SITE INFORMATION

Report Type: Closure Report (2RP-485)

General Site Information:						
Site:	**Sosa Federal #2**					
Company:	**EOG Resources**					
Section, Township and Range	**Unit P**	**Sec. 15**	**T 26S**	**R 29E**		
County:	**Eddy County, NM**					
GPS:	**32.03562**			**-103.96493**		
Surface Owner:	**State of New Mexico**					

Release Data:	
Date Released:	11/16/2010
Type Release:	Oil and Produced Water
Source of Contamination:	Flowline
Fluid Released:	3 bbls. Oil 12 bbls. of Produced water
Fluids Recovered:	0 bbls. of Oil/Produced Water

Official Communication:			
Name:	James Kennedy		Clair Gonzales
Company:	EOG Resources		Tetra Tech
Address:	5509 Champions Dr		901 West Wall Street
			Suite 100
City:	Midland, TX 79706		Midland, Texas 79701
Phone number:	432-686-7016		432-687-8634
Fax:			
Email:	James.Kennedy@eogresources.com		clair.gonzales@tetratech.com

Site Characterization	
Depth to Groundwater:	*50' below ground surface (bgs)*
Karst Potential:	*Medium*

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*

TETRA TECH

May 06, 2021

Bradford Billings
Hydrologist
District 2 Artesia
Oil Conservation Division
Santa Fe, NM 87505

Re: Closure Report
EOG Resources
Sosa Federal #2
Unit P, Section 15, Township 26 South, Range 29 East
Eddy County, New Mexico
2RP-485

Mr. Billings:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess a release at the EOG Sosa Federal #2 (API No. 30-015-26247). The release footprint is located in the Public Land Survey System (PLSS) Unit P, Section 15, Township 26 South, Range 29 East, Eddy County, New Mexico (Site). The Site coordinates are 32.035624º, -103.964930º. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the release occurred on November 16, 2010 as a result of a plugged flowline pressured up and blew out. The release consisted of 3 barrels (bbls.) of oil and 12 bbls. of produced water affecting an area of approximate 150 feet (ft.) by 1-inch. The impacted area is located on the south side of the location. During immediate response, the flowline was isolated and repaired. No free fluids were recovered. The initial C-141 report was submitted on November 19, 2010 to the New Mexico Oil Conservation District (NMOCD). The release was subsequently assigned the Remediation Permit (RP) number 2RP-485. The C-141 forms are included in Appendix A.

Site Characterization

A site characterization was performed for the site, and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances, and the site is in a medium karst potential area. The nearest well is listed in the USGS National Water Information Database website in Section 23, approximately 0.8 mile southwest of the site, and has a reported depth to groundwater of 80.88 feet (ft.) below ground surface (bgs.), the well was last sampled in 1987. In addition, according to the New Mexico Office of the State Engineer, there are no water wells within 800 meters (½ miles) radius. However, there are seven (7) water wells located within 6,400 meters (approximately 4 miles) of the Site. The average depth to groundwater is 50 ft. bgs. Site

Tetra Tech
901 West Wall Street, Suite 100, Midland, TX 79701
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

characterization data is included in Appendix B.

Regulatory

A risk-based evaluation was performed for the site per 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 on the site characterization, the proposed RRAL for TPH is 100 mg/kg (GRO+DRO+MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 600 mg/kg.

Soil Assessment and Analytical Results

On April 22, 2021, Tetra Tech personnel were on site to evaluate and sample the release area. The formerly impacted area was identified from the description in the C-141 and the aerial imagery. Soils were field screened for salinity using an Extech EC400 ExStik to determine sampling intervals. A total of two (2) auger holes (AH-1 and AH-2) were advanced inside the release footprint to a total depth from surface to 2.5 ft. bgs. In addition, four (4) auger holes (AH-3 through AH-6) were advanced at a depth from top to 1 ft. bgs to delineate the release footprint to the north, west, east, and south. A total of ten (10) samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1. The sample locations are shown on Figure 3. Photographic documentation is included.

Referring to Table 1, all the samples analyzed were below the Site RRAL for chloride (600 mg/kg), TPH (100 mg/kg), BTEX (50 m/kg) and benzene (10 mg/kg).

Conclusion

Based on the laboratory results and site assessment activities performed, EOG requests closure of this spill issue. The final C-141 initial reports are enclosed in Appendix A. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Paula Tocora Alonso
Paula Tocora Alonso
Environmental Engineer I
Tetra Tech, Inc

Figures

SITE LOCATION

N
W
E
S

0 2.5 5 Miles

Approximate Scale in Miles

Source: ESRI Basemap - Streets, 2021.

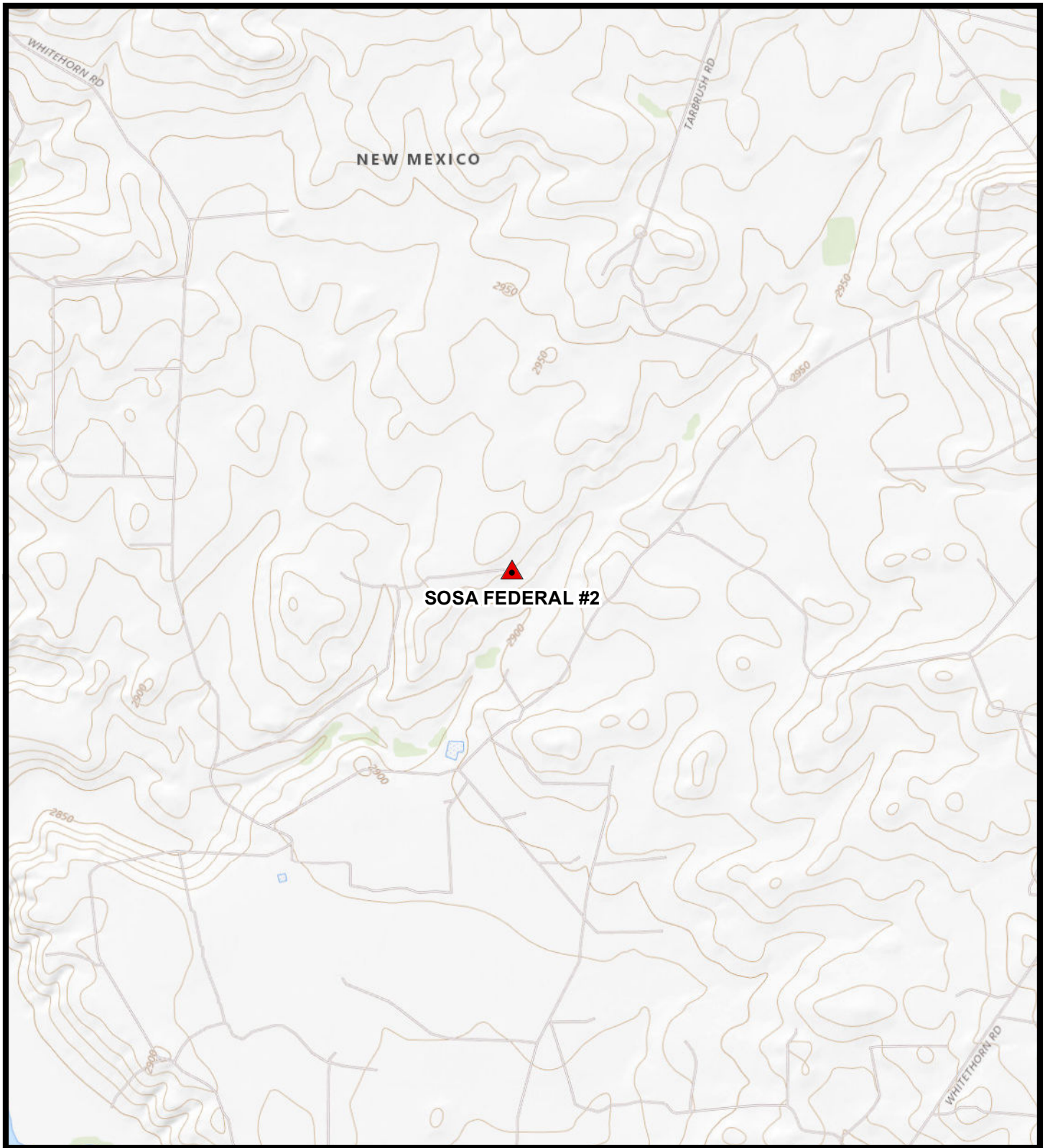
OVERVIEW MAP
SOSA FEDERAL #2
Property Located at coordinates 32.035624°, -103.964930°
EDDY COUNTY, NEW MEXICO

eog resources

Project #:
212C-MD-02419

FIGURE
1

C:\GIS\EOG Resources\212C-MD-02419_SOSAFEDERAL2\212C-MD-02419_SOSA_FEDERAL1_FIG1.mxd 5/3/2021 jpd.peters



SITE LOCATION

N
W
E
S

0 1,000 2,000 Feet

Approximate Scale in Feet

Source: USGS, The National Map, Topo Base, 2021.

