

SITE INFORMATION

Report Type: Work Plan nAPP2307052908

General Site Information:

Site:	Honey Buzzard 102 Lay Flat Line					
Company:	EOG Resources					
Section, Township and Range	Unit A	Sec. 32	T 24S	R 34E		
Lease Number:						
County:	Lea County					
GPS:	32.180930°			-103.487017°		
Surface Owner:	State					
Mineral Owner:						
Directions:	From intersection 128 and Vaca Ln, travel south on Vaca Ln for 2.26 miles. Turn Left and travel East on Resource Ln for 1.89 miles. Release location south of the lease road.					

Release Data:

Date Released:	1/22/2023
Type Release:	Reuse Water
Source of Contamination:	Lay Flat Line
Fluid Released:	10 bbl water
Fluids Recovered:	5 bbl water

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:	Todd_Wells@eogresources.com		clair.gonzales@tetrattech.com

Site Characterization

Depth to Groundwater:	17.56'
Karst Potential:	Low

Recommended Remedial Action Levels (RRALs)

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



June 9, 2023

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

**RE: Remediation Work Plan
EOG Resources
Honey Buzzard 102 Lay Flat Line
Lea County, New Mexico
nAPP2307052908**

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess a release that occurred at the Honey Buzzard 102 Lay Flat Line Release, Unit A, Section 32, Township 24 South, Range 34 East, Lea County, New Mexico (Site). The spill site coordinates are 32.180930°, -103.487017°. 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 Site was caused by a developed hole in the lay flat line, causing the release of 10 bbls of reuse water, the release was in the ROW along a lease road, impacting an area of 55' in length and between 15' and 30' in width. Additionally, approximately 5 bbls of fluids were recovered. On January 22, 2023, the release was discovered and 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, subsurface 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, USGS Mapper, and Karst map 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 2 mile radius of the Site. The well reported on the NMOSE Water Rights Reporting System reports a total depth of 60 ft bgs and measured water level of 30 ft bgs and is approximately 2.04 miles of the Site. The well reported on the USGS National Water Information System reports a water level measured at 17.56 ft bgs and is approximately 1.96 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
1.96 Miles	5/29/1991	USGS	-	17.56'
2.04 Miles	6/30/1912	NMOSE	60'	30'

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 for TPH is 100 mg/kg (GRO + DRO + ORO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 600 mg/kg.

Site Assessment Activities

Tetra Tech conducted site assessment activities on February 8, 2023. A total of two (2) auger holes (AH-1 through AH-2) were installed to depths ranging from surface to 1.0 ft bgs, because of hitting refusal due to dense geological formation, to attempt to assess and vertically delineate the impacted the area. Additionally, a total of four (4) horizontals (H-1 through H-4) were installed to total depths of 0.5 ft bgs, to horizontally delineate the impact. The impact and sample locations are shown on **Figure 3**.

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

Referring to Table 1, auger holes (AH-1 and AH-2) indicated chloride concentrations above RRALs, with concentrations of 966 mg/kg and 4,630 mg/kg at 1.0 ft bgs, respectively. However, vertical delineation of chlorides was not found in the both augers (AH-1 and AH-2)



due to hitting refusal due to the dense geological formation. Additionally, Horizontals (H-1 through H-4) did not indicate benzene, BTEX, TPH, or chloride concentrations above RRALs.

Work Plan

Based on the C-141 (nAPP2307052908) 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 that will be followed for the site, will be held to 600 mg/kg for chlorides, and 100 mg/kg (GRO + DRO + ORO) for TPH. Based on Tetra Tech assessment activities, laboratory results indicated chloride concentrations above RRALs, throughout the impact area, in total depths ranging from surface to 1.0 ft bgs.

Due to lay flat lines being in use and present on top of the release area, the remediation has been unable to be completed safely and without the chance of causing an additional release. The remediation will take place in the next 90 days once the production schedule allows the movement of the in use lay flat lines with minimal risk of damage or a release. Once the lines have been moved, EOG proposes to vertically delineate the area of auger holes (AH-1 and AH-2) by installing trenches during remediation activities. Following the delineation, and based on the collected data and determined RRALs, EOG will remediate the impacted areas to the most stringent RRALs, as determined by the delineation activities. The impacted area subject to delineation and remediation is indicated in **Table 1** and shown on **Figure 4**. Following excavation, 5-point composite confirmation bottom hole and sidewall samples will be installed within the remediated areas on a 200 square foot basis. The 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



▲ SITE LOCATION

0 18,000 36,000
Feet
Approximate Scale

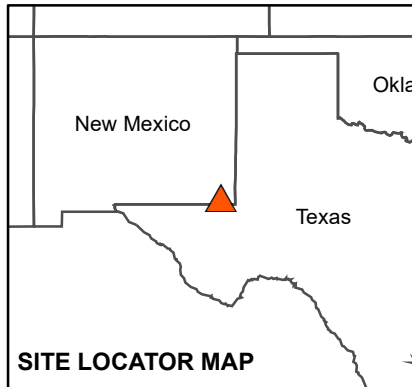


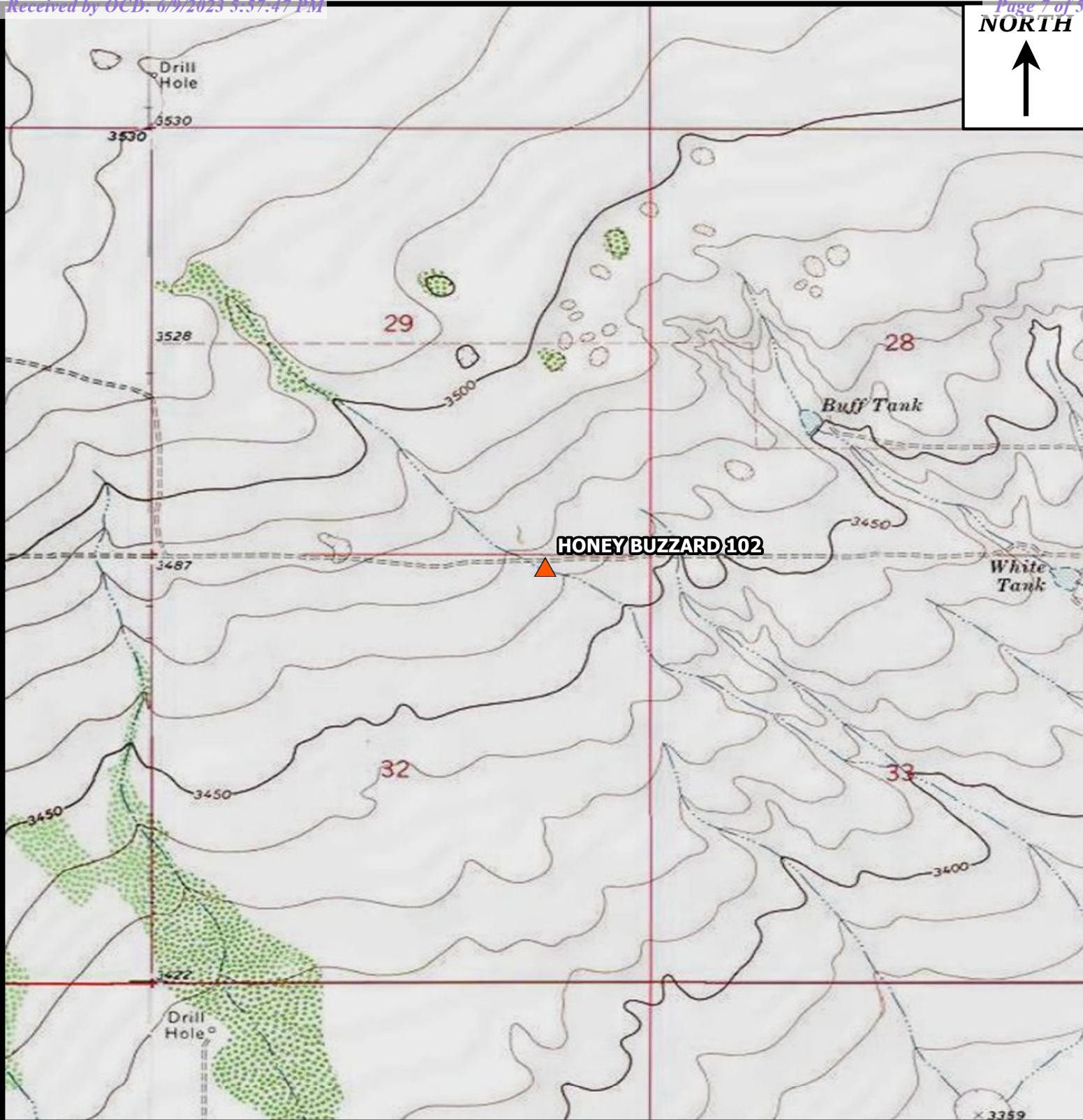
FIGURE 1
OVERVIEW MAP
HONEY BUZZARD 102
LEA COUNTY, NEW MEXICO
32.180812°, -103.486974°

