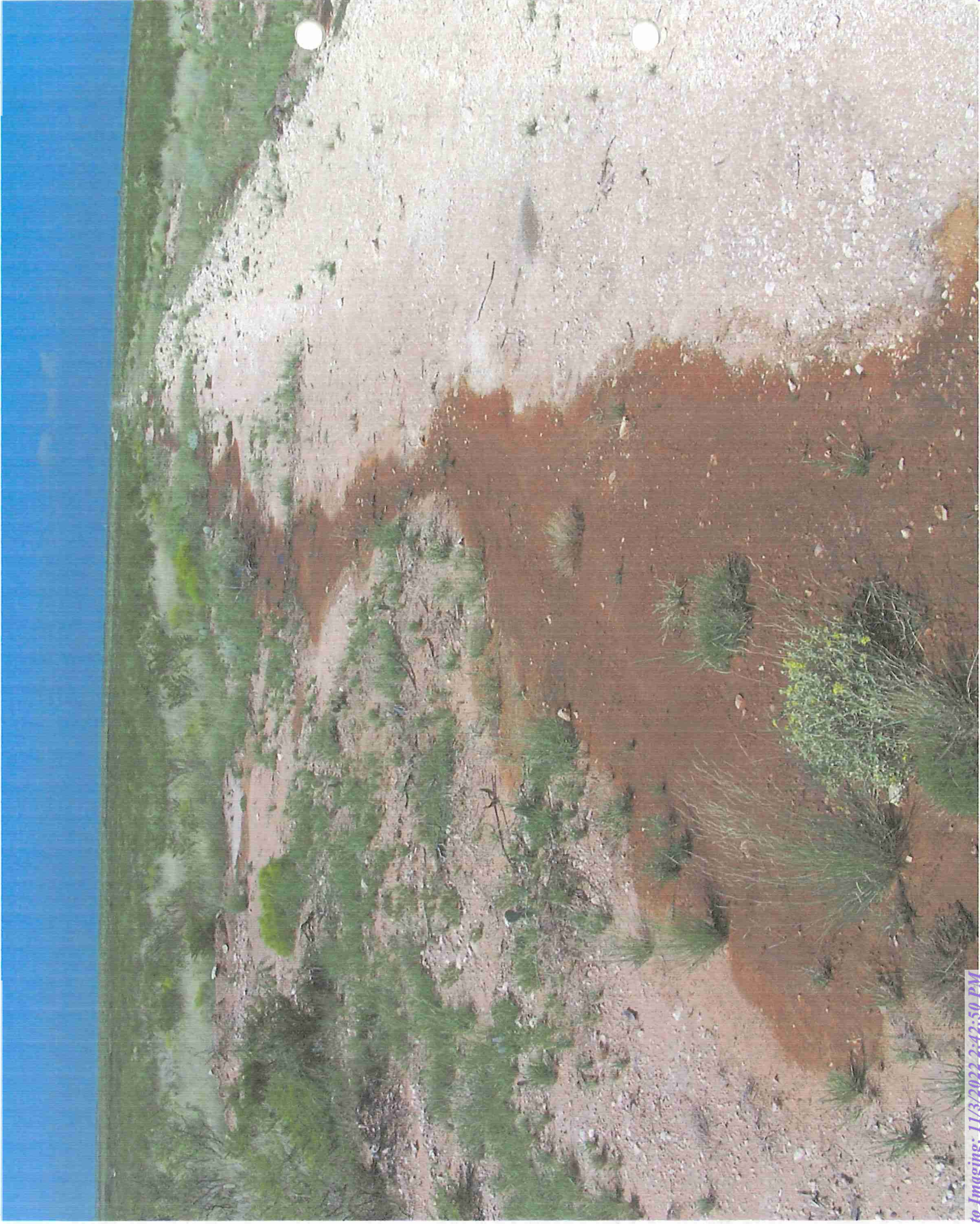
☐ Treat in place \_\_\_\_\_  
\_\_\_\_\_



9-14-0700







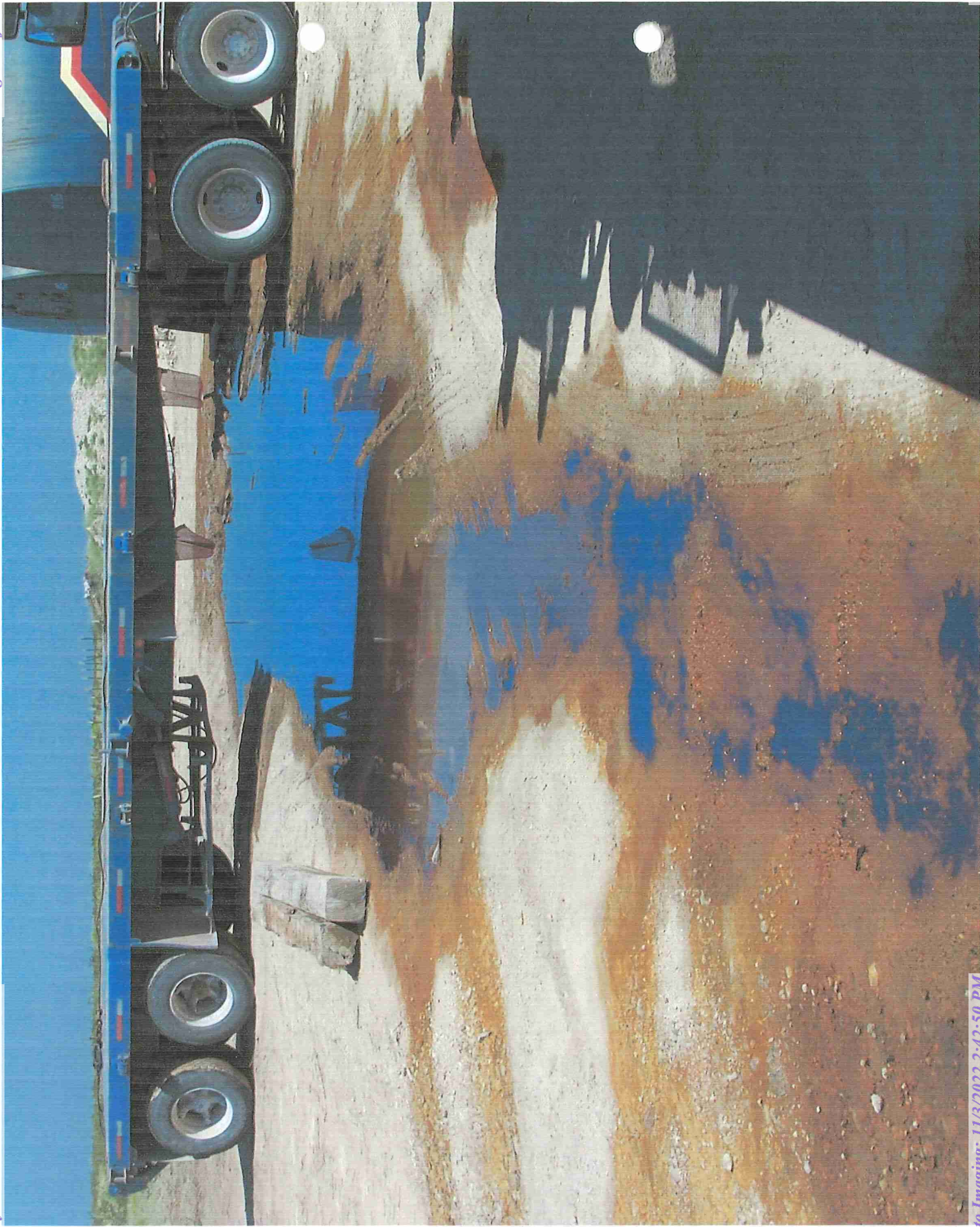




FLAC FRANK  
9-14-87  
DOL



6:20 AM 9-14-07





9-14-07 BDC







## Appendix D

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State Correspondence

**Long, Brittany**

---

**From:** Long, Brittany  
**Sent:** Friday, August 26, 2022 3:55 PM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** Todd Wells; James Kennedy; Doug Lowrie; Gonzales, Clair  
**Subject:** EOG Resources DOC BHU State #1 30-015-34552 (NKMW0735540161) Sampling Notification

Mike,

Tetra Tech is scheduled to be onsite on Wednesday, August 31, 2022, at approximately 8:30 AM MT Time, to assess the release that occurred on September 14, 2007 at the DOC BHU State #1 (NKMW0735540161). Sample points will be placed as requested, with a hand auger at intervals (0-1', 1-1.5', 2-2.5', 3-3.5', and 4-4.5') to 4.5' below surface, if possible.

Please let me know if you have any questions or concerns.

Best Regards,

*Brittany D. Long,*

**Brittany D. Long** | Biologist & Project Manager

Phone: 432.682.4559 | Mobile 432.741.5813 | Fax: 432.682.3946

[Brittany.Long@tetratech.com](mailto:Brittany.Long@tetratech.com)

**Tetra Tech** | *Leading with Science*®

901 West Wall Street, Suite 100 Midland, Texas 79701

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Please consider the environment before printing. [Read more](#)



**Long, Brittany**

---

**From:** Todd Wells <Todd\_Wells@eogresources.com>  
**Sent:** Thursday, August 25, 2022 9:31 AM  
**To:** Long, Brittany  
**Cc:** Gonzales, Clair; James Kennedy  
**Subject:** DOC BHU State #1 30-015-34552

**⚠ CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. **⚠**

Brittany,

Below are the soil sampling instructions from Mike Bratcher for the 2007 release and associated correspondence. Call me and we can discuss the details. Please schedule the soil sampling for this site and notify Mike Bratcher prior to the sampling, cc: James, Doug and me. There is a color figure of the release path on page 12 of the closure report. We will need to submit a new closure report that includes the old report information from 2007.

Thank you,

Todd

---

**From:** Jordan Kessler <Jordan\_Kessler@eogresources.com>  
**Sent:** Tuesday, August 16, 2022 10:02 PM  
**To:** Todd Wells <Todd\_Wells@eogresources.com>; James Kennedy <James\_Kennedy@eogresources.com>; Doug Lowrie <Doug\_Lowrie@eogresources.com>  
**Cc:** Patrick Padilla <Patrick\_Padilla@eogresources.com>  
**Subject:** FW: [EXTERNAL] RE: DOC BHU State #1 30-015-34552

Hi environmental folks,

See below for Mike Bratcher's request on the DOC BHU State No. 1 clean up. If you'd like to discuss internally or with him, I'm happy to help however I can.

Thanks,  
Jordan

---

**From:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Sent:** Tuesday, August 16, 2022 1:15 PM  
**To:** Jordan Kessler <[Jordan\\_Kessler@eogresources.com](mailto:Jordan_Kessler@eogresources.com)>  
**Subject:** RE: [EXTERNAL] RE: DOC BHU State #1 30-015-34552

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jordan,

Sorry for the delayed response. OCD requests additional samples be obtained for confirmation prior to closing this incident. Three sample points will be utilized with samples obtained in 1' increments from surface to 4' bgs. Using the "Sample Diagram Exhibit" document in the 2007 submittal, in the blue area denoting the release path, one sample point



at approximately the center X along the lease road, one sample point along the buried pipeline, and one sample point at the final X along the pipeline, where the spill path terminates. Samples are to be evaluated for BTEX, TPH and Chloride.

Please distribute as necessary and if there are any questions or EOG wants to schedule a meeting to discuss, let me know. If EOG is agreeable to this request, once completed, submit a new closure report and closure page of the current form C-141, along with the report (with the original C-141) from 2007, through OCD Permitting. Provide notification once the sampling event has been scheduled, and let me know once the closure report has been submitted.

Thank you,

**Mike Bratcher** • Incident Supervisor  
Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave | Artesia, NM 88210  
(575) 626-0857 | [mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Jordan Kessler <[Jordan\\_Kessler@eogresources.com](mailto:Jordan_Kessler@eogresources.com)>  
**Sent:** Tuesday, August 16, 2022 9:32 AM  
**To:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Subject:** [EXTERNAL] RE: DOC BHU State #1 30-015-34552

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hi Mike, wanted to follow up on this again. Thanks!

---

**From:** Jordan Kessler  
**Sent:** Tuesday, August 9, 2022 3:07 PM  
**To:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Subject:** FW: DOC BHU State #1 30-015-34552

Hi Mike, just a reminder to let us know what you would like to see for this site. Thanks!

---

**From:** Todd Wells <[Todd\\_Wells@eogresources.com](mailto:Todd_Wells@eogresources.com)>  
**Sent:** Friday, July 29, 2022 10:20 AM  
**To:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Doug Lowrie <[Doug\\_Lowrie@eogresources.com](mailto:Doug_Lowrie@eogresources.com)>; James Kennedy <[James\\_Kennedy@eogresources.com](mailto:James_Kennedy@eogresources.com)>; Jordan Kessler <[Jordan\\_Kessler@eogresources.com](mailto:Jordan_Kessler@eogresources.com)>; Patrick Padilla <[Patrick\\_Padilla@eogresources.com](mailto:Patrick_Padilla@eogresources.com)>; Keith Valentine <[Keith\\_Valentine@eogresources.com](mailto:Keith_Valentine@eogresources.com)>  
**Subject:** RE: DOC BHU State #1 30-015-34552

Good Morning Mr. Bratcher,

I wanted to check with you and see if you had a chance to review the closure report for the September 14, 2007 release, Incident #nKMW0735540161, for the Doc BHU State #1 site in Eddy County, New Mexico. Please let us know if you have any questions regarding this matter.

Thank you,

Todd Wells

---

**From:** Todd Wells

**Sent:** Friday, July 22, 2022 4:57 PM

**To:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Doug Lowrie <[Doug\\_Lowrie@eogresources.com](mailto:Doug_Lowrie@eogresources.com)>; James Kennedy <[James\\_Kennedy@eogresources.com](mailto:James_Kennedy@eogresources.com)>; Jordan Kessler <[Jordan\\_Kessler@eogresources.com](mailto:Jordan_Kessler@eogresources.com)>; Patrick Padilla <[Patrick\\_Padilla@eogresources.com](mailto:Patrick_Padilla@eogresources.com)>

**Subject:** DOC BHU State #1 30-015-34552

Good Afternoon Mr. Bratcher,

Our team in the Artesia office dug through their file boxes and found information for the Doc BHU State #1 regarding the September 14, 2007 release, Incident #nKMW0735540161, that we discussed during our Teams meeting yesterday. Please see the attached closure report prepared by Robert Asher with Yates Petroleum Corporation and submitted to the OCD Artesia Office on December 27, 2007. Included in the document are the Final and Initial C-141, site figures with data table, laboratory analytical reports and site photos. Please let us know if you have any questions regarding this site.