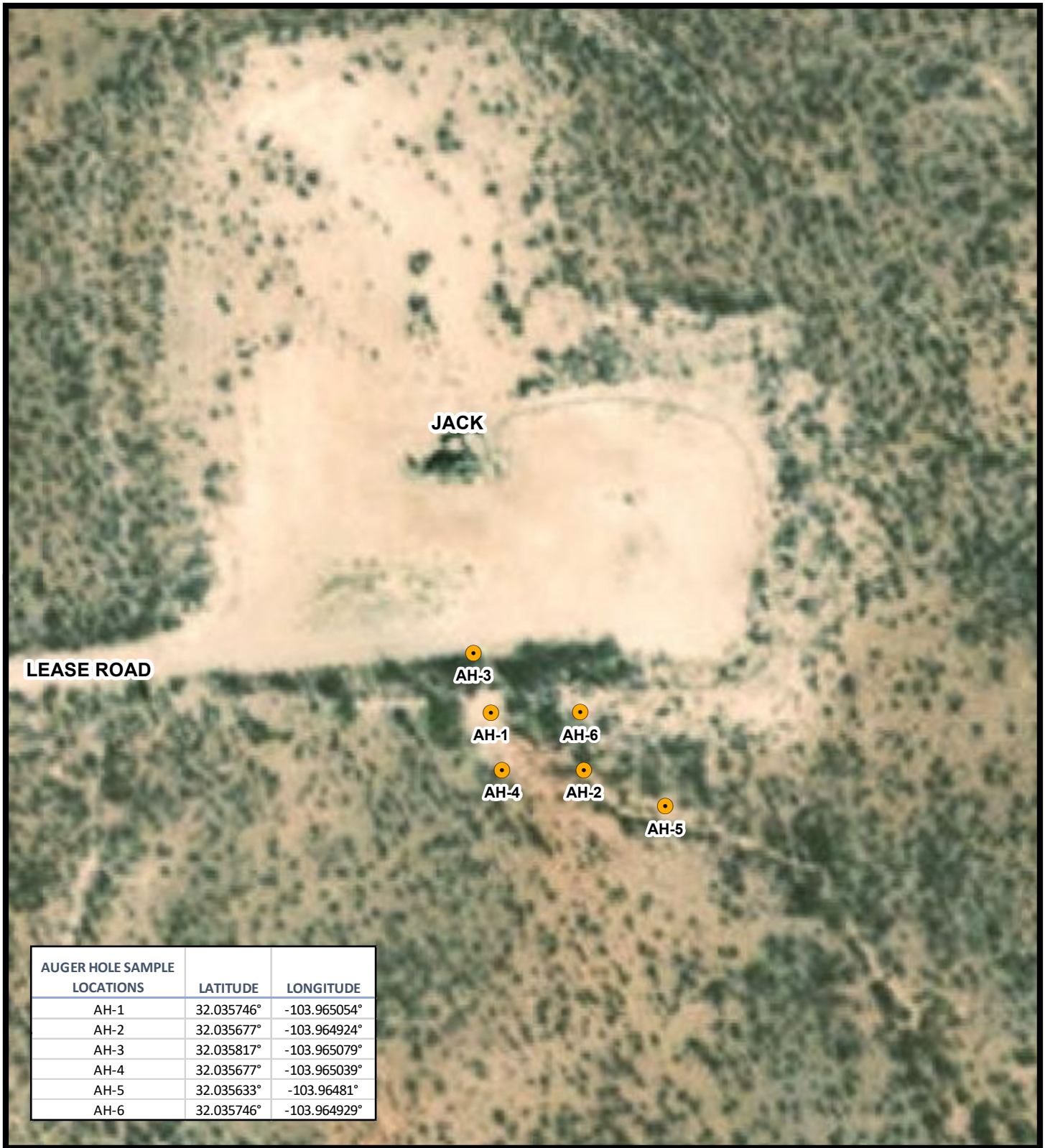
TOPOGRAPHIC MAP
SOSA FEDERAL #2
Property Located at coordinates 32.035624°, -103.964930°
EDDY COUNTY, NEW MEXICO

eog resources

Project #: 212C-MD-02419

FIGURE 2

C:\GIS\EOG Resources\212C-MD-02419_SOSAFEDERAL2\212C-MD-02419_SOSA_FEDERAL1_FIG2.mxd 5/3/2021 jpd.peters



AUGER HOLE SAMPLE LOCATIONS	LATITUDE	LONGITUDE
AH-1	32.035746°	-103.965054°
AH-2	32.035677°	-103.964924°
AH-3	32.035817°	-103.965079°
AH-4	32.035677°	-103.965039°
AH-5	32.035633°	-103.96481°
AH-6	32.035746°	-103.964929°

AUGER HOLE SAMPLE LOCATION

N
W E
S

0 25 50 Feet

Approximate Scale in Feet

Source: ESRI Basemap - Imagery, 2020.

RELEASE ASSESSMENT MAP AND BORING LOCATIONS
SOSA FEDERAL #2
Property Located at coordinates 32.035624°, -103.964930°
EDDY COUNTY, NEW MEXICO

eog resources

Project #:
212C-MD-02419

FIGURE
3

C:\GIS\EOG Resources\212C-MD-02419_SOSAFEDERAL2\212C-MD-02419_SOSA_FEDERAL1_FIG3.mxd 5/3/2021 jed.peters

Tables

Table 1
EOG
Sosa Federal #2
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
AH-1	4/22/2021	0-1	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	27.8
	"	1-1.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	12.1
	"	2-2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	7.81
AH-2	4/22/2021	0-1	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	5.53
	"	1-1.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<4.96
	"	2-2.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<4.97
AH-3	4/22/2021	0-1	X	-	<50.0	<50.0	52.8	52.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	46.4
AH-4	4/22/2021	0-1	X	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	9.62
AH-5	4/22/2021	0-1	X	-	<49.8	<49.8	<49.8	<49.8	0.358	0.311	0.174	0.0115	0.0115	7.37
AH-6	4/22/2021	0-1	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	6.13