Project: 212C-MD-03007

Date: 2/14/2023

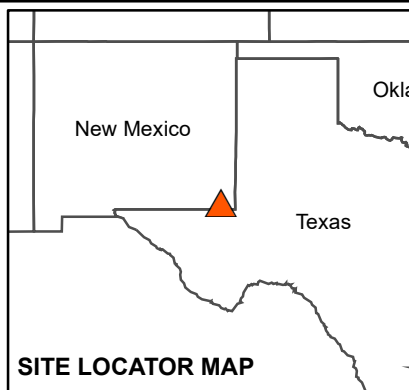
Name: Figure 1 - Honey Buzzard 102





▲ SITE LOCATION

0 1,100 2,200
Feet
Approximate Scale



SITE LOCATOR MAP



FIGURE 2
TOPOGRAPHIC MAP
HONEY BUZZARD 102
LEA COUNTY, NEW MEXICO
32.180812°, -103.486974°

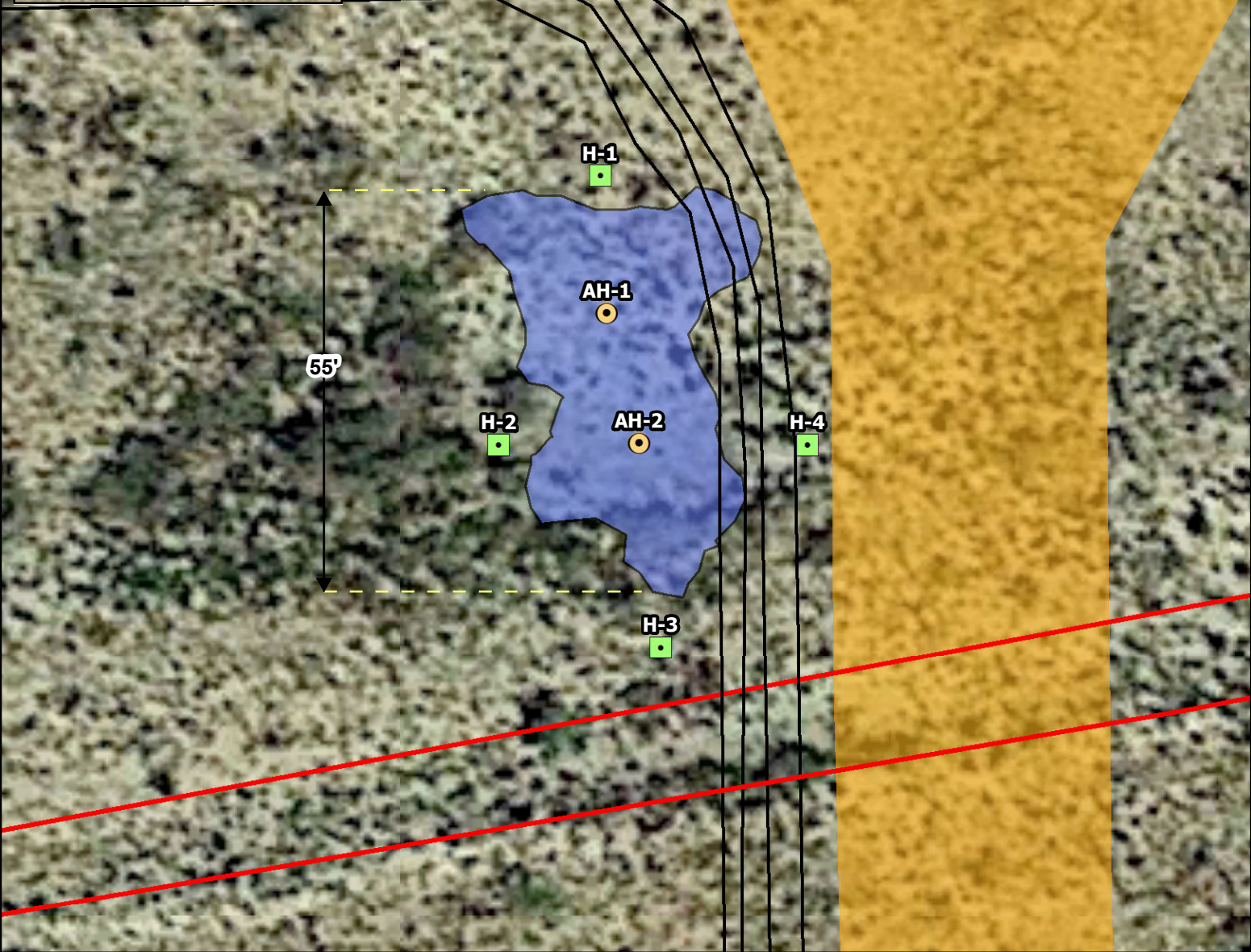
Project: 212C-MD-03007

Date: 2/14/2023

Name: Figure 2 - Honey Buzzard 102



NORTH



- HORIZONTAL SAMPLE LOCATIONS
- AUGERHOLE SAMPLE LOCATIONS
- EOG SUBSURFACE LINES
- SURFACE POLYLINES
- RELEASE EXTENT
- RIGHT-OF-WAY

0 10 20
Approximate Scale in Feet



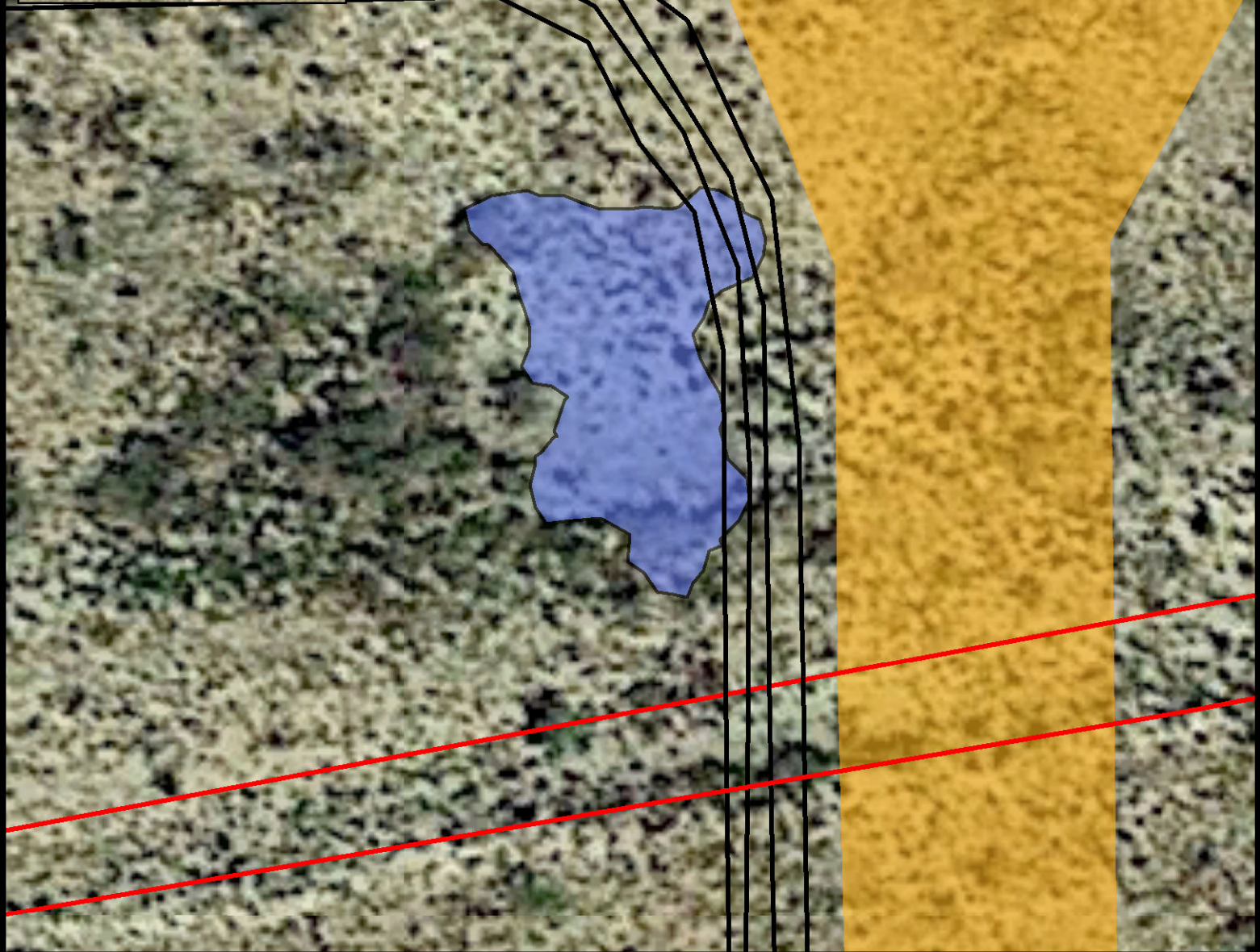
FIGURE 3
SITE ASSESSMENT MAP
HONEY BUZZARD 102
LEA COUNTY, NEW MEXICO
32.180812°, -103.486974°

