CARMONA RESOURCES

SITE INFORMATION

Work Plan
Denton 5 SWD
Lea County, New Mexico
Unit N Sec 02 T15S R37E
33.041141°, -103.173094°

Incident Number: NPAC0614540738
Produced Water Release
Point of Release: Tank overflow due to pump failure
Release Date: 05/23/2006
Volume Released: 125 barrels of Produced Water
Volume Recovered: 80 barrels of Produced Water

Incident Number: NPAC0730337383
Crude Oil Release
Point of Release: Tank overflow
Release Date: 10/22/2007
Volume Released: 20 barrels of Produced Water
Volume Recovered: 15 barrels of Produced Water

Incident Number: nGL0916227517
Crude Oil Release
Point of Release: Lighting Strike
Release Date: 05/31/2009
Volume Released: 50 barrels of Crude Oil
Volume Recovered: 0 barrels of Crude Oil

Prepared for:
Fasken Oil and Ranch, Ltd
6101 Holiday Hill Road,
Midland, Texas 79707

Prepared by:
Carmona Resources, LLC
310 West Wall Street
Suite 500
Midland, Texas 79701

310 West Wall Street, Suite 500
Midland TX, 79701
432.813.1992

CARMONA RESOURCES

TABLE OF CONTENTS

310 West Wall Street, Suite 500
Midland TX, 79701
432.813.1992

CARMONA RESOURCES

March 2, 2023

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

Re: Work Plan
Denton 5 SWD
Fasken Oil and Ranch, Ltd
Site Location: Unit N, S02, T15S, R37E
(Lat 33.041141º, Long -103.173094º)
Lea County, New Mexico

To whom it may concern:

On behalf of Fasken Oil and Ranch, Ltd (Fasken), Carmona Resources, LLC has prepared this letter to document the Denton 5 SWD site activities. The site is located at 33.041141º, -103.173094º within Unit N, S02, T15S, R37E, in Lea County, New Mexico (Figures 1 and 2).

1.0 Site Information and Background

NPAC0614540738

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on May 23, 2006, due to pump failure causing a tan to overflow. It resulted in the release of approximately one hundred and twenty-five (125) barrels of produced water, and eighty (80) barrels of produced water were recovered. See figure 3 for the area of concern located on the pad. The initial C-141 form is attached in Appendix C.

NPAC0730337383

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered due to a tank overflow on October 22, 2007. It resulted in the release of approximately twenty (20) barrels of crude oil, and fifteen (15) barrels of crude oil were recovered. See figure 3 for the area of concern located on the pad. The initial C-141 form is attached in Appendix C.

nGL0916227517

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on May 3, 2009, due to a lightning strike. It resulted in the release of approximately fifty (50) barrels of crude oil, and zero (0) barrels of crude oil were recovered. See figure 3 for the area of concern located on the pad. The initial C-141 form is attached in Appendix C.

2.0 Site Characterization and Groundwater

The site is located within a low karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, one known water source is located within a 0.50-mile radius of the location and drilled within 25 years. It is approximately 0.26 miles from the site in S02, T15S, R37E and was drilled in 1997. The well has a reported depth to groundwater of 84.0' feet below the ground surface (ft bgs). A copy of the associated Summary report is attached in Appendix D.

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Midland TX, 79701
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CARMONA RESOURCES

3.0 NMAC Regulatory Criteria

Per the NMOCD regulatory criteria established 19.15.29.12 NMAC, the following criteria were utilized in assessing the site.

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg.
- TPH: 2,500 mg/kg (GRO + DRO + MRO).
- TPH: 1,000 mg/kg (GRO + DRO).
- Chloride: 10,000mg/kg.

4.0 Site Assessment Activities

On September 29, 2022, Fasken performed site assessment activities to evaluate soil impacts stemming from the multiple releases. A total of six (6) backhoe samples (BH-1 through BH-6) and four (4) horizontal sample points (North, South, East, and West) and a background sample (BG) were installed to depths ranging from the surface – 4' bgs inside and surrounding the release area to evaluate the vertical and horizontal extent. See Figure 3 for the soil sample locations. For chemical analysis, the soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015 and chloride by EPA method 300.0. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E. Refer to Table 1.

All initial samples were below the regulatory requirements for TPH, BTEX, and chloride. Refer to Table 1.

5.0 Proposed Work Plan

Based on the analytical data and the detected chloride concentrations, Fasken proposes to remediate the areas shown in Figure 4 and highlighted (blue) in Table 1 per NMAC 19.15.29.13 reclamation standards.

- The areas of BH-1, BH-2, and BH-3 will be excavated to 4.0' below the surface to address the reclamation and vegetation requirements. The area will then be backfilled with clean material to grade.

- The areas of BH-4, BH-5, and BH-6 will be excavated to a depth of 1.0' below the surface and backfilled with clean material to grade.

- An estimated 4,600 cubic yards will be removed and hauled to the neared disposal based on the maximum depth.

- Fasken requests a variance per 19.15.29.14.A NMAC collecting composite sidewall and floor samples every 500 square feet.

- Once the site activities and excavation is complete, the areas will be backfilled with clean material to surface grade. The remediation will be implemented 90 days after the work plan is approved.

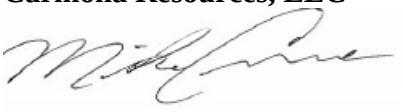
310 West Wall Street, Suite 500
Midland TX, 79701
432.813.1992

CARMONA RESOURCES

6.0 Conclusions

Upon completion, a final closure report describing the remediation activities will be presented to the New Mexico Oil Conservation Division (NMOCD). If you have any questions regarding this report or need additional information, don't hesitate to contact us at 432-813-1992.

Sincerely,
Carmona Resources, LLC



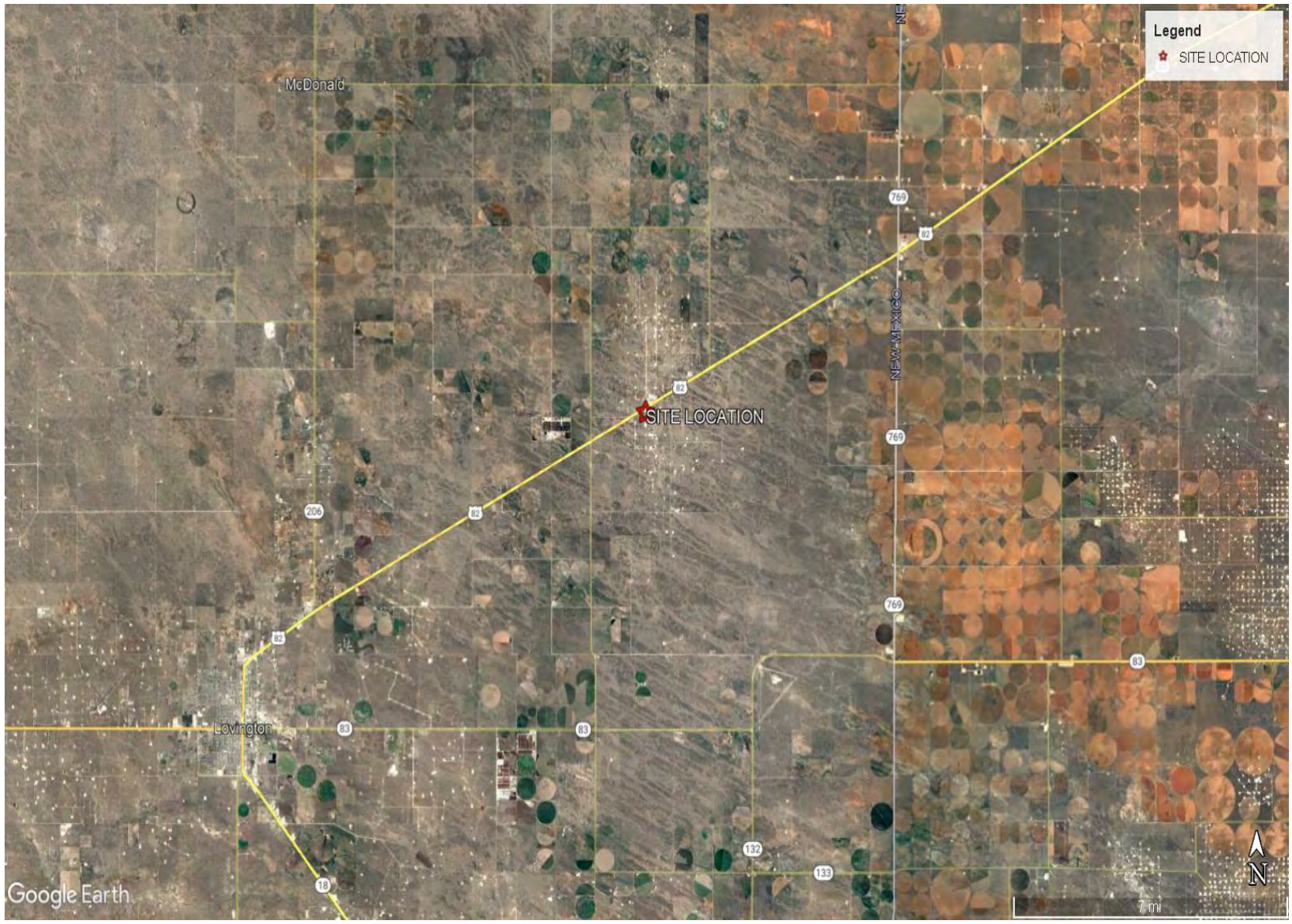
Mike Carmona
Environmental Manager

Ashton Thielke
Sr Project Manager

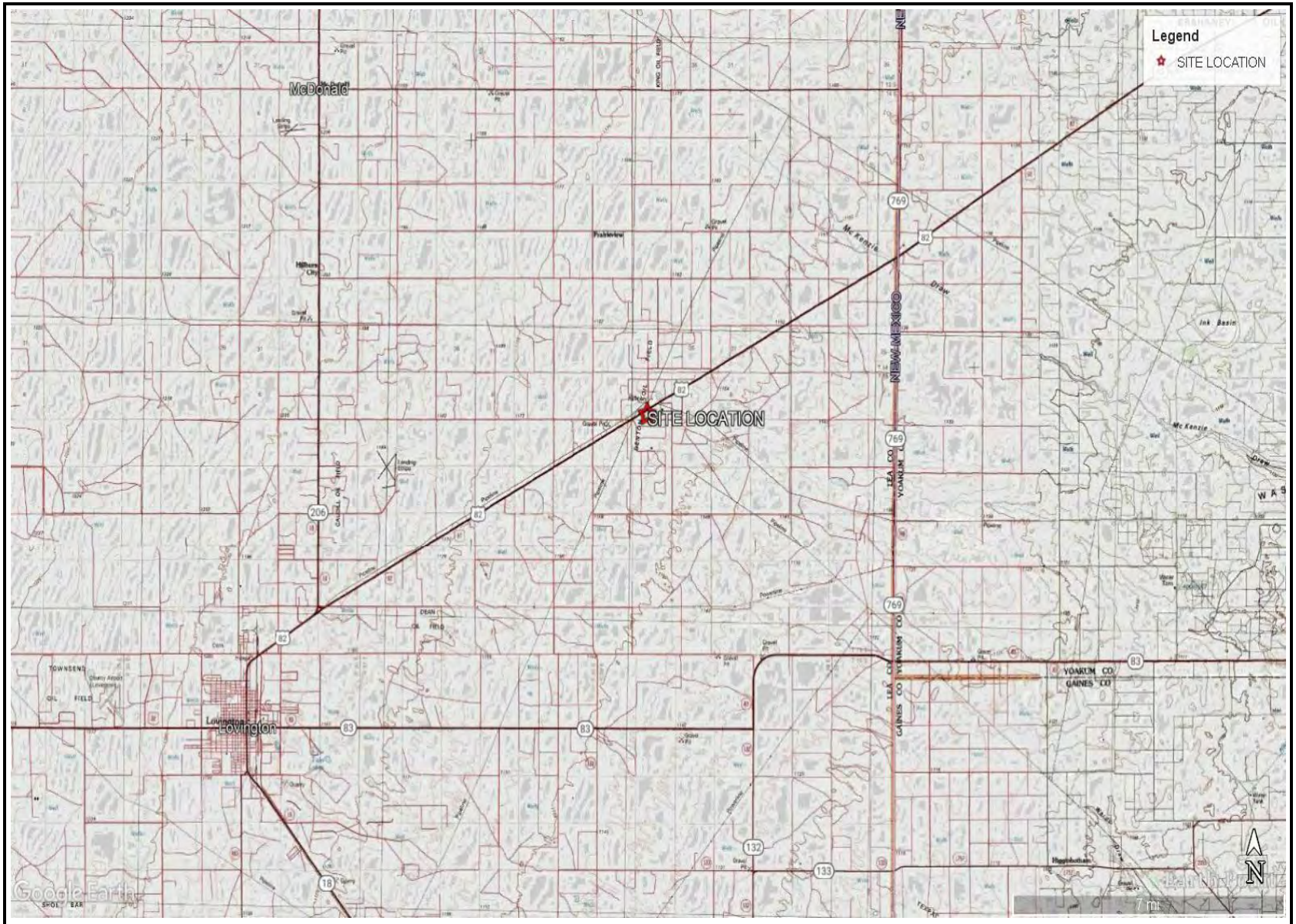
310 West Wall Street, Suite 500
Midland TX, 79701
432.813.1992

FIGURES

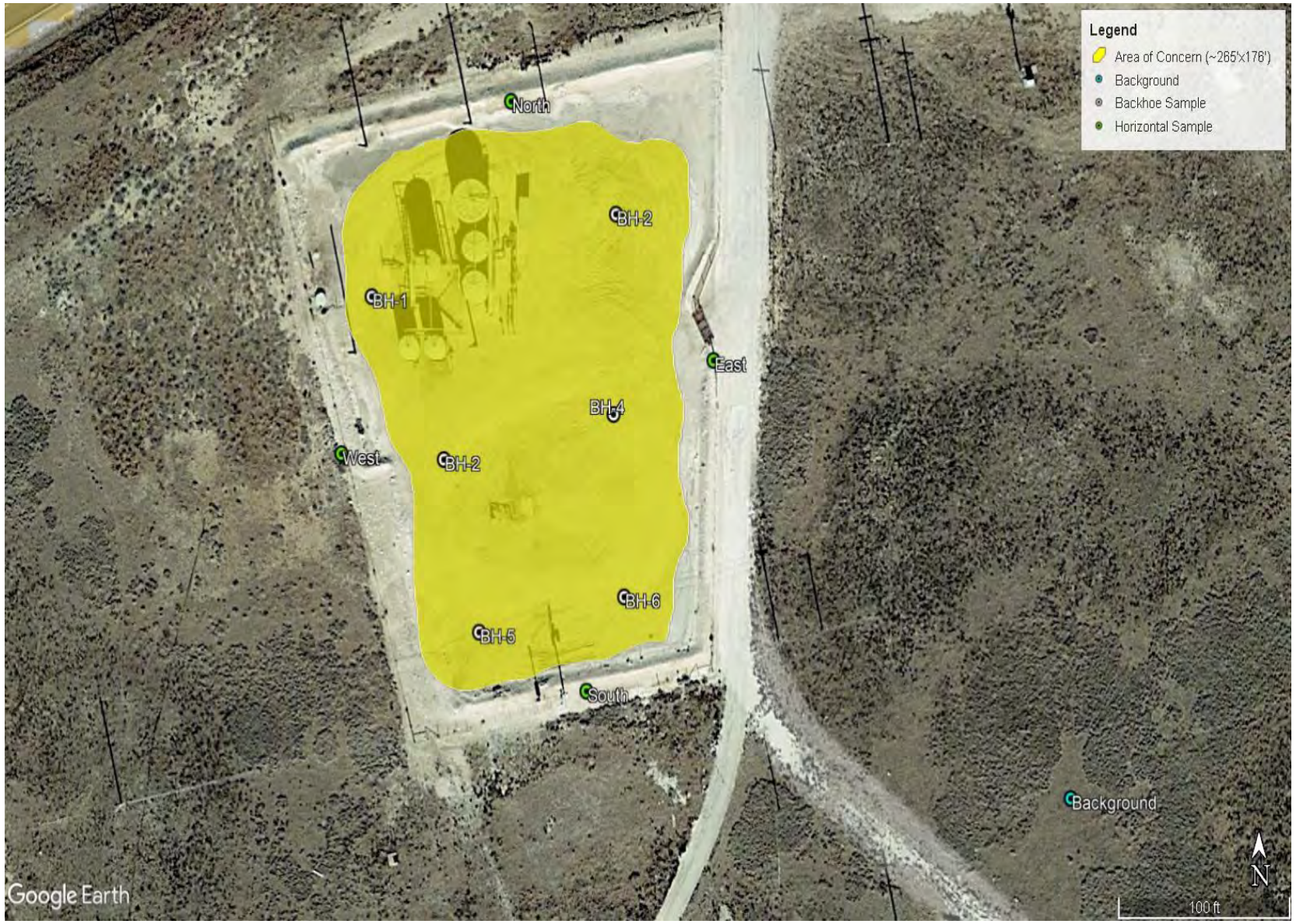
CARMONA RESOURCES



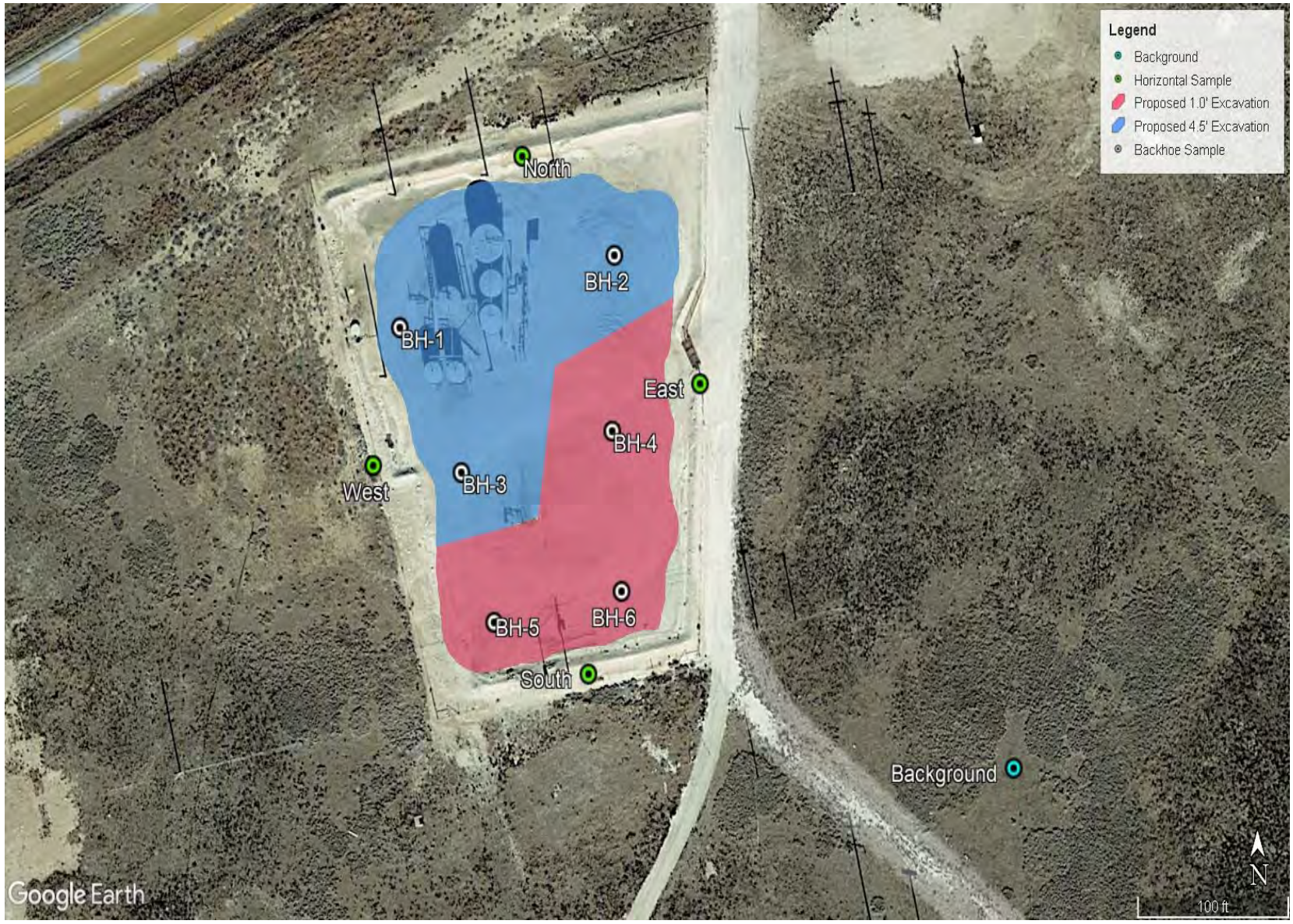
SITE OVERVIEW MAP FASKEN OIL AND RANCH DENTON 5 SWD LEA COUNTY, NEW MEXICO 33.041141°, -103.173094°	CARMONA RESOURCES	FIGURE 1



TOPOGRAPHIC MAP FASKEN OIL AND RANCH DENTON 5 SWD LEA COUNTY, NEW MEXICO 33.041141°, -103.173094°	CARMONA RESOURCES	FIGURE 2



SAMPLE LOCATION MAP FASKEN OIL AND RANCH DENTON 5 SWD LEA COUNTY, NEW MEXICO 33.041141°, -103.173094°	CARMONA RESOURCES	FIGURE 3



PROPOSED EXCAVATION MAP FASKEN OIL AND RANCH DENTON 5 SWD LEA COUNTY, NEW MEXICO 33.041141°, -103.173094°	CARMONA RESOURCES	FIGURE 4

APPENDIX A

CARMONA RESOURCES

Table 1
Fasken Oil and Ranch
Denton 5 SWD
Lea County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
BH-1	9/29/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,570
	"	1.0	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,180
	"	2.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,260
	"	3.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,750
	"	4.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	2,280
BH-2	9/29/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	3,080
	"	1.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	454
	"	2.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	464
	"	3.0	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	733
	"	4.0	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	761
BH-3	9/29/2022	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	4,020
	"	1.0	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,640
	"	2.0	<49.9	226	<49.9	226	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,200
	"	3.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	2,580
	"	4.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,630
BH-4	9/29/2022	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	2,440
	"	1.0	<50.0	52.7	<50.0	52.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	354
	"	2.0	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	304
	"	3.0	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	316
	"	4.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	518
BH-5	9/29/2022	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,660
	"	1.0	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00396	<0.00396	337
	"	2.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	438
	"	3.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	442
	"	4.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	572
BH-6	9/29/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	3,080
	"	1.0	<49.9	109	<49.9	109	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	293
	"	2.0	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	435
	"	3.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	255
	"	4.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	322
NORTH	9/29/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	251
SOUTH	9/29/2022	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	88.5
EAST	9/29/2022	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	437
WEST	9/29/2022	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	31.2
BACKGROUND	9/29/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	15.1
Regulatory Criteria [A]			1,000 mg/kg			2,500 mg/kg	10 mg/kg	-	-	-	50 mg/kg	10,000 mg/kg

(-) Not Analyzed
[A] – Table 1 - 19.15.29 NMAC
mg/kg - milligram per kilogram
TPH - Total Petroleum Hydrocarbons
ft - feet
(BH) - Backhoe
Proposed Excavation

APPENDIX B

CARMONA RESOURCES

PHOTOGRAPHIC LOG

Fasken Oil and Ranch

Photograph No. 1

Facility: Denton 5 SWD

County: Eddy County, New Mexico

Description:
View of the pad, area of backhoe samples (1-6).