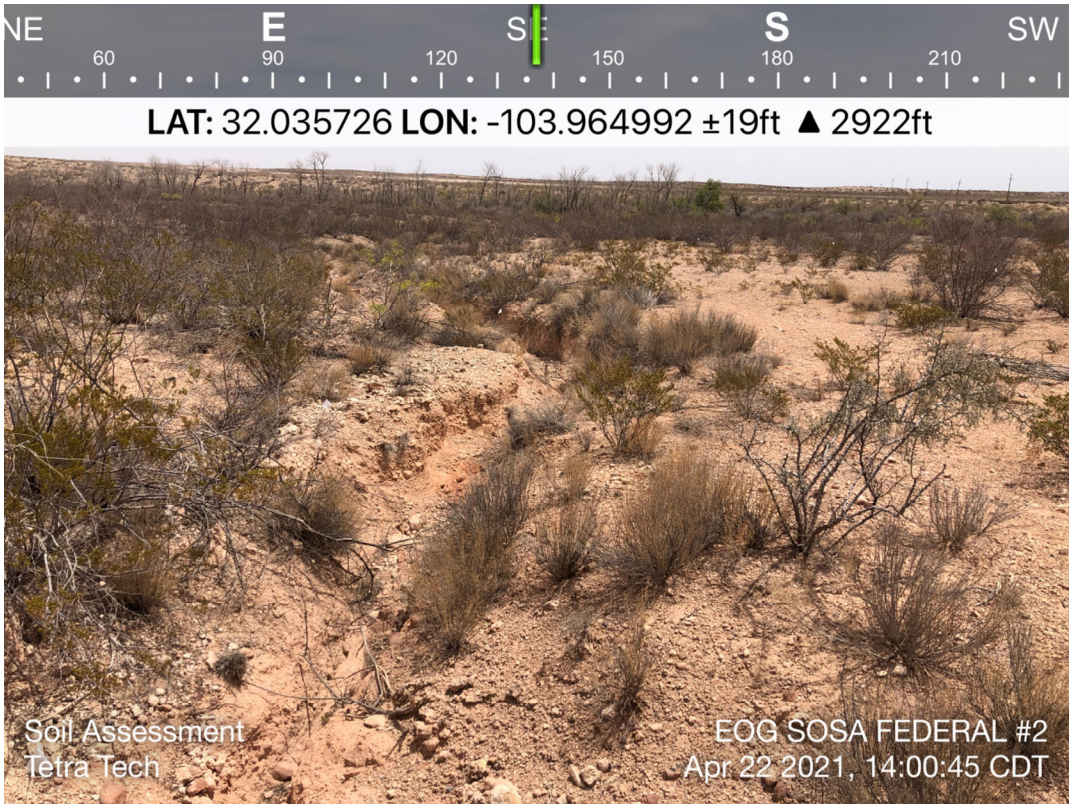
(-) Not Analyzed

Exceeded RRALs

Photos

EOG Resources
Sosa Federal #2
Eddy County, New Mexico

TETRA TECH



View of Release Area – View Southeast

View of Release Area – View East

EOG Resources
Sosa Federal #2
Eddy County, New Mexico

TETRA TECH

View of Release Area – View West

View of Release Area – View Northwest

Appendix A

RECEIVED
NOV 22 2010
NMOCD ARTESIA

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

nMLB1032735832

Release Notification and Corrective Action
OPERATOR ☒ Initial Report ☐ Final Report

Name of Company	OGRID Number	Contact
Yates Petroleum Corporation	25575	Amanda Trujillo
Address		Telephone No.
104 S. 4TH Street		575-748-1471
Facility Name	API Number	Facility Type / Order Number
Sosa Federal #2	~~30-015-26087~~	Oil well / 2RP- 485

Surface Owner	Mineral Owner	Lease No.
Federal	Federal	NM-44532

30-015-26247

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	15	26S	29E	480	SOUTH	660	East	EDDY

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
OIL & WATER	15	0
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Flowline failure	11/16/2010	11/16/2010 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher – NMOCD/Artesia	
By Whom? Amanda Trujillo – Yates Petroleum Corporation	Date and Hour 11/16/2010 pm	
Was a Watercourse Reached? ☐ Yes ☒ 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.*
A plugged flowline pressured up and blew out.

Describe Area Affected and Cleanup Action Taken.*
An approximate size of 150' x 1" was impacted. The impacted area is located on the south side if the location.. Soil from the pooling areas will be excavated and disposed of at an NMOCD approved facility. Vertical and horizontal delineation samples will taken and analysis ran for TPH and BTEX once all contaminated material has been removed. Chlorides analysis upon request. **Depth to Ground Water: >100' (approx. 100', per New Mexico ChevronTexaco Trend Map); Wellhead Protection Area: No; Distance to Surface Water Body: >1000'; SITE RANKING IS 0. Based on site ground water quality and enclosed analytical results.** (X) (X)

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: A Trujillo

Printed Name: Amanda Trujillo

Title: Environmental Scientist

E-mail Address: atrujillo@yatespetroleum.com

Date: Friday, November 19, 2010 Phone: 575-748-4310

OIL CONSERVATION DIVISION

Approved by District Supervisor: Signed By Mike Bratcher

Approval Date: NOV 23 2010 Expiration Date:

Conditions of Approval: REMEDIATION per OCD Rules and Guidelines. SUBMIT REMEDIATION PROPOSAL BY: 12/23/2010

Attached ☐

2RP-485

* Attach Additional Sheets If Necessary

(X) NOTE: Remediation proposal to be based on delineation of TPH, BTEX & Chlorides

(X) NOTE: No water quality info or analytical data was submitted with this form.

State of New Mexico
Oil Conservation Division

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?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ 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)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ 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?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☐ 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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

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: James F. Kennedy Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nMLB1032735832
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: James F. Kennedy Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

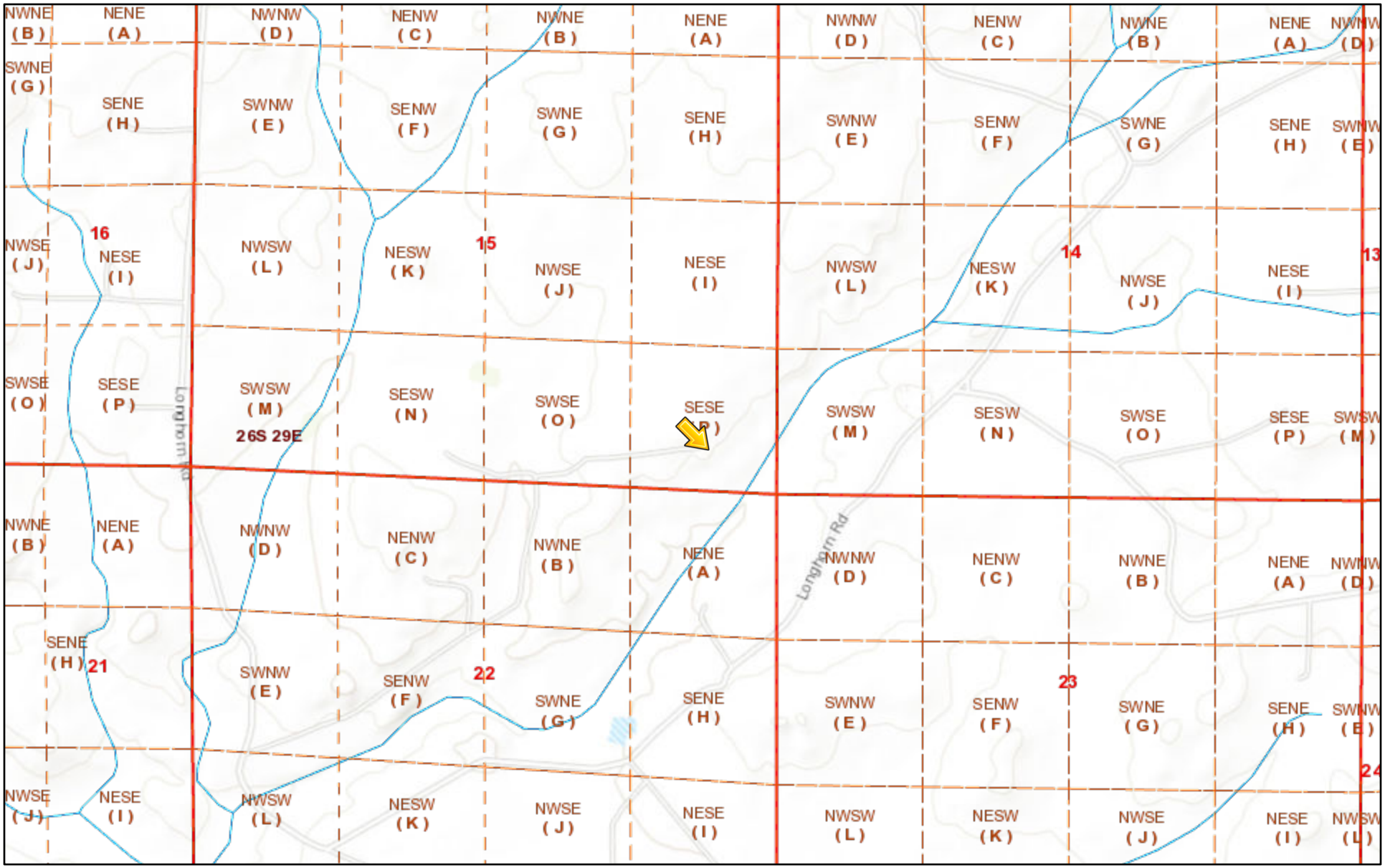
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance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