Project: 212C-MD-03007

Date: 5/24/2023

Name: Figure 2 - Honey Buzzard 102





- EOG SUBSURFACE LINES
- SURFACE POLYLINES
- DELINEATION AND EXCAVATION AREA (1.0'+)
- RIGHT-OF-WAY

0 10 20
Approximate Scale in Feet



FIGURE 4
PROPOSED EXCAVATION MAP
HONEY BUZZARD 102
LEA COUNTY, NEW MEXICO
32.180812°, -103.486974°

Project: 212C-MD-03007

Date: 6/7/2023

Name: Figure 4 - Honey Buzzard 102





Tables

Table 1
EOG Resources
Honey Buzzard 102
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				BTEX (mg/kg)					Chloride (mg/kg)
			In-Situ	Removed	GRO mg/kg	DRO mg/kg	ORO mg/kg	Total mg/kg	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	Total (mg/Kg)	
RRALs								100 mg/kg	10 mg/kg				50 mg/kg	600 mg/kg
AH-1	2/8/2023	0-1	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	966
AH-2	2/8/2023	0-1	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	4,630
H-1	2/8/2023	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	78.6
H-2	2/8/2023	0-0.5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	6.97
H-3	2/8/2023	0-0.5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	6.54
H-4	2/8/2023	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	21.5

NOTES

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

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

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

< = analyte was not detected above the respective sample detection limit

ft = feet below ground surface

(-) = not analyzed for respective constituent

TPH = total petroleum hydrocarbons

BTEX = benzene, toluene, ethylbenzene, xylene

 Exceedance



Photographic Documentation

EOG Resources
Honey Buzzard 102 Lay Flat Line
Lea County, New Mexico



View of Release Area – View Southeast



View of Release Area – View East

EOG Resources
Honey Buzzard 102 Lay Flat Line
Lea County, New Mexico



View of Release Area – View South



Appendix A

C-141 Document

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

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

Incident ID	nAPP2307052908
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources	OGRID 7377
Contact Name Todd Wells	Contact Telephone (432) 686-3613
Contact email Todd_Wells@eogresources.com	Incident # (assigned by OCD) nAPP2307052908
Contact mailing address 5509 Champions Drive Midland, TX 79706	

Location of Release Source

Latitude 32.180930° Longitude -103.487017°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Honey Buzzard 102 Lay Flat Line	Site Type Reuse Water Line
Date Release Discovered 1/22/23	API# (if applicable)

Unit Letter	Section	Township	Range	County
A	32	24S	34E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Reuse Water	Volume Released (bbls) 10	Volume Recovered (bbls) 5
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: The lay flat line going to the Honey Buzzard 102 developed a hole releasing reuse water. The line is located outside of the Klondike Reuse Pit and near Resource Lane. Initially, the release was estimated as less than 5 bbls. Following the initial soil assessment, the volume released from the lay flat line was revised to 10 bbls of reuse water in the pasture beside the lease road with 5 bbls recovered.

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: <u>Todd Wells</u> Title: <u>Environmental Specialist</u> Signature: <u>Todd Wells</u> Date: <u>3/11/23</u> email: <u>Todd_Wells@eogresources.com</u> Telephone: <u>(432) 686-3613</u>
<u>OCD Only</u> Received by: _____ Date: _____

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 not 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

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: 6

email: _____ Telephone: _____

OCD Only

Received by: Jocelyn Harimon Date: 06/12/2023

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD OnlyReceived by: Jocelyn Harimon Date: 06/12/2023☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral ApprovedSignature: Nelson Velez Date: 09/12/2023



Appendix B

Site Characterization Documents



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

National Water Information System: Web Interface


USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

GO

Click to hideNews Bulletins

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

Groundwater levels for the Nation

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

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321127103310401

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 321127103310401 24S.33E.24.44444

Lea County, New Mexico
Latitude 32°11'27", Longitude 103°31'04" NAD27
Land-surface elevation 3,538 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) 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
1953-11-27			D62610		3518.95	NGVD29	1	Z			A
1953-11-27			D62611		3520.60	NAVD88	1	Z			A
1953-11-27			D72019	17.40			1	Z			A
1976-01-21			D62610		3522.78	NGVD29	1	Z			A
1976-01-21			D62611		3524.43	NAVD88	1	Z			A
1976-01-21			D72019	13.57			1	Z			A
1981-03-19			D62610		3520.32	NGVD29	1	Z			A
1981-03-19			D62611		3521.97	NAVD88	1	Z			A
1981-03-19			D72019	16.03			1	Z			A
1986-03-06			D62610		3521.55	NGVD29	1	Z			A
1986-03-06			D62611		3523.20	NAVD88	1	Z			A
1986-03-06			D72019	14.80			1	Z			A
1991-05-29			D62610		3518.79	NGVD29	1	Z			A
1991-05-29			D62611		3520.44	NAVD88	1	Z			A
1991-05-29			D72019	17.56			1	Z			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	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

- [Questions or Comments](#)
[Automated retrievals](#)
[Help](#)
[Data Tips](#)
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[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)


Page Last Modified: 2023-06-07 11:41:19 EDT

0.29 0.24 nadww01



New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
		Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	02309	2	2	2	25	24S	33E	639708	3562997 
<hr/>									
Driller License:		Driller Company:							
Driller Name:		UNKNOWN							
Drill Start Date:		01/01/1912		Drill Finish Date:		06/30/1912		Plug Date:	
Log File Date:				PCW Rev Date:				Source:	
Pump Type:				Pipe Discharge Size:				Estimated Yield:	
Casing Size:		7.00		Depth Well:		60 feet		Depth Water:	
								40 GPM	
								30 feet	