Photograph No. 2

Facility: Denton 5 SWD

County: Eddy County, New Mexico

Description:
View of the pad, area of backhoe samples (1-6).

Photograph No. 3

Facility: Denton 5 SWD

County: Eddy County, New Mexico

Description:
View of the pad, area of backhoe samples (1-6).

CARMONA RESOURCES

APPENDIX C

CARMONA RESOURCES

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

X Initial Report ☐ Final Report

Name of Company Americo Energy	Contact Oscar Nosrati
Address 10940 Old Katy Road, Houston, TX 77043	Telephone No. 713-984-9700
Facility Name Denton SWD #5 Release	Facility Type SWD

Surface Owner State	Mineral Owner State	Lease No.

LOCATION OF RELEASE

API# 30025 05226 0000

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	2	15S	37E					Lea

41'

Latitude_____ Longitude_____

NATURE OF RELEASE

Type of Release: Produced Fluids	Volume of Release: 125 bbls	Volume Recovered: 80 bbls
Source of Release: Overflow from transfer pump failure	Date and Hour of Occurrence 5/23/06	Date and Hour of Discovery 5/23/06
Was Immediate Notice Given? X Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Caperton	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes X No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Tank overflow due to transfer pump failure

Describe Area Affected and Cleanup Action Taken.*
A vacuum truck was called in to recover standing fluid. SESI was called to assess cleanup.

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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Bob Allen	Approved by District Supervisor:	
Title: Consultant	Approval Date:	Expiration Date:
E-mail Address: ballen@sesi-nm.com	Conditions of Approval:	Attached ☐
Date 5/23/06 Phone: 505-397-0510		

* Attach Additional Sheets If Necessary

incident - nPAC0614540738
C-141 - nPAC0614540876

OCD Permitting

NPAC0730337383 2007 MINOR A OS @ 30-025-05226

General Incident Information

Site Name:			
Well:	[30-025-05226] DENTON SWD #005		
Facility:			
Operator:	[151416] FASKEN OIL & RANCH LTD		
Status:	Closure Not Approved	**Severity:**	Minor
Type:	Oil Release	**Surface Owner:**	State
District:	Hobbs	**County:**	Lea (25)
Incident Location:	N-02-15S-37E 660 FSL 1980 FWL		
Lat/Long:	33.0410194,-103.1731262 NAD83		
Directions:			

Notes

Source of Referral:	Industry Rep	**Action / Escalation:**	
Resulted In Fire:	☐	**Will or Has Reached Watercourse:**	☐
Endangered Public Health:	☐	**Property Or Environmental Damage:**	☐
Fresh Water Contamination:	☐		

Contact Details

Contact Name:	**Contact Title:**

Event Dates

Date of Discovery:	10/22/2007	**OCD Notified of Release:**	
Extension Date:	11/15/2018		
Initial C-141 Received:		**Cancelled Date:**	
Characterization Report Received:		**Characterization Report Approved:**	
Remediation Plan Received:		**Remediation Plan Approved:**	
		Remediation Due:	
Closure Report Received:		**Closure Report Approved:**	

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

Incidents Materials

Cause	Source	Material	Volume Unk.	Volume Released	Volume Recovered	Volume Lost	Units
Other	Tank (Any)	Crude Oil	☐	20	15	5	BBL

Incident Events

Date	Detail
10/30/2007	C-141: slug into disposal system caused skimmed oil tank to run over.

Quick Links
- General Incident Informati
- Materials
- Events
- Orders

Associated Images
- Incident Files (0)
- Well Files (91)

New Searches
- New Facility Search
- New Incident Search
- New Operator Search
- New Pit Search
- New Spill Search
- New Tank Search
- New Well Search

District I
1625 N French Dr , Hobbs, NM 88240
District II
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

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JUN 08 2009
HOBBSOCD

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

[X] Initial Report [X] ~~Final Report~~

Name of Company Fasken Oil and Ranch, Ltd.	Contact Jimmy D. Carlile
Address 303 W. Wall, Ste. 1800, Midland, TX	Telephone No. 432-687-1777
Facility Name Denton SWD No. 5	Facility Type SWD Battery

Surface Owner State of New Mexico	Mineral Owner Fee	Lease No. 303195

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	2	15S	37E	660'	South	1980'	West	Lea

API No. 30-025-05226 **Latitude**_____ **Longitude**_____

NATURE OF RELEASE

Type of Release Oil	Volume of Release 50	Volume Recovered 0
Source of Release Gun Barrel	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? [X] Yes [ ] No [ ] Not Required	If YES, To Whom? 5/31/09 8pm Mark - on call representative at OCD	5/31/09 8 pm
By Whom? Jimmy D. Carlile	Date and Hour 5/31/09 9:00 pm MST	
Was a Watercourse Reached? [ ] Yes [X] No	If YES, Volume Impacting the Watercourse. —	

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

Describe Cause of Problem and Remedial Action Taken.*
Lightening hit gun barrel blowing roof off and causing a fire. Local fire department was called and responded. Gun barrel taken out of service. 50 barrels of crude burned in the vessel.

Describe Area Affected and Cleanup Action Taken.*
No surface area affected. Rain water and water used by fire department removed via vacuum truck.

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: Jimmy D Carlile	OIL CONSERVATION DIVISION
Printed Name: Jimmy D. Carlile	DENIED ENV ENGR ~~Approved by District Supervisor:~~ Geoffrey Leking
Title: Regulatory Affairs Coordinator	Approval Date: — Expiration Date: —
E-mail Address: jimmyc@forl.com	Conditions of Approval: DELINEATE AND SUBMIT WORKPLAN FOR APPROVAL BY NMOCD. Attached [ ]
Date: 6-4-09 Phone: 432-687-1777	IRP-09-6-2197

* Attach Additional Sheets If Necessary

fGRL0916227018

DENIED DENIED 06/08/09
Geoffrey Leking
NMOCD-HOBBS

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	nPAC0614540738/nPAC0730337383/nGRL0916227517
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: Addison Guelker Title: Environmental Tech

Signature: [signature] Date: 03/03/23

email: addisong@forl.com Telephone: 432-687-1777

OCD Only

Received by: Jocelyn Harimon Date: 03/03/2023

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	nPAC0614540738/nPAC0730337383/nGRL0916227517
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: Addison Guelker Title: Environmental Tech

Signature: Addison Guelker Date: 3/3/23

email: addisong@forl.com Telephone: 432-687-1777

OCD Only

Received by: Jocelyn Harimon Date: 03/03/2023

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

Signature: Brittany Hall Date: 3/7/2023

APPENDIX D

CARMONA RESOURCES

Nearest Water Well

Fasken Oil and Ranch

LOW KARST

Fasken Oil and Ranch

Legend

Denton 5 SWD

Low

127

137

92

82

92

Denton 5 SWD

U.S. Hwy 82

97

91

82

91

93

115

N

2 mi

Google Earth

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	Depth Well	Depth Water	Water Column
L 00058		L	LE			2	10	15S	37E	669598	3656694*	112		
L 00059		L	LE	3	1	3	10	15S	37E	668503	3655575	100		
L 00059 S		L	LE		3	3	10	15S	37E	668604	3655676	150	49	101
L 00064		L	LE			3	22	15S	37E	668864	3652657*	105		
L 00064	R	L	LE			3	22	15S	37E	668864	3652657*	105		
L 00165		L	LE	1	1	1	27	15S	37E	668569	3652153*	126	50	76
L 00165 POD2		L	LE		2	1	27	15S	37E	669074	3652060*	224	95	129
L 00168		L	LE	1	1	3	19	15S	37E	663722	3652882	150	60	90
L 00185		L	LE	3	3	1	27	15S	37E	668577	3651550*	111	68	43
L 00216 POD2	R	L	LE	3	2	3	06	15S	37E	664037	3657516*	112		
L 00216 POD3	R	L	LE				07	15S	37E	664379	3656202*	117	96	21
L 00216 POD4		L	LE	3	2	3	06	15S	37E	663597	3657023	207	120	87
L 00222		L	LE	1	3	1	22	15S	37E	668547	3653360*	125	80	45
L 00222 S		L	LE	3	1	3	22	15S	37E	668555	3652758*	125	80	45
L 00232		L	LE	1	3	4	34	15S	37E	669428	3649347*	122		
L 00284		L	LE	1	2	3	17	15S	37E	665704	3654524*	193	79	114
L 00285		L	LE	1	2	2	21	15S	37E	668137	3653757*	105	49	56
L 00285 S		L	LE	1	2	4	21	15S	37E	668151	3652952*	118	118	0
L 00286		L	LE	2	1	1	20	15S	37E	666388	3654325	270	90	180
L 00310		L	LE	1	2	2	27	15S	37E	669779	3652171*	140	72	68
L 00318		L	LE	2	2	4	19	15S	37E	665128	3652901*	110	45	65
L 00318 S		L	LE	1	1	2	19	15S	37E	664127	3654336	260	80	180
L 00446		L	LE		1	2	28	15S	37E	667864	3652042*	114	54	60
L 00446 S		L	LE		3	2	28	15S	37E	668188	3650894	230	100	130
L 00456		L	LE	3	3	1	34	15S	37E	668607	3649940*	116	70	46
L 00459	R	L	LE	3	1	2	34	15S	37E	669405	3650355*	140		

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

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(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	Depth Well	Depth Water	Water Column
L 00459 POD4		L	LE	3	1	2	34	15S	37E	669339	3650589	241	110	131
L 00459 S	R	L	LE	1	1	2	34	15S	37E	669405	3650555*	146	67	79
L 00488		L	LE	1	2	2	20	15S	37E	666524	3653732*	120		
L 00488 POD2		L	LE	1	2	4	29	15S	37E	666568	3651317*	180	65	115
L 00488 POD4		L	LE	3	3	2	20	15S	37E	666047	3653070	225	120	105
L 00488 S		L	LE	1	1	4	20	15S	37E	666136	3652921*	126		
L 00553		L	LE		1	1	05	15S	37E	665331	3658442*	202	110	92
L 00553 S		L	LE	1	1	3	05	15S	37E	665244	3657736*	215	90	125
L 00555 POD3		L	LE			4	04	15S	37E	667969	3657475*	187	90	97
L 00555 POD4		L	LE			4	04	15S	37E	667969	3657475*	187	90	97
L 00555 POD5		L	LE	4	1	1	09	15S	37E	667069	3656759	195	65	130
L 00555 POD6		L	LE	4	1	1	09	15S	37E	667069	3656759	208	75	133
L 00555 POD6	R	L	LE	4	1	1	09	15S	37E	667069	3656759	208	75	133
L 00555 POD7		L	LE	1	3	4	04	15S	37E	667667	3657373*	200	100	100
L 00555 S	R	L	LE	1	1	2	04	15S	37E	667645	3658581*	125		
L 00556	R	L	LE		1	4	05	15S	37E	666150	3657651*	115		
L 00556 POD3		L	LE	4	1	3	09	15S	37E	667083	3655954*	199	75	124
L 00556 POD4		L	LE	4	4	1	09	15S	37E	667479	3656363	199	75	124
L 00556 POD5	R	L	LE	4	1	3	04	15S	37E	667054	3657564*	210	90	120
L 00556 POD6	R	L	LE	3	1	4	04	15S	37E	667660	3657576*	215	90	125
L 00556 POD8	R	L	LE	3	4	3	04	15S	37E	667354	3657087	200		
L 00556 S	R	L	LE	3	4	3	05	15S	37E	665654	3657140*	120		
L 00565		L	LE	1	1	4	32	15S	37E	666195	3649701*	97		
L 00566		L	LE	1	1	2	32	15S	37E	666180	3650506*	109		
L 00597		L	LE	1	1	1	33	15S	37E	666986	3650518*	125		
L 00597 S		L	LE	1	1	2	33	15S	37E	667793	3650530*	100		
L 00598	R	L	LE		1	3	33	15S	37E	667102	3649615*	125		
L 00598 POD3		L	LE	1	1	3	33	15S	37E	667001	3649714*	127	118	9
L 00598 S		L	LE	1	3	4	33	15S	37E	667816	3649322*	100		

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(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	Depth Well	Depth Water	Water Column
L 00599	R	L	LE				31	15S	37E	664487	3649766*	107		
L 00599 POD4		L	LE	1	4	3	30	15S	37E	664159	3650877*	195	191	4
L 00599 POD5		L	LE	3	2	4	31	15S	37E	664985	3649482*	193	191	2
L 00599 POD6		L	LE	2	2	4	31	15S	37E	665288	3649041	235	120	115
L 00599 POD7		L	LE	1	2	1	31	15S	37E	664120	3650593	235	95	140
L 00599 S	R	L	LE			3	30	15S	37E	664058	3650972*	100	44	56
L 00599 S2		L	LE			4	31	15S	37E	664891	3649376*	198	98	100
L 00610 POD4		L	LE	4	2	3	02	15S	37E	670687	3657616*	120	37	83
L 00610 POD5	R	L	LE	1	1	4	02	15S	37E	670890	3657821*	120	37	83
L 00706		L	LE	1	1	2	09	15S	37E	667675	3656971*	125		
L 00706 POD2		L	LE		1	4	09	15S	37E	667791	3656067*	100		
L 00706 POD7		L	LE	1	2	2	09	15S	37E	667222	3657454	200		
L 00707		L	LE	1	3	2	09	15S	37E	667682	3656568*	269	110	159
L 00708		L	LE	1	3	4	09	15S	37E	667701	3655857	103	65	38
L 00708	R	L	LE	1	3	4	09	15S	37E	667701	3655857	103	65	38
L 00735		L	LE	1	1	2	22	15S	37E	669347	3653775*	119	33	86
L 00735 S		L	LE	1	3	2	22	15S	37E	669354	3653372*	150	45	105
L 00736		L	LE	2	1	1	23	15S	37E	670354	3653787*	122		
L 00736	R	L	LE	2	1	1	23	15S	37E	670354	3653787*	122		
L 00746		L	LE	1	1	1	29	15S	37E	665345	3652103*	244	110	134
L 00747		L	LE	1	1	1	28	15S	37E	666957	3652128*	271	110	161
L 00759		L	LE	1	1	3	28	15S	37E	666971	3651323*	160	73	87
L 00759 S		L	LE		2	3	28	15S	37E	667476	3651230*	166	73	93
L 00759 S2		L	LE			4	28	15S	37E	668087	3651035*	177	98	79
L 00759 S3		L	LE	1	1	4	28	15S	37E	667778	3651336*	160	73	87
L 00759 S4		L	LE	3	1	3	28	15S	37E	666911	3651065	221	120	101
L 00759 S5		L	LE	4	4	4	28	15S	37E	668340	3650720	230	110	120
L 00819		L	LE	1	1	2	08	15S	37E	666064	3656945*	110	42	68
L 00819	R	L	LE	1	1	2	08	15S	37E	666064	3656945*	110	42	68

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POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 00819 S	R	L	LE	3	1	2	08	15S	37E	666064	3656745*	112	42	70
L 00821	R	L	LE				06	15S	37E	664351	3657812*	110		
L 00821 POD2		L	LE	1	1	2	06	15S	37E	664426	3658527*	195	82	113
L 00822		L	LE	3	1	4	06	15S	37E	664440	3657523*	104	80	24
L 00956 POD1		L	LE		2	2	15	15S	37E	669823	3655292*	112		
L 00994 POD1		L	LE	3	3	1	27	15S	37E	668577	3651550*	77		
L 01009 POD1		L	LE	4	4	3	28	15S	37E	667582	3650727*	100		
L 01045		L	LE	1	3	2	14	15S	37E	670939	3655004*	100	35	65
L 01067		L	LE	4	3	4	06	15S	37E	664647	3657120*			
L 01068		L	LE	4	3	3	05	15S	37E	665451	3657133*	75	53	22
L 01077		L	LE		1	1	12	15S	37E	671811	3656927*	120		
L 01080		L	LE	1	2	2	14	15S	37E	671336	3655412*	120	32	88
L 01095		L	LE		4	1	02	15S	37E	670581	3658120*	120		
L 01110 POD1		L	LE	1	1	2	14	15S	37E	670932	3655407*	115		
L 01117 POD1		L	LE	3	4	2	11	15S	37E	671314	3656419*	120	50	70
L 01118 POD1		L	LE		3	1	02	15S	37E	670178	3658115*	108		
L 01119 POD1		L	LE		3	3	04	15S	37E	666962	3657263*	108		
L 01136 POD1		L	LE		1	4	02	15S	37E	670991	3657722*	118		
L 01160 POD1		L	LE		2	2	04	15S	37E	668149	3658488*	150	50	100
L 01175 POD1		L	LE		1	3	01	15S	37E	671797	3657732*	120	33	87
L 01176 POD1		L	LE			1	04	15S	37E	667149	3658269*	65	35	30
L 01182 POD1		L	LE	1	1	1	11	15S	37E	670096	3657007*	110	35	75
L 01197 POD1		L	LE	3	1	3	02	15S	37E	670083	3657612*	112		
L 01199 POD1		L	LE	2	4	1	14	15S	37E	670736	3654999*	121	37	84
L 01204 POD1		L	LE	3	4	2	02	15S	37E	671286	3658028*	100	40	60
L 01207 POD1		L	LE		2	2	15	15S	37E	669823	3655292*	120	32	88
L 01224 POD1		L	LE		1	1	02	15S	37E	670172	3658517*	115	33	82
L 01237		L	LE		2	2	15	15S	37E	669823	3655292*	110	38	72
L 01283		L	LE		3	2	11	15S	37E	671012	3656515*	120	40	80

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(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 01284	L	LE		1	2	02	15S	37E	670978	3658527*	108	48	60
L 01285	L	LE		2	2	02	15S	37E	671380	3658531*	112	52	60
L 01293	L	LE		2	2	03	15S	37E	669767	3658511*	113	45	68
L 01297	L	LE		3	1	01	15S	37E	671790	3658134*	115	45	70
L 01320	L	LE		3	4	11	15S	37E	671026	3655710*	120	32	88
L 01321	L	LE		4	2	11	15S	37E	671415	3656520*	120	32	88
L 01322	L	LE	2	1	1	11	15S	37E	670296	3657007*	120	32	88
L 01323	L	LE		4	2	11	15S	37E	671415	3656520*	120	32	88
L 01324	L	LE		1	2	11	15S	37E	671004	3656917*	120	32	88
L 01332	L	LE		2	2	11	15S	37E	671408	3656922*	115	32	83
L 01337	L	LE	2	3	1	05	15S	37E	665437	3658138*	65	47	18
L 01376	L	LE	3	2	1	31	15S	37E	664166	3650275*	90	35	55
L 01379	L	LE		2	2	34	15S	37E	669909	3650462*	120	32	88
L 01422	L	LE		3	3	02	15S	37E	670190	3657310*	100		
L 01430	L	LE		2	1	11	15S	37E	670601	3656913*	120	33	87
L 01447	L	LE		1	1	01	15S	37E	671783	3658536*	113	45	68
L 01491	L	LE		3	1	01	15S	37E	671790	3658134*	117	45	72
L 01568 POD1	L	LE		1	3	12	15S	37E	671826	3656122*	120	38	82
L 01578 POD1	L	LE	2	2	4	03	15S	37E	669879	3657806*	115	55	60
L 01587 POD1	L	LE		2	1	01	15S	37E	672186	3658542*	115	55	60
L 01637 POD1	L	LE	1	1	3	01	15S	37E	671696	3657831*	109	50	59
L 01673 POD1	L	LE		4	3	02	15S	37E	670594	3657315*	120		
L 01739 POD1	L	LE	2	2	2	10	15S	37E	669893	3657001*	110	55	55
L 01808 POD1	L	LE		4	3	09	15S	37E	667395	3655658*	80	40	40
L 01997	L	LE		1	4	03	15S	37E	669375	3657701*	120	33	87
L 02268	L	LE		2	4	10	15S	37E	669808	3656097*		55	
L 02302	L	LE	2	2	4	11	15S	37E	671521	3656216*	80	45	35
L 02303	L	LE	2	2	4	16	15S	37E	668322	3654562*	80	45	35
L 02317	L	LE		1	1	11	15S	37E	670197	3656908*	110	65	45

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POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 02382	L	LE		4	2	14	15S	37E	671444	3654911*	112	35	77
L 02391	L	LE	3	3	3	11	15S	37E	670118	3655599*	80	37	43
L 02399	L	LE		2	2	20	15S	37E	666625	3653633*	80	42	38
L 02468	L	LE		2	4	22	15S	37E	669866	3652877*	100	40	60
L 02920	L	LE	4	4	3	06	15S	37E	664298	3657035	208	90	118
L 03099	L	LE		3	3	36	15S	37E	671944	3649285*	120	55	65
L 03207	L	LE		1	3	36	15S	37E	671937	3649687*	105	35	70
L 03240	L	LE		2	4	35	15S	37E	671534	3649681*	120	45	75
L 03316	L	LE		2	3	36	15S	37E	672340	3649694*	124	35	89
L 03781	L	LE	1	1	1	20	15S	37E	665316	3653712*	180		
L 03929	L	LE	1	4	1	01	15S	37E	672092	3658239*	100	55	45
L 03987	L	LE		2	2	07	15S	37E	664957	3656826*	102	86	16
L 04175	L	LE				34	15S	37E	669327	3649838*	100	80	20
L 04200	L	LE		3	3	34	15S	37E	668724	3649235*			
L 04472	L	LE		2	2	08	15S	37E	666567	3656853*	90	80	10
L 04512	L	LE		2	2	04	15S	37E	668149	3658488*	120	45	75
L 04550	L	LE		3	3	18	15S	37E	663804	3653990*	95	52	43
L 04655	L	LE	1	1	3	34	15S	37E	668615	3649737*	95	56	39
L 04956	L	LE	1	1	1	12	15S	37E	671710	3657026*	100	43	57
L 05242	L	LE			4	19	15S	37E	664835	3652595*	125	80	45
L 05331	L	LE		2	1	27	15S	37E	669074	3652060*	100	60	40
L 05337	L	LE		1	4	09	15S	37E	667791	3656067*	100	85	15
L 05403	L	LE		4	4	05	15S	37E	666560	3657255*	100	85	15
L 05455	L	LE	4	3	1	36	15S	37E	672030	3649988*	125	70	55
L 05484	L	LE	2	1	1	20	15S	37E	665516	3653712*	180		
L 05541	L	LE		1	1	25	15S	37E	671897	3652100*	115	40	75
L 05587 POD2	L	LE	1	1	4	27	15S	37E	669337	3651445	190	100	90
L 05825	L	LE		1	4	22	15S	37E	669462	3652871*	148	45	103
L 05825 S	L	LE	1	4	1	26	15S	37E	670593	3651780*	130	60	70