Closure Approved by: Bradford Billings Date: 11/02/2021

Printed Name: Bradford Billings Title: Envi.Spec.A

Appendix B

2RP-485



4/22/2021, 11:36:39 AM

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Override 1

OCD District Offices

PLSS First Division

PLSS Second Division

PLSS Townships

OSE Water-bodies

PLJV Probable Playas

OSE Streams

Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin,

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

Sosa Fed #2

2RP-485

New Mexico NFHL Data

April 25, 2021

1:18,056

0 0.15 0.3 0.6 mi

0 0.25 0.5 1 km

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

USGS
science for a changing world

National Water Information System: Mapper

USGS Home
Contact USGS
Search USGS

Help Info

Site Information

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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 01354 X-3		CUB	ED	2	1	3	23	26S	29E	598323	3543837	1173	170		
C 03605 POD1		CUB	ED	4	2	3	27	26S	29E	596990	3541983	2963	45	0	45
C 02038		C	ED	3	2	4	26	26S	29E	599204	3541992*	3216	200		
C 04473 POD1		CUB	ED	3	4	3	33	25S	29E	595018	3549768	5616	110		
C 03507 POD1		C	ED	1	3	3	05	26S	29E	593064	3548313	5812	140	78	62
C 03508 POD1		C	ED	1	3	3	05	26S	29E	593063	3548361	5841	140	75	65
C 01360		CUB	ED	4	3	3	05	26S	30E	602997	3548152	6212	770	173	597

Average Depth to Water: **81 feet**
Minimum Depth: **0 feet**
Maximum Depth: **173 feet**

Record Count: 7

UTMNAD83 Radius Search (in meters):

Easting (X): 597733.29 **Northing (Y):** 3544852 **Radius:** 6400

***UTM location was derived from PLSS - see Help**

4/25/21 1:10 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Click to hideNews Bulletins

- Explore the **NEW** USGS National Water Dashboard to access real-time data from over 13,500 stations nationwide.
- Full News

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 =
- 320135103573301

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320135103573301 26S.29E.23.31220

Eddy County, New Mexico
Latitude 32°01'35", Longitude 103°57'33" NAD27
Land-surface elevation 2,913 feet above NGVD29
The depth of the well is 170.00 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Forty-Niner Member of Rustler Formation (310FRNR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1987-10-14		D	62610		2832.12	NGVD29	1	S			A
1987-10-14		D	62611		2833.65	NAVD88	1	S			A
1987-10-14		D	72019	80.88			1	S			A

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	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

Appendix C

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
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Tel: (432)704-5440

Laboratory Job ID: 880-1552-1
Laboratory Sample Delivery Group: Eddy County, New Mexico
Client Project/Site: Sosa Federal # 2

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

Attn: Clair Gonzales

Authorized for release by:
4/26/2021 7:13:44 PM

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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: Sosa Federal # 2

Laboratory Job ID: 880-1552-1
SDG: Eddy County, New Mexico

Table of Contents

Definitions/Glossary

Client: Tetra Tech, Inc. Job ID: 880-1552-1
Project/Site: Sosa Federal # 2 SDG: Eddy County, New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low 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: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

Job ID: 880-1552-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-1552-1

Receipt
The samples were received on 4/23/2021 12:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: AH-6 (0'-1') (880-1552-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

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

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-1552-1
Matrix: Solid
Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 20:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 20:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 20:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/24/21 12:17	04/24/21 20:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 20:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/24/21 12:17	04/24/21 20:00	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		04/24/21 12:17	04/24/21 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*04/24/21 12:17*	*04/24/21 20:00*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*04/24/21 12:17*	*04/24/21 20:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/23/21 23:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/23/21 23:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/23/21 23:33	1
Total TPH	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/23/21 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*04/23/21 13:27*	*04/23/21 23:33*	*1*
o-Terphenyl	*99*		*70 - 130*	*04/23/21 13:27*	*04/23/21 23:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27.8**		5.03		mg/Kg			04/23/21 19:01	1

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

Lab Sample ID: 880-1552-2
Matrix: Solid
Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/24/21 12:17	04/24/21 20:20	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/24/21 12:17	04/24/21 20:20	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/24/21 12:17	04/24/21 20:20	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/24/21 12:17	04/24/21 20:20	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/24/21 12:17	04/24/21 20:20	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/24/21 12:17	04/24/21 20:20	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		04/24/21 12:17	04/24/21 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*04/24/21 12:17*	*04/24/21 20:20*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*04/24/21 12:17*	*04/24/21 20:20*	*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		04/23/21 13:27	04/24/21 00:38	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-1552-2
Matrix: Solid
Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/24/21 00:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/24/21 00:38	1
Total TPH	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/24/21 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*04/23/21 13:27*	*04/24/21 00:38*	*1*
o-Terphenyl	*106*		*70 - 130*	*04/23/21 13:27*	*04/24/21 00:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.1**		5.01		mg/Kg			04/23/21 19:06	1

Client Sample ID: AH-1 (2'-2.5')

Lab Sample ID: 880-1552-3
Matrix: Solid
Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/24/21 12:17	04/24/21 22:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/24/21 12:17	04/24/21 22:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/24/21 12:17	04/24/21 22:11	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/24/21 12:17	04/24/21 22:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/24/21 12:17	04/24/21 22:11	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/24/21 12:17	04/24/21 22:11	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		04/24/21 12:17	04/24/21 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*04/24/21 12:17*	*04/24/21 22:11*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*04/24/21 12:17*	*04/24/21 22:11*	*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		04/23/21 13:27	04/24/21 01:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/24/21 01:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/24/21 01:00	1
Total TPH	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/24/21 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*04/23/21 13:27*	*04/24/21 01:00*	*1*
o-Terphenyl	*114*		*70 - 130*	*04/23/21 13:27*	*04/24/21 01:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.81**		4.99		mg/Kg			04/23/21 19:11	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

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

Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

Lab Sample ID: 880-1552-4
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		04/24/21 12:17	04/24/21 22:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 22:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 22:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/24/21 12:17	04/24/21 22:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 22:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/24/21 12:17	04/24/21 22:31	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		04/24/21 12:17	04/24/21 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*04/24/21 12:17*	*04/24/21 22:31*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*04/24/21 12:17*	*04/24/21 22:31*	*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		04/23/21 13:27	04/24/21 01:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/23/21 13:27	04/24/21 01:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/23/21 13:27	04/24/21 01:21	1
Total TPH	<49.9	U	49.9		mg/Kg		04/23/21 13:27	04/24/21 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*04/23/21 13:27*	*04/24/21 01:21*	*1*
o-Terphenyl	*103*		*70 - 130*	*04/23/21 13:27*	*04/24/21 01:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.53**		4.99		mg/Kg			04/23/21 19:26	1

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

Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

Lab Sample ID: 880-1552-5
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		04/24/21 12:17	04/24/21 22:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 22:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 22:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/24/21 12:17	04/24/21 22:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 22:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/24/21 12:17	04/24/21 22:51	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		04/24/21 12:17	04/24/21 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*04/24/21 12:17*	*04/24/21 22:51*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*04/24/21 12:17*	*04/24/21 22:51*	*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		04/23/21 13:27	04/24/21 01:43	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-1552-5
Matrix: Solid
Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/24/21 01:43	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/24/21 01:43	1
Total TPH	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/24/21 01:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*04/23/21 13:27*	*04/24/21 01:43*	*1*
o-Terphenyl	*98*		*70 - 130*	*04/23/21 13:27*	*04/24/21 01:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			04/23/21 19:31	1

Client Sample ID: AH-2 (2'-2.5')