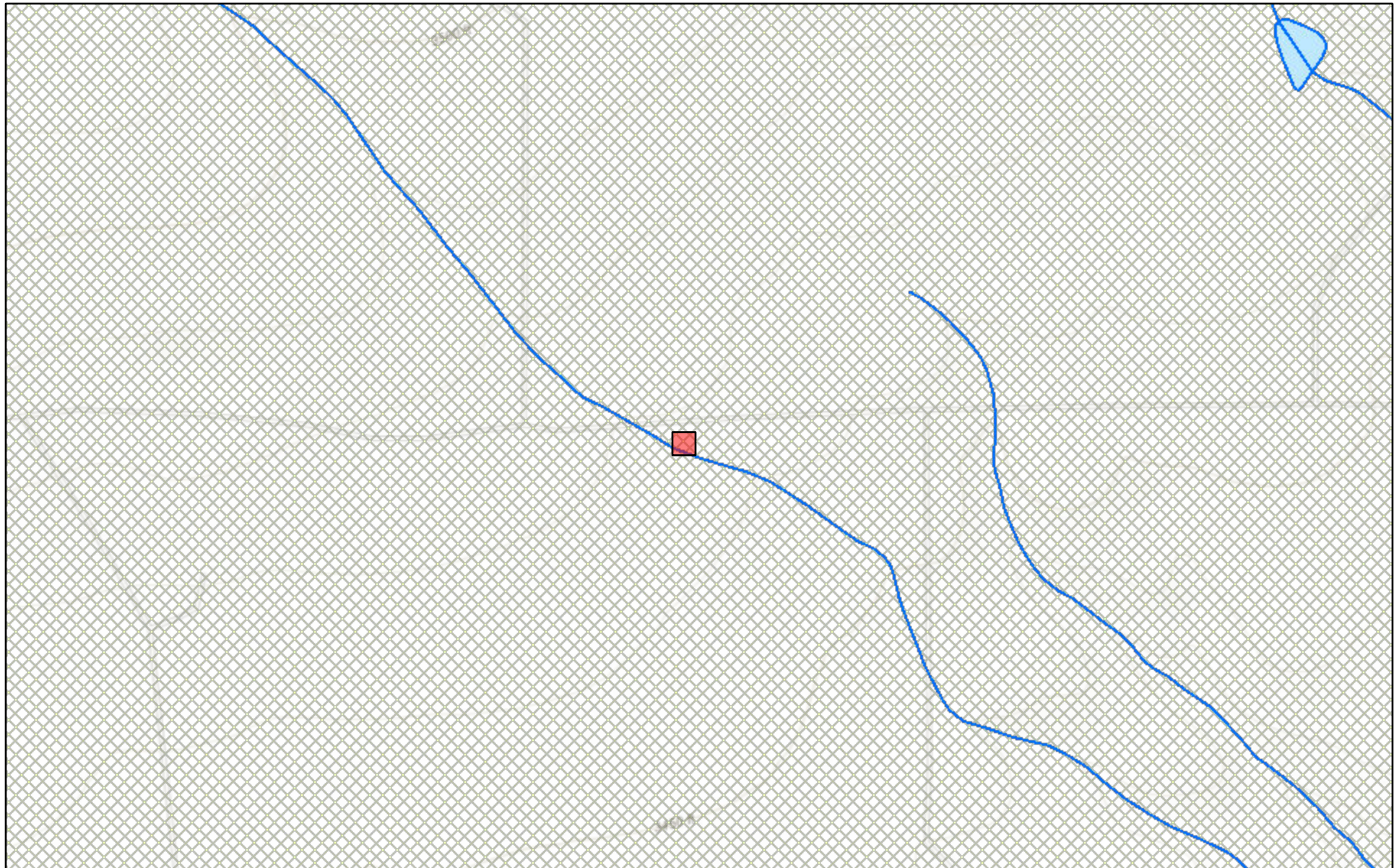
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

6/7/23 9:51 AM

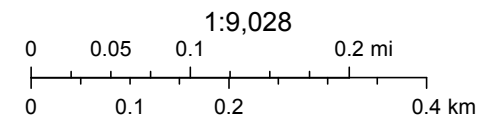
POINT OF DIVERSION SUMMARY



New Mexico NFHL Data



June 7, 2023



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

nmflood.org is made possible through a collaboration with NMDHSEM,

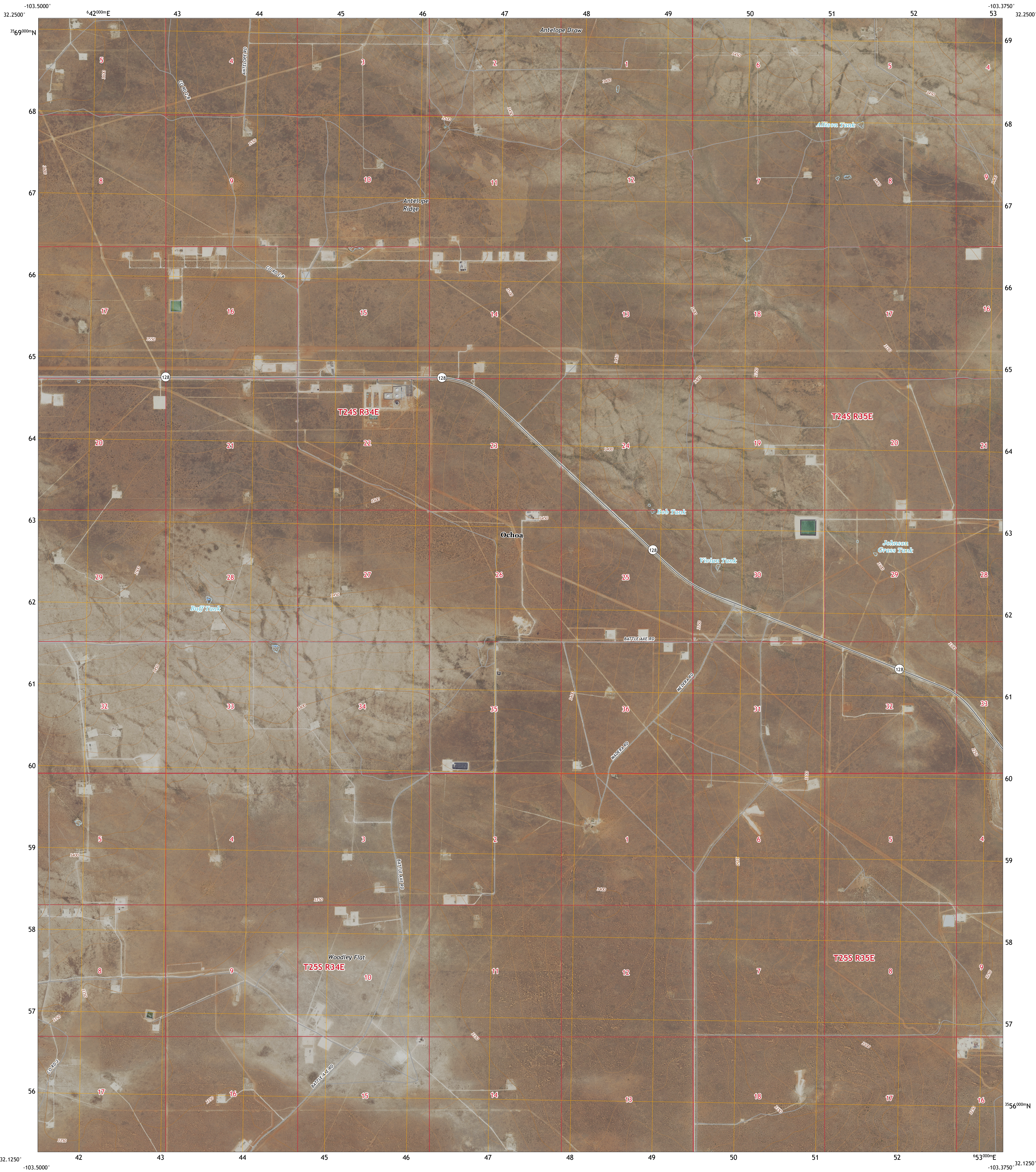
This is a non-regulatory product for informational use only. Please consult your local floodplain administrator for further information.