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

(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	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
L 05825 S2		L	LE			4	22	15S	37E	669671	3652669*	160	40	120
L 05956		L	LE		3	3	18	15S	37E	663804	3653990*	108	65	43
L 05957		L	LE		2	1	18	15S	37E	664182	3655203*	110	65	45
L 06625		L	LE	3	2	2	12	15S	37E	672920	3656845*	130	80	50
L 06782		L	LE			3	22	15S	37E	668864	3652657*			
L 07054		L	LE	4	1	1	22	15S	37E	668740	3653563*	142	60	82
L 07164		L	LE			3	20	15S	37E	665640	3652608*	120	71	49
L 07198		L	LE	4	2	3	02	15S	37E	670687	3657616*	125	47	78
L 07437		L	LE	4	3	3	21	15S	37E	667149	3652331*	120	73	47
L 07456		L	LE	2	2	3	36	15S	37E	672439	3649793*	126	32	94
L 07579		L	LE	2	2	4	27	15S	37E	669994	3651366*		44	
L 07592	R	L	LE		2	4	09	15S	37E	668194	3656073*	100	70	30
L 07610		L	LE		3	2	11	15S	37E	671012	3656515*	100		
L 07613		L	LE				23	15S	37E	670879	3653083*	96	45	51
L 07633		L	LE	4	4	4	29	15S	37E	666776	3650715*	110	65	45
L 07633	R	L	LE	4	4	4	29	15S	37E	666776	3650715*	110	65	45
L 07665		L	LE	4	4	4	11	15S	37E	671529	3655614*	126	40	86
L 07666		L	LE	4	4	2	27	15S	37E	669986	3651568*	126	60	66
L 07953		L	LE	3	4	1	15	15S	37E	668921	3654776*	100	68	32
L 07981		L	LE	4	4	1	26	15S	37E	670793	3651580*	142	70	72
L 08060 POD3		L	LE	2	2	1	28	15S	37E	667551	3652207	162	84	78
L 08123 POD1		L	LE				28	15S	37E	667683	3651425*	120	82	38
L 08123 POD2		L	LE				28	15S	37E	667683	3651425*	120	82	38
L 08411		L	LE	3	1	1	34	15S	37E	668600	3650342*	105		
L 08489		L	LE		4	2	18	15S	37E	664993	3654814*	116	73	43
L 08593		L	LE		4	2	18	15S	37E	664993	3654814*	120	80	40
L 08594		L	LE	3	1	3	03	15S	37E	668466	3657588*	150	90	60
L 08598		L	LE	3	1	3	03	15S	37E	668466	3657588*	150	90	60
L 09678		L	LE		3	4	06	15S	37E	664548	3657221*	150	110	40

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

(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	Depth Well	Depth Water	Water Column
L 09820		L	LE		2	2	07	15S	37E	664957	3656826*	100	60	40
L 09926		L	LE	1	1	4	12	15S	37E	672433	3656142	150	75	75
L 10026		L	LE	3	4	2	22	15S	37E	669757	3653178*	150	65	85
L 10220		L	LE		4	2	34	15S	37E	669916	3650059*	95	58	37
L 10410		L	LE		4	4	17	15S	37E	666618	3654035*	115	76	39
L 10541		L	LE	4	4	3	09	15S	37E	667494	3655557*	240		
L 10617		L	LE	3	1	4	28	15S	37E	667778	3651136*	188	65	123
L 10625		L	LE	4	4	4	29	15S	37E	666776	3650715*	120	60	60
L 10685		L	LE		2	3	02	15S	37E	670588	3657717*	150	84	66
L 11007	R	L	LE			4	09	15S	37E	667954	3655664	130	75	55
L 11105		L	LE		1	1	09	15S	37E	666970	3656860*	200	82	118
L 12181 POD1		L	LE	3	2	3	29	15S	37E	665768	3651095	215		
L 12299 POD1		L	LE	4	4	4	29	15S	37E	666684	3650778	197		
L 12602 POD1		L	LE	3	1	1	04	15S	37E	666772	3658334	195		
L 13024 POD1		L	LE	1	1	1	20	15S	37E	665287	3653733	182	97	85
L 13186 POD1		L	LE	2	4	4	20	15S	37E	666812	3652567	210		
L 13284 POD1		L	LE	4	3	3	21	15S	37E	667060	3652283	210	90	120
L 13285 POD1		L	LE	2	4	4	08	15S	37E	666751	3655811	200	90	110
L 13485 POD 1		L	LE	3	4	2	10	15S	37E	669192	3655778	180	103	77
L 13564 POD1		L	LE	2	2	1	01	15S	37E	672315	3658559	270	95	175
L 13629 POD10		L	LE	2	1	2	11	15S	37E	671037	3657002	90	70	20
L 13629 POD11		L	LE	2	1	2	11	15S	37E	671184	3657035	90	71	19
L 13629 POD12		L	LE	2	1	2	11	15S	37E	671138	3657111	90	72	18
L 13629 POD13		L	LE	2	1	2	11	15S	37E	671093	3657074	90	70	20
L 13629 POD14		L	LE	2	1	2	11	15S	37E	671112	3657085	90	70	20
L 13629 POD16		L	LE	2	1	2	11	15S	37E	671094	3657050	90	70	20
L 13629 POD7		L	LE	2	1	2	11	15S	37E	671073	3657109	90	73	17
L 13629 POD8		L	LE	2	1	2	11	15S	37E	671100	3656952	90	69	21
L 13631 POD4		L	LE	3	3	1	13	15S	37E	671507	3654796	86	72	14

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

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 13692 POD9	L	LE	2	1	2	11	15S	37E	671040	3657045	90	70	20
L 13755 POD1	L	LE	3	3	3	05	15S	37E	665231	3657051	210	95	115
L 14152 POD16	L	LE	1	2	2	14	15S	37E	671273	3655439	90	65	25
L 14152 POD17	L	LE	2	1	2	14	15S	37E	671132	3655522	89	65	24
L 14152 POD18	L	LE	2	1	2	14	15S	37E	671140	3655466	89	65	24
L 14152 POD19	L	LE	2	1	2	14	15S	37E	671188	3655404	90	65	25
L 14152 POD20	L	LE	3	4	4	11	15S	37E	671250	3655547	89	65	24
L 14152 POD21	L	LE	1	2	2	14	15S	37E	671288	3655501	89	65	24
L 14152 POD22	L	LE	4	3	4	11	15S	37E	671227	3655455	89	65	24
L 14152 POD23	L	LE	2	1	2	14	15S	37E	671166	3655528	89	65	24
L 14152 POD24	L	LE	2	1	2	14	15S	37E	671225	3655508	89	65	24
L 14185 POD1	L	LE	2	4	1	25	15S	37E	672330	3651781	237	61	176
L 14264 POD1	L	LE	3	3	1	18	15S	37E	663650	3654720	210	80	130
L 14299 POD1	L	LE	3	3	3	11	15S	37E	670136	3655563	210	84	126
L 14423 POD1	L	LE	3	3	1	27	15S	37E	668529	3651623	180	106	74
L 14462 POD1	L	LE	3	3	1	08	15S	37E	665318	3656291	205	80	125
L 14734 POD1	L	LE	2	1	1	21	15S	37E	666863	3653837	204	100	104
L 14748 POD1	L	LE	4	4	3	28	15S	37E	667649	3650714	225	100	125
L 14824 POD1	L	LE	1	3	2	30	15S	37E	664597	3651525	220	220	0
L 14961 POD1	L	LE	4	3	4	18	15S	37E	664713	3653930	240	90	150
L 15060 POD1	L	LE	4	3	3	20	15S	37E	665618	3652590	195	103	92
L 15107 POD1	L	LE	3	1	3	22	15S	37E	668468	3652823	210	100	110
L 15107 POD2	L	LE	1	3	1	22	15S	37E	668537	3653348	208	100	108
L 15107 POD4	L	LE	3	2	1	22	15S	37E	668844	3653631	245	100	145
L 15138 POD1	L	LE	3	4	1	22	15S	37E	668842	3655019	184	84	100
L 15240 POD1	L	LE	2	1	4	18	15S	37E	664742	3654582	212	110	102
L 15284 POD1	L	LE	4	2	1	22	15S	37E	669131	3653636	227	90	137

Average Depth to Water: **69 feet**

Minimum Depth: **32 feet**

Maximum Depth: **220 feet**

Record Count: 256

PLSS Search:

Township: 15S **Range:** 37E

New Mexico Office of the State Engineer
Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	L 10685		2	3	02	15S	37E	670588	3657717*

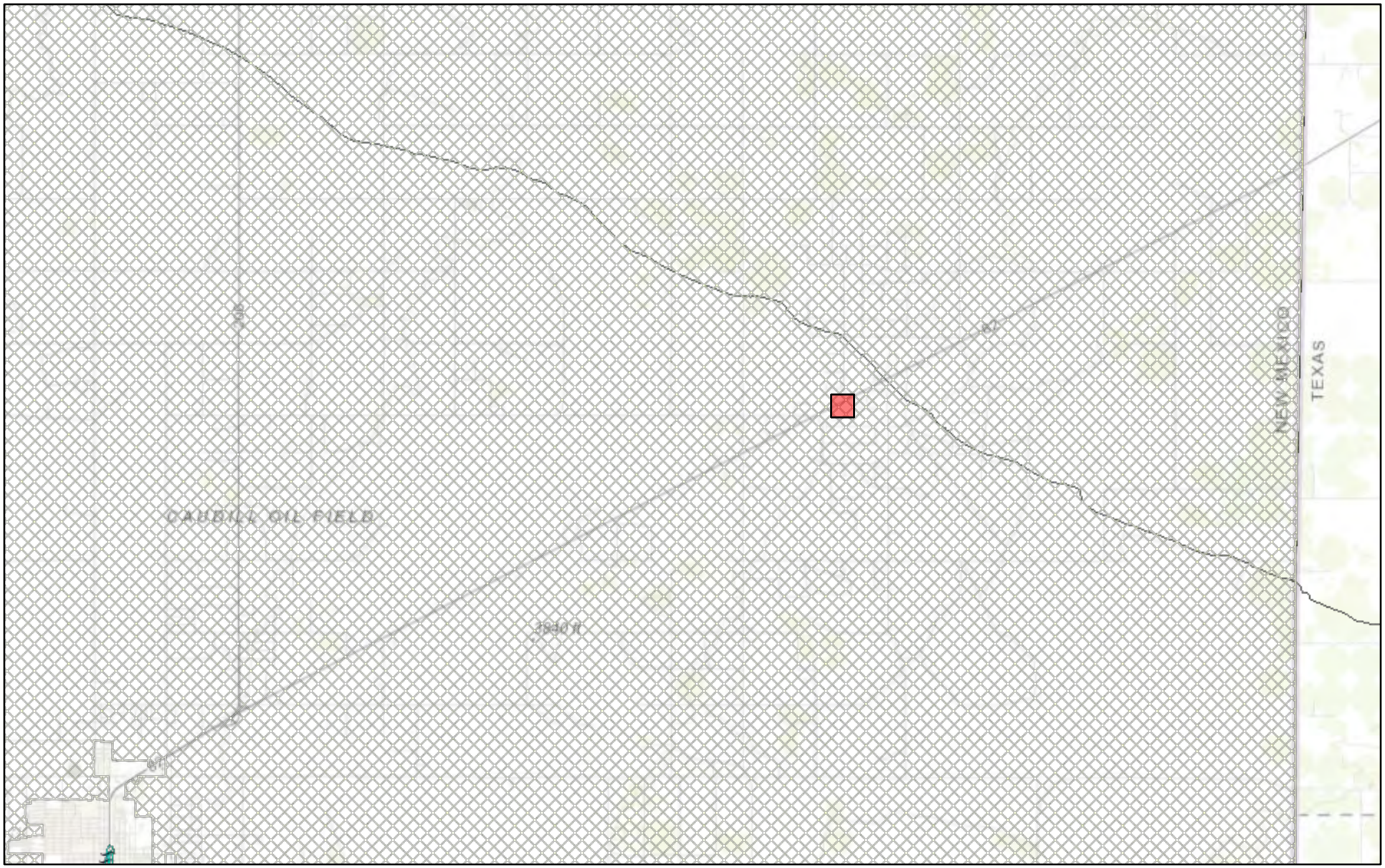
Driller License:	854	**Driller Company:**	GARY KIDD		
Driller Name:	KIDD, GARY (LD)				
Drill Start Date:	06/20/1997	**Drill Finish Date:**	06/23/1997	**Plug Date:**	
Log File Date:	07/23/1997	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	16 GPM
Casing Size:	5.00	**Depth Well:**	150 feet	**Depth Water:**	84 feet

Water Bearing Stratifications:	Top	Bottom	Description
	84	150	Other/Unknown

Casing Perforations:	Top	Bottom
	110	150

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

New Mexico NFHL Data



October 26, 2022

1:144,448

0 1 2 4 mi

0 1.5 3 6 km

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

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APPENDIX E

CARMONA RESOURCES

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-19825-1
Laboratory Sample Delivery Group: Lea Co, NM
Client Project/Site: Denton #5 SWD

For:
Fasken Oil and Ranch
6101 Holiday HIll Road
Midland, Texas 79707

Attn: Grant Huckabay

JKramer

Authorized for release by:
10/5/2022 10:23:12 AM

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

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Laboratory Job ID: 880-19825-1
SDG: Lea Co, NM

Table of Contents

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
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.
S1+	Surrogate recovery exceeds control limits, high 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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Job ID: 880-19825-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-19825-1

Receipt
The samples were received on 9/29/2022 3:53 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 4.4°C

Receipt Exceptions
The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: BH1 (880-19825-1), BH2 (880-19825-2), BH3 (880-19825-3), BH4 (880-19825-4), BH5 (880-19825-5) and BH6 (880-19825-6).

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35805 and analytical batch 880-35863 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-3075-A-1-B), (890-3075-A-1-C MS) and (890-3075-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-19834-A-1-C MSD). 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.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35802 and analytical batch 880-35924 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Client Sample ID: BH1

Lab Sample ID: 880-19825-1
Matrix: Solid
Date Collected: 09/29/22 08:45
Date Received: 09/29/22 15:53
Sample Depth: 0-6"

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		09/30/22 14:23	10/05/22 01:46	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/05/22 01:46	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/05/22 01:46	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/22 14:23	10/05/22 01:46	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/05/22 01:46	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/22 14:23	10/05/22 01:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*09/30/22 14:23*	*10/05/22 01:46*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/30/22 14:23*	*10/05/22 01:46*	*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			10/05/22 10:47	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			10/03/22 11:24	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		09/30/22 08:47	09/30/22 17:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 17:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*09/30/22 08:47*	*09/30/22 17:22*	*1*
o-Terphenyl	*102*		*70 - 130*	*09/30/22 08:47*	*09/30/22 17:22*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1570**		24.9		mg/Kg			10/03/22 10:26	5

Client Sample ID: BH2

Lab Sample ID: 880-19825-2
Matrix: Solid
Date Collected: 09/29/22 08:55
Date Received: 09/29/22 15:53
Sample Depth: 0-6"

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/30/22 14:23	10/05/22 02:07	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/30/22 14:23	10/05/22 02:07	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/30/22 14:23	10/05/22 02:07	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/30/22 14:23	10/05/22 02:07	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/30/22 14:23	10/05/22 02:07	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/30/22 14:23	10/05/22 02:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*09/30/22 14:23*	*10/05/22 02:07*	*1*

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Client Sample ID: BH2

Lab Sample ID: 880-19825-2
Matrix: Solid
Date Collected: 09/29/22 08:55
Date Received: 09/29/22 15:53
Sample Depth: 0-6"

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/30/22 14:23*	*10/05/22 02:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			10/05/22 10:47	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			10/03/22 11:24	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		09/30/22 08:47	09/30/22 17:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 17:44	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*09/30/22 08:47*	*09/30/22 17:44*	*1*
o-Terphenyl	*92*		*70 - 130*	*09/30/22 08:47*	*09/30/22 17:44*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**450**		5.04		mg/Kg			10/03/22 10:41	1

Client Sample ID: BH3

Lab Sample ID: 880-19825-3
Matrix: Solid
Date Collected: 09/29/22 09:05
Date Received: 09/29/22 15:53
Sample Depth: 0-6"

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		09/30/22 14:23	10/05/22 02:27	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/30/22 14:23	10/05/22 02:27	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/30/22 14:23	10/05/22 02:27	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/30/22 14:23	10/05/22 02:27	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/30/22 14:23	10/05/22 02:27	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/30/22 14:23	10/05/22 02:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*09/30/22 14:23*	*10/05/22 02:27*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*09/30/22 14:23*	*10/05/22 02:27*	*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			10/05/22 10:47	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			10/03/22 11:24	1

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Client Sample ID: BH3

Lab Sample ID: 880-19825-3
Matrix: Solid
Date Collected: 09/29/22 09:05
Date Received: 09/29/22 15:53
Sample Depth: 0-6"

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		09/30/22 08:47	09/30/22 18:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 18:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*09/30/22 08:47*	*09/30/22 18:05*	*1*
o-Terphenyl	*105*		*70 - 130*	*09/30/22 08:47*	*09/30/22 18:05*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4020**		25.2		mg/Kg			10/03/22 10:46	5

Client Sample ID: BH4

Lab Sample ID: 880-19825-4
Matrix: Solid
Date Collected: 09/29/22 09:15
Date Received: 09/29/22 15:53
Sample Depth: 0-6"

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		09/30/22 14:23	10/05/22 02:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/05/22 02:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/05/22 02:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/22 14:23	10/05/22 02:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/05/22 02:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/22 14:23	10/05/22 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/22 14:23*	*10/05/22 02:47*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/30/22 14:23*	*10/05/22 02:47*	*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			10/05/22 10:47	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			10/03/22 11:24	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		09/30/22 08:47	09/30/22 18:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 18:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*09/30/22 08:47*	*09/30/22 18:27*	*1*
o-Terphenyl	*105*		*70 - 130*	*09/30/22 08:47*	*09/30/22 18:27*	*1*

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Client Sample ID: BH4

Lab Sample ID: 880-19825-4
Matrix: Solid
Date Collected: 09/29/22 09:15
Date Received: 09/29/22 15:53
Sample Depth: 0-6"

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2440		25.2		mg/Kg			10/03/22 10:51	5

Client Sample ID: BH5

Lab Sample ID: 880-19825-5
Matrix: Solid
Date Collected: 09/29/22 09:25
Date Received: 09/29/22 15:53
Sample Depth: 0-6"

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		09/30/22 14:23	10/05/22 03:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/05/22 03:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/05/22 03:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/22 14:23	10/05/22 03:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/05/22 03:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/22 14:23	10/05/22 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*09/30/22 14:23*	*10/05/22 03:08*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*09/30/22 14:23*	*10/05/22 03:08*	*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			10/05/22 10:47	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			10/03/22 11:24	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		09/30/22 11:17	10/01/22 17:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 11:17	10/01/22 17:58	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 11:17	10/01/22 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*09/30/22 11:17*	*10/01/22 17:58*	*1*
o-Terphenyl	*81*		*70 - 130*	*09/30/22 11:17*	*10/01/22 17:58*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1660		25.2		mg/Kg			10/03/22 10:55	5

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Client Sample ID: BH6

Date Collected: 09/29/22 09:35
Date Received: 09/29/22 15:53
Sample Depth: 0-6"

Lab Sample ID: 880-19825-6

Matrix: Solid

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		09/30/22 14:23	10/05/22 03:28	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/05/22 03:28	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/05/22 03:28	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/22 14:23	10/05/22 03:28	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/05/22 03:28	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/22 14:23	10/05/22 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*09/30/22 14:23*	*10/05/22 03:28*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*09/30/22 14:23*	*10/05/22 03:28*	*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			10/05/22 10:47	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			10/03/22 11:24	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		09/30/22 11:17	10/01/22 18:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 18:19	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*09/30/22 11:17*	*10/01/22 18:19*	*1*
o-Terphenyl	*84*		*70 - 130*	*09/30/22 11:17*	*10/01/22 18:19*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3080**		25.0		mg/Kg			10/03/22 11:00	5

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, 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)
880-19823-A-1-E MS	Matrix Spike	115	108
880-19823-A-1-F MSD	Matrix Spike Duplicate	112	104
880-19825-1	BH1	115	103
880-19825-2	BH2	111	102
880-19825-3	BH3	114	101
880-19825-4	BH4	117	102
880-19825-5	BH5	114	105
880-19825-6	BH6	118	107
LCS 880-35822/1-A	Lab Control Sample	108	102
LCSD 880-35822/2-A	Lab Control Sample Dup	108	102
MB 880-35822/5-A	Method Blank	103	112

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-19825-1	BH1	102	102
880-19825-2	BH2	98	92
880-19825-3	BH3	108	105
880-19825-4	BH4	107	105
880-19825-5	BH5	90	81
880-19825-6	BH6	92	84
880-19834-A-1-B MS	Matrix Spike	124	80
880-19834-A-1-C MSD	Matrix Spike Duplicate	134 S1+	88
890-3075-A-1-C MS	Matrix Spike	69 S1-	62 S1-
890-3075-A-1-D MSD	Matrix Spike Duplicate	68 S1-	62 S1-
LCS 880-35754/2-A	Lab Control Sample	101	98
LCS 880-35805/2-A	Lab Control Sample	95	91
LCSD 880-35754/3-A	Lab Control Sample Dup	107	101
LCSD 880-35805/3-A	Lab Control Sample Dup	109	103
MB 880-35754/1-A	Method Blank	115	108
MB 880-35805/1-A	Method Blank	109	99

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35822/5-A
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/30/22 14:23	10/04/22 19:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/30/22 14:23*	*10/04/22 19:43*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/30/22 14:23*	*10/04/22 19:43*	*1*

Lab Sample ID: LCS 880-35822/1-A
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09822		mg/Kg		98	70 - 130
Toluene	0.100	0.1046		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1051		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2088		mg/Kg		104	70 - 130
o-Xylene	0.100	0.1021		mg/Kg		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-35822/2-A
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08416		mg/Kg		84	70 - 130	15	35
Toluene	0.100	0.08894		mg/Kg		89	70 - 130	16	35
Ethylbenzene	0.100	0.08921		mg/Kg		89	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.1794		mg/Kg		90	70 - 130	15	35
o-Xylene	0.100	0.08941		mg/Kg		89	70 - 130	13	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-19823-A-1-E MS
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.09243		mg/Kg		93	70 - 130
Toluene	<0.00200	U	0.0998	0.09415		mg/Kg		94	70 - 130

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QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-19823-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36069 — **Prep Batch: 35822**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0998	0.09096		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1819		mg/Kg		91	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08940		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-19823-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36069 — **Prep Batch: 35822**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08515		mg/Kg		86	70 - 130	8	35
Toluene	<0.00200	U	0.0990	0.08949		mg/Kg		90	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.0990	0.08762		mg/Kg		88	70 - 130	4	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1764		mg/Kg		89	70 - 130	3	35
o-Xylene	<0.00200	U	0.0990	0.08698		mg/Kg		88	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-35754/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35736 — **Prep Batch: 35754**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 09:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 09:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 09:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*09/30/22 08:47*	*09/30/22 09:28*	*1*
o-Terphenyl	*108*		*70 - 130*	*09/30/22 08:47*	*09/30/22 09:28*	*1*

Lab Sample ID: LCS 880-35754/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35736 — **Prep Batch: 35754**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	753.2		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	1000	962.9		mg/Kg		96	70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

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

Lab Sample ID: LCS 880-35754/2-A
Matrix: Solid
Analysis Batch: 35736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35754

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: LCSD 880-35754/3-A
Matrix: Solid
Analysis Batch: 35736

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35754

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	781.3		mg/Kg		78	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	998.5		mg/Kg		100	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 880-19834-A-1-B MS
Matrix: Solid
Analysis Batch: 35736

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1040		998	1890		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1690		998	2765		mg/Kg		108	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: 880-19834-A-1-C MSD
Matrix: Solid
Analysis Batch: 35736

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 35754

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	1040		999	1986		mg/Kg		94	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1690		999	2948		mg/Kg		126	70 - 130	6	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	134	S1+	70 - 130
o-Terphenyl	88		70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

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

Lab Sample ID: MB 880-35805/1-A
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 11:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 11:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*09/30/22 11:17*	*10/01/22 11:52*	*1*
o-Terphenyl	*99*		*70 - 130*	*09/30/22 11:17*	*10/01/22 11:52*	*1*

Lab Sample ID: LCS 880-35805/2-A
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35805

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	812.7		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	888.2		mg/Kg		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Lab Sample ID: LCSD 880-35805/3-A
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35805