Thank you,

Todd Wells

---

**From:** Todd Wells <[Todd\\_Wells@eogresources.com](mailto:Todd_Wells@eogresources.com)>

**Sent:** Friday, July 22, 2022 12:26 PM

**To:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Doug Lowrie <[Doug\\_Lowrie@eogresources.com](mailto:Doug_Lowrie@eogresources.com)>; James Kennedy <[James\\_Kennedy@eogresources.com](mailto:James_Kennedy@eogresources.com)>; Jordan Kessler <[Jordan\\_Kessler@eogresources.com](mailto:Jordan_Kessler@eogresources.com)>

**Subject:** Re: [EXTERNAL] DOC BHU State #1 30-015-34552

Okay, thank you for your help with this item.

Todd

Sent from my iPhone

On Jul 22, 2022, at 12:23 PM, Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)> wrote:

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Mr. Wells,

This compliance (cAB1602154782) was associated with incident number nAB1602154539, and is now closed. It may need to batch overnight to show as closed on well page, so you might check later today and/or Monday. If any issues, please let me know.

Thank you,

**Mike Bratcher** • Incident Supervisor  
Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave | Artesia, NM 88210  
(575) 626-0857 | [mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Todd Wells <[Todd\\_Wells@eogresources.com](mailto:Todd_Wells@eogresources.com)>  
**Sent:** Thursday, July 21, 2022 2:28 PM  
**To:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Doug Lowrie <[Doug\\_Lowrie@eogresources.com](mailto:Doug_Lowrie@eogresources.com)>; James Kennedy <[James\\_Kennedy@eogresources.com](mailto:James_Kennedy@eogresources.com)>; Jordan Kessler <[Jordan\\_Kessler@eogresources.com](mailto:Jordan_Kessler@eogresources.com)>  
**Subject:** [EXTERNAL] DOC BHU State #1 30-015-34552

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good Afternoon Mr. Bratcher,

Below is the information for the unresolved compliance issue for the Doc BHU State #1 site that we discussed during the Teams meeting. I discussed this matter on the phone last week with Ramona Marcus, and she mentioned that it may need to be reviewed by Amelia Bustamante. Please let us know if you have any questions, and thank you for your assistance regarding this matter.

Sincerely,

Todd

---

**From:** Todd Wells  
**Sent:** Tuesday, July 12, 2022 4:57 PM  
**To:** James Kennedy <[James\\_Kennedy@eogresources.com](mailto:James_Kennedy@eogresources.com)>; Kay Maddox <[Kay\\_Maddox@eogresources.com](mailto:Kay_Maddox@eogresources.com)>; Marcus, Ramona, EMNRD <[Ramona.Marcus@state.nm.us](mailto:Ramona.Marcus@state.nm.us)>  
**Cc:** Katie Jamison <[Katie\\_Jamison@eogresources.com](mailto:Katie_Jamison@eogresources.com)>  
**Subject:** RE: DOC BHU State #1 30-015-34552

Good Afternoon Ramona,

It was good to speak with you on the phone and thank you for your assistance with this matter. Below is the well name, API# and compliance number that we discussed. This is one of the wells to be transferred to ConocoPhillips. I understand that it will need to be reviewed by Amalia Bustamante. Please let us know if you have any questions regarding this site.

Sincerely,

Todd Wells

**DOC BHU State #1 30-015-34552**

**cAB1602154782**

Violation Source: Incident, Spill or Release

Date of Violation: 01/21/2016

Compliance Required: 04/25/2016

Resolved:

**Notes**

Converted compliance record had no comment!





# Appendix E

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Laboratory Reports



## Environment Testing America

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-2870-1

Laboratory Sample Delivery Group: Eddy County NM  
Client Project/Site: Doc BHU State #1 2007 Release

**For:**

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

Attn: Brittany Long

Authorized for release by:

9/12/2022 9:18:38 AM

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: Doc BHU State #1 2007 Release

Laboratory Job ID: 890-2870-1  
SDG: Eddy County NM

# Table of Contents

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QC Sample Results . . . . .	11
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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
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.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

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

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

**Job ID: 890-2870-1****Laboratory: Eurofins Carlsbad****Narrative****Job Narrative  
890-2870-1****Receipt**

The samples were received on 8/31/2022 4:33 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34107 and analytical batch 880-34153 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: Surrogate recovery for the following samples were outside control limits: (LCS 880-33646/2-A) and (LCSD 880-33646/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: H-6 (890-2870-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The method blank for preparation batch 880-33646 and analytical batch 880-33680 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-33646 and analytical batch 880-33680 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**

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: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

## Client Sample ID: H-1

## Lab Sample ID: 890-2870-1

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/10/22 20:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 20:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 20:11	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/09/22 12:37	09/10/22 20:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 20:11	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/09/22 12:37	09/10/22 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	09/09/22 12:37	09/10/22 20:11	1
1,4-Difluorobenzene (Surr)	87		70 - 130	09/09/22 12:37	09/10/22 20:11	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			09/12/22 09:52	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			09/06/22 13:04	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 F1	49.9		mg/Kg		09/02/22 11:29	09/03/22 21:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/03/22 21:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/03/22 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	09/02/22 11:29	09/03/22 21:34	1
o-Terphenyl	105		70 - 130	09/02/22 11:29	09/03/22 21:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.15		5.01		mg/Kg			09/08/22 21:29	1

## Client Sample ID: H-2

## Lab Sample ID: 890-2870-2

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/10/22 20:32	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/09/22 12:37	09/10/22 20:32	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/09/22 12:37	09/10/22 20:32	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/09/22 12:37	09/10/22 20:32	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/09/22 12:37	09/10/22 20:32	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/09/22 12:37	09/10/22 20:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	09/09/22 12:37	09/10/22 20:32	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/09/22 12:37	09/10/22 20:32	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

## Client Sample ID: H-2

## Lab Sample ID: 890-2870-2

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/12/22 09:52	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			09/06/22 13:04	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		09/02/22 11:29	09/03/22 22:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/03/22 22:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/03/22 22:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				09/02/22 11:29	09/03/22 22:38	1
o-Terphenyl	101		70 - 130				09/02/22 11:29	09/03/22 22:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.3		5.02		mg/Kg			09/08/22 21:44	1

## Client Sample ID: H-3

## Lab Sample ID: 890-2870-3

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/10/22 20:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 20:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 20:53	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/09/22 12:37	09/10/22 20:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 20:53	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/09/22 12:37	09/10/22 20:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				09/09/22 12:37	09/10/22 20:53	1
1,4-Difluorobenzene (Surr)	101		70 - 130				09/09/22 12:37	09/10/22 20:53	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/12/22 09:52	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			09/06/22 13:04	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		09/02/22 11:29	09/03/22 22:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/22 11:29	09/03/22 22:59	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

## Client Sample ID: H-3

Lab Sample ID: 890-2870-3

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/02/22 11:29	09/03/22 22:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				09/02/22 11:29	09/03/22 22:59	1
o-Terphenyl	103		70 - 130				09/02/22 11:29	09/03/22 22:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.3		5.05		mg/Kg			09/08/22 21:49	1

## Client Sample ID: H-4

Lab Sample ID: 890-2870-4

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/10/22 21:13	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/09/22 12:37	09/10/22 21:13	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/09/22 12:37	09/10/22 21:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/09/22 12:37	09/10/22 21:13	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/09/22 12:37	09/10/22 21:13	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/09/22 12:37	09/10/22 21:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				09/09/22 12:37	09/10/22 21:13	1
1,4-Difluorobenzene (Surr)	97		70 - 130				09/09/22 12:37	09/10/22 21:13	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			09/12/22 09:52	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			09/06/22 13:04	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		09/02/22 11:29	09/03/22 23:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/03/22 23:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/03/22 23:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				09/02/22 11:29	09/03/22 23:19	1
o-Terphenyl	121		70 - 130				09/02/22 11:29	09/03/22 23:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.2		5.00		mg/Kg			09/08/22 21:53	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

Client Sample ID: H-5

Lab Sample ID: 890-2870-5

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/10/22 21:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 21:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 21:34	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/09/22 12:37	09/10/22 21:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 21:34	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/09/22 12:37	09/10/22 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	09/09/22 12:37	09/10/22 21:34	1
1,4-Difluorobenzene (Surr)	109		70 - 130	09/09/22 12:37	09/10/22 21:34	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/12/22 09:52	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			09/06/22 13:04	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		09/02/22 11:29	09/03/22 23:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/03/22 23:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/03/22 23:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/02/22 11:29	09/03/22 23:41	1
o-Terphenyl	109		70 - 130	09/02/22 11:29	09/03/22 23:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.1		4.99		mg/Kg			09/08/22 21:58	1

Client Sample ID: H-6

Lab Sample ID: 890-2870-6

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/10/22 21:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/09/22 12:37	09/10/22 21:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/09/22 12:37	09/10/22 21:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/09/22 12:37	09/10/22 21:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/09/22 12:37	09/10/22 21:55	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/09/22 12:37	09/10/22 21:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/09/22 12:37	09/10/22 21:55	1
1,4-Difluorobenzene (Surr)	92		70 - 130	09/09/22 12:37	09/10/22 21:55	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

Client Sample ID: H-6

Lab Sample ID: 890-2870-6

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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			09/12/22 09:52	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			09/06/22 13:04	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		09/02/22 11:29	09/04/22 00:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/04/22 00:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/04/22 00:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130				09/02/22 11:29	09/04/22 00:02	1
o-Terphenyl	133	S1+	70 - 130				09/02/22 11:29	09/04/22 00:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.4		5.00		mg/Kg			09/08/22 22:13	1

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

## 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)
890-2865-A-1-C MS	Matrix Spike	85	92
890-2865-A-1-D MSD	Matrix Spike Duplicate	116	98
890-2870-1	H-1	87	87
890-2870-2	H-2	108	98
890-2870-3	H-3	112	101
890-2870-4	H-4	112	97
890-2870-5	H-5	97	109
890-2870-6	H-6	112	92
LCS 880-34107/1-A	Lab Control Sample	103	107
LCSD 880-34107/2-A	Lab Control Sample Dup	132 S1+	105
MB 880-34107/5-A	Method Blank	96	89
<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)
890-2870-1	H-1	100	105
890-2870-1 MS	H-1	85	74
890-2870-1 MSD	H-1	86	75
890-2870-2	H-2	100	101
890-2870-3	H-3	101	103
890-2870-4	H-4	121	121
890-2870-5	H-5	108	109
890-2870-6	H-6	134 S1+	133 S1+
LCS 880-33646/2-A	Lab Control Sample	150 S1+	151 S1+
LCSD 880-33646/3-A	Lab Control Sample Dup	147 S1+	152 S1+
MB 880-33646/1-A	Method Blank	116	121
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

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

Lab Sample ID: MB 880-34107/5-A

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 19:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 19:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 19:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/09/22 12:37	09/10/22 19:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 19:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/09/22 12:37	09/10/22 19:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/09/22 12:37	09/10/22 19:08	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/09/22 12:37	09/10/22 19:08	1

Lab Sample ID: LCS 880-34107/1-A

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08977		mg/Kg		90	70 - 130
Toluene	0.100	0.08000		mg/Kg		80	70 - 130
Ethylbenzene	0.100	0.07969		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	0.200	0.1624		mg/Kg		81	70 - 130
o-Xylene	0.100	0.09238		mg/Kg		92	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-34107/2-A

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34107

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09121		mg/Kg		91	70 - 130	2	35
Toluene	0.100	0.08741		mg/Kg		87	70 - 130	9	35
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130	24	35
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130	26	35
o-Xylene	0.100	0.1206		mg/Kg		121	70 - 130	26	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-2865-A-1-C MS

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.0998	0.03247	F1	mg/Kg		33	70 - 130
Toluene	<0.00201	U F1	0.0998	0.03634	F1	mg/Kg		36	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

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

Lab Sample ID: 890-2865-A-1-C MS

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1 F2	0.0998	0.03705	F1	mg/Kg		37	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.200	0.07196	F1	mg/Kg		36	70 - 130
o-Xylene	<0.00201	U F1 F2	0.0998	0.04226	F1	mg/Kg		42	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 890-2865-A-1-D MSD

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34107

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0996	0.04628	F1	mg/Kg		46	70 - 130	35	35
Toluene	<0.00201	U F1	0.0996	0.04928	F1	mg/Kg		49	70 - 130	30	35
Ethylbenzene	<0.00201	U F1 F2	0.0996	0.05680	F1 F2	mg/Kg		57	70 - 130	42	35
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.199	0.1146	F1 F2	mg/Kg		58	70 - 130	46	35
o-Xylene	<0.00201	U F1 F2	0.0996	0.06608	F1 F2	mg/Kg		66	70 - 130	44	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

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

Lab Sample ID: MB 880-33646/1-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33646

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		09/02/22 11:29	09/03/22 20:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/22 11:29	09/03/22 20:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:29	09/03/22 20:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	09/02/22 11:29	09/03/22 20:31	1
o-Terphenyl	121		70 - 130	09/02/22 11:29	09/03/22 20:31	1

Lab Sample ID: LCS 880-33646/2-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33646

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	867.1		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	989.5		mg/Kg		99	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

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

Lab Sample ID: LCS 880-33646/2-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33646

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	150	S1+	70 - 130
o-Terphenyl	151	S1+	70 - 130

Lab Sample ID: LCSD 880-33646/3-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33646

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1054		mg/Kg		105	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	1000	1053		mg/Kg		105	70 - 130	6	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	147	S1+	70 - 130
o-Terphenyl	152	S1+	70 - 130

Lab Sample ID: 890-2870-1 MS

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: H-1

Prep Type: Total/NA

Prep Batch: 33646

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	570.6	F1	mg/Kg		55	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	840.3		mg/Kg		82	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	74		70 - 130

Lab Sample ID: 890-2870-1 MSD

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: H-1

Prep Type: Total/NA

Prep Batch: 33646

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	<49.9	U F1	998	613.1	F1	mg/Kg		59	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	847.6		mg/Kg		83	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	75		70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33562/1-A

Matrix: Solid

Analysis Batch: 33926

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			09/08/22 21:14	1

Lab Sample ID: LCS 880-33562/2-A

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.9		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-33562/3-A

Matrix: Solid

Analysis Batch: 33926

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	252.9		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-2870-1 MS

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: H-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	9.15		251	273.3		mg/Kg		105	90 - 110

Lab Sample ID: 890-2870-1 MSD

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: H-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	9.15		251	272.8		mg/Kg		105	90 - 110	0	20