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

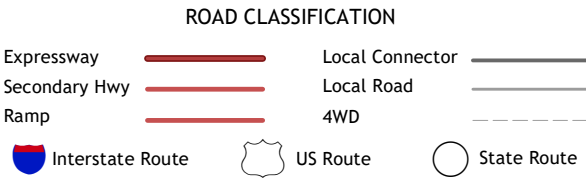
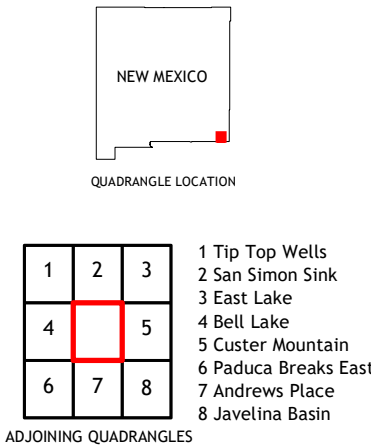
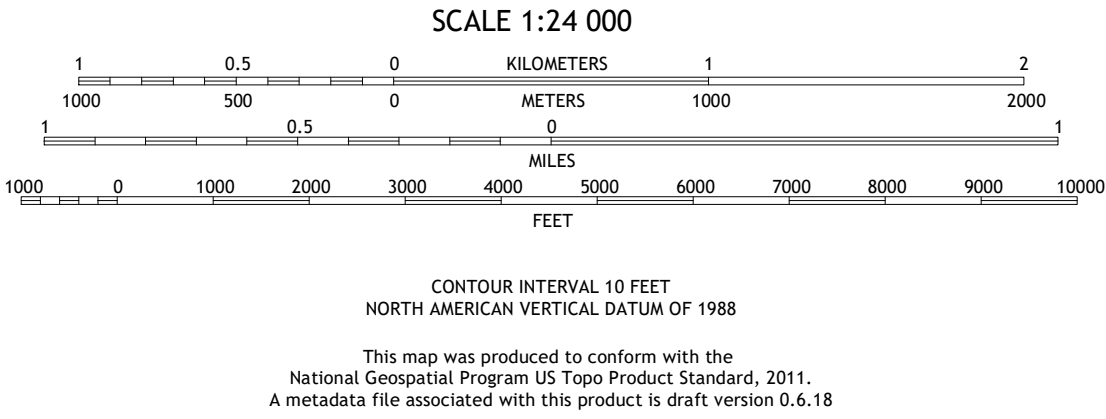
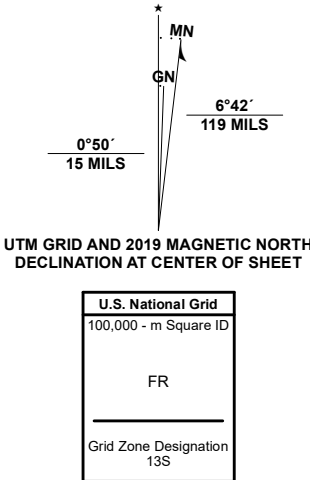


WOODLEY FLAT QUADRANGLE
NEW MEXICO - LEA COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83).
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 13S.
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....	NAIP, May 2016 - August 2016
Roads.....	U.S. Census Bureau, 2016
Names.....	GNIS, 1980-1994
Hydrography.....	National Hydrography Dataset, 1899 - 2018
Contours.....	National Elevation Dataset, 2002
Boundaries.....	Multiple sources: see metadata file, 2017 - 2018
Public Land Survey System.....	BLM, 2019
Wetlands.....	FWS National Wetlands Inventory, 2014



WOODLEY FLAT, NM
2020

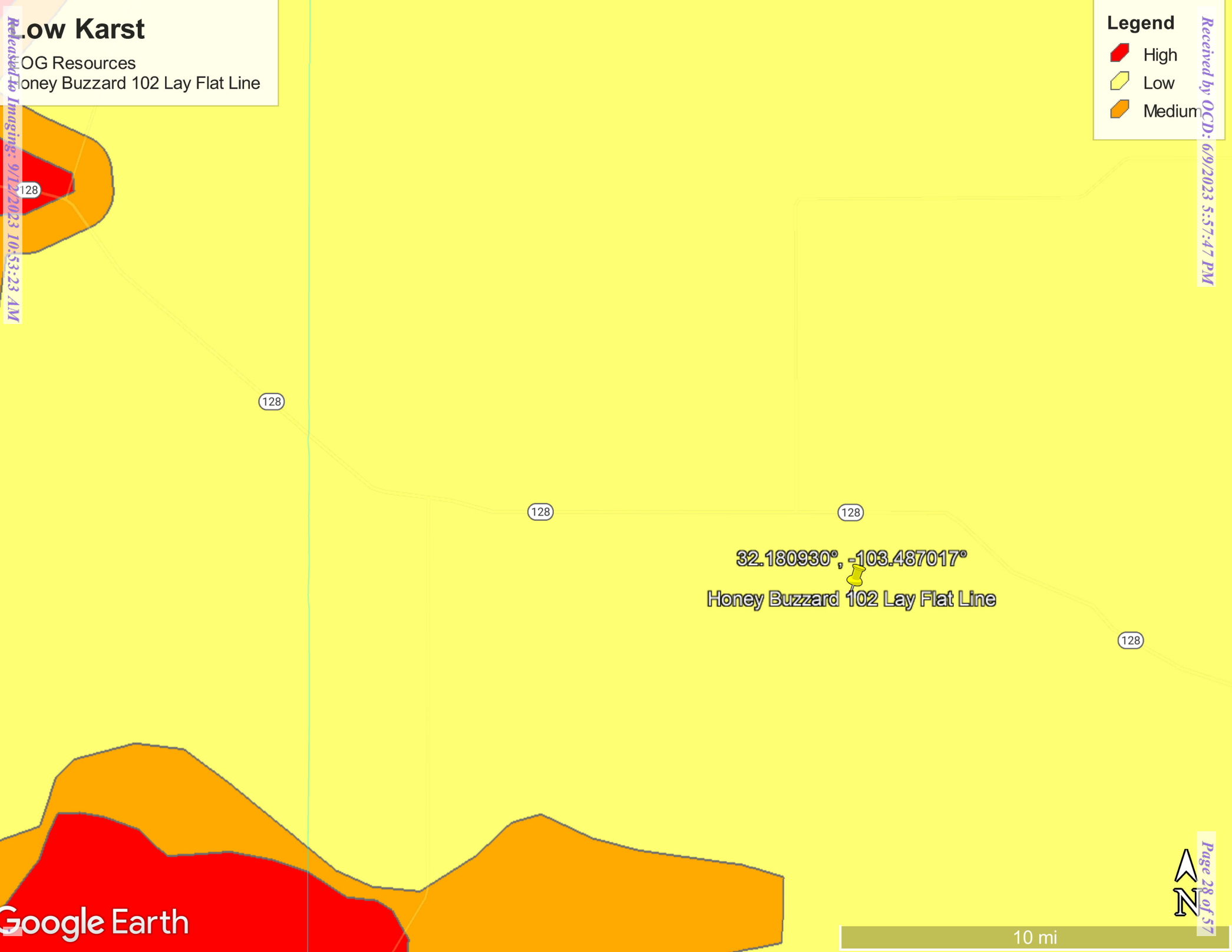


Low Karst
OG Resources
Honey Buzzard 102 Lay Flat Line

Legend

- High
- Low
- Medium

Received by OCD: 6/9/2023 5:57:47 PM



32.180930°, -103.487017°
Honey Buzzard 102 Lay Flat Line





Appendix C

Laboratory Reports



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Brittany Long
Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, Texas 79701

Generated 2/13/2023 7:39:28 PM

JOB DESCRIPTION

Honey Buzzard 102
SDG NUMBER Lea County NM

JOB NUMBER

890-4059-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad**Job Notes**

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated
2/13/2023 7:39:28 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Laboratory Job ID: 890-4059-1
SDG: Lea County NM

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

Qualifiers

GC VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	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: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

Job ID: 890-4059-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-4059-1****Receipt**

The samples were received on 2/8/2023 1:07 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 2.4°C

Receipt Exceptions

The following were received and analyzed from an unpreserved bulk soil jar: H-1 (890-4059-1), H-2 (890-4059-2), H-3 (890-4059-3), H-4 (890-4059-4), AH-1 (0-1') (890-4059-5) and AH-2 (0-1') (890-4059-6).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: H-1 (890-4059-1), H-3 (890-4059-3) and H-4 (890-4059-4). 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

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: H-1 (890-4059-1), H-2 (890-4059-2), H-3 (890-4059-3), H-4 (890-4059-4), AH-1 (0-1') (890-4059-5) and AH-2 (0-1') (890-4059-6). 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 880-46070 and analytical batch 880-46062 contained Gasoline Range Organics (GRO)-C6-C10 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: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-46070 and analytical batch 880-46062. The associated laboratory control sample (LCS) met acceptance criteria.