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	956.4		mg/Kg		96	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	1000	991.8		mg/Kg		99	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Lab Sample ID: 890-3075-A-1-C MS
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35805

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 F1	998	603.9	F1	mg/Kg		61	70 - 130
Diesel Range Organics (Over C10-C28)	188	F1	998	466.6	F1	mg/Kg		28	70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

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

Lab Sample ID: 890-3075-A-1-C MS
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35805

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*69*	*S1-*	*70 - 130*
o-Terphenyl	*62*	*S1-*	*70 - 130*

Lab Sample ID: 890-3075-A-1-D MSD
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 35805

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	999	573.3	F1	mg/Kg		57	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	188	F1	999	464.2	F1	mg/Kg		28	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*68*	*S1-*	*70 - 130*
o-Terphenyl	*62*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35802/1-A
Matrix: Solid
Analysis Batch: 35924

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			10/03/22 08:45	1

Lab Sample ID: LCS 880-35802/2-A
Matrix: Solid
Analysis Batch: 35924

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	242.9		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-35802/3-A
Matrix: Solid
Analysis Batch: 35924

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	267.5		mg/Kg		107	90 - 110	10	20

Lab Sample ID: 880-19823-A-1-C MS
Matrix: Solid
Analysis Batch: 35924

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	1750	F1	1240	2742	F1	mg/Kg		80	90 - 110

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-19823-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 35924

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1750	F1	1240	2859		mg/Kg		90	90 - 110	4	20

Lab Sample ID: 880-19824-A-5-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 35924

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	438		252	678.0		mg/Kg		96	90 - 110

Lab Sample ID: 880-19824-A-5-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 35924

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	438		252	677.7		mg/Kg		95	90 - 110	0	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

GC VOA

Prep Batch: 35822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19825-1	BH1	Total/NA	Solid	5035	
880-19825-2	BH2	Total/NA	Solid	5035	
880-19825-3	BH3	Total/NA	Solid	5035	
880-19825-4	BH4	Total/NA	Solid	5035	
880-19825-5	BH5	Total/NA	Solid	5035	
880-19825-6	BH6	Total/NA	Solid	5035	
MB 880-35822/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35822/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35822/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19823-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19823-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19825-1	BH1	Total/NA	Solid	8021B	35822
880-19825-2	BH2	Total/NA	Solid	8021B	35822
880-19825-3	BH3	Total/NA	Solid	8021B	35822
880-19825-4	BH4	Total/NA	Solid	8021B	35822
880-19825-5	BH5	Total/NA	Solid	8021B	35822
880-19825-6	BH6	Total/NA	Solid	8021B	35822
MB 880-35822/5-A	Method Blank	Total/NA	Solid	8021B	35822
LCS 880-35822/1-A	Lab Control Sample	Total/NA	Solid	8021B	35822
LCSD 880-35822/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35822
880-19823-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	35822
880-19823-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35822

Analysis Batch: 36162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19825-1	BH1	Total/NA	Solid	Total BTEX	
880-19825-2	BH2	Total/NA	Solid	Total BTEX	
880-19825-3	BH3	Total/NA	Solid	Total BTEX	
880-19825-4	BH4	Total/NA	Solid	Total BTEX	
880-19825-5	BH5	Total/NA	Solid	Total BTEX	
880-19825-6	BH6	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19825-1	BH1	Total/NA	Solid	8015B NM	35754
880-19825-2	BH2	Total/NA	Solid	8015B NM	35754
880-19825-3	BH3	Total/NA	Solid	8015B NM	35754
880-19825-4	BH4	Total/NA	Solid	8015B NM	35754
MB 880-35754/1-A	Method Blank	Total/NA	Solid	8015B NM	35754
LCS 880-35754/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35754
LCSD 880-35754/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35754
880-19834-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	35754
880-19834-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35754

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

GC Semi VOA

Prep Batch: 35754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19825-1	BH1	Total/NA	Solid	8015NM Prep	
880-19825-2	BH2	Total/NA	Solid	8015NM Prep	
880-19825-3	BH3	Total/NA	Solid	8015NM Prep	
880-19825-4	BH4	Total/NA	Solid	8015NM Prep	
MB 880-35754/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35754/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35754/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19834-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19834-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 35805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19825-5	BH5	Total/NA	Solid	8015NM Prep	
880-19825-6	BH6	Total/NA	Solid	8015NM Prep	
MB 880-35805/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35805/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35805/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3075-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3075-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19825-5	BH5	Total/NA	Solid	8015B NM	35805
880-19825-6	BH6	Total/NA	Solid	8015B NM	35805
MB 880-35805/1-A	Method Blank	Total/NA	Solid	8015B NM	35805
LCS 880-35805/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35805
LCSD 880-35805/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35805
890-3075-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35805
890-3075-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35805

Analysis Batch: 35958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19825-1	BH1	Total/NA	Solid	8015 NM	
880-19825-2	BH2	Total/NA	Solid	8015 NM	
880-19825-3	BH3	Total/NA	Solid	8015 NM	
880-19825-4	BH4	Total/NA	Solid	8015 NM	
880-19825-5	BH5	Total/NA	Solid	8015 NM	
880-19825-6	BH6	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19825-1	BH1	Soluble	Solid	DI Leach	
880-19825-2	BH2	Soluble	Solid	DI Leach	
880-19825-3	BH3	Soluble	Solid	DI Leach	
880-19825-4	BH4	Soluble	Solid	DI Leach	
880-19825-5	BH5	Soluble	Solid	DI Leach	
880-19825-6	BH6	Soluble	Solid	DI Leach	
MB 880-35802/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35802/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

HPLC/IC (Continued)

Leach Batch: 35802 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-35802/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19823-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19823-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-19824-A-5-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19824-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 35924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19825-1	BH1	Soluble	Solid	300.0	35802
880-19825-2	BH2	Soluble	Solid	300.0	35802
880-19825-3	BH3	Soluble	Solid	300.0	35802
880-19825-4	BH4	Soluble	Solid	300.0	35802
880-19825-5	BH5	Soluble	Solid	300.0	35802
880-19825-6	BH6	Soluble	Solid	300.0	35802
MB 880-35802/1-A	Method Blank	Soluble	Solid	300.0	35802
LCS 880-35802/2-A	Lab Control Sample	Soluble	Solid	300.0	35802
LCSD 880-35802/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35802
880-19823-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	35802
880-19823-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35802
880-19824-A-5-C MS	Matrix Spike	Soluble	Solid	300.0	35802
880-19824-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35802

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Client Sample ID: BH1

Lab Sample ID: 880-19825-1
Matrix: Solid
Date Collected: 09/29/22 08:45
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/05/22 01:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36162	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35958	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35754	09/30/22 08:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	09/30/22 17:22	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 10:26	CH	EET MID

Client Sample ID: BH2

Lab Sample ID: 880-19825-2
Matrix: Solid
Date Collected: 09/29/22 08:55
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/05/22 02:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36162	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35958	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35754	09/30/22 08:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	09/30/22 17:44	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		1			35924	10/03/22 10:41	CH	EET MID

Client Sample ID: BH3

Lab Sample ID: 880-19825-3
Matrix: Solid
Date Collected: 09/29/22 09:05
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/05/22 02:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36162	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35958	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35754	09/30/22 08:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	09/30/22 18:05	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 10:46	CH	EET MID

Client Sample ID: BH4

Lab Sample ID: 880-19825-4
Matrix: Solid
Date Collected: 09/29/22 09:15
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/05/22 02:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36162	10/05/22 10:47	SM	EET MID

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Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Client Sample ID: BH4

Lab Sample ID: 880-19825-4

Date Collected: 09/29/22 09:15

Matrix: Solid

Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35958	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35754	09/30/22 08:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	09/30/22 18:27	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 10:51	CH	EET MID

Client Sample ID: BH5

Lab Sample ID: 880-19825-5

Date Collected: 09/29/22 09:25

Matrix: Solid

Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/05/22 03:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36162	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35958	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35805	09/30/22 11:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35863	10/01/22 17:58	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 10:55	CH	EET MID

Client Sample ID: BH6

Lab Sample ID: 880-19825-6

Date Collected: 09/29/22 09:35

Matrix: Solid

Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/05/22 03:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36162	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35958	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35805	09/30/22 11:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35863	10/01/22 18:19	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 11:00	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19825-1
SDG: Lea Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-19825-1	BH1	Solid	09/29/22 08:45	09/29/22 15:53	0-6"
880-19825-2	BH2	Solid	09/29/22 08:55	09/29/22 15:53	0-6"
880-19825-3	BH3	Solid	09/29/22 09:05	09/29/22 15:53	0-6"
880-19825-4	BH4	Solid	09/29/22 09:15	09/29/22 15:53	0-6"
880-19825-5	BH5	Solid	09/29/22 09:25	09/29/22 15:53	0-6"
880-19825-6	BH6	Solid	09/29/22 09:35	09/29/22 15:53	0-6"

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio TX (210) 509-3334
EL Paso TX (915) 585-3443, Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No: 19825

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Project Manager	Grant Huckabay	Bill to (if different)	
Company Name	Fasken Oil and Ranch	Company Name	
Address	6101 Holiday Hill Road	Address	
City, State ZIP	Midland TX 79707	City State ZIP	
Phone	432-687-1777	Email	granth@forl.com / addisong@forl.com

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other

Project Name	DENTON #5 SWD	Turn Around	☐ Routine ☒ Rush
Project Number		Due Date	3 DAY
Project Location	LEA Co. NM	TAT starts the day received by the lab if received by 4:30pm	
Sampler's Name	Addison Guelker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID	YRB
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.20
Sample Custody Seals	Yes No (N/A)	Temperature Reading	4.2
Total Containers		Corrected Temperature	4.0

Preservative Codes

None NO; DI Water H_2O; Cool Cool; MeOH Me; HCL HC; HNO_3 HN; H_2SO_4 H_2; NaOH Na; H_3PO_4 HP; $NaHSO_4$ NABIS; $Na_2S_2O_3$ $NaSO_3$; Zn Acetate+NaOH Zn; NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CL	EC	TPH 8015M	BTEX 8021B	Sample Comments
BH1	S	9/29/22	8:45	0-6"	G	1		X		X	X	
BH2	S		8:55	0-6"	G	1		X		X	X	
BH3	S		9:05	0-6"	G	1		X		X	X	
BH4	S		9:15	0-6"	G	1		X		X	X	
BH5	S		9:25	0-6"	G	1		X		X	X	
BH6	S		9:35	0-6"	G	1		X		X	X	
	S											
	S											
	S											
	S											

880-19825 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		9/29/22 1553	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-19825-1
SDG Number: Lea Co, NM

Login Number: 19825
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-19826-1
Laboratory Sample Delivery Group: Lea Co, NM
Client Project/Site: Denton #5 SWD

For:
Fasken Oil and Ranch
6101 Holiday HIll Road
Midland, Texas 79707

Attn: Grant Huckabay

JKramer

Authorized for release by:
10/4/2022 3:18:55 PM

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

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Laboratory Job ID: 880-19826-1
SDG: Lea Co, NM

Table of Contents

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Job ID: 880-19826-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-19826-1

Receipt
The samples were received on 9/29/2022 3:53 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 4.4°C

Receipt Exceptions
The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: BH1 (880-19826-1), BH2 (880-19826-2), BH3 (880-19826-3), BH4 (880-19826-4), BH5 (880-19826-5) and BH6 (880-19826-6).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-3075-A-1-B), (890-3075-A-1-C MS) and (890-3075-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35805 and analytical batch 880-35863 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35802 and analytical batch 880-35924 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35803 and analytical batch 880-35998 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Client Sample ID: BH1

Lab Sample ID: 880-19826-1
Matrix: Solid
Date Collected: 09/29/22 08:46
Date Received: 09/29/22 15:53
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:51	10/04/22 12:13	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:51	10/04/22 12:13	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:51	10/04/22 12:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/22 14:51	10/04/22 12:13	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:51	10/04/22 12:13	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/22 14:51	10/04/22 12:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*09/30/22 14:51*	*10/04/22 12:13*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/30/22 14:51*	*10/04/22 12:13*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/04/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/03/22 11:31	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		09/30/22 11:17	10/01/22 19:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 11:17	10/01/22 19:03	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 11:17	10/01/22 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*09/30/22 11:17*	*10/01/22 19:03*	*1*
o-Terphenyl	*99*		*70 - 130*	*09/30/22 11:17*	*10/01/22 19:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1180**		24.8		mg/Kg			10/03/22 11:05	5

Client Sample ID: BH2

Lab Sample ID: 880-19826-2
Matrix: Solid
Date Collected: 09/29/22 08:56
Date Received: 09/29/22 15:53
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 12:34	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 12:34	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 12:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/22 14:51	10/04/22 12:34	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 12:34	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/22 14:51	10/04/22 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*09/30/22 14:51*	*10/04/22 12:34*	*1*

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Client Sample ID: BH2

Lab Sample ID: 880-19826-2
Matrix: Solid
Date Collected: 09/29/22 08:56
Date Received: 09/29/22 15:53
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*09/30/22 14:51*	*10/04/22 12:34*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/04/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/03/22 11:31	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	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 19:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 19:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*09/30/22 11:17*	*10/01/22 19:24*	*1*
o-Terphenyl	*98*		*70 - 130*	*09/30/22 11:17*	*10/01/22 19:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**454**		4.98		mg/Kg			10/03/22 11:10	1

Client Sample ID: BH3

Lab Sample ID: 880-19826-3
Matrix: Solid
Date Collected: 09/29/22 09:06
Date Received: 09/29/22 15:53
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 12:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 12:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 12:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/22 14:51	10/04/22 12:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 12:55	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/22 14:51	10/04/22 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*09/30/22 14:51*	*10/04/22 12:55*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/30/22 14:51*	*10/04/22 12:55*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/04/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/03/22 11:31	1

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Client Sample ID: BH3

Lab Sample ID: 880-19826-3
Matrix: Solid
Date Collected: 09/29/22 09:06
Date Received: 09/29/22 15:53
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/30/22 11:17	10/01/22 19:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 11:17	10/01/22 19:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 11:17	10/01/22 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*09/30/22 11:17*	*10/01/22 19:45*	*1*
o-Terphenyl	*92*		*70 - 130*	*09/30/22 11:17*	*10/01/22 19:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1640**	**F1**	25.2		mg/Kg			10/03/22 16:14	5

Client Sample ID: BH4

Lab Sample ID: 880-19826-4
Matrix: Solid
Date Collected: 09/29/22 09:16
Date Received: 09/29/22 15:53
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 13:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 13:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 13:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/22 14:51	10/04/22 13:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 13:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/22 14:51	10/04/22 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/30/22 14:51*	*10/04/22 13:16*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*09/30/22 14:51*	*10/04/22 13:16*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/04/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**52.7**		50.0		mg/Kg			10/03/22 11:31	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	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 20:07	1
Diesel Range Organics (Over C10-C28)	**52.7**		50.0		mg/Kg		09/30/22 11:17	10/01/22 20:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*09/30/22 11:17*	*10/01/22 20:07*	*1*
o-Terphenyl	*86*		*70 - 130*	*09/30/22 11:17*	*10/01/22 20:07*	*1*

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Client Sample ID: BH4

Lab Sample ID: 880-19826-4
Matrix: Solid
Date Collected: 09/29/22 09:16
Date Received: 09/29/22 15:53
Sample Depth: 1'

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	354		5.04		mg/Kg			10/03/22 16:29	1

Client Sample ID: BH5

Lab Sample ID: 880-19826-5
Matrix: Solid
Date Collected: 09/29/22 09:26
Date Received: 09/29/22 15:53
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/30/22 14:51	10/04/22 13:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/30/22 14:51	10/04/22 13:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/30/22 14:51	10/04/22 13:36	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/30/22 14:51	10/04/22 13:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/30/22 14:51	10/04/22 13:36	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/30/22 14:51	10/04/22 13:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*09/30/22 14:51*	*10/04/22 13:36*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/30/22 14:51*	*10/04/22 13:36*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/04/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/03/22 11:31	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		09/30/22 11:17	10/01/22 20:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 11:17	10/01/22 20:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 11:17	10/01/22 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*09/30/22 11:17*	*10/01/22 20:28*	*1*
o-Terphenyl	*88*		*70 - 130*	*09/30/22 11:17*	*10/01/22 20:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	337		5.02		mg/Kg			10/03/22 16:33	1

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Client Sample ID: BH6

Date Collected: 09/29/22 09:36
Date Received: 09/29/22 15:53
Sample Depth: 1'

Lab Sample ID: 880-19826-6

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/30/22 14:51	10/04/22 13:57	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/30/22 14:51	10/04/22 13:57	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/30/22 14:51	10/04/22 13:57	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/30/22 14:51	10/04/22 13:57	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/30/22 14:51	10/04/22 13:57	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/30/22 14:51	10/04/22 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*09/30/22 14:51*	*10/04/22 13:57*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/30/22 14:51*	*10/04/22 13:57*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			10/04/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**109**		49.9		mg/Kg			10/03/22 11:31	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		09/30/22 11:17	10/01/22 20:50	1
Diesel Range Organics (Over C10-C28)	**109**		49.9		mg/Kg		09/30/22 11:17	10/01/22 20:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 11:17	10/01/22 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/30/22 11:17*	*10/01/22 20:50*	*1*
o-Terphenyl	*97*		*70 - 130*	*09/30/22 11:17*	*10/01/22 20:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**293**		4.98		mg/Kg			10/03/22 16:38	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, 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)
880-19826-1	BH1	110	93
880-19826-1 MS	BH1	99	102
880-19826-1 MSD	BH1	96	98
880-19826-2	BH2	111	99
880-19826-3	BH3	115	103
880-19826-4	BH4	116	100
880-19826-5	BH5	123	102
880-19826-6	BH6	121	108
LCS 880-35824/1-A	Lab Control Sample	83	93
LCSD 880-35824/2-A	Lab Control Sample Dup	87	98
MB 880-35824/5-A	Method Blank	94	82

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)
880-19826-1	BH1	110	99
880-19826-2	BH2	106	98
880-19826-3	BH3	100	92
880-19826-4	BH4	94	86
880-19826-5	BH5	96	88
880-19826-6	BH6	105	97
890-3075-A-1-C MS	Matrix Spike	69 S1-	62 S1-
890-3075-A-1-D MSD	Matrix Spike Duplicate	68 S1-	62 S1-
LCS 880-35805/2-A	Lab Control Sample	95	91
LCSD 880-35805/3-A	Lab Control Sample Dup	109	103
MB 880-35805/1-A	Method Blank	109	99

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35824/5-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 11:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/30/22 14:51	10/04/22 11:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/30/22 14:51	10/04/22 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*09/30/22 14:51*	*10/04/22 11:52*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*09/30/22 14:51*	*10/04/22 11:52*	*1*

Lab Sample ID: LCS 880-35824/1-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1004		mg/Kg		100	70 - 130
Toluene	0.100	0.1007		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.09668		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2011		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1002		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 880-35824/2-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35824

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1036		mg/Kg		104	70 - 130	3	35
Toluene	0.100	0.1037		mg/Kg		104	70 - 130	3	35
Ethylbenzene	0.100	0.09909		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2058		mg/Kg		103	70 - 130	2	35
o-Xylene	0.100	0.1030		mg/Kg		103	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-19826-1 MS
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: BH1
Prep Type: Total/NA
Prep Batch: 35824

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.100	0.09434		mg/Kg		94	70 - 130
Toluene	<0.00201	U	0.100	0.09769		mg/Kg		97	70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-19826-1 MS
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: BH1
Prep Type: Total/NA
Prep Batch: 35824

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.09359		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1989		mg/Kg		99	70 - 130
o-Xylene	<0.00201	U	0.100	0.1003		mg/Kg		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-19826-1 MSD
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: BH1
Prep Type: Total/NA
Prep Batch: 35824

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0998	0.09755		mg/Kg		98	70 - 130	3	35
Toluene	<0.00201	U	0.0998	0.09855		mg/Kg		98	70 - 130	1	35
Ethylbenzene	<0.00201	U	0.0998	0.09317		mg/Kg		93	70 - 130	0	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1943		mg/Kg		97	70 - 130	2	35
o-Xylene	<0.00201	U	0.0998	0.09791		mg/Kg		98	70 - 130	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-35805/1-A
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 11:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 11:52	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 11:17	10/01/22 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*09/30/22 11:17*	*10/01/22 11:52*	*1*
o-Terphenyl	*99*		*70 - 130*	*09/30/22 11:17*	*10/01/22 11:52*	*1*

Lab Sample ID: LCS 880-35805/2-A
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35805

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	812.7		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	888.2		mg/Kg		89	70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

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

Lab Sample ID: LCS 880-35805/2-A
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35805

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: LCSD 880-35805/3-A
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35805

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	956.4		mg/Kg		96	70 - 130	16	20
Diesel Range Organics (Over C10-C28)			1000	991.8		mg/Kg		99	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 890-3075-A-1-C MS
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35805

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 F1	998	603.9	F1	mg/Kg		61	70 - 130
Diesel Range Organics (Over C10-C28)	188	F1	998	466.6	F1	mg/Kg		28	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	69	S1-	70 - 130
o-Terphenyl	62	S1-	70 - 130

Lab Sample ID: 890-3075-A-1-D MSD
Matrix: Solid
Analysis Batch: 35863

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 35805

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	999	573.3	F1	mg/Kg		57	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	188	F1	999	464.2	F1	mg/Kg		28	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	68	S1-	70 - 130
o-Terphenyl	62	S1-	70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35802/1-A
Matrix: Solid
Analysis Batch: 35924

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			10/03/22 08:45	1

Lab Sample ID: LCS 880-35802/2-A
Matrix: Solid
Analysis Batch: 35924

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	242.9		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-35802/3-A
Matrix: Solid
Analysis Batch: 35924

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	267.5		mg/Kg		107	90 - 110	10	20

Lab Sample ID: 880-19823-A-1-C MS
Matrix: Solid
Analysis Batch: 35924

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	1750	F1	1240	2742	F1	mg/Kg		80	90 - 110		

Lab Sample ID: 880-19823-A-1-D MSD
Matrix: Solid
Analysis Batch: 35924

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	1750	F1	1240	2859		mg/Kg		90	90 - 110	4	20

Lab Sample ID: 880-19824-A-5-C MS
Matrix: Solid
Analysis Batch: 35924

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	438		252	678.0		mg/Kg		96	90 - 110		

Lab Sample ID: 880-19824-A-5-D MSD
Matrix: Solid
Analysis Batch: 35924

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	438		252	677.7		mg/Kg		95	90 - 110	0	20

Lab Sample ID: MB 880-35803/1-A
Matrix: Solid
Analysis Batch: 35998

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			10/03/22 15:59	1

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-35803/2-A
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	243.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-35803/3-A
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	245.3		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-19826-3 MS
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: BH3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1640	F1	1260	2744	F1	mg/Kg		88	90 - 110		

Lab Sample ID: 880-19826-3 MSD
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: BH3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1640	F1	1260	2751	F1	mg/Kg		89	90 - 110	0	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

GC VOA

Prep Batch: 35824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-1	BH1	Total/NA	Solid	5035	
880-19826-2	BH2	Total/NA	Solid	5035	
880-19826-3	BH3	Total/NA	Solid	5035	
880-19826-4	BH4	Total/NA	Solid	5035	
880-19826-5	BH5	Total/NA	Solid	5035	
880-19826-6	BH6	Total/NA	Solid	5035	
MB 880-35824/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35824/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35824/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19826-1 MS	BH1	Total/NA	Solid	5035	
880-19826-1 MSD	BH1	Total/NA	Solid	5035	