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

## GC VOA

## Prep Batch: 34107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2870-1	H-1	Total/NA	Solid	5035	
890-2870-2	H-2	Total/NA	Solid	5035	
890-2870-3	H-3	Total/NA	Solid	5035	
890-2870-4	H-4	Total/NA	Solid	5035	
890-2870-5	H-5	Total/NA	Solid	5035	
890-2870-6	H-6	Total/NA	Solid	5035	
MB 880-34107/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34107/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34107/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2865-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2865-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 34153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2870-1	H-1	Total/NA	Solid	8021B	34107
890-2870-2	H-2	Total/NA	Solid	8021B	34107
890-2870-3	H-3	Total/NA	Solid	8021B	34107
890-2870-4	H-4	Total/NA	Solid	8021B	34107
890-2870-5	H-5	Total/NA	Solid	8021B	34107
890-2870-6	H-6	Total/NA	Solid	8021B	34107
MB 880-34107/5-A	Method Blank	Total/NA	Solid	8021B	34107
LCS 880-34107/1-A	Lab Control Sample	Total/NA	Solid	8021B	34107
LCSD 880-34107/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34107
890-2865-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	34107
890-2865-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34107

## Analysis Batch: 34236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2870-1	H-1	Total/NA	Solid	Total BTEX	
890-2870-2	H-2	Total/NA	Solid	Total BTEX	
890-2870-3	H-3	Total/NA	Solid	Total BTEX	
890-2870-4	H-4	Total/NA	Solid	Total BTEX	
890-2870-5	H-5	Total/NA	Solid	Total BTEX	
890-2870-6	H-6	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 33646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2870-1	H-1	Total/NA	Solid	8015NM Prep	
890-2870-2	H-2	Total/NA	Solid	8015NM Prep	
890-2870-3	H-3	Total/NA	Solid	8015NM Prep	
890-2870-4	H-4	Total/NA	Solid	8015NM Prep	
890-2870-5	H-5	Total/NA	Solid	8015NM Prep	
890-2870-6	H-6	Total/NA	Solid	8015NM Prep	
MB 880-33646/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33646/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33646/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2870-1 MS	H-1	Total/NA	Solid	8015NM Prep	
890-2870-1 MSD	H-1	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

## GC Semi VOA

## Analysis Batch: 33680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2870-1	H-1	Total/NA	Solid	8015B NM	33646
890-2870-2	H-2	Total/NA	Solid	8015B NM	33646
890-2870-3	H-3	Total/NA	Solid	8015B NM	33646
890-2870-4	H-4	Total/NA	Solid	8015B NM	33646
890-2870-5	H-5	Total/NA	Solid	8015B NM	33646
890-2870-6	H-6	Total/NA	Solid	8015B NM	33646
MB 880-33646/1-A	Method Blank	Total/NA	Solid	8015B NM	33646
LCS 880-33646/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33646
LCSD 880-33646/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33646
890-2870-1 MS	H-1	Total/NA	Solid	8015B NM	33646
890-2870-1 MSD	H-1	Total/NA	Solid	8015B NM	33646

## Analysis Batch: 33847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2870-1	H-1	Total/NA	Solid	8015 NM	
890-2870-2	H-2	Total/NA	Solid	8015 NM	
890-2870-3	H-3	Total/NA	Solid	8015 NM	
890-2870-4	H-4	Total/NA	Solid	8015 NM	
890-2870-5	H-5	Total/NA	Solid	8015 NM	
890-2870-6	H-6	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 33562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2870-1	H-1	Soluble	Solid	DI Leach	
890-2870-2	H-2	Soluble	Solid	DI Leach	
890-2870-3	H-3	Soluble	Solid	DI Leach	
890-2870-4	H-4	Soluble	Solid	DI Leach	
890-2870-5	H-5	Soluble	Solid	DI Leach	
890-2870-6	H-6	Soluble	Solid	DI Leach	
MB 880-33562/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33562/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33562/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2870-1 MS	H-1	Soluble	Solid	DI Leach	
890-2870-1 MSD	H-1	Soluble	Solid	DI Leach	

## Analysis Batch: 33926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2870-1	H-1	Soluble	Solid	300.0	33562
890-2870-2	H-2	Soluble	Solid	300.0	33562
890-2870-3	H-3	Soluble	Solid	300.0	33562
890-2870-4	H-4	Soluble	Solid	300.0	33562
890-2870-5	H-5	Soluble	Solid	300.0	33562
890-2870-6	H-6	Soluble	Solid	300.0	33562
MB 880-33562/1-A	Method Blank	Soluble	Solid	300.0	33562
LCS 880-33562/2-A	Lab Control Sample	Soluble	Solid	300.0	33562
LCSD 880-33562/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33562
890-2870-1 MS	H-1	Soluble	Solid	300.0	33562
890-2870-1 MSD	H-1	Soluble	Solid	300.0	33562

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

## Client Sample ID: H-1

## Lab Sample ID: 890-2870-1

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/10/22 20:11
Total/NA	Analysis	Total BTEX		1	34236	AJ	EET MID	09/12/22 09:52
Total/NA	Analysis	8015 NM		1	33847	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/03/22 21:34
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		1	33926	CH	EET MID	09/08/22 21:29

## Client Sample ID: H-2

## Lab Sample ID: 890-2870-2

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/10/22 20:32
Total/NA	Analysis	Total BTEX		1	34236	AJ	EET MID	09/12/22 09:52
Total/NA	Analysis	8015 NM		1	33847	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/03/22 22:38
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		1	33926	CH	EET MID	09/08/22 21:44

## Client Sample ID: H-3

## Lab Sample ID: 890-2870-3

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/10/22 20:53
Total/NA	Analysis	Total BTEX		1	34236	AJ	EET MID	09/12/22 09:52
Total/NA	Analysis	8015 NM		1	33847	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/03/22 22:59
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		1	33926	CH	EET MID	09/08/22 21:49

## Client Sample ID: H-4

## Lab Sample ID: 890-2870-4

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/10/22 21:13
Total/NA	Analysis	Total BTEX		1	34236	AJ	EET MID	09/12/22 09:52

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

## Client Sample ID: H-4

## Lab Sample ID: 890-2870-4

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	33847	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/03/22 23:19
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		1	33926	CH	EET MID	09/08/22 21:53

## Client Sample ID: H-5

## Lab Sample ID: 890-2870-5

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/10/22 21:34
Total/NA	Analysis	Total BTEX		1	34236	AJ	EET MID	09/12/22 09:52
Total/NA	Analysis	8015 NM		1	33847	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/03/22 23:41
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		1	33926	CH	EET MID	09/08/22 21:58

## Client Sample ID: H-6

## Lab Sample ID: 890-2870-6

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/10/22 21:55
Total/NA	Analysis	Total BTEX		1	34236	AJ	EET MID	09/12/22 09:52
Total/NA	Analysis	8015 NM		1	33847	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/04/22 00:02
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		1	33926	CH	EET MID	09/08/22 22:13

## Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

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



## Method Summary

Client: Tetra Tech, Inc.

Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1

SDG: Eddy County NM

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

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

## Sample Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2870-1  
SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2870-1	H-1	Solid	08/31/22 00:00	08/31/22 16:33
890-2870-2	H-2	Solid	08/31/22 00:00	08/31/22 16:33
890-2870-3	H-3	Solid	08/31/22 00:00	08/31/22 16:33
890-2870-4	H-4	Solid	08/31/22 00:00	08/31/22 16:33
890-2870-5	H-5	Solid	08/31/22 00:00	08/31/22 16:33
890-2870-6	H-6	Solid	08/31/22 00:00	08/31/22 16:33

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### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

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

Page 1 of 1

[illegible]

ORIGINAL COPY

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2870-1

SDG Number: Eddy County NM

Login Number: 2870

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2870-1

SDG Number: Eddy County NM

Login Number: 2870

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 09/02/22 10:54 AM

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



## Environment Testing America

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-2871-1

Laboratory Sample Delivery Group: Eddy County NM  
Client Project/Site: Doc BHU State #1 2007 Release

**For:**

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

Attn: Brittany Long

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

Authorized for release by:

9/12/2022 9:19:30 AM

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?



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[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: Doc BHU State #1 2007 Release

Laboratory Job ID: 890-2871-1  
SDG: Eddy County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
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.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

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

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⌘	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

**Job ID: 890-2871-1****Laboratory: Eurofins Carlsbad****Narrative****Job Narrative  
890-2871-1****Receipt**

The samples were received on 8/31/2022 4:33 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34107 and analytical batch 880-34153 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: Surrogate recovery for the following samples were outside control limits: (LCS 880-33646/2-A) and (LCSD 880-33646/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The method blank for preparation batch 880-33646 and analytical batch 880-33680 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-33646 and analytical batch 880-33680 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**

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: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

Client Sample ID: AH-1 (0.0-1.0")

Lab Sample ID: 890-2871-1

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/10/22 22:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/09/22 12:37	09/10/22 22:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/09/22 12:37	09/10/22 22:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/09/22 12:37	09/10/22 22:15	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/09/22 12:37	09/10/22 22:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/09/22 12:37	09/10/22 22:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/09/22 12:37	09/10/22 22:15	1
1,4-Difluorobenzene (Surr)	74		70 - 130	09/09/22 12:37	09/10/22 22:15	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			09/12/22 09:52	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			09/06/22 13:04	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		09/02/22 11:29	09/04/22 00:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/04/22 00:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/04/22 00:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	09/02/22 11:29	09/04/22 00:23	1
o-Terphenyl	117		70 - 130	09/02/22 11:29	09/04/22 00:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	269		4.96		mg/Kg			09/08/22 22:18	1

Client Sample ID: AH-2 (0.0-1.0')

Lab Sample ID: 890-2871-2

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/10/22 22:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 22:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 22:35	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/09/22 12:37	09/10/22 22:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 22:35	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/09/22 12:37	09/10/22 22:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	09/09/22 12:37	09/10/22 22:35	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/09/22 12:37	09/10/22 22:35	1

Eurofins Carlsbad

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

Client Sample ID: AH-2 (0.0-1.0')

Lab Sample ID: 890-2871-2

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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			09/12/22 09:52	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			09/06/22 13:04	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		09/02/22 11:29	09/04/22 00:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/22 11:29	09/04/22 00:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:29	09/04/22 00:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				09/02/22 11:29	09/04/22 00:44	1
o-Terphenyl	110		70 - 130				09/02/22 11:29	09/04/22 00:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	157		24.9		mg/Kg			09/08/22 22:23	5

Client Sample ID: AH-2 (1.0-1.5')

Lab Sample ID: 890-2871-3

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/10/22 23:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 23:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 23:57	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/09/22 12:37	09/10/22 23:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 23:57	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/09/22 12:37	09/10/22 23:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				09/09/22 12:37	09/10/22 23:57	1
1,4-Difluorobenzene (Surr)	85		70 - 130				09/09/22 12:37	09/10/22 23:57	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/12/22 09:52	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			09/06/22 13:04	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		09/02/22 11:29	09/04/22 01:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/22 11:29	09/04/22 01:05	1

Eurofins Carlsbad

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

## Client Sample ID: AH-2 (1.0-1.5')

Lab Sample ID: 890-2871-3

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/02/22 11:29	09/04/22 01:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				09/02/22 11:29	09/04/22 01:05	1
o-Terphenyl	104		70 - 130				09/02/22 11:29	09/04/22 01:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127		25.2		mg/Kg			09/08/22 22:27	5

## Client Sample ID: AH-3 (0.0-1.0')

Lab Sample ID: 890-2871-4

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/11/22 00:18	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/09/22 12:37	09/11/22 00:18	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/09/22 12:37	09/11/22 00:18	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		09/09/22 12:37	09/11/22 00:18	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/09/22 12:37	09/11/22 00:18	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		09/09/22 12:37	09/11/22 00:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				09/09/22 12:37	09/11/22 00:18	1
1,4-Difluorobenzene (Surr)	85		70 - 130				09/09/22 12:37	09/11/22 00:18	1

## 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			09/12/22 09:52	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			09/06/22 13:04	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		09/02/22 11:29	09/04/22 01:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/04/22 01:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:29	09/04/22 01:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				09/02/22 11:29	09/04/22 01:26	1
o-Terphenyl	117		70 - 130				09/02/22 11:29	09/04/22 01:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.3		5.03		mg/Kg			09/08/22 22:32	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

Client Sample ID: AH-3 (1.0-1.5')

Lab Sample ID: 890-2871-5

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

## 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		09/09/22 12:37	09/11/22 00:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/11/22 00:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/11/22 00:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/09/22 12:37	09/11/22 00:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/11/22 00:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/09/22 12:37	09/11/22 00:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/09/22 12:37	09/11/22 00:38	1
1,4-Difluorobenzene (Surr)	80		70 - 130	09/09/22 12:37	09/11/22 00:38	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/12/22 09:52	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			09/06/22 13:04	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		09/02/22 11:29	09/04/22 02:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/22 11:29	09/04/22 02:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:29	09/04/22 02:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	09/02/22 11:29	09/04/22 02:08	1
o-Terphenyl	107		70 - 130	09/02/22 11:29	09/04/22 02:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.2		5.00		mg/Kg			09/08/22 22:37	1

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

## 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)
890-2865-A-1-C MS	Matrix Spike	85	92
890-2865-A-1-D MSD	Matrix Spike Duplicate	116	98
890-2871-1	AH-1 (0.0-1.0")	100	74
890-2871-2	AH-2 (0.0-1.0')	92	86
890-2871-3	AH-2 (1.0-1.5')	112	85
890-2871-4	AH-3 (0.0-1.0')	115	85
890-2871-5	AH-3 (1.0-1.5')	112	80
LCS 880-34107/1-A	Lab Control Sample	103	107
LCSD 880-34107/2-A	Lab Control Sample Dup	132 S1+	105
MB 880-34107/5-A	Method Blank	96	89
<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)
890-2870-A-1-D MS	Matrix Spike	85	74
890-2870-A-1-E MSD	Matrix Spike Duplicate	86	75
890-2871-1	AH-1 (0.0-1.0")	115	117
890-2871-2	AH-2 (0.0-1.0')	110	110
890-2871-3	AH-2 (1.0-1.5')	103	104
890-2871-4	AH-3 (0.0-1.0')	116	117
890-2871-5	AH-3 (1.0-1.5')	105	107
LCS 880-33646/2-A	Lab Control Sample	150 S1+	151 S1+
LCSD 880-33646/3-A	Lab Control Sample Dup	147 S1+	152 S1+
MB 880-33646/1-A	Method Blank	116	121
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

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

Lab Sample ID: MB 880-34107/5-A

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 19:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 19:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 19:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/09/22 12:37	09/10/22 19:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:37	09/10/22 19:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/09/22 12:37	09/10/22 19:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/09/22 12:37	09/10/22 19:08	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/09/22 12:37	09/10/22 19:08	1

Lab Sample ID: LCS 880-34107/1-A

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08977		mg/Kg		90	70 - 130
Toluene	0.100	0.08000		mg/Kg		80	70 - 130
Ethylbenzene	0.100	0.07969		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	0.200	0.1624		mg/Kg		81	70 - 130
o-Xylene	0.100	0.09238		mg/Kg		92	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-34107/2-A