Lab Sample ID: 880-1552-6
Matrix: Solid
Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/24/21 12:17	04/24/21 23:12	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/24/21 12:17	04/24/21 23:12	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/24/21 12:17	04/24/21 23:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/24/21 12:17	04/24/21 23:12	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/24/21 12:17	04/24/21 23:12	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/24/21 12:17	04/24/21 23:12	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		04/24/21 12:17	04/24/21 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*04/24/21 12:17*	*04/24/21 23:12*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*04/24/21 12:17*	*04/24/21 23:12*	*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		04/23/21 13:27	04/24/21 02:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/23/21 13:27	04/24/21 02:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/23/21 13:27	04/24/21 02:05	1
Total TPH	<49.9	U	49.9		mg/Kg		04/23/21 13:27	04/24/21 02:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*04/23/21 13:27*	*04/24/21 02:05*	*1*
o-Terphenyl	*105*		*70 - 130*	*04/23/21 13:27*	*04/24/21 02:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			04/23/21 19:36	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

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

Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

Lab Sample ID: 880-1552-7
Matrix: Solid

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		04/24/21 12:17	04/24/21 23:32	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/24/21 12:17	04/24/21 23:32	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/24/21 12:17	04/24/21 23:32	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/24/21 12:17	04/24/21 23:32	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/24/21 12:17	04/24/21 23:32	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		04/24/21 12:17	04/24/21 23:32	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		04/24/21 12:17	04/24/21 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*04/24/21 12:17*	*04/24/21 23:32*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*04/24/21 12:17*	*04/24/21 23:32*	*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		04/23/21 13:27	04/24/21 02:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/24/21 02:48	1
Oil Range Organics (Over C28-C36)	**52.8**		50.0		mg/Kg		04/23/21 13:27	04/24/21 02:48	1
Total TPH	**52.8**		50.0		mg/Kg		04/23/21 13:27	04/24/21 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*04/23/21 13:27*	*04/24/21 02:48*	*1*
o-Terphenyl	*91*		*70 - 130*	*04/23/21 13:27*	*04/24/21 02:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46.4**		5.00		mg/Kg			04/23/21 19:41	1

Client Sample ID: AH-4 (0'-1')

Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

Lab Sample ID: 880-1552-8
Matrix: Solid

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		04/24/21 12:17	04/24/21 23:53	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/24/21 12:17	04/24/21 23:53	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/24/21 12:17	04/24/21 23:53	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/24/21 12:17	04/24/21 23:53	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/24/21 12:17	04/24/21 23:53	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		04/24/21 12:17	04/24/21 23:53	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		04/24/21 12:17	04/24/21 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*04/24/21 12:17*	*04/24/21 23:53*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*04/24/21 12:17*	*04/24/21 23:53*	*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		04/23/21 13:27	04/24/21 02:26	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

Client Sample ID: AH-4 (0'-1')

Lab Sample ID: 880-1552-8
Matrix: Solid
Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/23/21 13:27	04/24/21 02:26	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/23/21 13:27	04/24/21 02:26	1
Total TPH	<49.8	U	49.8		mg/Kg		04/23/21 13:27	04/24/21 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*04/23/21 13:27*	*04/24/21 02:26*	*1*
o-Terphenyl	*99*		*70 - 130*	*04/23/21 13:27*	*04/24/21 02:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.62**		5.00		mg/Kg			04/23/21 19:46	1

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

Lab Sample ID: 880-1552-9
Matrix: Solid
Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.358**		0.00198		mg/Kg		04/24/21 12:17	04/25/21 00:13	1
Toluene	**0.311**		0.00198		mg/Kg		04/24/21 12:17	04/25/21 00:13	1
Ethylbenzene	**0.174**		0.00198		mg/Kg		04/24/21 12:17	04/25/21 00:13	1
m-Xylene & p-Xylene	**0.633**		0.00397		mg/Kg		04/24/21 12:17	04/25/21 00:13	1
o-Xylene	**0.0115**		0.00201		mg/Kg		04/26/21 10:48	04/26/21 16:49	1
Xylenes, Total	**0.0115**		0.00402		mg/Kg		04/26/21 10:48	04/26/21 16:49	1
Total BTEX	**0.0115**		0.00402		mg/Kg		04/26/21 10:48	04/26/21 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*16370*	*S1+*	*70 - 130*	*04/24/21 12:17*	*04/25/21 00:13*	*1*
1,4-Difluorobenzene (Surr)	*388*	*S1+*	*70 - 130*	*04/24/21 12:17*	*04/25/21 00:13*	*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		04/23/21 13:47	04/26/21 10:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/23/21 13:47	04/26/21 10:59	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/23/21 13:47	04/26/21 10:59	1
Total TPH	<49.8	U	49.8		mg/Kg		04/23/21 13:47	04/26/21 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*04/23/21 13:47*	*04/26/21 10:59*	*1*
o-Terphenyl	*64*	*S1-*	*70 - 130*	*04/23/21 13:47*	*04/26/21 10:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.37**		4.95		mg/Kg			04/23/21 19:51	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

Client Sample ID: AH-6 (0'-1')

Date Collected: 04/22/21 00:00
Date Received: 04/23/21 12:00

Lab Sample ID: 880-1552-10

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		04/24/21 12:17	04/25/21 00:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/24/21 12:17	04/25/21 00:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/24/21 12:17	04/25/21 00:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/24/21 12:17	04/25/21 00:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/24/21 12:17	04/25/21 00:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/24/21 12:17	04/25/21 00:33	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/24/21 12:17	04/25/21 00:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*04/24/21 12:17*	*04/25/21 00:33*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*04/24/21 12:17*	*04/25/21 00:33*	*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		04/23/21 13:47	04/26/21 11:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/23/21 13:47	04/26/21 11:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/23/21 13:47	04/26/21 11:20	1
Total TPH	<49.9	U	49.9		mg/Kg		04/23/21 13:47	04/26/21 11:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*04/23/21 13:47*	*04/26/21 11:20*	*1*
o-Terphenyl	*92*		*70 - 130*	*04/23/21 13:47*	*04/26/21 11:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.13**		5.02		mg/Kg			04/23/21 20:07	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-1552-1	AH-1 (0'-1')	118	106
880-1552-2	AH-1 (1'-1.5')	113	106
880-1552-3	AH-1 (2'-2.5')	102	106
880-1552-4	AH-2 (0'-1')	109	107
880-1552-5	AH-2 (1'-1.5')	108	107
880-1552-6	AH-2 (2'-2.5')	110	107
880-1552-7	AH-3 (0'-1')	105	107
880-1552-8	AH-4 (0'-1')	116	105
880-1552-9	AH-5 (0'-1')	16370 S1+	388 S1+
880-1552-10	AH-6 (0'-1')	115	95
LCS 880-2278/1-A	Lab Control Sample	98	104
LCS 880-2322/1-A	Lab Control Sample	101	104
LCSD 880-2278/2-A	Lab Control Sample Dup	99	104
LCSD 880-2322/2-A	Lab Control Sample Dup	99	105
MB 880-2278/5-A	Method Blank	98	102
MB 880-2322/5-A	Method Blank	99	102

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**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-1552-1	AH-1 (0'-1')	90	99
880-1552-1 MS	AH-1 (0'-1')	97	95
880-1552-1 MSD	AH-1 (0'-1')	96	98
880-1552-2	AH-1 (1'-1.5')	92	106
880-1552-3	AH-1 (2'-2.5')	96	114
880-1552-4	AH-2 (0'-1')	89	103
880-1552-5	AH-2 (1'-1.5')	87	98
880-1552-6	AH-2 (2'-2.5')	93	105
880-1552-7	AH-3 (0'-1')	85	91
880-1552-8	AH-4 (0'-1')	85	99
880-1552-9	AH-5 (0'-1')	73	64 S1-
880-1552-10	AH-6 (0'-1')	99	92
LCS 880-2225/2-A	Lab Control Sample	94	97
LCS 880-2228/2-A	Lab Control Sample	111	102
LCSD 880-2225/3-A	Lab Control Sample Dup	92	90
LCSD 880-2228/3-A	Lab Control Sample Dup	103	98
MB 880-2225/1-A	Method Blank	86	99
MB 880-2228/1-A	Method Blank	111	115

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-2278/5-A
Matrix: Solid
Analysis Batch: 2279