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

HPLC/IC

Method 300_ORGFM_28D: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-45905 and analytical batch 880-45919. The associated laboratory control sample (LCS) met acceptance criteria.

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: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

Client Sample ID: H-1

Lab Sample ID: 890-4059-1

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 15:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 15:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 15:14	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/10/23 15:02	02/12/23 15:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 15:14	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/10/23 15:02	02/12/23 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130	02/10/23 15:02	02/12/23 15:14	1
1,4-Difluorobenzene (Surr)	98		70 - 130	02/10/23 15:02	02/12/23 15:14	1

Method: TAL SOP 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			02/13/23 19:47	1

Method: SW846 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			02/13/23 15:10	1

Method: SW846 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		02/12/23 09:06	02/12/23 18:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/12/23 09:06	02/12/23 18:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/12/23 09:06	02/12/23 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	51	S1-	70 - 130	02/12/23 09:06	02/12/23 18:26	1
o-Terphenyl	51	S1-	70 - 130	02/12/23 09:06	02/12/23 18:26	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78.6		4.96		mg/Kg			02/10/23 10:31	1

Client Sample ID: H-2

Lab Sample ID: 890-4059-2

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/10/23 15:02	02/12/23 15:34	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/10/23 15:02	02/12/23 15:34	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/10/23 15:02	02/12/23 15:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/10/23 15:02	02/12/23 15:34	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/10/23 15:02	02/12/23 15:34	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/10/23 15:02	02/12/23 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	02/10/23 15:02	02/12/23 15:34	1
1,4-Difluorobenzene (Surr)	94		70 - 130	02/10/23 15:02	02/12/23 15:34	1

Eurofins Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

Client Sample ID: H-2

Lab Sample ID: 890-4059-2

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Method: TAL SOP 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			02/13/23 19:47	1

Method: SW846 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			02/13/23 15:10	1

Method: SW846 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		02/12/23 09:06	02/12/23 18:47	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/12/23 09:06	02/12/23 18:47	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/12/23 09:06	02/12/23 18:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	58	S1-	70 - 130				02/12/23 09:06	02/12/23 18:47	1
o-Terphenyl	54	S1-	70 - 130				02/12/23 09:06	02/12/23 18:47	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.97		4.97		mg/Kg			02/10/23 10:36	1

Client Sample ID: H-3

Lab Sample ID: 890-4059-3

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/10/23 15:02	02/12/23 15:55	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/10/23 15:02	02/12/23 15:55	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/10/23 15:02	02/12/23 15:55	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/10/23 15:02	02/12/23 15:55	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/10/23 15:02	02/12/23 15:55	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/10/23 15:02	02/12/23 15:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130				02/10/23 15:02	02/12/23 15:55	1
1,4-Difluorobenzene (Surr)	65	S1-	70 - 130				02/10/23 15:02	02/12/23 15:55	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/13/23 19:47	1

Method: SW846 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			02/13/23 15:10	1

Method: SW846 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		02/12/23 09:06	02/12/23 19:09	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/12/23 09:06	02/12/23 19:09	1

Eurofins Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

Client Sample ID: H-3

Lab Sample ID: 890-4059-3

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/12/23 09:06	02/12/23 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	54	S1-	70 - 130				02/12/23 09:06	02/12/23 19:09	1
o-Terphenyl	54	S1-	70 - 130				02/12/23 09:06	02/12/23 19:09	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.54		5.03		mg/Kg			02/10/23 10:50	1

Client Sample ID: H-4

Lab Sample ID: 890-4059-4

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 16:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 16:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 16:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/10/23 15:02	02/12/23 16:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 16:15	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/10/23 15:02	02/12/23 16:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65	S1-	70 - 130				02/10/23 15:02	02/12/23 16:15	1
1,4-Difluorobenzene (Surr)	82		70 - 130				02/10/23 15:02	02/12/23 16:15	1

Method: TAL SOP 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			02/13/23 19:47	1

Method: SW846 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			02/13/23 15:10	1

Method: SW846 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		02/12/23 09:06	02/12/23 19:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/12/23 09:06	02/12/23 19:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/12/23 09:06	02/12/23 19:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	49	S1-	70 - 130				02/12/23 09:06	02/12/23 19:31	1
o-Terphenyl	49	S1-	70 - 130				02/12/23 09:06	02/12/23 19:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.5		5.00		mg/Kg			02/10/23 10:55	1

Eurofins Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

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

Lab Sample ID: 890-4059-5

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Sample Depth: 0 - 1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/10/23 15:02	02/12/23 16:36	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/10/23 15:02	02/12/23 16:36	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/10/23 15:02	02/12/23 16:36	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/10/23 15:02	02/12/23 16:36	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/10/23 15:02	02/12/23 16:36	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/10/23 15:02	02/12/23 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	02/10/23 15:02	02/12/23 16:36	1
1,4-Difluorobenzene (Surr)	91		70 - 130	02/10/23 15:02	02/12/23 16:36	1

Method: TAL SOP 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			02/13/23 19:47	1

Method: SW846 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			02/13/23 15:10	1

Method: SW846 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		02/12/23 09:06	02/12/23 19:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/12/23 09:06	02/12/23 19:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/12/23 09:06	02/12/23 19:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	54	S1-	70 - 130	02/12/23 09:06	02/12/23 19:53	1
o-Terphenyl	53	S1-	70 - 130	02/12/23 09:06	02/12/23 19:53	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	966		4.98		mg/Kg			02/10/23 10:59	1

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

Lab Sample ID: 890-4059-6

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Sample Depth: 0 - 1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/10/23 15:02	02/12/23 16:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/10/23 15:02	02/12/23 16:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/10/23 15:02	02/12/23 16:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/10/23 15:02	02/12/23 16:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/10/23 15:02	02/12/23 16:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/10/23 15:02	02/12/23 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	02/10/23 15:02	02/12/23 16:56	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

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

Lab Sample ID: 890-4059-6

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Sample Depth: 0 - 1

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92		70 - 130	02/10/23 15:02	02/12/23 16:56	1

Method: TAL SOP 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			02/13/23 19:47	1

Method: SW846 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			02/13/23 15:10	1

Method: SW846 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		02/12/23 09:06	02/12/23 20:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/12/23 09:06	02/12/23 20:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/12/23 09:06	02/12/23 20:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	52	S1-	70 - 130				02/12/23 09:06	02/12/23 20:15	1
o-Terphenyl	51	S1-	70 - 130				02/12/23 09:06	02/12/23 20:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4630		49.7		mg/Kg			02/10/23 15:16	10

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea 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)
820-7364-A-1-B MS	Matrix Spike	121	104
820-7364-A-1-C MSD	Matrix Spike Duplicate	115	106
890-4059-1	H-1	64 S1-	98
890-4059-2	H-2	86	94
890-4059-3	H-3	87	65 S1-
890-4059-4	H-4	65 S1-	82
890-4059-5	AH-1 (0-1')	89	91
890-4059-6	AH-2 (0-1')	95	92
LCS 880-46019/1-A	Lab Control Sample	114	102
LCSD 880-46019/2-A	Lab Control Sample Dup	109	104
MB 880-46019/5-A	Method Blank	74	95
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)
880-24599-A-1-H MS	Matrix Spike	76	72
880-24599-A-1-I MSD	Matrix Spike Duplicate	82	77
890-4059-1	H-1	51 S1-	51 S1-
890-4059-2	H-2	58 S1-	54 S1-
890-4059-3	H-3	54 S1-	54 S1-
890-4059-4	H-4	49 S1-	49 S1-
890-4059-5	AH-1 (0-1')	54 S1-	53 S1-
890-4059-6	AH-2 (0-1')	52 S1-	51 S1-
LCS 880-46070/2-A	Lab Control Sample	98	95
LCSD 880-46070/3-A	Lab Control Sample Dup	113	94
MB 880-46070/1-A	Method Blank	74	75
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-46019/5-A