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34107

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09121		mg/Kg		91	70 - 130	2	35
Toluene	0.100	0.08741		mg/Kg		87	70 - 130	9	35
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130	24	35
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130	26	35
o-Xylene	0.100	0.1206		mg/Kg		121	70 - 130	26	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-2865-A-1-C MS

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.0998	0.03247	F1	mg/Kg		33	70 - 130
Toluene	<0.00201	U F1	0.0998	0.03634	F1	mg/Kg		36	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

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

Lab Sample ID: 890-2865-A-1-C MS

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1 F2	0.0998	0.03705	F1	mg/Kg		37	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.200	0.07196	F1	mg/Kg		36	70 - 130
o-Xylene	<0.00201	U F1 F2	0.0998	0.04226	F1	mg/Kg		42	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 890-2865-A-1-D MSD

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34107

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0996	0.04628	F1	mg/Kg		46	70 - 130	35	35
Toluene	<0.00201	U F1	0.0996	0.04928	F1	mg/Kg		49	70 - 130	30	35
Ethylbenzene	<0.00201	U F1 F2	0.0996	0.05680	F1 F2	mg/Kg		57	70 - 130	42	35
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.199	0.1146	F1 F2	mg/Kg		58	70 - 130	46	35
o-Xylene	<0.00201	U F1 F2	0.0996	0.06608	F1 F2	mg/Kg		66	70 - 130	44	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

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

Lab Sample ID: MB 880-33646/1-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33646

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		09/02/22 11:29	09/03/22 20:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/22 11:29	09/03/22 20:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:29	09/03/22 20:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	09/02/22 11:29	09/03/22 20:31	1
o-Terphenyl	121		70 - 130	09/02/22 11:29	09/03/22 20:31	1

Lab Sample ID: LCS 880-33646/2-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33646

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	867.1		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	989.5		mg/Kg		99	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

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

Lab Sample ID: LCS 880-33646/2-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33646

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	150	S1+	70 - 130
o-Terphenyl	151	S1+	70 - 130

Lab Sample ID: LCSD 880-33646/3-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33646

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1054		mg/Kg		105	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	1000	1053		mg/Kg		105	70 - 130	6	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	147	S1+	70 - 130
o-Terphenyl	152	S1+	70 - 130

Lab Sample ID: 890-2870-A-1-D MS

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 33646

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	570.6	F1	mg/Kg		55	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	840.3		mg/Kg		82	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	74		70 - 130

Lab Sample ID: 890-2870-A-1-E MSD

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 33646

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	<49.9	U F1	998	613.1	F1	mg/Kg		59	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	847.6		mg/Kg		83	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	75		70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33562/1-A

Matrix: Solid

Analysis Batch: 33926

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			09/08/22 21:14	1

Lab Sample ID: LCS 880-33562/2-A

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.9		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-33562/3-A

Matrix: Solid

Analysis Batch: 33926

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	252.9		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-2871-5 MS

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: AH-3 (1.0-1.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.2		250	280.2		mg/Kg		106	90 - 110

Lab Sample ID: 890-2871-5 MSD

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: AH-3 (1.0-1.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	15.2		250	279.8		mg/Kg		106	90 - 110	0	20

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

## GC VOA

## Prep Batch: 34107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2871-1	AH-1 (0.0-1.0")	Total/NA	Solid	5035	
890-2871-2	AH-2 (0.0-1.0")	Total/NA	Solid	5035	
890-2871-3	AH-2 (1.0-1.5')	Total/NA	Solid	5035	
890-2871-4	AH-3 (0.0-1.0")	Total/NA	Solid	5035	
890-2871-5	AH-3 (1.0-1.5')	Total/NA	Solid	5035	
MB 880-34107/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34107/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34107/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2865-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2865-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 34153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2871-1	AH-1 (0.0-1.0")	Total/NA	Solid	8021B	34107
890-2871-2	AH-2 (0.0-1.0")	Total/NA	Solid	8021B	34107
890-2871-3	AH-2 (1.0-1.5')	Total/NA	Solid	8021B	34107
890-2871-4	AH-3 (0.0-1.0")	Total/NA	Solid	8021B	34107
890-2871-5	AH-3 (1.0-1.5')	Total/NA	Solid	8021B	34107
MB 880-34107/5-A	Method Blank	Total/NA	Solid	8021B	34107
LCS 880-34107/1-A	Lab Control Sample	Total/NA	Solid	8021B	34107
LCSD 880-34107/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34107
890-2865-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	34107
890-2865-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34107

## Analysis Batch: 34237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2871-1	AH-1 (0.0-1.0")	Total/NA	Solid	Total BTEX	
890-2871-2	AH-2 (0.0-1.0")	Total/NA	Solid	Total BTEX	
890-2871-3	AH-2 (1.0-1.5')	Total/NA	Solid	Total BTEX	
890-2871-4	AH-3 (0.0-1.0")	Total/NA	Solid	Total BTEX	
890-2871-5	AH-3 (1.0-1.5')	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 33646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2871-1	AH-1 (0.0-1.0")	Total/NA	Solid	8015NM Prep	
890-2871-2	AH-2 (0.0-1.0")	Total/NA	Solid	8015NM Prep	
890-2871-3	AH-2 (1.0-1.5')	Total/NA	Solid	8015NM Prep	
890-2871-4	AH-3 (0.0-1.0")	Total/NA	Solid	8015NM Prep	
890-2871-5	AH-3 (1.0-1.5')	Total/NA	Solid	8015NM Prep	
MB 880-33646/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33646/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33646/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2870-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2870-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 33680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2871-1	AH-1 (0.0-1.0")	Total/NA	Solid	8015B NM	33646
890-2871-2	AH-2 (0.0-1.0")	Total/NA	Solid	8015B NM	33646

Eurofins Carlsbad

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

## GC Semi VOA (Continued)

## Analysis Batch: 33680 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2871-3	AH-2 (1.0-1.5')	Total/NA	Solid	8015B NM	33646
890-2871-4	AH-3 (0.0-1.0')	Total/NA	Solid	8015B NM	33646
890-2871-5	AH-3 (1.0-1.5')	Total/NA	Solid	8015B NM	33646
MB 880-33646/1-A	Method Blank	Total/NA	Solid	8015B NM	33646
LCS 880-33646/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33646
LCSD 880-33646/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33646
890-2870-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	33646
890-2870-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33646

## Analysis Batch: 33848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2871-1	AH-1 (0.0-1.0")	Total/NA	Solid	8015 NM	
890-2871-2	AH-2 (0.0-1.0')	Total/NA	Solid	8015 NM	
890-2871-3	AH-2 (1.0-1.5')	Total/NA	Solid	8015 NM	
890-2871-4	AH-3 (0.0-1.0')	Total/NA	Solid	8015 NM	
890-2871-5	AH-3 (1.0-1.5')	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 33562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2871-1	AH-1 (0.0-1.0")	Soluble	Solid	DI Leach	
890-2871-2	AH-2 (0.0-1.0')	Soluble	Solid	DI Leach	
890-2871-3	AH-2 (1.0-1.5')	Soluble	Solid	DI Leach	
890-2871-4	AH-3 (0.0-1.0')	Soluble	Solid	DI Leach	
890-2871-5	AH-3 (1.0-1.5')	Soluble	Solid	DI Leach	
MB 880-33562/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33562/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33562/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2871-5 MS	AH-3 (1.0-1.5')	Soluble	Solid	DI Leach	
890-2871-5 MSD	AH-3 (1.0-1.5')	Soluble	Solid	DI Leach	

## Analysis Batch: 33926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2871-1	AH-1 (0.0-1.0")	Soluble	Solid	300.0	33562
890-2871-2	AH-2 (0.0-1.0')	Soluble	Solid	300.0	33562
890-2871-3	AH-2 (1.0-1.5')	Soluble	Solid	300.0	33562
890-2871-4	AH-3 (0.0-1.0')	Soluble	Solid	300.0	33562
890-2871-5	AH-3 (1.0-1.5')	Soluble	Solid	300.0	33562
MB 880-33562/1-A	Method Blank	Soluble	Solid	300.0	33562
LCS 880-33562/2-A	Lab Control Sample	Soluble	Solid	300.0	33562
LCSD 880-33562/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33562
890-2871-5 MS	AH-3 (1.0-1.5')	Soluble	Solid	300.0	33562
890-2871-5 MSD	AH-3 (1.0-1.5')	Soluble	Solid	300.0	33562

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

Client Sample ID: AH-1 (0.0-1.0")

Lab Sample ID: 890-2871-1

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/10/22 22:15
Total/NA	Analysis	Total BTEX		1	34237	AJ	EET MID	09/12/22 09:52
Total/NA	Analysis	8015 NM		1	33848	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/04/22 00:23
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		1	33926	CH	EET MID	09/08/22 22:18

Client Sample ID: AH-2 (0.0-1.0")

Lab Sample ID: 890-2871-2

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/10/22 22:35
Total/NA	Analysis	Total BTEX		1	34237	AJ	EET MID	09/12/22 09:52
Total/NA	Analysis	8015 NM		1	33848	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/04/22 00:44
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		5	33926	CH	EET MID	09/08/22 22:23

Client Sample ID: AH-2 (1.0-1.5")

Lab Sample ID: 890-2871-3

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/10/22 23:57
Total/NA	Analysis	Total BTEX		1	34237	AJ	EET MID	09/12/22 09:52
Total/NA	Analysis	8015 NM		1	33848	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/04/22 01:05
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		5	33926	CH	EET MID	09/08/22 22:27

Client Sample ID: AH-3 (0.0-1.0")

Lab Sample ID: 890-2871-4

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/11/22 00:18
Total/NA	Analysis	Total BTEX		1	34237	AJ	EET MID	09/12/22 09:52

Eurofins Carlsbad

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

Client Sample ID: AH-3 (0.0-1.0')

Lab Sample ID: 890-2871-4

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	33848	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/04/22 01:26
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		1	33926	CH	EET MID	09/08/22 22:32

Client Sample ID: AH-3 (1.0-1.5')

Lab Sample ID: 890-2871-5

Date Collected: 08/31/22 00:00

Matrix: Solid

Date Received: 08/31/22 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34107	MR	EET MID	09/09/22 12:37
Total/NA	Analysis	8021B		1	34153	MR	EET MID	09/11/22 00:38
Total/NA	Analysis	Total BTEX		1	34237	AJ	EET MID	09/12/22 09:52
Total/NA	Analysis	8015 NM		1	33848	SM	EET MID	09/06/22 13:04
Total/NA	Prep	8015NM Prep			33646	DM	EET MID	09/02/22 11:29
Total/NA	Analysis	8015B NM		1	33680	SM	EET MID	09/04/22 02:08
Soluble	Leach	DI Leach			33562	KS	EET MID	09/01/22 15:16
Soluble	Analysis	300.0		1	33926	CH	EET MID	09/08/22 22:37

## Laboratory References:

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



Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

## Method Summary

Client: Tetra Tech, Inc.

Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1

SDG: Eddy County NM

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

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

## Sample Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2871-1  
SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2871-1	AH-1 (0.0-1.0")	Solid	08/31/22 00:00	08/31/22 16:33
890-2871-2	AH-2 (0.0-1.0')	Solid	08/31/22 00:00	08/31/22 16:33
890-2871-3	AH-2 (1.0-1.5')	Solid	08/31/22 00:00	08/31/22 16:33
890-2871-4	AH-3 (0.0-1.0')	Solid	08/31/22 00:00	08/31/22 16:33
890-2871-5	AH-3 (1.0-1.5')	Solid	08/31/22 00:00	08/31/22 16:33

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## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2871-1

SDG Number: Eddy County NM

Login Number: 2871

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2871-1

SDG Number: Eddy County NM

Login Number: 2871

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 09/02/22 10:54 AM

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



## Environment Testing America

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-2906-1

Laboratory Sample Delivery Group: Eddy County NM  
Client Project/Site: Doc BHU State #1 2007 Release  
Revision: 1

**For:**

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

Attn: Brittany Long

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

Authorized for release by:  
9/23/2022 2:52:08 PM

Jessica Kramer, Project Manager  
(432)704-5440

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

#### LINKS

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

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

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Laboratory Job ID: 890-2906-1  
SDG: Eddy County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Qualifiers

## GC VOA

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

## GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

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

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⌘	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

**Job ID: 890-2906-1**

**Laboratory: Eurofins Carlsbad**

### Narrative

#### Job Narrative 890-2906-1

### REVISION

The report being provided is a revision of the original report sent on 9/21/2022. The report (revision 1) is being revised due to Per client email, requesting chloride re run.

Report revision history

### Receipt

The samples were received on 9/8/2022 3:06 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 27.0°C

### GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34693 and analytical batch 880-34745 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: Surrogate recovery for the following sample was outside control limits: (LCSD 880-34330/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-34330 and analytical batch 880-34169 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

### HPLC/IC

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



## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-1 (0-1')

Lab Sample ID: 890-2906-1

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 0 - 1

## 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		09/16/22 16:15	09/20/22 18:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 18:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 18:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/20/22 18:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 18:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/20/22 18:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	09/16/22 16:15	09/20/22 18:06	1
1,4-Difluorobenzene (Surr)	104		70 - 130	09/16/22 16:15	09/20/22 18:06	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 21:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/12/22 18:32	09/12/22 21:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 18:32	09/12/22 21:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/12/22 18:32	09/12/22 21:45	1
o-Terphenyl	94		70 - 130	09/12/22 18:32	09/12/22 21:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	591		4.98		mg/Kg			09/23/22 10:30	1

Client Sample ID: T-1 (2')

Lab Sample ID: 890-2906-2

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 2

## 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		09/16/22 16:15	09/20/22 18:26	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/16/22 16:15	09/20/22 18:26	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/16/22 16:15	09/20/22 18:26	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/16/22 16:15	09/20/22 18:26	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/16/22 16:15	09/20/22 18:26	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/16/22 16:15	09/20/22 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	09/16/22 16:15	09/20/22 18:26	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-1 (2')

Lab Sample ID: 890-2906-2

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	09/16/22 16:15	09/20/22 18:26	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 22:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/12/22 18:32	09/12/22 22:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 18:32	09/12/22 22:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				09/12/22 18:32	09/12/22 22:50	1
o-Terphenyl	107		70 - 130				09/12/22 18:32	09/12/22 22:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	470		5.04		mg/Kg			09/14/22 04:17	1

Client Sample ID: T-1 (3')

Lab Sample ID: 890-2906-3

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 3

## 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		09/16/22 16:15	09/20/22 18:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 18:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 18:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/20/22 18:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 18:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/20/22 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/16/22 16:15	09/20/22 18:47	1
1,4-Difluorobenzene (Surr)	106		70 - 130	09/16/22 16:15	09/20/22 18:47	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/19/22 09:42	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			09/13/22 09:59	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-1 (3')