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2278

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 16:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 16:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 16:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/24/21 12:17	04/24/21 16:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/21 12:17	04/24/21 16:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/24/21 12:17	04/24/21 16:48	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		04/24/21 12:17	04/24/21 16:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*04/24/21 12:17*	*04/24/21 16:48*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*04/24/21 12:17*	*04/24/21 16:48*	*1*

Lab Sample ID: LCS 880-2278/1-A
Matrix: Solid
Analysis Batch: 2279

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2278

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09172		mg/Kg		92	70 - 130		
Toluene			0.100	0.09493		mg/Kg		95	70 - 130		
Ethylbenzene			0.100	0.1003		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.2034		mg/Kg		102	70 - 130		
o-Xylene			0.100	0.09964		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-2278/2-A
Matrix: Solid
Analysis Batch: 2279

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2278

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09080		mg/Kg		91	70 - 130	1	35
Toluene			0.100	0.09385		mg/Kg		94	70 - 130	1	35
Ethylbenzene			0.100	0.09846		mg/Kg		98	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2009		mg/Kg		100	70 - 130	1	35
o-Xylene			0.100	0.09914		mg/Kg		99	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 880-2322/5-A
Matrix: Solid
Analysis Batch: 2325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/26/21 10:48	04/26/21 15:59	1

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-2322/5-A
Matrix: Solid
Analysis Batch: 2325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200		mg/Kg		04/26/21 10:48	04/26/21 15:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/26/21 10:48	04/26/21 15:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/26/21 10:48	04/26/21 15:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/26/21 10:48	04/26/21 15:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/26/21 10:48	04/26/21 15:59	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		04/26/21 10:48	04/26/21 15:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*04/26/21 10:48*	*04/26/21 15:59*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*04/26/21 10:48*	*04/26/21 15:59*	*1*

Lab Sample ID: LCS 880-2322/1-A
Matrix: Solid
Analysis Batch: 2325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2322

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09265		mg/Kg		93	70 - 130		
Toluene			0.100	0.09469		mg/Kg		95	70 - 130		
Ethylbenzene			0.100	0.1007		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.2048		mg/Kg		102	70 - 130		
o-Xylene			0.100	0.1002		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-2322/2-A
Matrix: Solid
Analysis Batch: 2325

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2322

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09343		mg/Kg		93	70 - 130	1	35
Toluene			0.100	0.09645		mg/Kg		96	70 - 130	2	35
Ethylbenzene			0.100	0.1022		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2080		mg/Kg		104	70 - 130	2	35
o-Xylene			0.100	0.1011		mg/Kg		101	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-2225/1-A
Matrix: Solid
Analysis Batch: 2197

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2225

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		04/23/21 13:27	04/23/21 22:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/23/21 22:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/23/21 22:28	1
Total TPH	<50.0	U	50.0		mg/Kg		04/23/21 13:27	04/23/21 22:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*04/23/21 13:27*	*04/23/21 22:28*	*1*
o-Terphenyl	*99*		*70 - 130*	*04/23/21 13:27*	*04/23/21 22:28*	*1*

Lab Sample ID: LCS 880-2225/2-A
Matrix: Solid
Analysis Batch: 2197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2225

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1012		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	950.3		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*94*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: LCSD 880-2225/3-A
Matrix: Solid
Analysis Batch: 2197

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2225

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	953.7		mg/Kg		95	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	881.8		mg/Kg		88	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

Lab Sample ID: 880-1552-1 MS
Matrix: Solid
Analysis Batch: 2197

Client Sample ID: AH-1 (0'-1')
Prep Type: Total/NA
Prep Batch: 2225

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	999.7		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	998	964.8		mg/Kg		97	70 - 130		

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-1552-1 MS
Matrix: Solid
Analysis Batch: 2197

Client Sample ID: AH-1 (0'-1')
Prep Type: Total/NA
Prep Batch: 2225

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: 880-1552-1 MSD
Matrix: Solid
Analysis Batch: 2197

Client Sample ID: AH-1 (0'-1')
Prep Type: Total/NA
Prep Batch: 2225

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	960.7		mg/Kg		94	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1010		mg/Kg		101	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: MB 880-2228/1-A
Matrix: Solid
Analysis Batch: 2306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2228

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		04/23/21 13:47	04/26/21 08:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/23/21 13:47	04/26/21 08:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/23/21 13:47	04/26/21 08:31	1
Total TPH	<50.0	U	50.0		mg/Kg		04/23/21 13:47	04/26/21 08:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	04/23/21 13:47	04/26/21 08:31	1
o-Terphenyl	115		70 - 130	04/23/21 13:47	04/26/21 08:31	1

Lab Sample ID: LCS 880-2228/2-A
Matrix: Solid
Analysis Batch: 2306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1174		mg/Kg		117	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	102		70 - 130

QC Sample Results

Client: Tetra Tech, Inc. Job ID: 880-1552-1
Project/Site: Sosa Federal # 2 SDG: Eddy County, New Mexico

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

Lab Sample ID: LCSD 880-2228/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 2306 **Prep Batch: 2228**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1125		mg/Kg		112	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1013		mg/Kg		101	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2232/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 2258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/23/21 18:25	1

Lab Sample ID: LCS 880-2232/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 2258

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	252.5		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-2232/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 2258

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	256.4		mg/Kg		103	90 - 110	2	20

Lab Sample ID: 880-1552-9 MS **Client Sample ID: AH-5 (0'-1')**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 2258

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	7.37		248	252.0		mg/Kg		99	90 - 110		

Lab Sample ID: 880-1552-9 MSD **Client Sample ID: AH-5 (0'-1')**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 2258

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.37		248	254.4		mg/Kg		100	90 - 110	1	20

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

GC VOA

Prep Batch: 2278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-1	AH-1 (0'-1')	Total/NA	Solid	5035	
880-1552-2	AH-1 (1'-1.5')	Total/NA	Solid	5035	
880-1552-3	AH-1 (2'-2.5')	Total/NA	Solid	5035	
880-1552-4	AH-2 (0'-1')	Total/NA	Solid	5035	
880-1552-5	AH-2 (1'-1.5')	Total/NA	Solid	5035	
880-1552-6	AH-2 (2'-2.5')	Total/NA	Solid	5035	
880-1552-7	AH-3 (0'-1')	Total/NA	Solid	5035	
880-1552-8	AH-4 (0'-1')	Total/NA	Solid	5035	
880-1552-9	AH-5 (0'-1')	Total/NA	Solid	5035	
880-1552-10	AH-6 (0'-1')	Total/NA	Solid	5035	
MB 880-2278/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2278/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2278/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 2279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-1	AH-1 (0'-1')	Total/NA	Solid	8021B	2278
880-1552-2	AH-1 (1'-1.5')	Total/NA	Solid	8021B	2278
880-1552-3	AH-1 (2'-2.5')	Total/NA	Solid	8021B	2278
880-1552-4	AH-2 (0'-1')	Total/NA	Solid	8021B	2278
880-1552-5	AH-2 (1'-1.5')	Total/NA	Solid	8021B	2278
880-1552-6	AH-2 (2'-2.5')	Total/NA	Solid	8021B	2278
880-1552-7	AH-3 (0'-1')	Total/NA	Solid	8021B	2278
880-1552-8	AH-4 (0'-1')	Total/NA	Solid	8021B	2278
880-1552-9	AH-5 (0'-1')	Total/NA	Solid	8021B	2278
880-1552-10	AH-6 (0'-1')	Total/NA	Solid	8021B	2278
MB 880-2278/5-A	Method Blank	Total/NA	Solid	8021B	2278
LCS 880-2278/1-A	Lab Control Sample	Total/NA	Solid	8021B	2278
LCSD 880-2278/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2278

Prep Batch: 2322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-9	AH-5 (0'-1')	Total/NA	Solid	5035	
MB 880-2322/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2322/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2322/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 2325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-9	AH-5 (0'-1')	Total/NA	Solid	8021B	2322
MB 880-2322/5-A	Method Blank	Total/NA	Solid	8021B	2322
LCS 880-2322/1-A	Lab Control Sample	Total/NA	Solid	8021B	2322
LCSD 880-2322/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2322