Analysis Batch: 36027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-1	BH1	Total/NA	Solid	8021B	35824
880-19826-2	BH2	Total/NA	Solid	8021B	35824
880-19826-3	BH3	Total/NA	Solid	8021B	35824
880-19826-4	BH4	Total/NA	Solid	8021B	35824
880-19826-5	BH5	Total/NA	Solid	8021B	35824
880-19826-6	BH6	Total/NA	Solid	8021B	35824
MB 880-35824/5-A	Method Blank	Total/NA	Solid	8021B	35824
LCS 880-35824/1-A	Lab Control Sample	Total/NA	Solid	8021B	35824
LCSD 880-35824/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35824
880-19826-1 MS	BH1	Total/NA	Solid	8021B	35824
880-19826-1 MSD	BH1	Total/NA	Solid	8021B	35824

Analysis Batch: 36061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-1	BH1	Total/NA	Solid	Total BTEX	
880-19826-2	BH2	Total/NA	Solid	Total BTEX	
880-19826-3	BH3	Total/NA	Solid	Total BTEX	
880-19826-4	BH4	Total/NA	Solid	Total BTEX	
880-19826-5	BH5	Total/NA	Solid	Total BTEX	
880-19826-6	BH6	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 35805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-1	BH1	Total/NA	Solid	8015NM Prep	
880-19826-2	BH2	Total/NA	Solid	8015NM Prep	
880-19826-3	BH3	Total/NA	Solid	8015NM Prep	
880-19826-4	BH4	Total/NA	Solid	8015NM Prep	
880-19826-5	BH5	Total/NA	Solid	8015NM Prep	
880-19826-6	BH6	Total/NA	Solid	8015NM Prep	
MB 880-35805/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35805/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35805/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3075-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3075-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

GC Semi VOA

Analysis Batch: 35863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-1	BH1	Total/NA	Solid	8015B NM	35805
880-19826-2	BH2	Total/NA	Solid	8015B NM	35805
880-19826-3	BH3	Total/NA	Solid	8015B NM	35805
880-19826-4	BH4	Total/NA	Solid	8015B NM	35805
880-19826-5	BH5	Total/NA	Solid	8015B NM	35805
880-19826-6	BH6	Total/NA	Solid	8015B NM	35805
MB 880-35805/1-A	Method Blank	Total/NA	Solid	8015B NM	35805
LCS 880-35805/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35805
LCSD 880-35805/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35805
890-3075-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35805
890-3075-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35805

Analysis Batch: 35973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-1	BH1	Total/NA	Solid	8015 NM	
880-19826-2	BH2	Total/NA	Solid	8015 NM	
880-19826-3	BH3	Total/NA	Solid	8015 NM	
880-19826-4	BH4	Total/NA	Solid	8015 NM	
880-19826-5	BH5	Total/NA	Solid	8015 NM	
880-19826-6	BH6	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-1	BH1	Soluble	Solid	DI Leach	
880-19826-2	BH2	Soluble	Solid	DI Leach	
MB 880-35802/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35802/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35802/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19823-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19823-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-19824-A-5-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19824-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 35803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-3	BH3	Soluble	Solid	DI Leach	
880-19826-4	BH4	Soluble	Solid	DI Leach	
880-19826-5	BH5	Soluble	Solid	DI Leach	
880-19826-6	BH6	Soluble	Solid	DI Leach	
MB 880-35803/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35803/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35803/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19826-3 MS	BH3	Soluble	Solid	DI Leach	
880-19826-3 MSD	BH3	Soluble	Solid	DI Leach	

Analysis Batch: 35924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-1	BH1	Soluble	Solid	300.0	35802
880-19826-2	BH2	Soluble	Solid	300.0	35802

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

HPLC/IC (Continued)

Analysis Batch: 35924 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35802/1-A	Method Blank	Soluble	Solid	300.0	35802
LCS 880-35802/2-A	Lab Control Sample	Soluble	Solid	300.0	35802
LCSD 880-35802/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35802
880-19823-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	35802
880-19823-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35802
880-19824-A-5-C MS	Matrix Spike	Soluble	Solid	300.0	35802
880-19824-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35802

Analysis Batch: 35998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-3	BH3	Soluble	Solid	300.0	35803
880-19826-4	BH4	Soluble	Solid	300.0	35803
880-19826-5	BH5	Soluble	Solid	300.0	35803
880-19826-6	BH6	Soluble	Solid	300.0	35803
MB 880-35803/1-A	Method Blank	Soluble	Solid	300.0	35803
LCS 880-35803/2-A	Lab Control Sample	Soluble	Solid	300.0	35803
LCSD 880-35803/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35803
880-19826-3 MS	BH3	Soluble	Solid	300.0	35803
880-19826-3 MSD	BH3	Soluble	Solid	300.0	35803

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Client Sample ID: BH1

Date Collected: 09/29/22 08:46
Date Received: 09/29/22 15:53

Lab Sample ID: 880-19826-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 12:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36061	10/04/22 13:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35973	10/03/22 11:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35805	09/30/22 11:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35863	10/01/22 19:03	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 11:05	CH	EET MID

Client Sample ID: BH2

Date Collected: 09/29/22 08:56
Date Received: 09/29/22 15:53

Lab Sample ID: 880-19826-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 12:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36061	10/04/22 13:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35973	10/03/22 11:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35805	09/30/22 11:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35863	10/01/22 19:24	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		1			35924	10/03/22 11:10	CH	EET MID

Client Sample ID: BH3

Date Collected: 09/29/22 09:06
Date Received: 09/29/22 15:53

Lab Sample ID: 880-19826-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 12:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36061	10/04/22 13:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35973	10/03/22 11:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35805	09/30/22 11:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35863	10/01/22 19:45	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		5			35998	10/03/22 16:14	CH	EET MID

Client Sample ID: BH4

Date Collected: 09/29/22 09:16
Date Received: 09/29/22 15:53

Lab Sample ID: 880-19826-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 13:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36061	10/04/22 13:45	MNR	EET MID

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Client Sample ID: BH4

Lab Sample ID: 880-19826-4
Date Collected: 09/29/22 09:16
Matrix: Solid
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35973	10/03/22 11:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35805	09/30/22 11:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35863	10/01/22 20:07	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 16:29	CH	EET MID

Client Sample ID: BH5

Lab Sample ID: 880-19826-5
Date Collected: 09/29/22 09:26
Matrix: Solid
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 13:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36061	10/04/22 13:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35973	10/03/22 11:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35805	09/30/22 11:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35863	10/01/22 20:28	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 16:33	CH	EET MID

Client Sample ID: BH6

Lab Sample ID: 880-19826-6
Date Collected: 09/29/22 09:36
Matrix: Solid
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 13:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36061	10/04/22 13:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35973	10/03/22 11:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35805	09/30/22 11:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35863	10/01/22 20:50	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 16:38	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19826-1
SDG: Lea Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-19826-1	BH1	Solid	09/29/22 08:46	09/29/22 15:53	1'
880-19826-2	BH2	Solid	09/29/22 08:56	09/29/22 15:53	1'
880-19826-3	BH3	Solid	09/29/22 09:06	09/29/22 15:53	1'
880-19826-4	BH4	Solid	09/29/22 09:16	09/29/22 15:53	1'
880-19826-5	BH5	Solid	09/29/22 09:26	09/29/22 15:53	1'
880-19826-6	BH6	Solid	09/29/22 09:36	09/29/22 15:53	1'

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio TX (210) 509-3334
EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No: 19826

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Project Manager	Grant Huckabay	Bill to (if different)	
Company Name	Fasken Oil and Ranch	Company Name	
Address	6101 Holiday Hill Road	Address	
City State ZIP	Midland TX 79707	City, State ZIP	
Phone	432-687-1777	Email	granth@forl.com / addisong@forl.com

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other

Project Name	DENTON #5 SWD	Turn Around	☐ Routine ☑ Rush
Project Number		Due Date	3 DAY
Project Location	LEA Co NM	TAT starts the day received by the lab if received by 4 30pm	
Sampler's Name	Addison Guelker		
PO #			

SAMPLE RECEIPT			
Temp Blank	Yes (No)	Wet Ice	(Yes) No
Samples Received Intact	(Yes) No	Thermometer ID	IR8
Cooler Custody Seals	Yes No (N/A)	Correction Factor	.20
Sample Custody Seals	Yes No (N/A)	Temperature Reading	4.2
Total Containers		Corrected Temperature	4.4

Preservative Codes

None NO; DI Water H_2O; Cool Cool; MeOH Me; HCL HC; HNO_3 HN; H_2SO_4 H_2; NaOH Na; H_3PO_4 HP; $NaHSO_4$ NABIS; $Na_2S_2O_3$ $NaSO_3$; Zn Acetate+NaOH Zn; NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CL	EC	TPH 8015M	BTEX 8021B	Sample Comments
BH1	S	9/29/22	8.46	1'	G	1		X		X	X	
BH2	S		8.56	1'	G	1						
BH3	S		9.06	1'	G	1						
BH4	S		9.16	1'	G	1						
BH5	S		9.26	1'	G	1						
BH6	S		9.36	1'	G	1						
	S											
	S											
	S											
	S											

880-19826 Chain of Custody

Total 200.7 / 6010 200 8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85 00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		9/29/22 1553	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-19826-1
SDG Number: Lea Co, NM

Login Number: 19826
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-19824-1
Laboratory Sample Delivery Group: Lea Co, NM
Client Project/Site: Denton #5 SWD

For:
Fasken Oil and Ranch
6101 Holiday HIll Road
Midland, Texas 79707

Attn: Grant Huckabay

JKramer

Authorized for release by:
10/5/2022 10:23:12 AM

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

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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Laboratory Job ID: 880-19824-1
SDG: Lea Co, NM

Table of Contents

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Job ID: 880-19824-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-19824-1

Receipt
The samples were received on 9/29/2022 3:53 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 4.4°C

Receipt Exceptions
The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: BH1 (880-19824-1), BH2 (880-19824-2), BH3 (880-19824-3), BH4 (880-19824-4), BH5 (880-19824-5) and BH6 (880-19824-6).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-19834-A-1-C MSD). 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.

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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Client Sample ID: BH1

Lab Sample ID: 880-19824-1
Matrix: Solid
Date Collected: 09/29/22 08:47
Date Received: 09/29/22 15:53
Sample Depth: 2'

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		09/30/22 14:23	10/04/22 22:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/04/22 22:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/04/22 22:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/22 14:23	10/04/22 22:15	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/04/22 22:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/22 14:23	10/04/22 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/22 14:23*	*10/04/22 22:15*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/30/22 14:23*	*10/04/22 22:15*	*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			10/05/22 10:47	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			10/03/22 11:24	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		09/30/22 08:47	09/30/22 15:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 15:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*09/30/22 08:47*	*09/30/22 15:14*	*1*
o-Terphenyl	*98*		*70 - 130*	*09/30/22 08:47*	*09/30/22 15:14*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1260**		25.1		mg/Kg			10/03/22 09:48	5

Client Sample ID: BH2

Lab Sample ID: 880-19824-2
Matrix: Solid
Date Collected: 09/29/22 08:57
Date Received: 09/29/22 15:53
Sample Depth: 2'

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		09/30/22 14:23	10/04/22 22:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 22:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 22:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/22 14:23	10/04/22 22:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 22:35	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/22 14:23	10/04/22 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/30/22 14:23*	*10/04/22 22:35*	*1*

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Client Sample ID: BH2

Date Collected: 09/29/22 08:57
Date Received: 09/29/22 15:53
Sample Depth: 2'

Lab Sample ID: 880-19824-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/30/22 14:23*	*10/04/22 22:35*	*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			10/05/22 10:47	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			10/03/22 11:24	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		09/30/22 08:47	09/30/22 15:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 15:36	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/30/22 08:47*	*09/30/22 15:36*	*1*
o-Terphenyl	*102*		*70 - 130*	*09/30/22 08:47*	*09/30/22 15:36*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**464**		4.98		mg/Kg			10/03/22 09:53	1

Client Sample ID: BH3

Date Collected: 09/29/22 09:07
Date Received: 09/29/22 15:53
Sample Depth: 2'

Lab Sample ID: 880-19824-3
Matrix: Solid

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		09/30/22 14:23	10/04/22 22:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 22:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 22:55	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/30/22 14:23	10/04/22 22:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 22:55	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/30/22 14:23	10/04/22 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*09/30/22 14:23*	*10/04/22 22:55*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*09/30/22 14:23*	*10/04/22 22:55*	*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			10/05/22 10:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**226**		49.9		mg/Kg			10/03/22 11:24	1

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Client Sample ID: BH3

Lab Sample ID: 880-19824-3
Matrix: Solid
Date Collected: 09/29/22 09:07
Date Received: 09/29/22 15:53
Sample Depth: 2'

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		09/30/22 08:47	09/30/22 15:57	1
Diesel Range Organics (Over C10-C28)	226		49.9		mg/Kg		09/30/22 08:47	09/30/22 15:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*09/30/22 08:47*	*09/30/22 15:57*	*1*
o-Terphenyl	*100*		*70 - 130*	*09/30/22 08:47*	*09/30/22 15:57*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		24.8		mg/Kg			10/03/22 09:57	5

Client Sample ID: BH4

Lab Sample ID: 880-19824-4
Matrix: Solid
Date Collected: 09/29/22 09:17
Date Received: 09/29/22 15:53
Sample Depth: 2'

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		09/30/22 14:23	10/04/22 23:16	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/04/22 23:16	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/04/22 23:16	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/22 14:23	10/04/22 23:16	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/04/22 23:16	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/22 14:23	10/04/22 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/30/22 14:23*	*10/04/22 23:16*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/30/22 14:23*	*10/04/22 23:16*	*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			10/05/22 10:47	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			10/03/22 11:24	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		09/30/22 08:47	09/30/22 16:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 16:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*09/30/22 08:47*	*09/30/22 16:18*	*1*
o-Terphenyl	*115*		*70 - 130*	*09/30/22 08:47*	*09/30/22 16:18*	*1*

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Client Sample ID: BH4

Lab Sample ID: 880-19824-4
Matrix: Solid
Date Collected: 09/29/22 09:17
Date Received: 09/29/22 15:53
Sample Depth: 2'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	304		4.97		mg/Kg			10/03/22 10:02	1

Client Sample ID: BH5

Lab Sample ID: 880-19824-5
Matrix: Solid
Date Collected: 09/29/22 09:27
Date Received: 09/29/22 15:53
Sample Depth: 2'

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		09/30/22 14:23	10/05/22 01:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/05/22 01:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/05/22 01:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/22 14:23	10/05/22 01:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/05/22 01:05	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/22 14:23	10/05/22 01:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/22 14:23*	*10/05/22 01:05*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/30/22 14:23*	*10/05/22 01:05*	*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			10/05/22 10:47	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			10/03/22 11:24	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		09/30/22 08:47	09/30/22 16:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 16:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*09/30/22 08:47*	*09/30/22 16:40*	*1*
o-Terphenyl	*103*		*70 - 130*	*09/30/22 08:47*	*09/30/22 16:40*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	438		5.03		mg/Kg			10/03/22 10:07	1

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Client Sample ID: BH6

Date Collected: 09/29/22 09:37
Date Received: 09/29/22 15:53
Sample Depth: 2'

Lab Sample ID: 880-19824-6

Matrix: Solid

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		09/30/22 14:23	10/05/22 01:26	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/05/22 01:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/05/22 01:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/22 14:23	10/05/22 01:26	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/05/22 01:26	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/22 14:23	10/05/22 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*09/30/22 14:23*	*10/05/22 01:26*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/30/22 14:23*	*10/05/22 01:26*	*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			10/05/22 10:47	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			10/03/22 11:24	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		09/30/22 08:47	09/30/22 17:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 17:01	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:47	09/30/22 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*09/30/22 08:47*	*09/30/22 17:01*	*1*
o-Terphenyl	*99*		*70 - 130*	*09/30/22 08:47*	*09/30/22 17:01*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**435**		4.97		mg/Kg			10/03/22 10:22	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, 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)
880-19823-A-1-E MS	Matrix Spike	115	108
880-19823-A-1-F MSD	Matrix Spike Duplicate	112	104
880-19824-1	BH1	117	106
880-19824-2	BH2	116	104
880-19824-3	BH3	110	101
880-19824-4	BH4	116	106
880-19824-5	BH5	117	106
880-19824-6	BH6	125	109
LCS 880-35822/1-A	Lab Control Sample	108	102
LCSD 880-35822/2-A	Lab Control Sample Dup	108	102
MB 880-35822/5-A	Method Blank	103	112

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-19824-1	BH1	102	98
880-19824-2	BH2	105	102
880-19824-3	BH3	106	100
880-19824-4	BH4	112	115
880-19824-5	BH5	102	103
880-19824-6	BH6	100	99
880-19834-A-1-B MS	Matrix Spike	124	80
880-19834-A-1-C MSD	Matrix Spike Duplicate	134 S1+	88
LCS 880-35754/2-A	Lab Control Sample	101	98
LCSD 880-35754/3-A	Lab Control Sample Dup	107	101
MB 880-35754/1-A	Method Blank	115	108

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35822/5-A
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/30/22 14:23	10/04/22 19:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/30/22 14:23*	*10/04/22 19:43*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/30/22 14:23*	*10/04/22 19:43*	*1*

Lab Sample ID: LCS 880-35822/1-A
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09822		mg/Kg		98	70 - 130
Toluene	0.100	0.1046		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1051		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2088		mg/Kg		104	70 - 130
o-Xylene	0.100	0.1021		mg/Kg		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-35822/2-A
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08416		mg/Kg		84	70 - 130	15	35
Toluene	0.100	0.08894		mg/Kg		89	70 - 130	16	35
Ethylbenzene	0.100	0.08921		mg/Kg		89	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.1794		mg/Kg		90	70 - 130	15	35
o-Xylene	0.100	0.08941		mg/Kg		89	70 - 130	13	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-19823-A-1-E MS
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.09243		mg/Kg		93	70 - 130
Toluene	<0.00200	U	0.0998	0.09415		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-19823-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36069 — **Prep Batch: 35822**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0998	0.09096		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1819		mg/Kg		91	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08940		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-19823-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36069 — **Prep Batch: 35822**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08515		mg/Kg		86	70 - 130	8	35
Toluene	<0.00200	U	0.0990	0.08949		mg/Kg		90	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.0990	0.08762		mg/Kg		88	70 - 130	4	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1764		mg/Kg		89	70 - 130	3	35
o-Xylene	<0.00200	U	0.0990	0.08698		mg/Kg		88	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-35754/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35736 — **Prep Batch: 35754**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 09:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 09:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:47	09/30/22 09:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*09/30/22 08:47*	*09/30/22 09:28*	*1*
o-Terphenyl	*108*		*70 - 130*	*09/30/22 08:47*	*09/30/22 09:28*	*1*

Lab Sample ID: LCS 880-35754/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35736 — **Prep Batch: 35754**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	753.2		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	1000	962.9		mg/Kg		96	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

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

Lab Sample ID: LCS 880-35754/2-A
Matrix: Solid
Analysis Batch: 35736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35754

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: LCSD 880-35754/3-A
Matrix: Solid
Analysis Batch: 35736

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35754

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	781.3		mg/Kg		78	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	998.5		mg/Kg		100	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 880-19834-A-1-B MS
Matrix: Solid
Analysis Batch: 35736

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1040		998	1890		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1690		998	2765		mg/Kg		108	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: 880-19834-A-1-C MSD
Matrix: Solid
Analysis Batch: 35736

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 35754

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	1040		999	1986		mg/Kg		94	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1690		999	2948		mg/Kg		126	70 - 130	6	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	134	S1+	70 - 130
o-Terphenyl	88		70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35802/1-A
Matrix: Solid
Analysis Batch: 35924

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			10/03/22 08:45	1

Lab Sample ID: LCS 880-35802/2-A
Matrix: Solid
Analysis Batch: 35924

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	242.9		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-35802/3-A
Matrix: Solid
Analysis Batch: 35924

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	267.5		mg/Kg		107	90 - 110	10	20

Lab Sample ID: 880-19824-5 MS
Matrix: Solid
Analysis Batch: 35924

Client Sample ID: BH5
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	438		252	678.0		mg/Kg		96	90 - 110		

Lab Sample ID: 880-19824-5 MSD
Matrix: Solid
Analysis Batch: 35924

Client Sample ID: BH5
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	438		252	677.7		mg/Kg		95	90 - 110	0	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

GC VOA

Prep Batch: 35822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19824-1	BH1	Total/NA	Solid	5035	
880-19824-2	BH2	Total/NA	Solid	5035	
880-19824-3	BH3	Total/NA	Solid	5035	
880-19824-4	BH4	Total/NA	Solid	5035	
880-19824-5	BH5	Total/NA	Solid	5035	
880-19824-6	BH6	Total/NA	Solid	5035	
MB 880-35822/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35822/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35822/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19823-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19823-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19824-1	BH1	Total/NA	Solid	8021B	35822
880-19824-2	BH2	Total/NA	Solid	8021B	35822
880-19824-3	BH3	Total/NA	Solid	8021B	35822
880-19824-4	BH4	Total/NA	Solid	8021B	35822
880-19824-5	BH5	Total/NA	Solid	8021B	35822
880-19824-6	BH6	Total/NA	Solid	8021B	35822
MB 880-35822/5-A	Method Blank	Total/NA	Solid	8021B	35822
LCS 880-35822/1-A	Lab Control Sample	Total/NA	Solid	8021B	35822
LCSD 880-35822/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35822
880-19823-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	35822
880-19823-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35822

Analysis Batch: 36161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19824-1	BH1	Total/NA	Solid	Total BTEX	
880-19824-2	BH2	Total/NA	Solid	Total BTEX	
880-19824-3	BH3	Total/NA	Solid	Total BTEX	
880-19824-4	BH4	Total/NA	Solid	Total BTEX	
880-19824-5	BH5	Total/NA	Solid	Total BTEX	
880-19824-6	BH6	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19824-1	BH1	Total/NA	Solid	8015B NM	35754
880-19824-2	BH2	Total/NA	Solid	8015B NM	35754
880-19824-3	BH3	Total/NA	Solid	8015B NM	35754
880-19824-4	BH4	Total/NA	Solid	8015B NM	35754
880-19824-5	BH5	Total/NA	Solid	8015B NM	35754
880-19824-6	BH6	Total/NA	Solid	8015B NM	35754
MB 880-35754/1-A	Method Blank	Total/NA	Solid	8015B NM	35754
LCS 880-35754/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35754
LCSD 880-35754/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35754
880-19834-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	35754
880-19834-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35754

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

GC Semi VOA

Prep Batch: 35754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19824-1	BH1	Total/NA	Solid	8015NM Prep	
880-19824-2	BH2	Total/NA	Solid	8015NM Prep	
880-19824-3	BH3	Total/NA	Solid	8015NM Prep	
880-19824-4	BH4	Total/NA	Solid	8015NM Prep	
880-19824-5	BH5	Total/NA	Solid	8015NM Prep	
880-19824-6	BH6	Total/NA	Solid	8015NM Prep	
MB 880-35754/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35754/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35754/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19834-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19834-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19824-1	BH1	Total/NA	Solid	8015 NM	
880-19824-2	BH2	Total/NA	Solid	8015 NM	
880-19824-3	BH3	Total/NA	Solid	8015 NM	
880-19824-4	BH4	Total/NA	Solid	8015 NM	
880-19824-5	BH5	Total/NA	Solid	8015 NM	
880-19824-6	BH6	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19824-1	BH1	Soluble	Solid	DI Leach	
880-19824-2	BH2	Soluble	Solid	DI Leach	
880-19824-3	BH3	Soluble	Solid	DI Leach	
880-19824-4	BH4	Soluble	Solid	DI Leach	
880-19824-5	BH5	Soluble	Solid	DI Leach	
880-19824-6	BH6	Soluble	Solid	DI Leach	
MB 880-35802/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35802/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35802/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19824-5 MS	BH5	Soluble	Solid	DI Leach	
880-19824-5 MSD	BH5	Soluble	Solid	DI Leach	