Lab Sample ID: 890-2906-3

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 3

## 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		09/12/22 18:32	09/12/22 23:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/12/22 18:32	09/12/22 23:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/22 18:32	09/12/22 23:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/12/22 18:32	09/12/22 23:11	1
o-Terphenyl	92		70 - 130				09/12/22 18:32	09/12/22 23:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	498		5.00		mg/Kg			09/14/22 04:22	1

Client Sample ID: T-1 (4')

Lab Sample ID: 890-2906-4

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 4

## 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		09/16/22 16:15	09/20/22 19:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 19:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 19:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/20/22 19:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 19:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/20/22 19:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				09/16/22 16:15	09/20/22 19:07	1
1,4-Difluorobenzene (Surr)	107		70 - 130				09/16/22 16:15	09/20/22 19:07	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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 23:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/12/22 18:32	09/12/22 23:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 18:32	09/12/22 23:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/12/22 18:32	09/12/22 23:32	1
o-Terphenyl	93		70 - 130				09/12/22 18:32	09/12/22 23:32	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Client Sample ID: T-1 (4')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

Sample Depth: 4

## Lab Sample ID: 890-2906-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	471		5.00		mg/Kg			09/14/22 04:26	1

## Client Sample ID: T-1 (5')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

Sample Depth: 5

## Lab Sample ID: 890-2906-5

Matrix: Solid

## 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		09/16/22 16:15	09/20/22 19:27	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/16/22 16:15	09/20/22 19:27	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/16/22 16:15	09/20/22 19:27	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/16/22 16:15	09/20/22 19:27	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/16/22 16:15	09/20/22 19:27	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/16/22 16:15	09/20/22 19:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				09/16/22 16:15	09/20/22 19:27	1
1,4-Difluorobenzene (Surr)	106		70 - 130				09/16/22 16:15	09/20/22 19:27	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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 23:54	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		09/12/22 18:32	09/12/22 23:54	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/12/22 18:32	09/12/22 23:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/12/22 18:32	09/12/22 23:54	1
o-Terphenyl	93		70 - 130				09/12/22 18:32	09/12/22 23:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	231		4.99		mg/Kg			09/14/22 04:31	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-2 (0-1')

Lab Sample ID: 890-2906-6

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 0 - 1

## 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		09/16/22 16:15	09/20/22 19:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 19:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 19:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/20/22 19:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 19:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/20/22 19:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/16/22 16:15	09/20/22 19:48	1
1,4-Difluorobenzene (Surr)	106		70 - 130	09/16/22 16:15	09/20/22 19:48	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/13/22 00:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		09/12/22 18:32	09/13/22 00:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/12/22 18:32	09/13/22 00:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	09/12/22 18:32	09/13/22 00:15	1
o-Terphenyl	95		70 - 130	09/12/22 18:32	09/13/22 00:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	352		5.00		mg/Kg			09/14/22 04:46	1

Client Sample ID: T-2 (2')

Lab Sample ID: 890-2906-7

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 2

## 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		09/16/22 16:15	09/20/22 20:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 20:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 20:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/20/22 20:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 20:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/20/22 20:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	09/16/22 16:15	09/20/22 20:08	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-2 (2')

Lab Sample ID: 890-2906-7

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	114		70 - 130	09/16/22 16:15	09/20/22 20:08	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/13/22 00:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/12/22 18:32	09/13/22 00:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/22 18:32	09/13/22 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				09/12/22 18:32	09/13/22 00:36	1
o-Terphenyl	93		70 - 130				09/12/22 18:32	09/13/22 00:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	112		4.96		mg/Kg			09/14/22 04:51	1

Client Sample ID: T-2 (3')

Lab Sample ID: 890-2906-8

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 3

## 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		09/16/22 16:15	09/20/22 20:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 20:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 20:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/20/22 20:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 20:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/20/22 20:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	09/16/22 16:15	09/20/22 20:29	1
1,4-Difluorobenzene (Surr)	111		70 - 130	09/16/22 16:15	09/20/22 20:29	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/19/22 09:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<5.00	U	5.00		mg/Kg			09/13/22 09:59	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-2 (3')

Lab Sample ID: 890-2906-8

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 3

## 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	<5.00	U	5.00		mg/Kg		09/12/22 18:32	09/13/22 00:57	1
Diesel Range Organics (Over C10-C28)	<5.00	U *1	5.00		mg/Kg		09/12/22 18:32	09/13/22 00:57	1
Oil Range Organics (Over C28-C36)	<5.00	U	5.00		mg/Kg		09/12/22 18:32	09/13/22 00:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				09/12/22 18:32	09/13/22 00:57	1
o-Terphenyl	93		70 - 130				09/12/22 18:32	09/13/22 00:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84.4		5.00		mg/Kg			09/14/22 04:56	1

Client Sample ID: T-2 (4')

Lab Sample ID: 890-2906-9

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 4

## 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		09/16/22 16:15	09/20/22 20:49	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/16/22 16:15	09/20/22 20:49	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/16/22 16:15	09/20/22 20:49	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		09/16/22 16:15	09/20/22 20:49	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/16/22 16:15	09/20/22 20:49	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		09/16/22 16:15	09/20/22 20:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				09/16/22 16:15	09/20/22 20:49	1
1,4-Difluorobenzene (Surr)	106		70 - 130				09/16/22 16:15	09/20/22 20:49	1

## 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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 20:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/12/22 18:32	09/12/22 20:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 18:32	09/12/22 20:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				09/12/22 18:32	09/12/22 20:41	1
o-Terphenyl	88		70 - 130				09/12/22 18:32	09/12/22 20:41	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Client Sample ID: T-2 (4')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

Sample Depth: 4

## Lab Sample ID: 890-2906-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	192		5.04		mg/Kg			09/14/22 05:01	1

## Client Sample ID: T-2 (5')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

Sample Depth: 5

## Lab Sample ID: 890-2906-10

Matrix: Solid

## 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		09/16/22 16:15	09/20/22 21:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 21:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 21:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/20/22 21:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/20/22 21:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/20/22 21:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				09/16/22 16:15	09/20/22 21:09	1
1,4-Difluorobenzene (Surr)	102		70 - 130				09/16/22 16:15	09/20/22 21:09	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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 21:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/12/22 18:32	09/12/22 21:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 18:32	09/12/22 21:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				09/12/22 18:32	09/12/22 21:02	1
o-Terphenyl	87		70 - 130				09/12/22 18:32	09/12/22 21:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	124		5.03		mg/Kg			09/14/22 05:05	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-2 (6')

Lab Sample ID: 890-2906-11

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 6

## 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		09/16/22 16:15	09/20/22 23:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 23:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 23:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/16/22 16:15	09/20/22 23:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 23:00	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/16/22 16:15	09/20/22 23:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/16/22 16:15	09/20/22 23:00	1
1,4-Difluorobenzene (Surr)	106		70 - 130	09/16/22 16:15	09/20/22 23:00	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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 21:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/12/22 18:32	09/12/22 21:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 18:32	09/12/22 21:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	09/12/22 18:32	09/12/22 21:24	1
o-Terphenyl	100		70 - 130	09/12/22 18:32	09/12/22 21:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84.4		5.02		mg/Kg			09/14/22 05:10	1

Client Sample ID: T-3 (0-1')

Lab Sample ID: 890-2906-12

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 0 - 1

## 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		09/16/22 16:15	09/20/22 23:20	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/16/22 16:15	09/20/22 23:20	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/16/22 16:15	09/20/22 23:20	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/16/22 16:15	09/20/22 23:20	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/16/22 16:15	09/20/22 23:20	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/16/22 16:15	09/20/22 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	09/16/22 16:15	09/20/22 23:20	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-3 (0-1')

Lab Sample ID: 890-2906-12

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 0 - 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	110		70 - 130	09/16/22 16:15	09/20/22 23:20	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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 21:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		09/12/22 18:32	09/12/22 21:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/12/22 18:32	09/12/22 21:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130				09/12/22 18:32	09/12/22 21:45	1
o-Terphenyl	86		70 - 130				09/12/22 18:32	09/12/22 21:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	142		4.97		mg/Kg			09/14/22 05:25	1

Client Sample ID: T-3 (2')

Lab Sample ID: 890-2906-13

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 2

## 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		09/16/22 16:15	09/20/22 23:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 23:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 23:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/20/22 23:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 23:41	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/20/22 23:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	09/16/22 16:15	09/20/22 23:41	1
1,4-Difluorobenzene (Surr)	107		70 - 130	09/16/22 16:15	09/20/22 23:41	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/19/22 09:42	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			09/13/22 09:59	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Client Sample ID: T-3 (2')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

Sample Depth: 2

## Lab Sample ID: 890-2906-13

Matrix: Solid

## 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		09/12/22 18:32	09/12/22 22:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/12/22 18:32	09/12/22 22:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 18:32	09/12/22 22:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/12/22 18:32	09/12/22 22:06	1
o-Terphenyl	101		70 - 130				09/12/22 18:32	09/12/22 22:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	116		4.99		mg/Kg			09/14/22 05:30	1

## Client Sample ID: T-3 (3')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

Sample Depth: 3

## Lab Sample ID: 890-2906-14

Matrix: Solid

## 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		09/16/22 16:15	09/21/22 00:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/21/22 00:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/21/22 00:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/21/22 00:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/21/22 00:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/21/22 00:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				09/16/22 16:15	09/21/22 00:01	1
1,4-Difluorobenzene (Surr)	109		70 - 130				09/16/22 16:15	09/21/22 00:01	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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 22:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/12/22 18:32	09/12/22 22:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/22 18:32	09/12/22 22:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				09/12/22 18:32	09/12/22 22:28	1
o-Terphenyl	94		70 - 130				09/12/22 18:32	09/12/22 22:28	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Client Sample ID: T-3 (3')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

Sample Depth: 3

## Lab Sample ID: 890-2906-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	105		5.02		mg/Kg			09/14/22 05:44	1

## Client Sample ID: T-3 (4')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

Sample Depth: 4

## Lab Sample ID: 890-2906-15

Matrix: Solid

## 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		09/16/22 16:15	09/21/22 00:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 00:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 00:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/21/22 00:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 00:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/21/22 00:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				09/16/22 16:15	09/21/22 00:21	1
1,4-Difluorobenzene (Surr)	111		70 - 130				09/16/22 16:15	09/21/22 00:21	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 22:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/12/22 18:32	09/12/22 22:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 18:32	09/12/22 22:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				09/12/22 18:32	09/12/22 22:50	1
o-Terphenyl	79		70 - 130				09/12/22 18:32	09/12/22 22:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	298		24.9		mg/Kg			09/14/22 05:49	5

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-3 (5')

Lab Sample ID: 890-2906-16

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 5

## 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		09/16/22 16:15	09/21/22 00:42	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/16/22 16:15	09/21/22 00:42	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/16/22 16:15	09/21/22 00:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/16/22 16:15	09/21/22 00:42	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/16/22 16:15	09/21/22 00:42	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/16/22 16:15	09/21/22 00:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	09/16/22 16:15	09/21/22 00:42	1
1,4-Difluorobenzene (Surr)	106		70 - 130	09/16/22 16:15	09/21/22 00:42	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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 23:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/12/22 18:32	09/12/22 23:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/22 18:32	09/12/22 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	09/12/22 18:32	09/12/22 23:11	1
o-Terphenyl	86		70 - 130	09/12/22 18:32	09/12/22 23:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	266		5.00		mg/Kg			09/14/22 05:54	1

Client Sample ID: T-3 (6')

Lab Sample ID: 890-2906-17

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 6

## 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		09/16/22 16:15	09/21/22 01:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 01:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 01:02	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/16/22 16:15	09/21/22 01:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 01:02	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/16/22 16:15	09/21/22 01:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	09/16/22 16:15	09/21/22 01:02	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-3 (6')

Lab Sample ID: 890-2906-17

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130	09/16/22 16:15	09/21/22 01:02	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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/12/22 23:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/12/22 18:32	09/12/22 23:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/22 18:32	09/12/22 23:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				09/12/22 18:32	09/12/22 23:32	1
o-Terphenyl	84		70 - 130				09/12/22 18:32	09/12/22 23:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	204		5.03		mg/Kg			09/14/22 05:59	1

Client Sample ID: T-4 (1')

Lab Sample ID: 890-2906-18

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 1

## 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		09/16/22 16:15	09/21/22 01:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 01:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 01:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/21/22 01:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 01:23	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/21/22 01:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/16/22 16:15	09/21/22 01:23	1
1,4-Difluorobenzene (Surr)	107		70 - 130	09/16/22 16:15	09/21/22 01:23	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/19/22 09:42	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			09/13/22 09:59	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-4 (1')

Lab Sample ID: 890-2906-18

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 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		09/12/22 18:32	09/12/22 23:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/12/22 18:32	09/12/22 23:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 18:32	09/12/22 23:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				09/12/22 18:32	09/12/22 23:54	1
o-Terphenyl	92		70 - 130				09/12/22 18:32	09/12/22 23:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.4		5.04		mg/Kg			09/14/22 06:04	1

Client Sample ID: T-4 (2')

Lab Sample ID: 890-2906-19

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 2

## 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		09/16/22 16:15	09/21/22 01:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/21/22 01:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/21/22 01:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/21/22 01:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:15	09/21/22 01:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/16/22 16:15	09/21/22 01:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				09/16/22 16:15	09/21/22 01:43	1
1,4-Difluorobenzene (Surr)	105		70 - 130				09/16/22 16:15	09/21/22 01:43	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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/13/22 00:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		09/12/22 18:32	09/13/22 00:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/12/22 18:32	09/13/22 00:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				09/12/22 18:32	09/13/22 00:15	1
o-Terphenyl	90		70 - 130				09/12/22 18:32	09/13/22 00:15	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Client Sample ID: T-4 (2')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

Sample Depth: 2

## Lab Sample ID: 890-2906-19

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.2		4.96		mg/Kg			09/14/22 06:08	1

## Client Sample ID: T-4 (3')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

Sample Depth: 3

## Lab Sample ID: 890-2906-20

Matrix: Solid

## 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		09/16/22 16:15	09/21/22 02:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 02:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 02:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/21/22 02:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/21/22 02:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/16/22 16:15	09/21/22 02:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130				09/16/22 16:15	09/21/22 02:03	1
1,4-Difluorobenzene (Surr)	111		70 - 130				09/16/22 16:15	09/21/22 02:03	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 18:32	09/13/22 00:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/12/22 18:32	09/13/22 00:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 18:32	09/13/22 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				09/12/22 18:32	09/13/22 00:36	1
o-Terphenyl	93		70 - 130				09/12/22 18:32	09/13/22 00:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	128		5.03		mg/Kg			09/14/22 06:13	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-4 (4')