GC Semi VOA

Analysis Batch: 2197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-1	AH-1 (0'-1')	Total/NA	Solid	8015B NM	2225
880-1552-2	AH-1 (1'-1.5')	Total/NA	Solid	8015B NM	2225
880-1552-3	AH-1 (2'-2.5')	Total/NA	Solid	8015B NM	2225

QC Association Summary

Client: Tetra Tech, Inc. Job ID: 880-1552-1
Project/Site: Sosa Federal # 2 SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 2197 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-4	AH-2 (0'-1')	Total/NA	Solid	8015B NM	2225
880-1552-5	AH-2 (1'-1.5')	Total/NA	Solid	8015B NM	2225
880-1552-6	AH-2 (2'-2.5')	Total/NA	Solid	8015B NM	2225
880-1552-7	AH-3 (0'-1')	Total/NA	Solid	8015B NM	2225
880-1552-8	AH-4 (0'-1')	Total/NA	Solid	8015B NM	2225
MB 880-2225/1-A	Method Blank	Total/NA	Solid	8015B NM	2225
LCS 880-2225/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2225
LCSD 880-2225/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2225
880-1552-1 MS	AH-1 (0'-1')	Total/NA	Solid	8015B NM	2225
880-1552-1 MSD	AH-1 (0'-1')	Total/NA	Solid	8015B NM	2225

Prep Batch: 2225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-1	AH-1 (0'-1')	Total/NA	Solid	8015NM Prep	
880-1552-2	AH-1 (1'-1.5')	Total/NA	Solid	8015NM Prep	
880-1552-3	AH-1 (2'-2.5')	Total/NA	Solid	8015NM Prep	
880-1552-4	AH-2 (0'-1')	Total/NA	Solid	8015NM Prep	
880-1552-5	AH-2 (1'-1.5')	Total/NA	Solid	8015NM Prep	
880-1552-6	AH-2 (2'-2.5')	Total/NA	Solid	8015NM Prep	
880-1552-7	AH-3 (0'-1')	Total/NA	Solid	8015NM Prep	
880-1552-8	AH-4 (0'-1')	Total/NA	Solid	8015NM Prep	
MB 880-2225/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2225/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2225/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-1552-1 MS	AH-1 (0'-1')	Total/NA	Solid	8015NM Prep	
880-1552-1 MSD	AH-1 (0'-1')	Total/NA	Solid	8015NM Prep	

Prep Batch: 2228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-9	AH-5 (0'-1')	Total/NA	Solid	8015NM Prep	
880-1552-10	AH-6 (0'-1')	Total/NA	Solid	8015NM Prep	
MB 880-2228/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2228/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2228/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 2306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-9	AH-5 (0'-1')	Total/NA	Solid	8015B NM	2228
880-1552-10	AH-6 (0'-1')	Total/NA	Solid	8015B NM	2228
MB 880-2228/1-A	Method Blank	Total/NA	Solid	8015B NM	2228
LCS 880-2228/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2228
LCSD 880-2228/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2228

HPLC/IC

Leach Batch: 2232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-1	AH-1 (0'-1')	Soluble	Solid	DI Leach	
880-1552-2	AH-1 (1'-1.5')	Soluble	Solid	DI Leach	
880-1552-3	AH-1 (2'-2.5')	Soluble	Solid	DI Leach	
880-1552-4	AH-2 (0'-1')	Soluble	Solid	DI Leach	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

HPLC/IC (Continued)

Leach Batch: 2232 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-5	AH-2 (1'-1.5')	Soluble	Solid	DI Leach	
880-1552-6	AH-2 (2'-2.5')	Soluble	Solid	DI Leach	
880-1552-7	AH-3 (0'-1')	Soluble	Solid	DI Leach	
880-1552-8	AH-4 (0'-1')	Soluble	Solid	DI Leach	
880-1552-9	AH-5 (0'-1')	Soluble	Solid	DI Leach	
880-1552-10	AH-6 (0'-1')	Soluble	Solid	DI Leach	
MB 880-2232/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2232/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2232/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-1552-9 MS	AH-5 (0'-1')	Soluble	Solid	DI Leach	
880-1552-9 MSD	AH-5 (0'-1')	Soluble	Solid	DI Leach	

Analysis Batch: 2258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1552-1	AH-1 (0'-1')	Soluble	Solid	300.0	2232
880-1552-2	AH-1 (1'-1.5')	Soluble	Solid	300.0	2232
880-1552-3	AH-1 (2'-2.5')	Soluble	Solid	300.0	2232
880-1552-4	AH-2 (0'-1')	Soluble	Solid	300.0	2232
880-1552-5	AH-2 (1'-1.5')	Soluble	Solid	300.0	2232
880-1552-6	AH-2 (2'-2.5')	Soluble	Solid	300.0	2232
880-1552-7	AH-3 (0'-1')	Soluble	Solid	300.0	2232
880-1552-8	AH-4 (0'-1')	Soluble	Solid	300.0	2232
880-1552-9	AH-5 (0'-1')	Soluble	Solid	300.0	2232
880-1552-10	AH-6 (0'-1')	Soluble	Solid	300.0	2232
MB 880-2232/1-A	Method Blank	Soluble	Solid	300.0	2232
LCS 880-2232/2-A	Lab Control Sample	Soluble	Solid	300.0	2232
LCSD 880-2232/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2232
880-1552-9 MS	AH-5 (0'-1')	Soluble	Solid	300.0	2232
880-1552-9 MSD	AH-5 (0'-1')	Soluble	Solid	300.0	2232

Lab Chronicle

Client: Tetra Tech, Inc. Job ID: 880-1552-1
Project/Site: Sosa Federal # 2 SDG: Eddy County, New Mexico

Client Sample ID: AH-1 (0'-1') Lab Sample ID: 880-1552-1

Date Collected: 04/22/21 00:00 **Matrix: Solid**
Date Received: 04/23/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2278	04/24/21 12:17	KL	XM
Total/NA	Analysis	8021B		1	2279	04/24/21 20:00	KL	XM
Total/NA	Prep	8015NM Prep			2225	04/23/21 13:27	DM	XM
Total/NA	Analysis	8015B NM		1	2197	04/23/21 23:33	AJ	XM
Soluble	Leach	DI Leach			2232	04/23/21 14:05	CH	XM
Soluble	Analysis	300.0		1	2258	04/23/21 19:01	WP	XM

Client Sample ID: AH-1 (1'-1.5') Lab Sample ID: 880-1552-2

Date Collected: 04/22/21 00:00 **Matrix: Solid**
Date Received: 04/23/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2278	04/24/21 12:17	KL	XM
Total/NA	Analysis	8021B		1	2279	04/24/21 20:20	KL	XM
Total/NA	Prep	8015NM Prep			2225	04/23/21 13:27	DM	XM
Total/NA	Analysis	8015B NM		1	2197	04/24/21 00:38	AJ	XM
Soluble	Leach	DI Leach			2232	04/23/21 14:05	CH	XM
Soluble	Analysis	300.0		1	2258	04/23/21 19:06	WP	XM

Client Sample ID: AH-1 (2'-2.5') Lab Sample ID: 880-1552-3

Date Collected: 04/22/21 00:00 **Matrix: Solid**
Date Received: 04/23/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2278	04/24/21 12:17	KL	XM
Total/NA	Analysis	8021B		1	2279	04/24/21 22:11	KL	XM
Total/NA	Prep	8015NM Prep			2225	04/23/21 13:27	DM	XM
Total/NA	Analysis	8015B NM		1	2197	04/24/21 01:00	AJ	XM
Soluble	Leach	DI Leach			2232	04/23/21 14:05	CH	XM
Soluble	Analysis	300.0		1	2258	04/23/21 19:11	WP	XM

Client Sample ID: AH-2 (0'-1') Lab Sample ID: 880-1552-4

Date Collected: 04/22/21 00:00 **Matrix: Solid**
Date Received: 04/23/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2278	04/24/21 12:17	KL	XM
Total/NA	Analysis	8021B		1	2279	04/24/21 22:31	KL	XM
Total/NA	Prep	8015NM Prep			2225	04/23/21 13:27	DM	XM
Total/NA	Analysis	8015B NM		1	2197	04/24/21 01:21	AJ	XM
Soluble	Leach	DI Leach			2232	04/23/21 14:05	CH	XM
Soluble	Analysis	300.0		1	2258	04/23/21 19:26	WP	XM