Analysis Batch: 35924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19824-1	BH1	Soluble	Solid	300.0	35802
880-19824-2	BH2	Soluble	Solid	300.0	35802
880-19824-3	BH3	Soluble	Solid	300.0	35802
880-19824-4	BH4	Soluble	Solid	300.0	35802
880-19824-5	BH5	Soluble	Solid	300.0	35802
880-19824-6	BH6	Soluble	Solid	300.0	35802
MB 880-35802/1-A	Method Blank	Soluble	Solid	300.0	35802
LCS 880-35802/2-A	Lab Control Sample	Soluble	Solid	300.0	35802
LCSD 880-35802/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35802
880-19824-5 MS	BH5	Soluble	Solid	300.0	35802
880-19824-5 MSD	BH5	Soluble	Solid	300.0	35802

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Client Sample ID: BH1

Lab Sample ID: 880-19824-1
Matrix: Solid
Date Collected: 09/29/22 08:47
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/04/22 22:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36161	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35957	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35754	09/30/22 08:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	09/30/22 15:14	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 09:48	CH	EET MID

Client Sample ID: BH2

Lab Sample ID: 880-19824-2
Matrix: Solid
Date Collected: 09/29/22 08:57
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/04/22 22:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36161	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35957	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35754	09/30/22 08:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	09/30/22 15:36	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		1			35924	10/03/22 09:53	CH	EET MID

Client Sample ID: BH3

Lab Sample ID: 880-19824-3
Matrix: Solid
Date Collected: 09/29/22 09:07
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/04/22 22:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36161	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35957	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35754	09/30/22 08:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	09/30/22 15:57	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 09:57	CH	EET MID

Client Sample ID: BH4

Lab Sample ID: 880-19824-4
Matrix: Solid
Date Collected: 09/29/22 09:17
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/04/22 23:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36161	10/05/22 10:47	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Client Sample ID: BH4
Date Collected: 09/29/22 09:17
Date Received: 09/29/22 15:53

Lab Sample ID: 880-19824-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35957	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35754	09/30/22 08:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	09/30/22 16:18	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		1			35924	10/03/22 10:02	CH	EET MID

Client Sample ID: BH5
Date Collected: 09/29/22 09:27
Date Received: 09/29/22 15:53

Lab Sample ID: 880-19824-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/05/22 01:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36161	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35957	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35754	09/30/22 08:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	09/30/22 16:40	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		1			35924	10/03/22 10:07	CH	EET MID

Client Sample ID: BH6
Date Collected: 09/29/22 09:37
Date Received: 09/29/22 15:53

Lab Sample ID: 880-19824-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/05/22 01:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36161	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35957	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35754	09/30/22 08:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	09/30/22 17:01	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		1			35924	10/03/22 10:22	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19824-1
SDG: Lea Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-19824-1	BH1	Solid	09/29/22 08:47	09/29/22 15:53	2'
880-19824-2	BH2	Solid	09/29/22 08:57	09/29/22 15:53	2'
880-19824-3	BH3	Solid	09/29/22 09:07	09/29/22 15:53	2'
880-19824-4	BH4	Solid	09/29/22 09:17	09/29/22 15:53	2'
880-19824-5	BH5	Solid	09/29/22 09:27	09/29/22 15:53	2'
880-19824-6	BH6	Solid	09/29/22 09:37	09/29/22 15:53	2'

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio, TX (210) 509-3334
EL Paso TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No: 19824

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Project Manager	Grant Huckabay	Bill to (if different)	
Company Name	Fasken Oil and Ranch	Company Name	
Address	6101 Holiday Hill Road	Address.	
City, State ZIP	Midland TX 79707	City State ZIP	
Phone	432-687-1777	Email	granth@forl.com / addisong@forl.com

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other

Project Name	DENTON #5 SWD	Turn Around	☐ Routine ☒ Rush
Project Number		Due Date	3 DAY
Project Location	LEA Co. NM	TAT starts the day received by the lab if received by 4 30pm	
Sampler's Name	Addison Guelker		
PO #			

SAMPLE RECEIPT			
Temp Blank	Yes No	Wet Ice	Yes No
Samples Received Intact.	Yes No	Thermometer ID	IR8
Cooler Custody Seals.	Yes No N/A	Correction Factor	-.20
Sample Custody Seals.	Yes No N/A	Temperature Reading	4.2
Total Containers		Corrected Temperature	4.4

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2S0_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CL	EC	TPH 8015M	BTEX 8021B
BH1	S	9/29/22	8 47	2'	G	1		X		X	X
BH2	S		8 57		G	1					
BH3	S		9 07		G	1					
BH4	S		9 17		G	1					
BH5	S		9 27		G	1					
BH6	S		9 37		G	1					
	S										
	S										
	S										
	S										

Parameters: ANALYSIS REQUEST

Sample Comments

880-19824 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed These terms will be enforced unless previously negotiated

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		09/29/22 1553	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020 2

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-19824-1
SDG Number: Lea Co, NM

Login Number: 19824
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-19823-1
Laboratory Sample Delivery Group: Lea Co, NM
Client Project/Site: Denton #5 SWD

For:
Fasken Oil and Ranch
6101 Holiday HIll Road
Midland, Texas 79707

Attn: Grant Huckabay

JKramer

Authorized for release by:
10/5/2022 10:19:19 AM

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

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Laboratory Job ID: 880-19823-1
SDG: Lea Co, NM

Table of Contents

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
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
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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Job ID: 880-19823-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-19823-1

Receipt
The samples were received on 9/29/2022 3:53 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 4.4°C

Receipt Exceptions
The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: BH1 (880-19823-1), BH2 (880-19823-2), BH3 (880-19823-3), BH4 (880-19823-4), BH5 (880-19823-5) and BH6 (880-19823-6).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-19829-A-1-B) and (880-19829-A-1-C MS). 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.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35802 and analytical batch 880-35924 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Client Sample ID: BH1

Lab Sample ID: 880-19823-1
Matrix: Solid
Date Collected: 09/29/22 08:48
Date Received: 09/29/22 15:53
Sample Depth: 3'

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		09/30/22 14:23	10/04/22 20:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 20:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 20:12	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/30/22 14:23	10/04/22 20:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 20:12	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/30/22 14:23	10/04/22 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*09/30/22 14:23*	*10/04/22 20:12*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*09/30/22 14:23*	*10/04/22 20:12*	*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			10/05/22 10:47	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			10/03/22 11:45	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		09/30/22 08:55	09/30/22 15:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 15:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*09/30/22 08:55*	*09/30/22 15:14*	*1*
o-Terphenyl	*94*		*70 - 130*	*09/30/22 08:55*	*09/30/22 15:14*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1750**	**F1**	24.8		mg/Kg			10/03/22 08:59	5

Client Sample ID: BH2

Lab Sample ID: 880-19823-2
Matrix: Solid
Date Collected: 09/29/22 08:58
Date Received: 09/29/22 15:53
Sample Depth: 3'

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		09/30/22 14:23	10/04/22 20:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/04/22 20:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/04/22 20:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/22 14:23	10/04/22 20:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/04/22 20:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/22 14:23	10/04/22 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*09/30/22 14:23*	*10/04/22 20:32*	*1*

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Client Sample ID: BH2

Lab Sample ID: 880-19823-2
Matrix: Solid
Date Collected: 09/29/22 08:58
Date Received: 09/29/22 15:53
Sample Depth: 3'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/30/22 14:23*	*10/04/22 20:32*	*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			10/05/22 10:47	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			10/03/22 11:45	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		09/30/22 08:55	09/30/22 15:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 15:36	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*09/30/22 08:55*	*09/30/22 15:36*	*1*
o-Terphenyl	*94*		*70 - 130*	*09/30/22 08:55*	*09/30/22 15:36*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**733**		25.0		mg/Kg			10/03/22 09:14	5

Client Sample ID: BH3

Lab Sample ID: 880-19823-3
Matrix: Solid
Date Collected: 09/29/22 09:08
Date Received: 09/29/22 15:53
Sample Depth: 3'

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		09/30/22 14:23	10/04/22 20:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 20:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 20:53	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/22 14:23	10/04/22 20:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 20:53	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/22 14:23	10/04/22 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*09/30/22 14:23*	*10/04/22 20:53*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/30/22 14:23*	*10/04/22 20:53*	*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			10/05/22 10:47	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			10/03/22 11:45	1

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Client Sample ID: BH3

Lab Sample ID: 880-19823-3
Matrix: Solid
Date Collected: 09/29/22 09:08
Date Received: 09/29/22 15:53
Sample Depth: 3'

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		09/30/22 08:55	09/30/22 15:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 15:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*09/30/22 08:55*	*09/30/22 15:57*	*1*
o-Terphenyl	*94*		*70 - 130*	*09/30/22 08:55*	*09/30/22 15:57*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2580**		25.0		mg/Kg			10/03/22 09:19	5

Client Sample ID: BH4

Lab Sample ID: 880-19823-4
Matrix: Solid
Date Collected: 09/29/22 09:18
Date Received: 09/29/22 15:53
Sample Depth: 3'

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		09/30/22 14:23	10/04/22 21:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/04/22 21:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/04/22 21:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/22 14:23	10/04/22 21:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:23	10/04/22 21:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/22 14:23	10/04/22 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/22 14:23*	*10/04/22 21:13*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/30/22 14:23*	*10/04/22 21:13*	*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			10/05/22 10:47	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			10/03/22 11:45	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		09/30/22 08:55	09/30/22 16:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 16:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*09/30/22 08:55*	*09/30/22 16:18*	*1*
o-Terphenyl	*90*		*70 - 130*	*09/30/22 08:55*	*09/30/22 16:18*	*1*

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Client Sample ID: BH4

Lab Sample ID: 880-19823-4
Matrix: Solid
Date Collected: 09/29/22 09:18
Date Received: 09/29/22 15:53
Sample Depth: 3'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	316		4.96		mg/Kg			10/03/22 09:23	1

Client Sample ID: BH5

Lab Sample ID: 880-19823-5
Matrix: Solid
Date Collected: 09/29/22 09:28
Date Received: 09/29/22 15:53
Sample Depth: 3'

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		09/30/22 14:23	10/04/22 21:34	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/04/22 21:34	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/04/22 21:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/22 14:23	10/04/22 21:34	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:23	10/04/22 21:34	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/22 14:23	10/04/22 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*09/30/22 14:23*	*10/04/22 21:34*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/30/22 14:23*	*10/04/22 21:34*	*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			10/05/22 10:47	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			10/03/22 11:45	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		09/30/22 08:55	09/30/22 16:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 16:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*09/30/22 08:55*	*09/30/22 16:40*	*1*
o-Terphenyl	*103*		*70 - 130*	*09/30/22 08:55*	*09/30/22 16:40*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	442		5.01		mg/Kg			10/03/22 09:28	1

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Client Sample ID: BH6

Date Collected: 09/29/22 09:38
Date Received: 09/29/22 15:53
Sample Depth: 3'

Lab Sample ID: 880-19823-6

Matrix: Solid

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		09/30/22 14:23	10/04/22 21:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 21:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 21:54	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/30/22 14:23	10/04/22 21:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 21:54	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/30/22 14:23	10/04/22 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*09/30/22 14:23*	*10/04/22 21:54*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/30/22 14:23*	*10/04/22 21:54*	*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			10/05/22 10:47	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			10/03/22 11:45	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		09/30/22 08:55	09/30/22 17:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 17:01	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*09/30/22 08:55*	*09/30/22 17:01*	*1*
o-Terphenyl	*88*		*70 - 130*	*09/30/22 08:55*	*09/30/22 17:01*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**255**		5.02		mg/Kg			10/03/22 09:43	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, 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)
880-19823-1	BH1	111	100
880-19823-1 MS	BH1	115	108
880-19823-1 MSD	BH1	112	104
880-19823-2	BH2	111	106
880-19823-3	BH3	114	108
880-19823-4	BH4	117	106
880-19823-5	BH5	114	102
880-19823-6	BH6	115	102
LCS 880-35822/1-A	Lab Control Sample	108	102
LCSD 880-35822/2-A	Lab Control Sample Dup	108	102
MB 880-35822/5-A	Method Blank	103	112

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-19823-1	BH1	89	94
880-19823-2	BH2	91	94
880-19823-3	BH3	90	94
880-19823-4	BH4	86	90
880-19823-5	BH5	96	103
880-19823-6	BH6	84	88
880-19829-A-1-C MS	Matrix Spike	74	67 S1-
880-19829-A-1-D MSD	Matrix Spike Duplicate	78	73
LCS 880-35755/2-A	Lab Control Sample	107	113
LCSD 880-35755/3-A	Lab Control Sample Dup	101	101
MB 880-35755/1-A	Method Blank	104	113

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35822/5-A
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:23	10/04/22 19:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/30/22 14:23	10/04/22 19:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/30/22 14:23*	*10/04/22 19:43*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/30/22 14:23*	*10/04/22 19:43*	*1*

Lab Sample ID: LCS 880-35822/1-A
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09822		mg/Kg		98	70 - 130
Toluene	0.100	0.1046		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1051		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2088		mg/Kg		104	70 - 130
o-Xylene	0.100	0.1021		mg/Kg		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-35822/2-A
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08416		mg/Kg		84	70 - 130	15	35
Toluene	0.100	0.08894		mg/Kg		89	70 - 130	16	35
Ethylbenzene	0.100	0.08921		mg/Kg		89	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.1794		mg/Kg		90	70 - 130	15	35
o-Xylene	0.100	0.08941		mg/Kg		89	70 - 130	13	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-19823-1 MS
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: BH1
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.09243		mg/Kg		93	70 - 130
Toluene	<0.00200	U	0.0998	0.09415		mg/Kg		94	70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-19823-1 MS
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: BH1
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0998	0.09096		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1819		mg/Kg		91	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08940		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-19823-1 MSD
Matrix: Solid
Analysis Batch: 36069

Client Sample ID: BH1
Prep Type: Total/NA
Prep Batch: 35822

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08515		mg/Kg		86	70 - 130	8	35
Toluene	<0.00200	U	0.0990	0.08949		mg/Kg		90	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.0990	0.08762		mg/Kg		88	70 - 130	4	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1764		mg/Kg		89	70 - 130	3	35
o-Xylene	<0.00200	U	0.0990	0.08698		mg/Kg		88	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-35755/1-A
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35755

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/30/22 08:55*	*09/30/22 09:28*	*1*
o-Terphenyl	*113*		*70 - 130*	*09/30/22 08:55*	*09/30/22 09:28*	*1*

Lab Sample ID: LCS 880-35755/2-A
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35755

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1023		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	995.8		mg/Kg		100	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

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

Lab Sample ID: LCS 880-35755/2-A
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35755

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-35755/3-A
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35755

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	939.2		mg/Kg		94	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	896.6		mg/Kg		90	70 - 130	10	20

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

Lab Sample ID: 880-19829-A-1-C MS
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35755

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	727.0		mg/Kg		71	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	998	758.3		mg/Kg		74	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	74		70 - 130
o-Terphenyl	67	S1-	70 - 130

Lab Sample ID: 880-19829-A-1-D MSD
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 35755

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	999	731.1		mg/Kg		72	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	827.6		mg/Kg		81	70 - 130	9	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	73		70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35802/1-A
Matrix: Solid
Analysis Batch: 35924

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			10/03/22 08:45	1

Lab Sample ID: LCS 880-35802/2-A
Matrix: Solid
Analysis Batch: 35924

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	242.9		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-35802/3-A
Matrix: Solid
Analysis Batch: 35924

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	267.5		mg/Kg		107	90 - 110	10	20

Lab Sample ID: 880-19823-1 MS
Matrix: Solid
Analysis Batch: 35924

Client Sample ID: BH1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1750	F1	1240	2742	F1	mg/Kg		80	90 - 110		

Lab Sample ID: 880-19823-1 MSD
Matrix: Solid
Analysis Batch: 35924

Client Sample ID: BH1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1750	F1	1240	2859		mg/Kg		90	90 - 110	4	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

GC VOA

Prep Batch: 35822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19823-1	BH1	Total/NA	Solid	5035	
880-19823-2	BH2	Total/NA	Solid	5035	
880-19823-3	BH3	Total/NA	Solid	5035	
880-19823-4	BH4	Total/NA	Solid	5035	
880-19823-5	BH5	Total/NA	Solid	5035	
880-19823-6	BH6	Total/NA	Solid	5035	
MB 880-35822/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35822/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35822/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19823-1 MS	BH1	Total/NA	Solid	5035	
880-19823-1 MSD	BH1	Total/NA	Solid	5035	

Analysis Batch: 36069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19823-1	BH1	Total/NA	Solid	8021B	35822
880-19823-2	BH2	Total/NA	Solid	8021B	35822
880-19823-3	BH3	Total/NA	Solid	8021B	35822
880-19823-4	BH4	Total/NA	Solid	8021B	35822
880-19823-5	BH5	Total/NA	Solid	8021B	35822
880-19823-6	BH6	Total/NA	Solid	8021B	35822
MB 880-35822/5-A	Method Blank	Total/NA	Solid	8021B	35822
LCS 880-35822/1-A	Lab Control Sample	Total/NA	Solid	8021B	35822
LCSD 880-35822/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35822
880-19823-1 MS	BH1	Total/NA	Solid	8021B	35822
880-19823-1 MSD	BH1	Total/NA	Solid	8021B	35822

Analysis Batch: 36160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19823-1	BH1	Total/NA	Solid	Total BTEX	
880-19823-2	BH2	Total/NA	Solid	Total BTEX	
880-19823-3	BH3	Total/NA	Solid	Total BTEX	
880-19823-4	BH4	Total/NA	Solid	Total BTEX	
880-19823-5	BH5	Total/NA	Solid	Total BTEX	
880-19823-6	BH6	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19823-1	BH1	Total/NA	Solid	8015B NM	35755
880-19823-2	BH2	Total/NA	Solid	8015B NM	35755
880-19823-3	BH3	Total/NA	Solid	8015B NM	35755
880-19823-4	BH4	Total/NA	Solid	8015B NM	35755
880-19823-5	BH5	Total/NA	Solid	8015B NM	35755
880-19823-6	BH6	Total/NA	Solid	8015B NM	35755
MB 880-35755/1-A	Method Blank	Total/NA	Solid	8015B NM	35755
LCS 880-35755/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35755
LCSD 880-35755/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35755
880-19829-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35755
880-19829-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35755

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

GC Semi VOA

Prep Batch: 35755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19823-1	BH1	Total/NA	Solid	8015NM Prep	
880-19823-2	BH2	Total/NA	Solid	8015NM Prep	
880-19823-3	BH3	Total/NA	Solid	8015NM Prep	
880-19823-4	BH4	Total/NA	Solid	8015NM Prep	
880-19823-5	BH5	Total/NA	Solid	8015NM Prep	
880-19823-6	BH6	Total/NA	Solid	8015NM Prep	
MB 880-35755/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35755/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35755/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19829-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19829-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19823-1	BH1	Total/NA	Solid	8015 NM	
880-19823-2	BH2	Total/NA	Solid	8015 NM	
880-19823-3	BH3	Total/NA	Solid	8015 NM	
880-19823-4	BH4	Total/NA	Solid	8015 NM	
880-19823-5	BH5	Total/NA	Solid	8015 NM	
880-19823-6	BH6	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19823-1	BH1	Soluble	Solid	DI Leach	
880-19823-2	BH2	Soluble	Solid	DI Leach	
880-19823-3	BH3	Soluble	Solid	DI Leach	
880-19823-4	BH4	Soluble	Solid	DI Leach	
880-19823-5	BH5	Soluble	Solid	DI Leach	
880-19823-6	BH6	Soluble	Solid	DI Leach	
MB 880-35802/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35802/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35802/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19823-1 MS	BH1	Soluble	Solid	DI Leach	
880-19823-1 MSD	BH1	Soluble	Solid	DI Leach	

Analysis Batch: 35924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19823-1	BH1	Soluble	Solid	300.0	35802
880-19823-2	BH2	Soluble	Solid	300.0	35802
880-19823-3	BH3	Soluble	Solid	300.0	35802
880-19823-4	BH4	Soluble	Solid	300.0	35802
880-19823-5	BH5	Soluble	Solid	300.0	35802
880-19823-6	BH6	Soluble	Solid	300.0	35802
MB 880-35802/1-A	Method Blank	Soluble	Solid	300.0	35802
LCS 880-35802/2-A	Lab Control Sample	Soluble	Solid	300.0	35802
LCSD 880-35802/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35802
880-19823-1 MS	BH1	Soluble	Solid	300.0	35802
880-19823-1 MSD	BH1	Soluble	Solid	300.0	35802

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Client Sample ID: BH1

Lab Sample ID: 880-19823-1
Matrix: Solid
Date Collected: 09/29/22 08:48
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/04/22 20:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36160	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35976	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 15:14	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 08:59	CH	EET MID

Client Sample ID: BH2

Lab Sample ID: 880-19823-2
Matrix: Solid
Date Collected: 09/29/22 08:58
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/04/22 20:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36160	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35976	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 15:36	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 09:14	CH	EET MID

Client Sample ID: BH3

Lab Sample ID: 880-19823-3
Matrix: Solid
Date Collected: 09/29/22 09:08
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/04/22 20:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36160	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35976	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 15:57	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		5			35924	10/03/22 09:19	CH	EET MID

Client Sample ID: BH4

Lab Sample ID: 880-19823-4
Matrix: Solid
Date Collected: 09/29/22 09:18
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/04/22 21:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36160	10/05/22 10:47	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Client Sample ID: BH4

Lab Sample ID: 880-19823-4

Date Collected: 09/29/22 09:18
Matrix: Solid
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35976	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 16:18	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		1			35924	10/03/22 09:23	CH	EET MID

Client Sample ID: BH5

Lab Sample ID: 880-19823-5

Date Collected: 09/29/22 09:28
Matrix: Solid
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/04/22 21:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36160	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35976	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 16:40	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		1			35924	10/03/22 09:28	CH	EET MID

Client Sample ID: BH6

Lab Sample ID: 880-19823-6

Date Collected: 09/29/22 09:38
Matrix: Solid
Date Received: 09/29/22 15:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35822	09/30/22 14:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36069	10/04/22 21:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36160	10/05/22 10:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			35976	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 17:01	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	35802	09/30/22 10:54	SMC	EET MID
Soluble	Analysis	300.0		1			35924	10/03/22 09:43	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19823-1
SDG: Lea Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-19823-1	BH1	Solid	09/29/22 08:48	09/29/22 15:53	3'
880-19823-2	BH2	Solid	09/29/22 08:58	09/29/22 15:53	3'
880-19823-3	BH3	Solid	09/29/22 09:08	09/29/22 15:53	3'
880-19823-4	BH4	Solid	09/29/22 09:18	09/29/22 15:53	3'
880-19823-5	BH5	Solid	09/29/22 09:28	09/29/22 15:53	3'
880-19823-6	BH6	Solid	09/29/22 09:38	09/29/22 15:53	3'

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio TX (210) 509-3334
EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392 7550 Carlsbad NM (575) 988-3199

Work Order No: 19823

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Project Manager	Grant Huckabay	Bill to (if different)	
Company Name	Fasken Oil and Ranch	Company Name	
Address	6101 Holiday Hill Road	Address	
City, State ZIP	Midland TX 79707	City, State ZIP	
Phone	432-687-1777	Email	granth@forl.com / addisong@forl.com

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other

Project Name	DENTON #5 SWD	Turn Around	☐ Routine ☒ Rush
Project Number		Due Date	3 DAY
Project Location	LEA Co. NM	TAT starts the day received by the lab if received by 4.30pm	
Sampler's Name	Addison Guelker		
PO #:			

SAMPLE RECEIPT			
Temp Blank	Yes (No)	Wet Ice	(Yes) No
Samples Received Intact.	(Yes) No	Thermometer ID	IR8
Cooler Custody Seals.	Yes No (N/A)	Correction Factor	-.20
Sample Custody Seals	Yes No (N/A)	Temperature Reading	4-2
Total Containers		Corrected Temperature	4-4

Preservative Codes

None NO; DI Water H_2O; Cool Cool; MeOH Me; HCL HC; HNO_3 HN; H_2SO_4 H_2; NaOH Na; H_3PO_4 HP; $NaHSO_4$ NABIS; $Na_2S_2O_3$ $NaSO_3$; Zn Acetate+NaOH Zn; NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CL	EC	TPH 8015M	BTEX 8021B
BH1	S	9/29/22	8 48	2'	G	1		X		X	X
BH2	S		8 58		G	1					
BH3	S		9 08		G	1					
BH4	S		9 18		G	1					
BH5	S		9.28		G	1					
BH6	S		9.38		G	1					
	S										
	S										
	S										
	S										

Sample Comments

880-19823 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		9/29/22	2		
3		1553	4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-19823-1
SDG Number: Lea Co, NM

Login Number: 19823
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-19827-1
Laboratory Sample Delivery Group: Lea Co, NM
Client Project/Site: Denton #5 SWD

For:
Fasken Oil and Ranch
6101 Holiday HIll Road
Midland, Texas 79707

Attn: Grant Huckabay

JKramer

Authorized for release by:
10/4/2022 8:03:40 PM

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

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Laboratory Job ID: 880-19827-1
SDG: Lea Co, NM

Table of Contents

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Job ID: 880-19827-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-19827-1

Receipt
The samples were received on 9/29/2022 4:15 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 4.4°C

Receipt Exceptions
The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: BH1 (880-19827-1), BH2 (880-19827-2), BH3 (880-19827-3), BH4 (880-19827-4), BH5 (880-19827-5) and BH6 (880-19827-6).