Lab Sample ID: 890-2906-21

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 4

## 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		09/16/22 16:25	09/19/22 07:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 07:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 07:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/16/22 16:25	09/19/22 07:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 07:35	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/16/22 16:25	09/19/22 07:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/16/22 16:25	09/19/22 07:35	1
1,4-Difluorobenzene (Surr)	110		70 - 130	09/16/22 16:25	09/19/22 07:35	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 08:43	09/12/22 16:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/12/22 08:43	09/12/22 16:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/22 08:43	09/12/22 16:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	09/12/22 08:43	09/12/22 16:45	1
o-Terphenyl	94		70 - 130	09/12/22 08:43	09/12/22 16:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	124		5.03		mg/Kg			09/13/22 17:03	1

Client Sample ID: T-4 (5')

Lab Sample ID: 890-2906-22

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 5

## 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		09/16/22 16:25	09/19/22 07:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:25	09/19/22 07:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:25	09/19/22 07:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/16/22 16:25	09/19/22 07:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/16/22 16:25	09/19/22 07:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/16/22 16:25	09/19/22 07:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/16/22 16:25	09/19/22 07:56	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-4 (5')

Lab Sample ID: 890-2906-22

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Sample Depth: 5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	107		70 - 130	09/16/22 16:25	09/19/22 07:56	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			09/19/22 09:42	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			09/13/22 09:59	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		09/12/22 08:43	09/12/22 17:06	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/12/22 08:43	09/12/22 17:06	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/12/22 08:43	09/12/22 17:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				09/12/22 08:43	09/12/22 17:06	1
o-Terphenyl	95		70 - 130				09/12/22 08:43	09/12/22 17:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	169		5.05		mg/Kg			09/13/22 17:08	1

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-19317-A-1-G MS	Matrix Spike	108	94
880-19317-A-1-H MSD	Matrix Spike Duplicate	106	99
890-2906-1	T-1 (0-1')	94	104
890-2906-1 MS	T-1 (0-1')	108	97
890-2906-1 MSD	T-1 (0-1')	90	110
890-2906-2	T-1 (2')	86	109
890-2906-3	T-1 (3')	98	106
890-2906-4	T-1 (4')	109	107
890-2906-5	T-1 (5')	114	106
890-2906-6	T-2 (0-1')	104	106
890-2906-7	T-2 (2')	90	114
890-2906-8	T-2 (3')	90	111
890-2906-9	T-2 (4')	110	106
890-2906-10	T-2 (5')	107	102
890-2906-11	T-2 (6')	100	106
890-2906-12	T-3 (0-1')	94	110
890-2906-13	T-3 (2')	110	107
890-2906-14	T-3 (3')	102	109
890-2906-15	T-3 (4')	94	111
890-2906-16	T-3 (5')	111	106
890-2906-17	T-3 (6')	90	111
890-2906-18	T-4 (1')	112	107
890-2906-19	T-4 (2')	96	105
890-2906-20	T-4 (3')	100	111
890-2906-21	T-4 (4')	104	110
890-2906-22	T-4 (5')	100	107
LCS 880-34692/1-A	Lab Control Sample	88	104
LCS 880-34693/1-A	Lab Control Sample	107	98
LCSD 880-34692/2-A	Lab Control Sample Dup	82	109
LCSD 880-34693/2-A	Lab Control Sample Dup	106	99
MB 880-34410/5-B	Method Blank	104	117
MB 880-34692/5-A	Method Blank	102	116
MB 880-34693/5-A	Method Blank	101	112

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-2904-A-1-E MS	Matrix Spike	111	93
890-2904-A-1-F MSD	Matrix Spike Duplicate	114	95
890-2906-1	T-1 (0-1')	107	94
890-2906-1 MS	T-1 (0-1')	123	94
890-2906-1 MSD	T-1 (0-1')	126	93
890-2906-2	T-1 (2')	121	107

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# Surrogate Summary

Client: Tetra Tech, Inc.

Job ID: 890-2906-1

Project/Site: Doc BHU State #1 2007 Release

SDG: Eddy County NM

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)**
**Matrix: Solid**
**Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2906-3	T-1 (3')	104	92
890-2906-4	T-1 (4')	104	93
890-2906-5	T-1 (5')	104	93
890-2906-6	T-2 (0-1')	109	95
890-2906-7	T-2 (2')	107	93
890-2906-8	T-2 (3')	108	93
890-2906-9	T-2 (4')	87	88
890-2906-10	T-2 (5')	87	87
890-2906-11	T-2 (6')	103	100
890-2906-12	T-3 (0-1')	85	86
890-2906-13	T-3 (2')	106	101
890-2906-14	T-3 (3')	98	94
890-2906-15	T-3 (4')	79	79
890-2906-16	T-3 (5')	85	86
890-2906-17	T-3 (6')	83	84
890-2906-18	T-4 (1')	91	92
890-2906-19	T-4 (2')	91	90
890-2906-20	T-4 (3')	93	93
890-2906-21	T-4 (4')	101	94
890-2906-22	T-4 (5')	100	95
LCS 880-34180/2-A	Lab Control Sample	117	117
LCS 880-34330/2-A	Lab Control Sample	106	97
LCSD 880-34180/3-A	Lab Control Sample Dup	119	121
LCSD 880-34330/3-A	Lab Control Sample Dup	132 S1+	136 S1+
MB 880-34180/1-A	Method Blank	106	105
MB 880-34330/1-A	Method Blank	110	100

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl



## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

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

Lab Sample ID: MB 880-34410/5-B

Matrix: Solid

Analysis Batch: 34745

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34410

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/22 14:00	09/18/22 17:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/22 14:00	09/18/22 17:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/22 14:00	09/18/22 17:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/13/22 14:00	09/18/22 17:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/22 14:00	09/18/22 17:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/13/22 14:00	09/18/22 17:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/13/22 14:00	09/18/22 17:48	1
1,4-Difluorobenzene (Surr)	117		70 - 130	09/13/22 14:00	09/18/22 17:48	1

Lab Sample ID: MB 880-34692/5-A

Matrix: Solid

Analysis Batch: 34895

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/16/22 16:15	09/20/22 17:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	09/16/22 16:15	09/20/22 17:37	1
1,4-Difluorobenzene (Surr)	116		70 - 130	09/16/22 16:15	09/20/22 17:37	1

Lab Sample ID: LCS 880-34692/1-A

Matrix: Solid

Analysis Batch: 34895

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09904		mg/Kg		99	70 - 130
Toluene	0.100	0.08531		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.08482		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1771		mg/Kg		89	70 - 130
o-Xylene	0.100	0.08767		mg/Kg		88	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-34692/2-A

Matrix: Solid

Analysis Batch: 34895

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34692

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1081		mg/Kg		108	70 - 130	9	35

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

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

Lab Sample ID: LCSD 880-34692/2-A

Matrix: Solid

Analysis Batch: 34895

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34692

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.08669		mg/Kg		87	70 - 130	2	35
Ethylbenzene	0.100	0.08401		mg/Kg		84	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1709		mg/Kg		85	70 - 130	4	35
o-Xylene	0.100	0.08452		mg/Kg		85	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 890-2906-1 MS

Matrix: Solid

Analysis Batch: 34895

Client Sample ID: T-1 (0-1')

Prep Type: Total/NA

Prep Batch: 34692

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.07725		mg/Kg		77	70 - 130
Toluene	<0.00200	U	0.0998	0.08024		mg/Kg		80	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.07854		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1655		mg/Kg		83	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08656		mg/Kg		87	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 890-2906-1 MSD

Matrix: Solid

Analysis Batch: 34895

Client Sample ID: T-1 (0-1')

Prep Type: Total/NA

Prep Batch: 34692

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.101	0.09161		mg/Kg		91	70 - 130	17	35
Toluene	<0.00200	U	0.101	0.07345		mg/Kg		73	70 - 130	9	35
Ethylbenzene	<0.00200	U	0.101	0.07388		mg/Kg		73	70 - 130	6	35
m-Xylene & p-Xylene	<0.00399	U	0.202	0.1529		mg/Kg		76	70 - 130	8	35
o-Xylene	<0.00200	U	0.101	0.07607		mg/Kg		75	70 - 130	13	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: MB 880-34693/5-A

Matrix: Solid

Analysis Batch: 34745

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 05:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 05:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 05:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/16/22 16:25	09/19/22 05:25	1

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

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

Lab Sample ID: MB 880-34693/5-A

Matrix: Solid

Analysis Batch: 34745

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 05:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/16/22 16:25	09/19/22 05:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/16/22 16:25	09/19/22 05:25	1
1,4-Difluorobenzene (Surr)	112		70 - 130	09/16/22 16:25	09/19/22 05:25	1

Lab Sample ID: LCS 880-34693/1-A

Matrix: Solid

Analysis Batch: 34745

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08533		mg/Kg		85	70 - 130
Toluene	0.100	0.08574		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.08382		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1705		mg/Kg		85	70 - 130
o-Xylene	0.100	0.08599		mg/Kg		86	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-34693/2-A

Matrix: Solid

Analysis Batch: 34745

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34693

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.08638		mg/Kg		86	70 - 130	1	35
Toluene	0.100	0.08834		mg/Kg		88	70 - 130	3	35
Ethylbenzene	0.100	0.08742		mg/Kg		87	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1843		mg/Kg		92	70 - 130	8	35
o-Xylene	0.100	0.09310		mg/Kg		93	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-19317-A-1-G MS

Matrix: Solid

Analysis Batch: 34745

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F1	0.0998	0.06447	F1	mg/Kg		65	70 - 130
Toluene	<0.00199	U F1	0.0998	0.06048	F1	mg/Kg		61	70 - 130
Ethylbenzene	<0.00199	U F1	0.0998	0.06015	F1	mg/Kg		60	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1217	F1	mg/Kg		61	70 - 130
o-Xylene	<0.00199	U F1	0.0998	0.06506	F1	mg/Kg		65	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

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

Lab Sample ID: 880-19317-A-1-G MS

Matrix: Solid

Analysis Batch: 34745

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34693

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-19317-A-1-H MSD

Matrix: Solid

Analysis Batch: 34745

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.07072		mg/Kg		70	70 - 130	9	35
Toluene	<0.00199	U F1	0.100	0.05975	F1	mg/Kg		60	70 - 130	1	35
Ethylbenzene	<0.00199	U F1	0.100	0.05638	F1	mg/Kg		56	70 - 130	6	35
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.1156	F1	mg/Kg		58	70 - 130	5	35
o-Xylene	<0.00199	U F1	0.100	0.06056	F1	mg/Kg		60	70 - 130	7	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

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

Lab Sample ID: MB 880-34180/1-A

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34180

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		09/12/22 08:43	09/12/22 10:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/12/22 08:43	09/12/22 10:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/22 08:43	09/12/22 10:56	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	106		70 - 130	09/12/22 08:43	09/12/22 10:56	1			
o-Terphenyl	105		70 - 130	09/12/22 08:43	09/12/22 10:56	1			

Lab Sample ID: LCS 880-34180/2-A

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34180

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	902.7		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1104		mg/Kg		110	70 - 130		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	117		70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

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

Lab Sample ID: LCSD 880-34180/3-A

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34180

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	819.5		mg/Kg		82	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	1000	1035		mg/Kg		103	70 - 130	6	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	121		70 - 130						

Lab Sample ID: 890-2904-A-1-E MS

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34180

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	815.3		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)	111		997	838.4		mg/Kg		73	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	111		70 - 130								
o-Terphenyl	93		70 - 130								

Lab Sample ID: 890-2904-A-1-F MSD

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34180

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	<49.9	U	999	850.4		mg/Kg		85	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	111		999	875.8		mg/Kg		77	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	114		70 - 130								
o-Terphenyl	95		70 - 130								

Lab Sample ID: MB 880-34330/1-A

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34330

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		09/12/22 18:32	09/12/22 20:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/12/22 18:32	09/12/22 20:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/22 18:32	09/12/22 20:41	1

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

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

Lab Sample ID: MB 880-34330/1-A

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34330

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/12/22 18:32	09/12/22 20:41	1
o-Terphenyl	100		70 - 130	09/12/22 18:32	09/12/22 20:41	1

Lab Sample ID: LCS 880-34330/2-A

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34330

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	816.4		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	1000	938.8		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: LCSD 880-34330/3-A

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34330

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	963.3		mg/Kg		96	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	1000	1167	*1	mg/Kg		117	70 - 130	22	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	132	S1+	70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 890-2906-1 MS

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: T-1 (0-1')

Prep Type: Total/NA

Prep Batch: 34330

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	908.9		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *1	996	978.9		mg/Kg		98	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	94		70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

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

Lab Sample ID: 890-2906-1 MSD

Matrix: Solid

Analysis Batch: 34169

Client Sample ID: T-1 (0-1')

Prep Type: Total/NA

Prep Batch: 34330

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	<49.9	U	999	882.7		mg/Kg		88	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U *1	999	980.9		mg/Kg		98	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	126		70 - 130								
o-Terphenyl	93		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34103/1-A

Matrix: Solid

Analysis Batch: 34370

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			09/13/22 14:52	1

Lab Sample ID: LCS 880-34103/2-A

Matrix: Solid

Analysis Batch: 34370

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	241.8		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-34103/3-A

Matrix: Solid

Analysis Batch: 34370

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	242.1		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 890-2902-A-8-B MS

Matrix: Solid

Analysis Batch: 34370

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	739		250	968.5		mg/Kg		92	90 - 110

Lab Sample ID: 890-2902-A-8-C MSD

Matrix: Solid

Analysis Batch: 34370

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	739		250	970.6		mg/Kg		93	90 - 110	0	20

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-34106/1-A

Matrix: Solid

Analysis Batch: 34472

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			09/14/22 03:47	1

Lab Sample ID: LCS 880-34106/2-A

Matrix: Solid

Analysis Batch: 34472

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	243.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-34106/3-A

Matrix: Solid

Analysis Batch: 34472

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	245.2		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 890-2906-11 MS

Matrix: Solid

Analysis Batch: 34472

Client Sample ID: T-2 (6')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	84.4		251	342.1		mg/Kg		103	90 - 110

Lab Sample ID: 890-2906-11 MSD

Matrix: Solid

Analysis Batch: 34472

Client Sample ID: T-2 (6')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	84.4		251	341.3		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-2906-A-1-B MS

Matrix: Solid

Analysis Batch: 34472

Client Sample ID: 890-2906-A-1-B MS

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	607		250	832.7		mg/Kg		91	90 - 110

Lab Sample ID: 890-2906-A-1-C MSD

Matrix: Solid

Analysis Batch: 34472

Client Sample ID: 890-2906-A-1-C MSD

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	607		250	834.3		mg/Kg		91	90 - 110	0	20

Lab Sample ID: MB 880-35072/1-A

Matrix: Solid

Analysis Batch: 35195

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			09/23/22 08:19	1

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-35072/2-A

Matrix: Solid

Analysis Batch: 35195

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.3		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-35072/3-A

Matrix: Solid

Analysis Batch: 35195

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	255.2		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-19381-A-11-B MS