Lab Chronicle

Client: Tetra Tech, Inc.
Job ID: 880-1552-1
Project/Site: Sosa Federal # 2
SDG: Eddy County, New Mexico

Client Sample ID: AH-2 (1'-1.5')
Lab Sample ID: 880-1552-5
Date Collected: 04/22/21 00:00
Matrix: Solid
Date Received: 04/23/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2278	04/24/21 12:17	KL	XM
Total/NA	Analysis	8021B		1	2279	04/24/21 22:51	KL	XM
Total/NA	Prep	8015NM Prep			2225	04/23/21 13:27	DM	XM
Total/NA	Analysis	8015B NM		1	2197	04/24/21 01:43	AJ	XM
Soluble	Leach	DI Leach			2232	04/23/21 14:05	CH	XM
Soluble	Analysis	300.0		1	2258	04/23/21 19:31	WP	XM

Client Sample ID: AH-2 (2'-2.5')
Lab Sample ID: 880-1552-6
Date Collected: 04/22/21 00:00
Matrix: Solid
Date Received: 04/23/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2278	04/24/21 12:17	KL	XM
Total/NA	Analysis	8021B		1	2279	04/24/21 23:12	KL	XM
Total/NA	Prep	8015NM Prep			2225	04/23/21 13:27	DM	XM
Total/NA	Analysis	8015B NM		1	2197	04/24/21 02:05	AJ	XM
Soluble	Leach	DI Leach			2232	04/23/21 14:05	CH	XM
Soluble	Analysis	300.0		1	2258	04/23/21 19:36	WP	XM

Client Sample ID: AH-3 (0'-1')
Lab Sample ID: 880-1552-7
Date Collected: 04/22/21 00:00
Matrix: Solid
Date Received: 04/23/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2278	04/24/21 12:17	KL	XM
Total/NA	Analysis	8021B		1	2279	04/24/21 23:32	KL	XM
Total/NA	Prep	8015NM Prep			2225	04/23/21 13:27	DM	XM
Total/NA	Analysis	8015B NM		1	2197	04/24/21 02:48	AJ	XM
Soluble	Leach	DI Leach			2232	04/23/21 14:05	CH	XM
Soluble	Analysis	300.0		1	2258	04/23/21 19:41	WP	XM

Client Sample ID: AH-4 (0'-1')
Lab Sample ID: 880-1552-8
Date Collected: 04/22/21 00:00
Matrix: Solid
Date Received: 04/23/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2278	04/24/21 12:17	KL	XM
Total/NA	Analysis	8021B		1	2279	04/24/21 23:53	KL	XM
Total/NA	Prep	8015NM Prep			2225	04/23/21 13:27	DM	XM
Total/NA	Analysis	8015B NM		1	2197	04/24/21 02:26	AJ	XM
Soluble	Leach	DI Leach			2232	04/23/21 14:05	CH	XM
Soluble	Analysis	300.0		1	2258	04/23/21 19:46	WP	XM

Lab Chronicle

Client: Tetra Tech, Inc. Job ID: 880-1552-1
Project/Site: Sosa Federal # 2 SDG: Eddy County, New Mexico

Client Sample ID: AH-5 (0'-1') Lab Sample ID: 880-1552-9

Date Collected: 04/22/21 00:00 **Matrix: Solid**
Date Received: 04/23/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2278	04/24/21 12:17	KL	XM
Total/NA	Analysis	8021B		1	2279	04/25/21 00:13	KL	XM
Total/NA	Prep	5035			2322	04/26/21 10:48	KL	XM
Total/NA	Analysis	8021B		1	2325	04/26/21 16:49	KL	XM
Total/NA	Prep	8015NM Prep			2228	04/23/21 13:47	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/26/21 10:59	AJ	XM
Soluble	Leach	DI Leach			2232	04/23/21 14:05	CH	XM
Soluble	Analysis	300.0		1	2258	04/23/21 19:51	WP	XM

Client Sample ID: AH-6 (0'-1') Lab Sample ID: 880-1552-10

Date Collected: 04/22/21 00:00 **Matrix: Solid**
Date Received: 04/23/21 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2278	04/24/21 12:17	KL	XM
Total/NA	Analysis	8021B		1	2279	04/25/21 00:33	KL	XM
Total/NA	Prep	8015NM Prep			2228	04/23/21 13:47	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/26/21 11:20	AJ	XM
Soluble	Leach	DI Leach			2232	04/23/21 14:05	CH	XM
Soluble	Analysis	300.0		1	2258	04/23/21 20:07	WP	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

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

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

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

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.

Laboratory References:

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Sosa Federal # 2

Job ID: 880-1552-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-1552-1	AH-1 (0'-1')	Solid	04/22/21 00:00	04/23/21 12:00	
880-1552-2	AH-1 (1'-1.5')	Solid	04/22/21 00:00	04/23/21 12:00	
880-1552-3	AH-1 (2'-2.5')	Solid	04/22/21 00:00	04/23/21 12:00	
880-1552-4	AH-2 (0'-1')	Solid	04/22/21 00:00	04/23/21 12:00	
880-1552-5	AH-2 (1'-1.5')	Solid	04/22/21 00:00	04/23/21 12:00	
880-1552-6	AH-2 (2'-2.5')	Solid	04/22/21 00:00	04/23/21 12:00	
880-1552-7	AH-3 (0'-1')	Solid	04/22/21 00:00	04/23/21 12:00	
880-1552-8	AH-4 (0'-1')	Solid	04/22/21 00:00	04/23/21 12:00	
880-1552-9	AH-5 (0'-1')	Solid	04/22/21 00:00	04/23/21 12:00	
880-1552-10	AH-6 (0'-1')	Solid	04/22/21 00:00	04/23/21 12:00	

Analysis Request of Chain of Custody Record

Tetra Tech

880-1552 Chain of Custody

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

880-1552 4/26/2021

Client Name:	EOG	**Site Manager:**	Paula TocoraAlonso
Project Name:	Sosa Federal #2	**Contact Info:**	Email paula tocoraalonso@tetratech com
Project Location: (county, state)	Eddy County, New Mexico	**Project #:**	212C-MD-02419, Task 3000
Invoice to:	EOG James Kennedy		
Receiving Laboratory:	Xenco	**Sampler Signature:**	Joe Tyler
Comments:			

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	PRESERVATIVE METHOD	# 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	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol 8260B / 624	GC/MS Semi Vol 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300 0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
		YEAR 2021																															
	AH-1 (0'-1')	04/22/21			X				X			1	N	X		X												X					
	AH-1 (1'-1 5')	04/22/21			X				X			1	N	X		X												X					
	AH-1 (2'-2 5')	04/22/21			X				X			1	N	X		X												X					
	AH-2 (0'-1')	04/22/21			X				X			1	N	X		X												X					
	AH-2 (1'-1 5')	04/22/21			X				X			1	N	X		X												X					
	AH-2 (2'-2 5')	04/22/21			X				X			1	N	X		X												X					
	AH-3 (0'-1')	04/22/21			X				X			1	N	X		X												X					
	AH-4 (0'-1')	04/22/21			X				X			1	N	X		X												X					
	AH-5 (0'-1')	04/22/21			X				X			1	N	X		X												X					
	AH-6 (0'-1')	04/22/21			X				X			1	N	X		X												X					

Relinquished by	Joe Tyler	Date 4-25-2021	Time 1200	Received by	Date 4/23/21	Time 1200
Relinquished by		Date	Time	Received by	Date	Time
Relinquished by		Date	Time	Received by	Date	Time

ORIGINAL COPY

LAB USE ONLY

Sample Temperature 0.6 | 1.0

+0.5

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking # _____

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-1552-1
SDG Number: Eddy County, New Mexico

Login Number: 1552
List Number: 1
Creator: Phillips, Kerianna

List Source: Eurofins Midland

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

Operator:	OGRID:
EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	7377
	Action Number: 54730
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	None	11/2/2021