Matrix: Solid

Analysis Batch: 46073

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 46019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 14:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 14:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 14:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/10/23 15:02	02/12/23 14:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/10/23 15:02	02/12/23 14:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/10/23 15:02	02/12/23 14:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	02/10/23 15:02	02/12/23 14:31	1
1,4-Difluorobenzene (Surr)	95		70 - 130	02/10/23 15:02	02/12/23 14:31	1

Lab Sample ID: LCS 880-46019/1-A

Matrix: Solid

Analysis Batch: 46073

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 46019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1043		mg/Kg		104	70 - 130
Toluene	0.100	0.1031		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.1072		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2306		mg/Kg		115	70 - 130
o-Xylene	0.100	0.1142		mg/Kg		114	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-46019/2-A

Matrix: Solid

Analysis Batch: 46073

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 46019

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1134		mg/Kg		113	70 - 130	8	35
Toluene	0.100	0.1048		mg/Kg		105	70 - 130	2	35
Ethylbenzene	0.100	0.1094		mg/Kg		109	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2311		mg/Kg		116	70 - 130	0	35
o-Xylene	0.100	0.1138		mg/Kg		114	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 820-7364-A-1-B MS

Matrix: Solid

Analysis Batch: 46073

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 46019

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.0996	0.09111		mg/Kg		91	70 - 130
Toluene	<0.00201	U	0.0996	0.09028		mg/Kg		91	70 - 130

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

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

Lab Sample ID: 820-7364-A-1-B MS

Matrix: Solid

Analysis Batch: 46073

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 46019

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.0996	0.09883		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.199	0.2130		mg/Kg		106	70 - 130
o-Xylene	0.00207		0.0996	0.1063		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 820-7364-A-1-C MSD

Matrix: Solid

Analysis Batch: 46073

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 46019

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0996	0.1013		mg/Kg		102	70 - 130	11	35
Toluene	<0.00201	U	0.0996	0.1036		mg/Kg		104	70 - 130	14	35
Ethylbenzene	<0.00201	U	0.0996	0.1085		mg/Kg		108	70 - 130	9	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.2331		mg/Kg		116	70 - 130	9	35
o-Xylene	0.00207		0.0996	0.1158		mg/Kg		114	70 - 130	9	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

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

Lab Sample ID: MB 880-46070/1-A

Matrix: Solid

Analysis Batch: 46062

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 46070

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/12/23 09:06	02/12/23 09:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/12/23 09:06	02/12/23 09:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/12/23 09:06	02/12/23 09:21	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130	02/12/23 09:06	02/12/23 09:21	1
o-Terphenyl	75		70 - 130	02/12/23 09:06	02/12/23 09:21	1

Lab Sample ID: LCS 880-46070/2-A

Matrix: Solid

Analysis Batch: 46062

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 46070

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	999	987.2		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	999	1094		mg/Kg		110	70 - 130

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

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

Lab Sample ID: LCS 880-46070/2-A
Matrix: Solid
Analysis Batch: 46062

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46070

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: LCSD 880-46070/3-A
Matrix: Solid
Analysis Batch: 46062

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46070

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	999	1059		mg/Kg		106	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	999	1004		mg/Kg		101	70 - 130	9	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 880-24599-A-1-H MS
Matrix: Solid
Analysis Batch: 46062

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46070

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	997	<49.9	U F1	mg/Kg		-0.01	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U F1	997	<49.9	U F1	mg/Kg		-0.3	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	76		70 - 130
o-Terphenyl	72		70 - 130

Lab Sample ID: 880-24599-A-1-I MSD
Matrix: Solid
Analysis Batch: 46062

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46070

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 F1	998	<49.9	U F1	mg/Kg		0.3	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	<49.9	U F1	mg/Kg		-0.04	70 - 130	11	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	77		70 - 130

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-45905/1-A

Matrix: Solid

Analysis Batch: 45919

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			02/10/23 08:35	1

Lab Sample ID: LCS 880-45905/2-A

Matrix: Solid

Analysis Batch: 45919

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253.0		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-45905/3-A

Matrix: Solid

Analysis Batch: 45919

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	268.4		mg/Kg		107	90 - 110	6	20

Lab Sample ID: 890-4058-A-1-B MS

Matrix: Solid

Analysis Batch: 45919

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	2470		2510	5014		mg/Kg		101	90 - 110

Lab Sample ID: 890-4058-A-1-C MSD

Matrix: Solid

Analysis Batch: 45919

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	2470		2510	5198		mg/Kg		109	90 - 110	4	20

Lab Sample ID: 890-4058-A-11-B MS

Matrix: Solid

Analysis Batch: 45919

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	2420	F1	1240	2547	F1	mg/Kg		10	90 - 110

Lab Sample ID: 890-4058-A-11-C MSD

Matrix: Solid

Analysis Batch: 45919

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	2420	F1	1240	2550	F1	mg/Kg		10	90 - 110	0	20

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

GC VOA

Prep Batch: 46019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4059-1	H-1	Total/NA	Solid	5035	
890-4059-2	H-2	Total/NA	Solid	5035	
890-4059-3	H-3	Total/NA	Solid	5035	
890-4059-4	H-4	Total/NA	Solid	5035	
890-4059-5	AH-1 (0-1')	Total/NA	Solid	5035	
890-4059-6	AH-2 (0-1')	Total/NA	Solid	5035	
MB 880-46019/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-46019/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-46019/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-7364-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
820-7364-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 46073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4059-1	H-1	Total/NA	Solid	8021B	46019
890-4059-2	H-2	Total/NA	Solid	8021B	46019
890-4059-3	H-3	Total/NA	Solid	8021B	46019
890-4059-4	H-4	Total/NA	Solid	8021B	46019
890-4059-5	AH-1 (0-1')	Total/NA	Solid	8021B	46019
890-4059-6	AH-2 (0-1')	Total/NA	Solid	8021B	46019
MB 880-46019/5-A	Method Blank	Total/NA	Solid	8021B	46019
LCS 880-46019/1-A	Lab Control Sample	Total/NA	Solid	8021B	46019
LCSD 880-46019/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	46019
820-7364-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	46019
820-7364-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	46019

Analysis Batch: 46248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4059-1	H-1	Total/NA	Solid	Total BTEX	
890-4059-2	H-2	Total/NA	Solid	Total BTEX	
890-4059-3	H-3	Total/NA	Solid	Total BTEX	
890-4059-4	H-4	Total/NA	Solid	Total BTEX	
890-4059-5	AH-1 (0-1')	Total/NA	Solid	Total BTEX	
890-4059-6	AH-2 (0-1')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 46062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4059-1	H-1	Total/NA	Solid	8015B NM	46070
890-4059-2	H-2	Total/NA	Solid	8015B NM	46070
890-4059-3	H-3	Total/NA	Solid	8015B NM	46070
890-4059-4	H-4	Total/NA	Solid	8015B NM	46070
890-4059-5	AH-1 (0-1')	Total/NA	Solid	8015B NM	46070
890-4059-6	AH-2 (0-1')	Total/NA	Solid	8015B NM	46070
MB 880-46070/1-A	Method Blank	Total/NA	Solid	8015B NM	46070
LCS 880-46070/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	46070
LCSD 880-46070/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	46070
880-24599-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	46070
880-24599-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	46070