Matrix: Solid

Analysis Batch: 35195

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100		252	362.1		mg/Kg		104	90 - 110

Lab Sample ID: 880-19381-A-11-C MSD

Matrix: Solid

Analysis Batch: 35195

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100		252	362.1		mg/Kg		104	90 - 110	0	20

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## GC VOA

## Prep Batch: 34410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34410/5-B	Method Blank	Total/NA	Solid	5035	

## Prep Batch: 34692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-1	T-1 (0-1')	Total/NA	Solid	5035	
890-2906-2	T-1 (2')	Total/NA	Solid	5035	
890-2906-3	T-1 (3')	Total/NA	Solid	5035	
890-2906-4	T-1 (4')	Total/NA	Solid	5035	
890-2906-5	T-1 (5')	Total/NA	Solid	5035	
890-2906-6	T-2 (0-1')	Total/NA	Solid	5035	
890-2906-7	T-2 (2')	Total/NA	Solid	5035	
890-2906-8	T-2 (3')	Total/NA	Solid	5035	
890-2906-9	T-2 (4')	Total/NA	Solid	5035	
890-2906-10	T-2 (5')	Total/NA	Solid	5035	
890-2906-11	T-2 (6')	Total/NA	Solid	5035	
890-2906-12	T-3 (0-1')	Total/NA	Solid	5035	
890-2906-13	T-3 (2')	Total/NA	Solid	5035	
890-2906-14	T-3 (3')	Total/NA	Solid	5035	
890-2906-15	T-3 (4')	Total/NA	Solid	5035	
890-2906-16	T-3 (5')	Total/NA	Solid	5035	
890-2906-17	T-3 (6')	Total/NA	Solid	5035	
890-2906-18	T-4 (1')	Total/NA	Solid	5035	
890-2906-19	T-4 (2')	Total/NA	Solid	5035	
890-2906-20	T-4 (3')	Total/NA	Solid	5035	
MB 880-34692/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34692/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34692/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2906-1 MS	T-1 (0-1')	Total/NA	Solid	5035	
890-2906-1 MSD	T-1 (0-1')	Total/NA	Solid	5035	

## Prep Batch: 34693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-21	T-4 (4')	Total/NA	Solid	5035	
890-2906-22	T-4 (5')	Total/NA	Solid	5035	
MB 880-34693/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34693/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34693/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19317-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
880-19317-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 34745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-21	T-4 (4')	Total/NA	Solid	8021B	34693
890-2906-22	T-4 (5')	Total/NA	Solid	8021B	34693
MB 880-34410/5-B	Method Blank	Total/NA	Solid	8021B	34410
MB 880-34693/5-A	Method Blank	Total/NA	Solid	8021B	34693
LCS 880-34693/1-A	Lab Control Sample	Total/NA	Solid	8021B	34693
LCSD 880-34693/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34693
880-19317-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	34693
880-19317-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34693

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## GC VOA

## Analysis Batch: 34794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-1	T-1 (0-1')	Total/NA	Solid	Total BTEX	
890-2906-2	T-1 (2')	Total/NA	Solid	Total BTEX	
890-2906-3	T-1 (3')	Total/NA	Solid	Total BTEX	
890-2906-4	T-1 (4')	Total/NA	Solid	Total BTEX	
890-2906-5	T-1 (5')	Total/NA	Solid	Total BTEX	
890-2906-6	T-2 (0-1')	Total/NA	Solid	Total BTEX	
890-2906-7	T-2 (2')	Total/NA	Solid	Total BTEX	
890-2906-8	T-2 (3')	Total/NA	Solid	Total BTEX	
890-2906-9	T-2 (4')	Total/NA	Solid	Total BTEX	
890-2906-10	T-2 (5')	Total/NA	Solid	Total BTEX	
890-2906-11	T-2 (6')	Total/NA	Solid	Total BTEX	
890-2906-12	T-3 (0-1')	Total/NA	Solid	Total BTEX	
890-2906-13	T-3 (2')	Total/NA	Solid	Total BTEX	
890-2906-14	T-3 (3')	Total/NA	Solid	Total BTEX	
890-2906-15	T-3 (4')	Total/NA	Solid	Total BTEX	
890-2906-16	T-3 (5')	Total/NA	Solid	Total BTEX	
890-2906-17	T-3 (6')	Total/NA	Solid	Total BTEX	
890-2906-18	T-4 (1')	Total/NA	Solid	Total BTEX	
890-2906-19	T-4 (2')	Total/NA	Solid	Total BTEX	
890-2906-20	T-4 (3')	Total/NA	Solid	Total BTEX	
890-2906-21	T-4 (4')	Total/NA	Solid	Total BTEX	
890-2906-22	T-4 (5')	Total/NA	Solid	Total BTEX	

## Analysis Batch: 34895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-1	T-1 (0-1')	Total/NA	Solid	8021B	34692
890-2906-2	T-1 (2')	Total/NA	Solid	8021B	34692
890-2906-3	T-1 (3')	Total/NA	Solid	8021B	34692
890-2906-4	T-1 (4')	Total/NA	Solid	8021B	34692
890-2906-5	T-1 (5')	Total/NA	Solid	8021B	34692
890-2906-6	T-2 (0-1')	Total/NA	Solid	8021B	34692
890-2906-7	T-2 (2')	Total/NA	Solid	8021B	34692
890-2906-8	T-2 (3')	Total/NA	Solid	8021B	34692
890-2906-9	T-2 (4')	Total/NA	Solid	8021B	34692
890-2906-10	T-2 (5')	Total/NA	Solid	8021B	34692
890-2906-11	T-2 (6')	Total/NA	Solid	8021B	34692
890-2906-12	T-3 (0-1')	Total/NA	Solid	8021B	34692
890-2906-13	T-3 (2')	Total/NA	Solid	8021B	34692
890-2906-14	T-3 (3')	Total/NA	Solid	8021B	34692
890-2906-15	T-3 (4')	Total/NA	Solid	8021B	34692
890-2906-16	T-3 (5')	Total/NA	Solid	8021B	34692
890-2906-17	T-3 (6')	Total/NA	Solid	8021B	34692
890-2906-18	T-4 (1')	Total/NA	Solid	8021B	34692
890-2906-19	T-4 (2')	Total/NA	Solid	8021B	34692
890-2906-20	T-4 (3')	Total/NA	Solid	8021B	34692
MB 880-34692/5-A	Method Blank	Total/NA	Solid	8021B	34692
LCS 880-34692/1-A	Lab Control Sample	Total/NA	Solid	8021B	34692
LCSD 880-34692/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34692
890-2906-1 MS	T-1 (0-1')	Total/NA	Solid	8021B	34692
890-2906-1 MSD	T-1 (0-1')	Total/NA	Solid	8021B	34692

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## GC Semi VOA

## Analysis Batch: 34169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-1	T-1 (0-1')	Total/NA	Solid	8015B NM	34330
890-2906-2	T-1 (2')	Total/NA	Solid	8015B NM	34330
890-2906-3	T-1 (3')	Total/NA	Solid	8015B NM	34330
890-2906-4	T-1 (4')	Total/NA	Solid	8015B NM	34330
890-2906-5	T-1 (5')	Total/NA	Solid	8015B NM	34330
890-2906-6	T-2 (0-1')	Total/NA	Solid	8015B NM	34330
890-2906-7	T-2 (2')	Total/NA	Solid	8015B NM	34330
890-2906-8	T-2 (3')	Total/NA	Solid	8015B NM	34330
890-2906-21	T-4 (4')	Total/NA	Solid	8015B NM	34180
890-2906-22	T-4 (5')	Total/NA	Solid	8015B NM	34180
MB 880-34180/1-A	Method Blank	Total/NA	Solid	8015B NM	34180
MB 880-34330/1-A	Method Blank	Total/NA	Solid	8015B NM	34330
LCS 880-34180/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34180
LCS 880-34330/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34330
LCSD 880-34180/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34180
LCSD 880-34330/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34330
890-2904-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	34180
890-2904-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34180
890-2906-1 MS	T-1 (0-1')	Total/NA	Solid	8015B NM	34330
890-2906-1 MSD	T-1 (0-1')	Total/NA	Solid	8015B NM	34330

## Analysis Batch: 34171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-9	T-2 (4')	Total/NA	Solid	8015B NM	34330
890-2906-10	T-2 (5')	Total/NA	Solid	8015B NM	34330
890-2906-11	T-2 (6')	Total/NA	Solid	8015B NM	34330
890-2906-12	T-3 (0-1')	Total/NA	Solid	8015B NM	34330
890-2906-13	T-3 (2')	Total/NA	Solid	8015B NM	34330
890-2906-14	T-3 (3')	Total/NA	Solid	8015B NM	34330
890-2906-15	T-3 (4')	Total/NA	Solid	8015B NM	34330
890-2906-16	T-3 (5')	Total/NA	Solid	8015B NM	34330
890-2906-17	T-3 (6')	Total/NA	Solid	8015B NM	34330
890-2906-18	T-4 (1')	Total/NA	Solid	8015B NM	34330
890-2906-19	T-4 (2')	Total/NA	Solid	8015B NM	34330
890-2906-20	T-4 (3')	Total/NA	Solid	8015B NM	34330

## Prep Batch: 34180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-21	T-4 (4')	Total/NA	Solid	8015NM Prep	
890-2906-22	T-4 (5')	Total/NA	Solid	8015NM Prep	
MB 880-34180/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34180/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34180/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2904-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2904-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Prep Batch: 34330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-1	T-1 (0-1')	Total/NA	Solid	8015NM Prep	
890-2906-2	T-1 (2')	Total/NA	Solid	8015NM Prep	
890-2906-3	T-1 (3')	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## GC Semi VOA (Continued)

## Prep Batch: 34330 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-4	T-1 (4')	Total/NA	Solid	8015NM Prep	
890-2906-5	T-1 (5')	Total/NA	Solid	8015NM Prep	
890-2906-6	T-2 (0-1')	Total/NA	Solid	8015NM Prep	
890-2906-7	T-2 (2')	Total/NA	Solid	8015NM Prep	
890-2906-8	T-2 (3')	Total/NA	Solid	8015NM Prep	
890-2906-9	T-2 (4')	Total/NA	Solid	8015NM Prep	
890-2906-10	T-2 (5')	Total/NA	Solid	8015NM Prep	
890-2906-11	T-2 (6')	Total/NA	Solid	8015NM Prep	
890-2906-12	T-3 (0-1')	Total/NA	Solid	8015NM Prep	
890-2906-13	T-3 (2')	Total/NA	Solid	8015NM Prep	
890-2906-14	T-3 (3')	Total/NA	Solid	8015NM Prep	
890-2906-15	T-3 (4')	Total/NA	Solid	8015NM Prep	
890-2906-16	T-3 (5')	Total/NA	Solid	8015NM Prep	
890-2906-17	T-3 (6')	Total/NA	Solid	8015NM Prep	
890-2906-18	T-4 (1')	Total/NA	Solid	8015NM Prep	
890-2906-19	T-4 (2')	Total/NA	Solid	8015NM Prep	
890-2906-20	T-4 (3')	Total/NA	Solid	8015NM Prep	
MB 880-34330/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34330/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34330/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2906-1 MS	T-1 (0-1')	Total/NA	Solid	8015NM Prep	
890-2906-1 MSD	T-1 (0-1')	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 34366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-1	T-1 (0-1')	Total/NA	Solid	8015 NM	
890-2906-2	T-1 (2')	Total/NA	Solid	8015 NM	
890-2906-3	T-1 (3')	Total/NA	Solid	8015 NM	
890-2906-4	T-1 (4')	Total/NA	Solid	8015 NM	
890-2906-5	T-1 (5')	Total/NA	Solid	8015 NM	
890-2906-6	T-2 (0-1')	Total/NA	Solid	8015 NM	
890-2906-7	T-2 (2')	Total/NA	Solid	8015 NM	
890-2906-8	T-2 (3')	Total/NA	Solid	8015 NM	
890-2906-9	T-2 (4')	Total/NA	Solid	8015 NM	
890-2906-10	T-2 (5')	Total/NA	Solid	8015 NM	
890-2906-11	T-2 (6')	Total/NA	Solid	8015 NM	
890-2906-12	T-3 (0-1')	Total/NA	Solid	8015 NM	
890-2906-13	T-3 (2')	Total/NA	Solid	8015 NM	
890-2906-14	T-3 (3')	Total/NA	Solid	8015 NM	
890-2906-15	T-3 (4')	Total/NA	Solid	8015 NM	
890-2906-16	T-3 (5')	Total/NA	Solid	8015 NM	
890-2906-17	T-3 (6')	Total/NA	Solid	8015 NM	
890-2906-18	T-4 (1')	Total/NA	Solid	8015 NM	
890-2906-19	T-4 (2')	Total/NA	Solid	8015 NM	
890-2906-20	T-4 (3')	Total/NA	Solid	8015 NM	
890-2906-21	T-4 (4')	Total/NA	Solid	8015 NM	
890-2906-22	T-4 (5')	Total/NA	Solid	8015 NM	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## HPLC/IC

## Leach Batch: 34103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-21	T-4 (4')	Soluble	Solid	DI Leach	
890-2906-22	T-4 (5')	Soluble	Solid	DI Leach	
MB 880-34103/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34103/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34103/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2902-A-8-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2902-A-8-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Leach Batch: 34106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-2	T-1 (2')	Soluble	Solid	DI Leach	
890-2906-3	T-1 (3')	Soluble	Solid	DI Leach	
890-2906-4	T-1 (4')	Soluble	Solid	DI Leach	
890-2906-5	T-1 (5')	Soluble	Solid	DI Leach	
890-2906-6	T-2 (0-1')	Soluble	Solid	DI Leach	
890-2906-7	T-2 (2')	Soluble	Solid	DI Leach	
890-2906-8	T-2 (3')	Soluble	Solid	DI Leach	
890-2906-9	T-2 (4')	Soluble	Solid	DI Leach	
890-2906-10	T-2 (5')	Soluble	Solid	DI Leach	
890-2906-11	T-2 (6')	Soluble	Solid	DI Leach	
890-2906-12	T-3 (0-1')	Soluble	Solid	DI Leach	
890-2906-13	T-3 (2')	Soluble	Solid	DI Leach	
890-2906-14	T-3 (3')	Soluble	Solid	DI Leach	
890-2906-15	T-3 (4')	Soluble	Solid	DI Leach	
890-2906-16	T-3 (5')	Soluble	Solid	DI Leach	
890-2906-17	T-3 (6')	Soluble	Solid	DI Leach	
890-2906-18	T-4 (1')	Soluble	Solid	DI Leach	
890-2906-19	T-4 (2')	Soluble	Solid	DI Leach	
890-2906-20	T-4 (3')	Soluble	Solid	DI Leach	
MB 880-34106/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34106/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34106/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2906-11 MS	T-2 (6')	Soluble	Solid	DI Leach	
890-2906-11 MSD	T-2 (6')	Soluble	Solid	DI Leach	
890-2906-A-1-B MS	890-2906-A-1-B MS	Soluble	Solid	DI Leach	
890-2906-A-1-C MSD	890-2906-A-1-C MSD	Soluble	Solid	DI Leach	