GC VOA
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
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35803 and analytical batch 880-35998 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35803 and analytical batch 880-35998 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Client Sample ID: BH1

Lab Sample ID: 880-19827-1
Matrix: Solid
Date Collected: 09/29/22 08:49
Date Received: 09/29/22 16:15
Sample Depth: 4'

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		09/30/22 14:51	10/04/22 18:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 18:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 18:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/22 14:51	10/04/22 18:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 18:07	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/22 14:51	10/04/22 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/22 14:51*	*10/04/22 18:07*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/30/22 14:51*	*10/04/22 18:07*	*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			10/04/22 20:54	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			10/03/22 11:47	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		09/30/22 15:02	10/01/22 12:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 15:02	10/01/22 12:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 15:02	10/01/22 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*09/30/22 15:02*	*10/01/22 12:57*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/30/22 15:02*	*10/01/22 12:57*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2280**		24.8		mg/Kg			10/03/22 16:43	5

Client Sample ID: BH2

Lab Sample ID: 880-19827-2
Matrix: Solid
Date Collected: 09/29/22 08:59
Date Received: 09/29/22 16:15
Sample Depth: 4'

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		09/30/22 14:51	10/04/22 18:28	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 18:28	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 18:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/22 14:51	10/04/22 18:28	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 18:28	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/22 14:51	10/04/22 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*09/30/22 14:51*	*10/04/22 18:28*	*1*

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Client Sample ID: BH2

Date Collected: 09/29/22 08:59
Date Received: 09/29/22 16:15
Sample Depth: 4'

Lab Sample ID: 880-19827-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/30/22 14:51*	*10/04/22 18:28*	*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			10/04/22 20:54	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			10/03/22 11:47	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		09/30/22 15:02	10/01/22 14:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/30/22 15:02	10/01/22 14:01	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/30/22 15:02	10/01/22 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*09/30/22 15:02*	*10/01/22 14:01*	*1*
o-Terphenyl	*94*		*70 - 130*	*09/30/22 15:02*	*10/01/22 14:01*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**761**		4.96		mg/Kg			10/03/22 16:58	1

Client Sample ID: BH3

Date Collected: 09/29/22 09:09
Date Received: 09/29/22 16:15
Sample Depth: 4'

Lab Sample ID: 880-19827-3
Matrix: Solid

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		09/30/22 14:51	10/04/22 18:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 18:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 18:49	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/30/22 14:51	10/04/22 18:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 18:49	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/30/22 14:51	10/04/22 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*09/30/22 14:51*	*10/04/22 18:49*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*09/30/22 14:51*	*10/04/22 18:49*	*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			10/04/22 20:54	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			10/03/22 11:47	1

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Client Sample ID: BH3

Lab Sample ID: 880-19827-3
Matrix: Solid
Date Collected: 09/29/22 09:09
Date Received: 09/29/22 16:15
Sample Depth: 4'

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		09/30/22 15:02	10/01/22 14:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 15:02	10/01/22 14:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 15:02	10/01/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*09/30/22 15:02*	*10/01/22 14:23*	*1*
o-Terphenyl	*98*		*70 - 130*	*09/30/22 15:02*	*10/01/22 14:23*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1630**		50.4		mg/Kg			10/03/22 17:03	10

Client Sample ID: BH4

Lab Sample ID: 880-19827-4
Matrix: Solid
Date Collected: 09/29/22 09:19
Date Received: 09/29/22 16:15
Sample Depth: 4'

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		09/30/22 14:51	10/04/22 19:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 19:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 19:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/22 14:51	10/04/22 19:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 19:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/22 14:51	10/04/22 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*09/30/22 14:51*	*10/04/22 19:10*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/30/22 14:51*	*10/04/22 19:10*	*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			10/04/22 20:54	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			10/03/22 11:47	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		09/30/22 15:02	10/01/22 14:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 15:02	10/01/22 14:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 15:02	10/01/22 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*09/30/22 15:02*	*10/01/22 14:44*	*1*
o-Terphenyl	*90*		*70 - 130*	*09/30/22 15:02*	*10/01/22 14:44*	*1*

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Client Sample ID: BH4

Lab Sample ID: 880-19827-4
Matrix: Solid
Date Collected: 09/29/22 09:19
Date Received: 09/29/22 16:15
Sample Depth: 4'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	518		4.99		mg/Kg			10/03/22 17:07	1

Client Sample ID: BH5

Lab Sample ID: 880-19827-5
Matrix: Solid
Date Collected: 09/29/22 09:29
Date Received: 09/29/22 16:15
Sample Depth: 4'

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		09/30/22 14:51	10/04/22 19:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 19:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 19:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/22 14:51	10/04/22 19:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/22 14:51	10/04/22 19:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/22 14:51	10/04/22 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*09/30/22 14:51*	*10/04/22 19:30*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*09/30/22 14:51*	*10/04/22 19:30*	*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			10/04/22 20:54	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			10/03/22 11:47	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		09/30/22 15:02	10/01/22 15:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 15:02	10/01/22 15:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 15:02	10/01/22 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*09/30/22 15:02*	*10/01/22 15:06*	*1*
o-Terphenyl	*107*		*70 - 130*	*09/30/22 15:02*	*10/01/22 15:06*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	572		24.9		mg/Kg			10/03/22 17:12	5

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Client Sample ID: BH6

Date Collected: 09/29/22 09:39
Date Received: 09/29/22 16:15
Sample Depth: 4'

Lab Sample ID: 880-19827-6

Matrix: Solid

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		09/30/22 14:51	10/04/22 19:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:51	10/04/22 19:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:51	10/04/22 19:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/22 14:51	10/04/22 19:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/22 14:51	10/04/22 19:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/22 14:51	10/04/22 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*09/30/22 14:51*	*10/04/22 19:51*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*09/30/22 14:51*	*10/04/22 19:51*	*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			10/04/22 20:54	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			10/03/22 11:47	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		09/30/22 15:02	10/01/22 15:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 15:02	10/01/22 15:27	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 15:02	10/01/22 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*09/30/22 15:02*	*10/01/22 15:27*	*1*
o-Terphenyl	*106*		*70 - 130*	*09/30/22 15:02*	*10/01/22 15:27*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**322**		5.01		mg/Kg			10/03/22 17:17	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (70-130)	DFBZ1 (70-130)
880-19826-A-1-C MS	Matrix Spike	99	102
880-19826-A-1-D MSD	Matrix Spike Duplicate	96	98
880-19827-1	BH1	117	102
880-19827-2	BH2	122	102
880-19827-3	BH3	119	100
880-19827-4	BH4	123	102
880-19827-5	BH5	123	101
880-19827-6	BH6	121	100
LCS 880-35824/1-A	Lab Control Sample	83	93
LCSD 880-35824/2-A	Lab Control Sample Dup	87	98
MB 880-35824/5-A	Method Blank	94	82

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 1CO1 (70-130)	OTPH1 (70-130)
880-19827-1	BH1	99	110
880-19827-1 MS	BH1	75	78
880-19827-1 MSD	BH1	74	76
880-19827-2	BH2	84	94
880-19827-3	BH3	85	98
880-19827-4	BH4	79	90
880-19827-5	BH5	97	107
880-19827-6	BH6	94	106
LCS 880-35829/2-A	Lab Control Sample	114	126
LCSD 880-35829/3-A	Lab Control Sample Dup	95	106
MB 880-35829/1-A	Method Blank	99	114

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35824/5-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 11:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/30/22 14:51	10/04/22 11:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/30/22 14:51	10/04/22 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*09/30/22 14:51*	*10/04/22 11:52*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*09/30/22 14:51*	*10/04/22 11:52*	*1*

Lab Sample ID: LCS 880-35824/1-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1004		mg/Kg		100	70 - 130
Toluene	0.100	0.1007		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.09668		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2011		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1002		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 880-35824/2-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35824

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1036		mg/Kg		104	70 - 130	3	35
Toluene	0.100	0.1037		mg/Kg		104	70 - 130	3	35
Ethylbenzene	0.100	0.09909		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2058		mg/Kg		103	70 - 130	2	35
o-Xylene	0.100	0.1030		mg/Kg		103	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-19826-A-1-C MS
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35824

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.100	0.09434		mg/Kg		94	70 - 130
Toluene	<0.00201	U	0.100	0.09769		mg/Kg		97	70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-19826-A-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36027 — **Prep Batch: 35824**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.09359		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1989		mg/Kg		99	70 - 130
o-Xylene	<0.00201	U	0.100	0.1003		mg/Kg		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-19826-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36027 — **Prep Batch: 35824**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0998	0.09755		mg/Kg		98	70 - 130	3	35
Toluene	<0.00201	U	0.0998	0.09855		mg/Kg		98	70 - 130	1	35
Ethylbenzene	<0.00201	U	0.0998	0.09317		mg/Kg		93	70 - 130	0	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1943		mg/Kg		97	70 - 130	2	35
o-Xylene	<0.00201	U	0.0998	0.09791		mg/Kg		98	70 - 130	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-35829/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35865 — **Prep Batch: 35829**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 15:02	10/01/22 11:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 15:02	10/01/22 11:52	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 15:02	10/01/22 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*09/30/22 15:02*	*10/01/22 11:52*	*1*
o-Terphenyl	*114*		*70 - 130*	*09/30/22 15:02*	*10/01/22 11:52*	*1*

Lab Sample ID: LCS 880-35829/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35865 — **Prep Batch: 35829**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	876.7		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1098		mg/Kg		110	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

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

Lab Sample ID: LCS 880-35829/2-A
Matrix: Solid
Analysis Batch: 35865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35829

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	126		70 - 130

Lab Sample ID: LCSD 880-35829/3-A
Matrix: Solid
Analysis Batch: 35865

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35829

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	981.2		mg/Kg		98	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	907.5		mg/Kg		91	70 - 130	19	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: 880-19827-1 MS
Matrix: Solid
Analysis Batch: 35865

Client Sample ID: BH1
Prep Type: Total/NA
Prep Batch: 35829

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	993.8		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	998	850.4		mg/Kg		83	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	78		70 - 130

Lab Sample ID: 880-19827-1 MSD
Matrix: Solid
Analysis Batch: 35865

Client Sample ID: BH1
Prep Type: Total/NA
Prep Batch: 35829

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	999	979.4		mg/Kg		96	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	836.8		mg/Kg		82	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	74		70 - 130
o-Terphenyl	76		70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35803/1-A
Matrix: Solid
Analysis Batch: 35998

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			10/03/22 15:59	1

Lab Sample ID: LCS 880-35803/2-A
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	243.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-35803/3-A
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	245.3		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-19826-A-3-B MS
Matrix: Solid
Analysis Batch: 35998

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	1640	F1	1260	2744	F1	mg/Kg		88	90 - 110		

Lab Sample ID: 880-19826-A-3-C MSD
Matrix: Solid
Analysis Batch: 35998

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	1640	F1	1260	2751	F1	mg/Kg		89	90 - 110	0	20

Lab Sample ID: 880-19828-A-1-C MS
Matrix: Solid
Analysis Batch: 35998

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	251	F1	252	456.8	F1	mg/Kg		82	90 - 110		

Lab Sample ID: 880-19828-A-1-D MSD
Matrix: Solid
Analysis Batch: 35998

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	251	F1	252	457.2	F1	mg/Kg		82	90 - 110	0	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

GC VOA

Prep Batch: 35824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19827-1	BH1	Total/NA	Solid	5035	
880-19827-2	BH2	Total/NA	Solid	5035	
880-19827-3	BH3	Total/NA	Solid	5035	
880-19827-4	BH4	Total/NA	Solid	5035	
880-19827-5	BH5	Total/NA	Solid	5035	
880-19827-6	BH6	Total/NA	Solid	5035	
MB 880-35824/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35824/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35824/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19826-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-19826-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19827-1	BH1	Total/NA	Solid	8021B	35824
880-19827-2	BH2	Total/NA	Solid	8021B	35824
880-19827-3	BH3	Total/NA	Solid	8021B	35824
880-19827-4	BH4	Total/NA	Solid	8021B	35824
880-19827-5	BH5	Total/NA	Solid	8021B	35824
880-19827-6	BH6	Total/NA	Solid	8021B	35824
MB 880-35824/5-A	Method Blank	Total/NA	Solid	8021B	35824
LCS 880-35824/1-A	Lab Control Sample	Total/NA	Solid	8021B	35824
LCSD 880-35824/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35824
880-19826-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	35824
880-19826-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35824

Analysis Batch: 36112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19827-1	BH1	Total/NA	Solid	Total BTEX	
880-19827-2	BH2	Total/NA	Solid	Total BTEX	
880-19827-3	BH3	Total/NA	Solid	Total BTEX	
880-19827-4	BH4	Total/NA	Solid	Total BTEX	
880-19827-5	BH5	Total/NA	Solid	Total BTEX	
880-19827-6	BH6	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 35829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19827-1	BH1	Total/NA	Solid	8015NM Prep	
880-19827-2	BH2	Total/NA	Solid	8015NM Prep	
880-19827-3	BH3	Total/NA	Solid	8015NM Prep	
880-19827-4	BH4	Total/NA	Solid	8015NM Prep	
880-19827-5	BH5	Total/NA	Solid	8015NM Prep	
880-19827-6	BH6	Total/NA	Solid	8015NM Prep	
MB 880-35829/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35829/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35829/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19827-1 MS	BH1	Total/NA	Solid	8015NM Prep	
880-19827-1 MSD	BH1	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

GC Semi VOA

Analysis Batch: 35865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19827-1	BH1	Total/NA	Solid	8015B NM	35829
880-19827-2	BH2	Total/NA	Solid	8015B NM	35829
880-19827-3	BH3	Total/NA	Solid	8015B NM	35829
880-19827-4	BH4	Total/NA	Solid	8015B NM	35829
880-19827-5	BH5	Total/NA	Solid	8015B NM	35829
880-19827-6	BH6	Total/NA	Solid	8015B NM	35829
MB 880-35829/1-A	Method Blank	Total/NA	Solid	8015B NM	35829
LCS 880-35829/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35829
LCSD 880-35829/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35829
880-19827-1 MS	BH1	Total/NA	Solid	8015B NM	35829
880-19827-1 MSD	BH1	Total/NA	Solid	8015B NM	35829

Analysis Batch: 35984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19827-1	BH1	Total/NA	Solid	8015 NM	
880-19827-2	BH2	Total/NA	Solid	8015 NM	
880-19827-3	BH3	Total/NA	Solid	8015 NM	
880-19827-4	BH4	Total/NA	Solid	8015 NM	
880-19827-5	BH5	Total/NA	Solid	8015 NM	
880-19827-6	BH6	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19827-1	BH1	Soluble	Solid	DI Leach	
880-19827-2	BH2	Soluble	Solid	DI Leach	
880-19827-3	BH3	Soluble	Solid	DI Leach	
880-19827-4	BH4	Soluble	Solid	DI Leach	
880-19827-5	BH5	Soluble	Solid	DI Leach	
880-19827-6	BH6	Soluble	Solid	DI Leach	
MB 880-35803/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35803/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35803/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19826-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19826-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-19828-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19828-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 35998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19827-1	BH1	Soluble	Solid	300.0	35803
880-19827-2	BH2	Soluble	Solid	300.0	35803
880-19827-3	BH3	Soluble	Solid	300.0	35803
880-19827-4	BH4	Soluble	Solid	300.0	35803
880-19827-5	BH5	Soluble	Solid	300.0	35803
880-19827-6	BH6	Soluble	Solid	300.0	35803
MB 880-35803/1-A	Method Blank	Soluble	Solid	300.0	35803
LCS 880-35803/2-A	Lab Control Sample	Soluble	Solid	300.0	35803
LCSD 880-35803/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35803
880-19826-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	35803

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

HPLC/IC (Continued)

Analysis Batch: 35998 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19826-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35803
880-19828-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	35803
880-19828-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35803

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Client Sample ID: BH1

Lab Sample ID: 880-19827-1
Matrix: Solid
Date Collected: 09/29/22 08:49
Date Received: 09/29/22 16:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 18:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36112	10/04/22 20:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35984	10/03/22 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35829	09/30/22 15:02	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35865	10/01/22 12:57	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		5			35998	10/03/22 16:43	CH	EET MID

Client Sample ID: BH2

Lab Sample ID: 880-19827-2
Matrix: Solid
Date Collected: 09/29/22 08:59
Date Received: 09/29/22 16:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 18:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36112	10/04/22 20:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35984	10/03/22 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	35829	09/30/22 15:02	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35865	10/01/22 14:01	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 16:58	CH	EET MID

Client Sample ID: BH3

Lab Sample ID: 880-19827-3
Matrix: Solid
Date Collected: 09/29/22 09:09
Date Received: 09/29/22 16:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 18:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36112	10/04/22 20:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35984	10/03/22 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35829	09/30/22 15:02	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35865	10/01/22 14:23	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		10			35998	10/03/22 17:03	CH	EET MID

Client Sample ID: BH4

Lab Sample ID: 880-19827-4
Matrix: Solid
Date Collected: 09/29/22 09:19
Date Received: 09/29/22 16:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 19:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36112	10/04/22 20:54	AJ	EET MID

Eurofins Midland

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Client Sample ID: BH4

Date Collected: 09/29/22 09:19
Date Received: 09/29/22 16:15

Lab Sample ID: 880-19827-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35984	10/03/22 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35829	09/30/22 15:02	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35865	10/01/22 14:44	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 17:07	CH	EET MID

Client Sample ID: BH5

Date Collected: 09/29/22 09:29
Date Received: 09/29/22 16:15

Lab Sample ID: 880-19827-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 19:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36112	10/04/22 20:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35984	10/03/22 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35829	09/30/22 15:02	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35865	10/01/22 15:06	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		5			35998	10/03/22 17:12	CH	EET MID

Client Sample ID: BH6

Date Collected: 09/29/22 09:39
Date Received: 09/29/22 16:15

Lab Sample ID: 880-19827-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 19:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36112	10/04/22 20:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35984	10/03/22 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35829	09/30/22 15:02	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35865	10/01/22 15:27	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 17:17	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19827-1
SDG: Lea Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-19827-1	BH1	Solid	09/29/22 08:49	09/29/22 16:15	4'
880-19827-2	BH2	Solid	09/29/22 08:59	09/29/22 16:15	4'
880-19827-3	BH3	Solid	09/29/22 09:09	09/29/22 16:15	4'
880-19827-4	BH4	Solid	09/29/22 09:19	09/29/22 16:15	4'
880-19827-5	BH5	Solid	09/29/22 09:29	09/29/22 16:15	4'
880-19827-6	BH6	Solid	09/29/22 09:39	09/29/22 16:15	4'

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad NM (575) 988-3199

Work Order No: 19827

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Project Manager:	GRANT HUCKABAY	Bill to: (if different)	
Company Name:	FASKEN OIL AND RANCH, LTD	Company Name:	
Address:	6101 HOLIDAY HILL RD.	Address:	
City, State ZIP:	MIDLAND TX 79707	City, State ZIP:	
Phone	432-687-1777 Email	granth@forl.com, addisong@forl.com	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other:

Project Name	DENTON #5 SWD	Turn Around	
Project Number:		☐ Routine ☒ Rush	
Project Location	LEA Co NM	Due Date	3 DAY
Sampler's Name:	Addison Gleeker	TAT starts the day received by the lab, if received by 4:30pm	
PO #			

SAMPLE RECEIPT				
Temp Blank.	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID	IR8	
Cooler Custody Seals.	Yes No N/A	Correction Factor:	-.2	
Sample Custody Seals.	Yes No N/A	Temperature Reading	4.2	
Total Containers:		Corrected Temperature:	4.4	

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2SO_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CL	TPH 8015M	BTEX 8021B
BH1	S	9/29/22	8:49	4'	G	1		X	X	X
BH2			8:59			1				
BH3			9:09			1				
BH4			9:19			1				
BH5			9:29			1				
BH6			9:39			1				

Sample Comments

880-19827 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9/29/22	2		
3		1610	4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-19827-1
SDG Number: Lea Co, NM

Login Number: 19827
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-19829-1
Laboratory Sample Delivery Group: Lea Co, NM
Client Project/Site: Denton #5 SWD

For:
Fasken Oil and Ranch
6101 Holiday HIll Road
Midland, Texas 79707

Attn: Grant Huckabay

JKramer

Authorized for release by:
10/4/2022 9:03:13 AM

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

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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Laboratory Job ID: 880-19829-1
SDG: Lea Co, NM

Table of Contents

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

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
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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

Job ID: 880-19829-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-19829-1

Receipt
The sample was received on 9/29/2022 4:10 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

Receipt Exceptions
The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: BG (880-19829-1).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-19347-A-7-G MSD). 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: BG (880-19829-1) and (880-19829-A-1-C MS). 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.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35803 and analytical batch 880-35998 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

Client Sample ID: BG

Date Collected: 09/29/22 11:00
Date Received: 09/29/22 16:10
Sample Depth: 0-6"

Lab Sample ID: 880-19829-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/22 08:57	09/30/22 15:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 08:57	09/30/22 15:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 08:57	09/30/22 15:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/22 08:57	09/30/22 15:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 08:57	09/30/22 15:32	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/22 08:57	09/30/22 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/30/22 08:57*	*09/30/22 15:32*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*09/30/22 08:57*	*09/30/22 15:32*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/30/22 17:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/03/22 11:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 10:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 10:33	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 10:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*69*	*S1-*	*70 - 130*	*09/30/22 08:55*	*09/30/22 10:33*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*09/30/22 08:55*	*09/30/22 10:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.1**		4.98		mg/Kg			10/03/22 17:56	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-19347-A-7-F MS	Matrix Spike	118	105
880-19347-A-7-G MSD	Matrix Spike Duplicate	133 S1+	102
880-19829-1	BG	102	73
LCS 880-35745/1-A	Lab Control Sample	120	102
LCSD 880-35745/2-A	Lab Control Sample Dup	128	95
MB 880-35745/5-A	Method Blank	104	87