Eurofins Carlsbad

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

GC Semi VOA

Prep Batch: 46070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4059-1	H-1	Total/NA	Solid	8015NM Prep	
890-4059-2	H-2	Total/NA	Solid	8015NM Prep	
890-4059-3	H-3	Total/NA	Solid	8015NM Prep	
890-4059-4	H-4	Total/NA	Solid	8015NM Prep	
890-4059-5	AH-1 (0-1')	Total/NA	Solid	8015NM Prep	
890-4059-6	AH-2 (0-1')	Total/NA	Solid	8015NM Prep	
MB 880-46070/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-46070/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-46070/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-24599-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-24599-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 46179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4059-1	H-1	Total/NA	Solid	8015 NM	
890-4059-2	H-2	Total/NA	Solid	8015 NM	
890-4059-3	H-3	Total/NA	Solid	8015 NM	
890-4059-4	H-4	Total/NA	Solid	8015 NM	
890-4059-5	AH-1 (0-1')	Total/NA	Solid	8015 NM	
890-4059-6	AH-2 (0-1')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 45905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4059-1	H-1	Soluble	Solid	DI Leach	
890-4059-2	H-2	Soluble	Solid	DI Leach	
890-4059-3	H-3	Soluble	Solid	DI Leach	
890-4059-4	H-4	Soluble	Solid	DI Leach	
890-4059-5	AH-1 (0-1')	Soluble	Solid	DI Leach	
890-4059-6	AH-2 (0-1')	Soluble	Solid	DI Leach	
MB 880-45905/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-45905/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-45905/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4058-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4058-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-4058-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4058-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 45919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4059-1	H-1	Soluble	Solid	300.0	45905
890-4059-2	H-2	Soluble	Solid	300.0	45905
890-4059-3	H-3	Soluble	Solid	300.0	45905
890-4059-4	H-4	Soluble	Solid	300.0	45905
890-4059-5	AH-1 (0-1')	Soluble	Solid	300.0	45905
890-4059-6	AH-2 (0-1')	Soluble	Solid	300.0	45905
MB 880-45905/1-A	Method Blank	Soluble	Solid	300.0	45905
LCS 880-45905/2-A	Lab Control Sample	Soluble	Solid	300.0	45905
LCSD 880-45905/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	45905
890-4058-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	45905

Eurofins Carlsbad

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

HPLC/IC (Continued)

Analysis Batch: 45919 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4058-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	45905
890-4058-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	45905
890-4058-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	45905

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- 2
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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

Client Sample ID: H-1

Lab Sample ID: 890-4059-1

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			46019	MNR	EET MID	02/10/23 15:02
Total/NA	Analysis	8021B		1	46073	MNR	EET MID	02/12/23 15:14
Total/NA	Analysis	Total BTEX		1	46248	SM	EET MID	02/13/23 19:47
Total/NA	Analysis	8015 NM		1	46179	SM	EET MID	02/13/23 15:10
Total/NA	Prep	8015NM Prep			46070	AM	EET MID	02/12/23 09:06
Total/NA	Analysis	8015B NM		1	46062	SM	EET MID	02/12/23 18:26
Soluble	Leach	DI Leach			45905	KS	EET MID	02/09/23 14:50
Soluble	Analysis	300.0		1	45919	CH	EET MID	02/10/23 10:31

Client Sample ID: H-2

Lab Sample ID: 890-4059-2

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			46019	MNR	EET MID	02/10/23 15:02
Total/NA	Analysis	8021B		1	46073	MNR	EET MID	02/12/23 15:34
Total/NA	Analysis	Total BTEX		1	46248	SM	EET MID	02/13/23 19:47
Total/NA	Analysis	8015 NM		1	46179	SM	EET MID	02/13/23 15:10
Total/NA	Prep	8015NM Prep			46070	AM	EET MID	02/12/23 09:06
Total/NA	Analysis	8015B NM		1	46062	SM	EET MID	02/12/23 18:47
Soluble	Leach	DI Leach			45905	KS	EET MID	02/09/23 14:50
Soluble	Analysis	300.0		1	45919	CH	EET MID	02/10/23 10:36

Client Sample ID: H-3

Lab Sample ID: 890-4059-3

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			46019	MNR	EET MID	02/10/23 15:02
Total/NA	Analysis	8021B		1	46073	MNR	EET MID	02/12/23 15:55
Total/NA	Analysis	Total BTEX		1	46248	SM	EET MID	02/13/23 19:47
Total/NA	Analysis	8015 NM		1	46179	SM	EET MID	02/13/23 15:10
Total/NA	Prep	8015NM Prep			46070	AM	EET MID	02/12/23 09:06
Total/NA	Analysis	8015B NM		1	46062	SM	EET MID	02/12/23 19:09
Soluble	Leach	DI Leach			45905	KS	EET MID	02/09/23 14:50
Soluble	Analysis	300.0		1	45919	CH	EET MID	02/10/23 10:50

Client Sample ID: H-4

Lab Sample ID: 890-4059-4

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			46019	MNR	EET MID	02/10/23 15:02
Total/NA	Analysis	8021B		1	46073	MNR	EET MID	02/12/23 16:15
Total/NA	Analysis	Total BTEX		1	46248	SM	EET MID	02/13/23 19:47

Eurofins Carlsbad

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

Client Sample ID: H-4

Lab Sample ID: 890-4059-4

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	46179	SM	EET MID	02/13/23 15:10
Total/NA	Prep	8015NM Prep			46070	AM	EET MID	02/12/23 09:06
Total/NA	Analysis	8015B NM		1	46062	SM	EET MID	02/12/23 19:31
Soluble	Leach	DI Leach			45905	KS	EET MID	02/09/23 14:50
Soluble	Analysis	300.0		1	45919	CH	EET MID	02/10/23 10:55

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

Lab Sample ID: 890-4059-5

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			46019	MNR	EET MID	02/10/23 15:02
Total/NA	Analysis	8021B		1	46073	MNR	EET MID	02/12/23 16:36
Total/NA	Analysis	Total BTEX		1	46248	SM	EET MID	02/13/23 19:47
Total/NA	Analysis	8015 NM		1	46179	SM	EET MID	02/13/23 15:10
Total/NA	Prep	8015NM Prep			46070	AM	EET MID	02/12/23 09:06
Total/NA	Analysis	8015B NM		1	46062	SM	EET MID	02/12/23 19:53
Soluble	Leach	DI Leach			45905	KS	EET MID	02/09/23 14:50
Soluble	Analysis	300.0		1	45919	CH	EET MID	02/10/23 10:59

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

Lab Sample ID: 890-4059-6

Date Collected: 02/08/23 00:00

Matrix: Solid

Date Received: 02/08/23 13:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			46019	MNR	EET MID	02/10/23 15:02
Total/NA	Analysis	8021B		1	46073	MNR	EET MID	02/12/23 16:56
Total/NA	Analysis	Total BTEX		1	46248	SM	EET MID	02/13/23 19:47
Total/NA	Analysis	8015 NM		1	46179	SM	EET MID	02/13/23 15:10
Total/NA	Prep	8015NM Prep			46070	AM	EET MID	02/12/23 09:06
Total/NA	Analysis	8015B NM		1	46062	SM	EET MID	02/12/23 20:15
Soluble	Leach	DI Leach			45905	KS	EET MID	02/09/23 14:50
Soluble	Analysis	300.0		10	45919	CH	EET MID	02/10/23 15:16

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: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea 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	T104704400-22-25	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
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Method Summary

Client: Tetra Tech, Inc.
Project/Site: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea 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	EPA	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

EPA = US Environmental Protection Agency

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: Honey Buzzard 102

Job ID: 890-4059-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4059-1	H-1	Solid	02/08/23 00:00	02/08/23 13:07	
890-4059-2	H-2	Solid	02/08/23 00:00	02/08/23 13:07	
890-4059-3	H-3	Solid	02/08/23 00:00	02/08/23 13:07	
890-4059-4	H-4	Solid	02/08/23 00:00	02/08/23 13:07	
890-4059-5	AH-1 (0-1')	Solid	02/08/23 00:00	02/08/23 13:07	0 - 1
890-4059-6	AH-2 (0-1')	Solid	02/08/23 00:00	02/08/23 13:07	0 - 1



ORIGINAL COPY

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-4059-1

SDG Number: Lea County NM

Login Number: 4059

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.	N/A	Refer to Job Narrative for details.
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: 890-4059-1

SDG Number: Lea County NM

Login Number: 4059

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 02/09/23 11:55 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
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	



Appendix D

State Correspondence

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 226018

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 226018
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvez	Remediation plan is approved as written. EOG has 90-days (December 11, 2023) to submit the appropriate or final closure report.	9/12/2023