## Analysis Batch: 34370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-21	T-4 (4')	Soluble	Solid	300.0	34103
890-2906-22	T-4 (5')	Soluble	Solid	300.0	34103
MB 880-34103/1-A	Method Blank	Soluble	Solid	300.0	34103
LCS 880-34103/2-A	Lab Control Sample	Soluble	Solid	300.0	34103
LCSD 880-34103/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34103
890-2902-A-8-B MS	Matrix Spike	Soluble	Solid	300.0	34103
890-2902-A-8-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34103

## Analysis Batch: 34472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-2	T-1 (2')	Soluble	Solid	300.0	34106
890-2906-3	T-1 (3')	Soluble	Solid	300.0	34106

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## HPLC/IC (Continued)

## Analysis Batch: 34472 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-4	T-1 (4')	Soluble	Solid	300.0	34106
890-2906-5	T-1 (5')	Soluble	Solid	300.0	34106
890-2906-6	T-2 (0-1')	Soluble	Solid	300.0	34106
890-2906-7	T-2 (2')	Soluble	Solid	300.0	34106
890-2906-8	T-2 (3')	Soluble	Solid	300.0	34106
890-2906-9	T-2 (4')	Soluble	Solid	300.0	34106
890-2906-10	T-2 (5')	Soluble	Solid	300.0	34106
890-2906-11	T-2 (6')	Soluble	Solid	300.0	34106
890-2906-12	T-3 (0-1')	Soluble	Solid	300.0	34106
890-2906-13	T-3 (2')	Soluble	Solid	300.0	34106
890-2906-14	T-3 (3')	Soluble	Solid	300.0	34106
890-2906-15	T-3 (4')	Soluble	Solid	300.0	34106
890-2906-16	T-3 (5')	Soluble	Solid	300.0	34106
890-2906-17	T-3 (6')	Soluble	Solid	300.0	34106
890-2906-18	T-4 (1')	Soluble	Solid	300.0	34106
890-2906-19	T-4 (2')	Soluble	Solid	300.0	34106
890-2906-20	T-4 (3')	Soluble	Solid	300.0	34106
MB 880-34106/1-A	Method Blank	Soluble	Solid	300.0	34106
LCS 880-34106/2-A	Lab Control Sample	Soluble	Solid	300.0	34106
LCSD 880-34106/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34106
890-2906-11 MS	T-2 (6')	Soluble	Solid	300.0	34106
890-2906-11 MSD	T-2 (6')	Soluble	Solid	300.0	34106
890-2906-A-1-B MS	890-2906-A-1-B MS	Soluble	Solid	300.0	34106
890-2906-A-1-C MSD	890-2906-A-1-C MSD	Soluble	Solid	300.0	34106

## Leach Batch: 35072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-1	T-1 (0-1')	Soluble	Solid	DI Leach	
MB 880-35072/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35072/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35072/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19381-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19381-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 35195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2906-1	T-1 (0-1')	Soluble	Solid	300.0	35072
MB 880-35072/1-A	Method Blank	Soluble	Solid	300.0	35072
LCS 880-35072/2-A	Lab Control Sample	Soluble	Solid	300.0	35072
LCSD 880-35072/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35072
880-19381-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	35072
880-19381-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35072

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-1 (0-1')

Lab Sample ID: 890-2906-1

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 18:06
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34169	SM	EET MID	09/12/22 21:45
Soluble	Leach	DI Leach			35072	SMC	EET MID	09/21/22 14:09
Soluble	Analysis	300.0		1	35195	CH	EET MID	09/23/22 10:30

Client Sample ID: T-1 (2')

Lab Sample ID: 890-2906-2

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 18:26
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34169	SM	EET MID	09/12/22 22:50
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 04:17

Client Sample ID: T-1 (3')

Lab Sample ID: 890-2906-3

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 18:47
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34169	SM	EET MID	09/12/22 23:11
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 04:22

Client Sample ID: T-1 (4')

Lab Sample ID: 890-2906-4

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 19:07
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Client Sample ID: T-1 (4')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34169	SM	EET MID	09/12/22 23:32
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 04:26

## Client Sample ID: T-1 (5')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 19:27
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34169	SM	EET MID	09/12/22 23:54
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 04:31

## Client Sample ID: T-2 (0-1')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 19:48
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34169	SM	EET MID	09/13/22 00:15
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 04:46

## Client Sample ID: T-2 (2')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 20:08
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34169	SM	EET MID	09/13/22 00:36

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Client Sample ID: T-2 (2')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 04:51

## Client Sample ID: T-2 (3')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 20:29
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34169	SM	EET MID	09/13/22 00:57
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 04:56

## Client Sample ID: T-2 (4')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 20:49
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/12/22 20:41
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 05:01

## Client Sample ID: T-2 (5')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 21:09
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/12/22 21:02
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 05:05

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-2 (6')

Lab Sample ID: 890-2906-11

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 23:00
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/12/22 21:24
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 05:10

Client Sample ID: T-3 (0-1')

Lab Sample ID: 890-2906-12

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 23:20
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/12/22 21:45
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 05:25

Client Sample ID: T-3 (2')

Lab Sample ID: 890-2906-13

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/20/22 23:41
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/12/22 22:06
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 05:30

Client Sample ID: T-3 (3')

Lab Sample ID: 890-2906-14

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/21/22 00:01
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Client Sample ID: T-3 (3')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/12/22 22:28
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 05:44

## Client Sample ID: T-3 (4')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/21/22 00:21
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/12/22 22:50
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		5	34472	CH	EET MID	09/14/22 05:49

## Client Sample ID: T-3 (5')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/21/22 00:42
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/12/22 23:11
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 05:54

## Client Sample ID: T-3 (6')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/21/22 01:02
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/12/22 23:32

Eurofins Carlsbad



## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

## Client Sample ID: T-3 (6')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 05:59

## Client Sample ID: T-4 (1')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/21/22 01:23
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/12/22 23:54
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 06:04

## Client Sample ID: T-4 (2')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/21/22 01:43
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/13/22 00:15
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 06:08

## Client Sample ID: T-4 (3')

Date Collected: 09/08/22 00:00

Date Received: 09/08/22 15:06

## Lab Sample ID: 890-2906-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34692	MR	EET MID	09/16/22 16:15
Total/NA	Analysis	8021B		1	34895	MR	EET MID	09/21/22 02:03
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34330	AM	EET MID	09/12/22 18:32
Total/NA	Analysis	8015B NM		1	34171	SM	EET MID	09/13/22 00:36
Soluble	Leach	DI Leach			34106	KS	EET MID	09/09/22 12:35
Soluble	Analysis	300.0		1	34472	CH	EET MID	09/14/22 06:13

Eurofins Carlsbad

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Client Sample ID: T-4 (4')

Lab Sample ID: 890-2906-21

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34693	MR	EET MID	09/16/22 16:25
Total/NA	Analysis	8021B		1	34745	MR	EET MID	09/19/22 07:35
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34180	AM	EET MID	09/12/22 08:43
Total/NA	Analysis	8015B NM		1	34169	SM	EET MID	09/12/22 16:45
Soluble	Leach	DI Leach			34103	KS	EET MID	09/09/22 12:30
Soluble	Analysis	300.0		1	34370	CH	EET MID	09/13/22 17:03

Client Sample ID: T-4 (5')

Lab Sample ID: 890-2906-22

Date Collected: 09/08/22 00:00

Matrix: Solid

Date Received: 09/08/22 15:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			34693	MR	EET MID	09/16/22 16:25
Total/NA	Analysis	8021B		1	34745	MR	EET MID	09/19/22 07:56
Total/NA	Analysis	Total BTEX		1	34794	AJ	EET MID	09/19/22 09:42
Total/NA	Analysis	8015 NM		1	34366	SM	EET MID	09/13/22 09:59
Total/NA	Prep	8015NM Prep			34180	AM	EET MID	09/12/22 08:43
Total/NA	Analysis	8015B NM		1	34169	SM	EET MID	09/12/22 17:06
Soluble	Leach	DI Leach			34103	KS	EET MID	09/09/22 12:30
Soluble	Analysis	300.0		1	34370	CH	EET MID	09/13/22 17:08

## Laboratory References:

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

**Accreditation/Certification Summary**

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

**Laboratory: Eurofins Midland**

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

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

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

Eurofins Carlsbad

## Sample Summary

Client: Tetra Tech, Inc.  
Project/Site: Doc BHU State #1 2007 Release

Job ID: 890-2906-1  
SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2906-1	T-1 (0-1')	Solid	09/08/22 00:00	09/08/22 15:06	0 - 1
890-2906-2	T-1 (2')	Solid	09/08/22 00:00	09/08/22 15:06	2
890-2906-3	T-1 (3')	Solid	09/08/22 00:00	09/08/22 15:06	3
890-2906-4	T-1 (4')	Solid	09/08/22 00:00	09/08/22 15:06	4
890-2906-5	T-1 (5')	Solid	09/08/22 00:00	09/08/22 15:06	5
890-2906-6	T-2 (0-1')	Solid	09/08/22 00:00	09/08/22 15:06	0 - 1
890-2906-7	T-2 (2')	Solid	09/08/22 00:00	09/08/22 15:06	2
890-2906-8	T-2 (3')	Solid	09/08/22 00:00	09/08/22 15:06	3
890-2906-9	T-2 (4')	Solid	09/08/22 00:00	09/08/22 15:06	4
890-2906-10	T-2 (5')	Solid	09/08/22 00:00	09/08/22 15:06	5
890-2906-11	T-2 (6')	Solid	09/08/22 00:00	09/08/22 15:06	6
890-2906-12	T-3 (0-1')	Solid	09/08/22 00:00	09/08/22 15:06	0 - 1
890-2906-13	T-3 (2')	Solid	09/08/22 00:00	09/08/22 15:06	2
890-2906-14	T-3 (3')	Solid	09/08/22 00:00	09/08/22 15:06	3
890-2906-15	T-3 (4')	Solid	09/08/22 00:00	09/08/22 15:06	4
890-2906-16	T-3 (5')	Solid	09/08/22 00:00	09/08/22 15:06	5
890-2906-17	T-3 (6')	Solid	09/08/22 00:00	09/08/22 15:06	6
890-2906-18	T-4 (1')	Solid	09/08/22 00:00	09/08/22 15:06	1
890-2906-19	T-4 (2')	Solid	09/08/22 00:00	09/08/22 15:06	2
890-2906-20	T-4 (3')	Solid	09/08/22 00:00	09/08/22 15:06	3
890-2906-21	T-4 (4')	Solid	09/08/22 00:00	09/08/22 15:06	4
890-2906-22	T-4 (5')	Solid	09/08/22 00:00	09/08/22 15:06	5



## Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 80 W Wall Street, Ste. 10  
 Middletown, CT 06455  
 Tel (432) 825-4535  
 Fax (432) 825-5846

890-2906 Chain of Custody

Page 1 of 3

Client Name: EOG Resources		Site Manager: Brittany Long	
Project Name: Doc BHU State #1 2007 Release		Project #: 212C-MD-02833	
Project Location: Eddy County, NM		Project #: 212C-MD-02833	
Invoice to: EOG Resources - Todd Wells		Sampler Signature: Payton Oliver	
Receiving Laboratory: Xenco Eurofins		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>			
T-1 (0-1)		9/8/2022		X						BTEX 8021B BTEX 8260B
T-1 (2)		9/8/2022		X						TPH TX1005 (Ext to C35)
T-1 (3)		9/8/2022		X						TPH 8015M (GRO - DRO - ORO - MRO)
T-1 (4)		9/8/2022		X						PAH 8270C
T-1 (5)		9/8/2022		X						Total Metals Ag As Ba Cd Cr Pb Se Hg
T-2 (0-1)		9/8/2022		X						TCLP Metals Ag As Ba Cd Cr Pb Se Hg
T-2 (2)		9/8/2022		X						TCLP Volatiles
T-2 (3)		9/8/2022		X						TCLP Semi Volatiles
T-2 (4)		9/8/2022		X						RCI
T-2 (5)		9/8/2022		X						GC/MS Vol. 8260B / 624
										GC/MS Semi. Vol. 8270C/625
										PCB's 8082 / 608
										NORM
										PLM (Asbestos)
										Chloride
										Chloride Sulfate TDS
										General Water Chemistry (see attached list)
										Anion/Cation Balance
										Hold

Relinquished by: <i>Brittany Long</i>	Date: 9/8/22	Received by: <i>Payton Oliver</i>	Date: 9/8/22
Relinquished by: <i>Brittany Long</i>	Date: 9/8/22	Received by: <i>Payton Oliver</i>	Date: 9/8/22
Relinquished by: <i>Brittany Long</i>	Date: 9/8/22	Received by: <i>Payton Oliver</i>	Date: 9/8/22

LAB USE ONLY	STANDARD
<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	

Sample Temperature: 27.2

27.2

ORIGINAL COPY

### Analysis Request of Chain of Custody Record

Page 2 of 3

Tetra Tech, Inc.

90° W Wall Street, Ste 100  
Madison, Texas 78705  
Tel (432) 882-4559  
Fax (432) 882-3046

ANALYSIS REQUEST

(Circle or Specify Method No.)

Client Name:

Site Manager:

Brittany Long

Project Name:

Doc BHU State #1 2007 Release

Project Location:

Eddy County, NM

Project #: Brittany.Long@tetratech.com  
212C-MD-02833

Invoice to:

EOG Resources - Todd Wells

Sampler Signature:

Peyton Oliver

Receiving Laboratory:

Xenoco Eurofins

Comments:

SAMPLE IDENTIFICATION

LAB #

LAB USE ONLY

YEAR: 2020

DATE

TIME

WATER

SOIL

HCL

HNO<sub>3</sub>

ICE

None

# CONTAINERS

FILTERED (Y/N)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

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

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCPL Metals Ag As Ba Cd Cr Pb Se Hg

TCPL Volatiles

TCPL Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Sample Temperature

LAB USE ONLY

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Special Report Limits or TRRP Report

FEDER UPS Tracking #

Hand Delivered

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report

Special Report Limits or TRRP Report



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2906-1  
SDG Number: Eddy County NMLogin Number: 2906  
List Number: 1  
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2906-1  
SDG Number: Eddy County NM**Login Number: 2906****List Number: 2****Creator: Rodriguez, Leticia****List Source: Eurofins Midland****List Creation: 09/12/22 09:08 AM**

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



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 150965

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 150965
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
mbratcher	Closure report received and approved	11/3/2022