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-19829-1	BG	69 S1-	68 S1-
880-19829-1 MS	BG	74	67 S1-
880-19829-1 MSD	BG	78	73
LCS 880-35755/2-A	Lab Control Sample	107	113
LCSD 880-35755/3-A	Lab Control Sample Dup	101	101
MB 880-35755/1-A	Method Blank	104	113

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35745/5-A
Matrix: Solid
Analysis Batch: 35744

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35745

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/22 07:58	09/30/22 10:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/22 07:58	09/30/22 10:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/22 07:58	09/30/22 10:23	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/30/22 07:58	09/30/22 10:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/22 07:58	09/30/22 10:23	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/30/22 07:58	09/30/22 10:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/30/22 07:58*	*09/30/22 10:23*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*09/30/22 07:58*	*09/30/22 10:23*	*1*

Lab Sample ID: LCS 880-35745/1-A
Matrix: Solid
Analysis Batch: 35744

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35745

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08346		mg/Kg		83	70 - 130		
Toluene			0.100	0.07921		mg/Kg		79	70 - 130		
Ethylbenzene			0.100	0.08765		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1803		mg/Kg		90	70 - 130		
o-Xylene			0.100	0.1018		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-35745/2-A
Matrix: Solid
Analysis Batch: 35744

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35745

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07504		mg/Kg		75	70 - 130	11	35
Toluene			0.100	0.08078		mg/Kg		81	70 - 130	2	35
Ethylbenzene			0.100	0.08938		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1897		mg/Kg		95	70 - 130	5	35
o-Xylene			0.100	0.1078		mg/Kg		108	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-19347-A-7-F MS
Matrix: Solid
Analysis Batch: 35744

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35745

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.0998	0.08818		mg/Kg		88	70 - 130		
Toluene	<0.00200	U	0.0998	0.08271		mg/Kg		83	70 - 130		

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

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

Lab Sample ID: 880-19347-A-7-F MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35744 — **Prep Batch: 35745**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0998	0.08821		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1806		mg/Kg		90	70 - 130
o-Xylene	<0.00200	U	0.0998	0.1019		mg/Kg		102	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 880-19347-A-7-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35744 — **Prep Batch: 35745**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.08390		mg/Kg		84	70 - 130	5	35
Toluene	<0.00200	U	0.0996	0.08269		mg/Kg		83	70 - 130	0	35
Ethylbenzene	<0.00200	U	0.0996	0.09357		mg/Kg		94	70 - 130	6	35
m-Xylene & p-Xylene	<0.00399	U	0.199	0.1984		mg/Kg		100	70 - 130	9	35
o-Xylene	<0.00200	U	0.0996	0.1133		mg/Kg		114	70 - 130	11	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MB 880-35755/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35738 — **Prep Batch: 35755**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/30/22 08:55*	*09/30/22 09:28*	*1*
o-Terphenyl	*113*		*70 - 130*	*09/30/22 08:55*	*09/30/22 09:28*	*1*

Lab Sample ID: LCS 880-35755/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35738 — **Prep Batch: 35755**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1023		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	995.8		mg/Kg		100	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

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

Lab Sample ID: LCS 880-35755/2-A
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35755

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-35755/3-A
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35755

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	939.2		mg/Kg		94	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	896.6		mg/Kg		90	70 - 130	10	20

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

Lab Sample ID: 880-19829-1 MS
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: BG
Prep Type: Total/NA
Prep Batch: 35755

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	727.0		mg/Kg		71	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	998	758.3		mg/Kg		74	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	74		70 - 130
o-Terphenyl	67	S1-	70 - 130

Lab Sample ID: 880-19829-1 MSD
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: BG
Prep Type: Total/NA
Prep Batch: 35755

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	999	731.1		mg/Kg		72	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	827.6		mg/Kg		81	70 - 130	9	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	73		70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35803/1-A
Matrix: Solid
Analysis Batch: 35998

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			10/03/22 15:59	1

Lab Sample ID: LCS 880-35803/2-A
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	243.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-35803/3-A
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	245.3		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-19828-A-1-C MS
Matrix: Solid
Analysis Batch: 35998

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	251	F1	252	456.8	F1	mg/Kg		82	90 - 110		

Lab Sample ID: 880-19828-A-1-D MSD
Matrix: Solid
Analysis Batch: 35998

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	251	F1	252	457.2	F1	mg/Kg		82	90 - 110	0	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

GC VOA

Analysis Batch: 35744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19829-1	BG	Total/NA	Solid	8021B	35745
MB 880-35745/5-A	Method Blank	Total/NA	Solid	8021B	35745
LCS 880-35745/1-A	Lab Control Sample	Total/NA	Solid	8021B	35745
LCSD 880-35745/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35745
880-19347-A-7-F MS	Matrix Spike	Total/NA	Solid	8021B	35745
880-19347-A-7-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35745

Prep Batch: 35745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19829-1	BG	Total/NA	Solid	5035	
MB 880-35745/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35745/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35745/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19347-A-7-F MS	Matrix Spike	Total/NA	Solid	5035	
880-19347-A-7-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 35841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19829-1	BG	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19829-1	BG	Total/NA	Solid	8015B NM	35755
MB 880-35755/1-A	Method Blank	Total/NA	Solid	8015B NM	35755
LCS 880-35755/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35755
LCSD 880-35755/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35755
880-19829-1 MS	BG	Total/NA	Solid	8015B NM	35755
880-19829-1 MSD	BG	Total/NA	Solid	8015B NM	35755

Prep Batch: 35755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19829-1	BG	Total/NA	Solid	8015NM Prep	
MB 880-35755/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35755/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35755/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19829-1 MS	BG	Total/NA	Solid	8015NM Prep	
880-19829-1 MSD	BG	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19829-1	BG	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19829-1	BG	Soluble	Solid	DI Leach	
MB 880-35803/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35803/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35803/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

HPLC/IC (Continued)

Leach Batch: 35803 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19828-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19828-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 35998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19829-1	BG	Soluble	Solid	300.0	35803
MB 880-35803/1-A	Method Blank	Soluble	Solid	300.0	35803
LCS 880-35803/2-A	Lab Control Sample	Soluble	Solid	300.0	35803
LCSD 880-35803/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35803
880-19828-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	35803
880-19828-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35803

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

Client Sample ID: BG
Date Collected: 09/29/22 11:00
Date Received: 09/29/22 16:10

Lab Sample ID: 880-19829-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35745	09/30/22 08:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35744	09/30/22 15:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35841	09/30/22 17:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			35974	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 10:33	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 17:56	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19829-1
SDG: Lea Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-19829-1	BG	Solid	09/29/22 11:00	09/29/22 16:10	0-6"

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: 19829

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Project Manager:	GRANT HUCKABAY	Bill to: (if different)	
Company Name:	FASKEN OIL AND RANCH LTD.	Company Name:	
Address	6101 HOLIDAY HILL Rd.	Address.	
City, State ZIP:	MIDLAND, TX 79707	City, State ZIP:	
Phone:	432-687-1777	Email	granth@forl.com, addi.song@forl.com

Work Order Comments

Program. UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other:

Project Name:	DENTON #5 SWD	Turn Around	
Project Number:		☐ Routine ☒ Rush	
Project Location:	LEA Co. NM	Due Date	3 DAY
Sampler's Name.	Addison Buelker	TAT starts the day received by the lab, if received by 4:30pm	
PO #			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	Yes No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR8
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-.20
Sample Custody Seals:	Yes No (N/A)	Temperature Reading	4.2
Total Containers.		Corrected Temperature:	4.4

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: Cl	TPH 8015M	BTEX 8021B
BG	S	9/29/22	11.00	0-6"	G	1		X	X	X

Preservative Codes

None NO | DI Water H_2O
Cool Cool | MeOH Me
HCL. HC | HNO_3 HN
H_2SO_4 H_2 | NaOH Na
H_3PO_4. HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Comments

880-19829 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Addison		9/29/22 1610	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-19829-1
SDG Number: Lea Co, NM

Login Number: 19829
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-19828-1
Laboratory Sample Delivery Group: Lea Co, NM
Client Project/Site: Denton #5 SWD

For:
Fasken Oil and Ranch
6101 Holiday HIll Road
Midland, Texas 79707

Attn: Grant Huckabay

JKramer

Authorized for release by:
10/4/2022 10:33:26 AM

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

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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Laboratory Job ID: 880-19828-1
SDG: Lea Co, NM

Table of Contents

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

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
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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

Job ID: 880-19828-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-19828-1

Receipt
The samples were received on 9/29/2022 4:10 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 4.4°C

Receipt Exceptions
The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: North (880-19828-1), South (880-19828-2) and West (880-19828-3).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: West (880-19828-3). Evidence of matrix interferences is not obvious.

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: (880-19829-A-1-B) and (880-19829-A-1-C MS). 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.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35803 and analytical batch 880-35998 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

Client Sample ID: North

Lab Sample ID: 880-19828-1
Matrix: Solid
Date Collected: 09/29/22 10:15
Date Received: 09/29/22 16:10
Sample Depth: 0-6"

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		10/03/22 13:34	10/04/22 00:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/03/22 13:34	10/04/22 00:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/03/22 13:34	10/04/22 00:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/03/22 13:34	10/04/22 00:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/03/22 13:34	10/04/22 00:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/03/22 13:34	10/04/22 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*10/03/22 13:34*	*10/04/22 00:46*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*10/03/22 13:34*	*10/04/22 00:46*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/04/22 08:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/03/22 11:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 17:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 17:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*09/30/22 08:55*	*09/30/22 17:22*	*1*
o-Terphenyl	*92*		*70 - 130*	*09/30/22 08:55*	*09/30/22 17:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**251**	**F1**	5.03		mg/Kg			10/03/22 17:22	1

Client Sample ID: South

Lab Sample ID: 880-19828-2
Matrix: Solid
Date Collected: 09/29/22 10:30
Date Received: 09/29/22 16:10
Sample Depth: 0-6"

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		10/03/22 13:34	10/04/22 02:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/03/22 13:34	10/04/22 02:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/03/22 13:34	10/04/22 02:50	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/03/22 13:34	10/04/22 02:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/03/22 13:34	10/04/22 02:50	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/03/22 13:34	10/04/22 02:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*10/03/22 13:34*	*10/04/22 02:50*	*1*

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

Client Sample ID: South

Lab Sample ID: 880-19828-2
Matrix: Solid
Date Collected: 09/29/22 10:30
Date Received: 09/29/22 16:10
Sample Depth: 0-6"

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*10/03/22 13:34*	*10/04/22 02:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			10/04/22 08:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/03/22 11:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 17:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 17:44	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*101*		*70 - 130*	*09/30/22 08:55*	*09/30/22 17:44*	*1*
o-Terphenyl	*104*		*70 - 130*	*09/30/22 08:55*	*09/30/22 17:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**88.5**		4.97		mg/Kg			10/03/22 17:37	1

Client Sample ID: West

Lab Sample ID: 880-19828-3
Matrix: Solid
Date Collected: 09/29/22 10:45
Date Received: 09/29/22 16:10
Sample Depth: 0-6"

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		10/03/22 13:34	10/04/22 03:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/03/22 13:34	10/04/22 03:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/03/22 13:34	10/04/22 03:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/03/22 13:34	10/04/22 03:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/03/22 13:34	10/04/22 03:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/03/22 13:34	10/04/22 03:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*	*10/03/22 13:34*	*10/04/22 03:11*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*10/03/22 13:34*	*10/04/22 03:11*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/04/22 08:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/03/22 11:45	1

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

Client Sample ID: West

Date Collected: 09/29/22 10:45
Date Received: 09/29/22 16:10
Sample Depth: 0-6"

Lab Sample ID: 880-19828-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 18:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 18:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*09/30/22 08:55*	*09/30/22 18:05*	*1*
o-Terphenyl	*84*		*70 - 130*	*09/30/22 08:55*	*09/30/22 18:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.2**		4.97		mg/Kg			10/03/22 17:42	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (70-130)	DFBZ1 (70-130)
880-19828-1	North	119	94
880-19828-2	South	120	101
880-19828-3	West	137 S1+	109
890-3026-A-1-D MS	Matrix Spike	93	96
890-3026-A-1-E MSD	Matrix Spike Duplicate	95	97
LCS 880-35997/1-A	Lab Control Sample	88	96
LCSD 880-35997/2-A	Lab Control Sample Dup	89	97
MB 880-35997/5-A	Method Blank	94	85

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 1CO1 (70-130)	OTPH1 (70-130)
880-19828-1	North	89	92
880-19828-2	South	101	104
880-19828-3	West	82	84
880-19829-A-1-C MS	Matrix Spike	74	67 S1-
880-19829-A-1-D MSD	Matrix Spike Duplicate	78	73
LCS 880-35755/2-A	Lab Control Sample	107	113
LCSD 880-35755/3-A	Lab Control Sample Dup	101	101
MB 880-35755/1-A	Method Blank	104	113

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35997/5-A
Matrix: Solid
Analysis Batch: 35920

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/03/22 13:34	10/03/22 22:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/03/22 13:34	10/03/22 22:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/03/22 13:34	10/03/22 22:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/03/22 13:34	10/03/22 22:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/03/22 13:34	10/03/22 22:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/03/22 13:34	10/03/22 22:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*10/03/22 13:34*	*10/03/22 22:00*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*10/03/22 13:34*	*10/03/22 22:00*	*1*

Lab Sample ID: LCS 880-35997/1-A
Matrix: Solid
Analysis Batch: 35920

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35997

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1071		mg/Kg		107	70 - 130
Toluene	0.100	0.1071		mg/Kg		107	70 - 130
Ethylbenzene	0.100	0.09944		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.2049		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1039		mg/Kg		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-35997/2-A
Matrix: Solid
Analysis Batch: 35920

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35997

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1072		mg/Kg		107	70 - 130	0	35
Toluene	0.100	0.1073		mg/Kg		107	70 - 130	0	35
Ethylbenzene	0.100	0.09953		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2078		mg/Kg		104	70 - 130	1	35
o-Xylene	0.100	0.1051		mg/Kg		105	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-3026-A-1-D MS
Matrix: Solid
Analysis Batch: 35920

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35997

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.0998	0.09738		mg/Kg		98	70 - 130
Toluene	<0.00201	U	0.0998	0.1003		mg/Kg		100	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

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

Lab Sample ID: 890-3026-A-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35920 — **Prep Batch: 35997**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.0998	0.09562		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1967		mg/Kg		99	70 - 130
o-Xylene	<0.00201	U	0.0998	0.1000		mg/Kg		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 890-3026-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35920 — **Prep Batch: 35997**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.100	0.09537		mg/Kg		95	70 - 130	2	35
Toluene	<0.00201	U	0.100	0.09776		mg/Kg		98	70 - 130	3	35
Ethylbenzene	<0.00201	U	0.100	0.09210		mg/Kg		92	70 - 130	4	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1922		mg/Kg		96	70 - 130	2	35
o-Xylene	<0.00201	U	0.100	0.09755		mg/Kg		97	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 880-35755/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35738 — **Prep Batch: 35755**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/30/22 08:55*	*09/30/22 09:28*	*1*
o-Terphenyl	*113*		*70 - 130*	*09/30/22 08:55*	*09/30/22 09:28*	*1*

Lab Sample ID: LCS 880-35755/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35738 — **Prep Batch: 35755**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1023		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	995.8		mg/Kg		100	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

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

Lab Sample ID: LCS 880-35755/2-A
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35755

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-35755/3-A
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35755

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	939.2		mg/Kg		94	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	896.6		mg/Kg		90	70 - 130	10	20

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

Lab Sample ID: 880-19829-A-1-C MS
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35755

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	727.0		mg/Kg		71	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	998	758.3		mg/Kg		74	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	74		70 - 130
o-Terphenyl	67	S1-	70 - 130

Lab Sample ID: 880-19829-A-1-D MSD
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 35755

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	999	731.1		mg/Kg		72	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	827.6		mg/Kg		81	70 - 130	9	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	73		70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35803/1-A
Matrix: Solid
Analysis Batch: 35998

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			10/03/22 15:59	1

Lab Sample ID: LCS 880-35803/2-A
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	243.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-35803/3-A
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	245.3		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-19828-1 MS
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: North
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	251	F1	252	456.8	F1	mg/Kg		82	90 - 110		

Lab Sample ID: 880-19828-1 MSD
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: North
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	251	F1	252	457.2	F1	mg/Kg		82	90 - 110	0	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

GC VOA

Analysis Batch: 35920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19828-1	North	Total/NA	Solid	8021B	35997
880-19828-2	South	Total/NA	Solid	8021B	35997
880-19828-3	West	Total/NA	Solid	8021B	35997
MB 880-35997/5-A	Method Blank	Total/NA	Solid	8021B	35997
LCS 880-35997/1-A	Lab Control Sample	Total/NA	Solid	8021B	35997
LCSD 880-35997/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35997
890-3026-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	35997
890-3026-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35997

Prep Batch: 35997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19828-1	North	Total/NA	Solid	5035	
880-19828-2	South	Total/NA	Solid	5035	
880-19828-3	West	Total/NA	Solid	5035	
MB 880-35997/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35997/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35997/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3026-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-3026-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19828-1	North	Total/NA	Solid	Total BTEX	
880-19828-2	South	Total/NA	Solid	Total BTEX	
880-19828-3	West	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19828-1	North	Total/NA	Solid	8015B NM	35755
880-19828-2	South	Total/NA	Solid	8015B NM	35755
880-19828-3	West	Total/NA	Solid	8015B NM	35755
MB 880-35755/1-A	Method Blank	Total/NA	Solid	8015B NM	35755
LCS 880-35755/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35755
LCSD 880-35755/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35755
880-19829-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35755
880-19829-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35755

Prep Batch: 35755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19828-1	North	Total/NA	Solid	8015NM Prep	
880-19828-2	South	Total/NA	Solid	8015NM Prep	
880-19828-3	West	Total/NA	Solid	8015NM Prep	
MB 880-35755/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35755/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35755/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19829-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19829-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

GC Semi VOA

Analysis Batch: 35977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19828-1	North	Total/NA	Solid	8015 NM	
880-19828-2	South	Total/NA	Solid	8015 NM	
880-19828-3	West	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19828-1	North	Soluble	Solid	DI Leach	
880-19828-2	South	Soluble	Solid	DI Leach	
880-19828-3	West	Soluble	Solid	DI Leach	
MB 880-35803/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35803/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35803/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19828-1 MS	North	Soluble	Solid	DI Leach	
880-19828-1 MSD	North	Soluble	Solid	DI Leach	

Analysis Batch: 35998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19828-1	North	Soluble	Solid	300.0	35803
880-19828-2	South	Soluble	Solid	300.0	35803
880-19828-3	West	Soluble	Solid	300.0	35803
MB 880-35803/1-A	Method Blank	Soluble	Solid	300.0	35803
LCS 880-35803/2-A	Lab Control Sample	Soluble	Solid	300.0	35803
LCSD 880-35803/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35803
880-19828-1 MS	North	Soluble	Solid	300.0	35803
880-19828-1 MSD	North	Soluble	Solid	300.0	35803

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

Client Sample ID: North
Date Collected: 09/29/22 10:15
Date Received: 09/29/22 16:10

Lab Sample ID: 880-19828-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35997	10/03/22 13:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35920	10/04/22 00:46	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36031	10/04/22 08:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35977	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 17:22	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 17:22	CH	EET MID

Client Sample ID: South
Date Collected: 09/29/22 10:30
Date Received: 09/29/22 16:10

Lab Sample ID: 880-19828-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	35997	10/03/22 13:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35920	10/04/22 02:50	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36031	10/04/22 08:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35977	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 17:44	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 17:37	CH	EET MID

Client Sample ID: West
Date Collected: 09/29/22 10:45
Date Received: 09/29/22 16:10

Lab Sample ID: 880-19828-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35997	10/03/22 13:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35920	10/04/22 03:11	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36031	10/04/22 08:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35977	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 18:05	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 17:42	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19828-1
SDG: Lea Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-19828-1	North	Solid	09/29/22 10:15	09/29/22 16:10	0-6"
880-19828-2	South	Solid	09/29/22 10:30	09/29/22 16:10	0-6"
880-19828-3	West	Solid	09/29/22 10:45	09/29/22 16:10	0-6"

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Chain of Custody

Houston, TX (281) 240-4200, Dallas TX (214) 902-0300
Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad, NM (575) 988-3199

Work Order No: 19828

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Project Manager:	GRANT HUCKABAY	Bill to: (if different)	
Company Name	FASKEN OIL AND RANCH, LTD	Company Name:	
Address:	6101 HOLIDAY HILL Rd.	Address:	
City, State ZIP:	MIDLAND, TX 79707	City, State ZIP:	
Phone:	432-687-1777 Email	grantha@forl.com, addisong@forl.com	

Work Order Comments

Program. UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other:

Project Name:	DEMON #5 SWD	Turn Around	
Project Number:		☐ Routine ☒ Rush	
Project Location	LEA Co NM	Due Date.	3 DAY
Sampler's Name:	Addison Gwelker	TAT starts the day received by the lab, if received by 4:30pm	
PO #			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR8
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-.20
Sample Custody Seals:	Yes No (N/A)	Temperature Reading	4.2
Total Containers:		Corrected Temperature:	4.4

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CL	TPH 8015M	BTEX 8021B
NORTH	S	9/29/22	10:15	0-6"	G	1		X	X	X
SOUTH			10:30	0-6"	G	1		X	X	X
WEST			10:45	0-6"	G	1		X	X	X

ANALYSIS REQUEST

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2SO_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Comments

880-19828 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9/29/22 1610	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-19828-1
SDG Number: Lea Co, NM

Login Number: 19828
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-19830-1
Laboratory Sample Delivery Group: Lea Co, NM
Client Project/Site: Denton #5 SWD

For:
Fasken Oil and Ranch
6101 Holiday HIll Road
Midland, Texas 79707

Attn: Grant Huckabay

JKramer

Authorized for release by:
10/4/2022 10:34:23 AM

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

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Laboratory Job ID: 880-19830-1
SDG: Lea Co, NM

Table of Contents

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
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
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: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

Job ID: 880-19830-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-19830-1

Receipt
The sample was received on 9/29/2022 4:10 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

Receipt Exceptions
The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: East (880-19830-1).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-19829-A-1-B) and (880-19829-A-1-C MS). 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.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35803 and analytical batch 880-35998 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

Client Sample ID: East

Date Collected: 09/29/22 10:00
Date Received: 09/29/22 16:10
Sample Depth: 0-6"

Lab Sample ID: 880-19830-1

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		10/03/22 13:34	10/04/22 00:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/03/22 13:34	10/04/22 00:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/03/22 13:34	10/04/22 00:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/03/22 13:34	10/04/22 00:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/03/22 13:34	10/04/22 00:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/03/22 13:34	10/04/22 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*10/03/22 13:34*	*10/04/22 00:25*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/03/22 13:34*	*10/04/22 00:25*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/04/22 08:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/03/22 11:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 18:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 18:27	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/22 08:55	09/30/22 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*09/30/22 08:55*	*09/30/22 18:27*	*1*
o-Terphenyl	*87*		*70 - 130*	*09/30/22 08:55*	*09/30/22 18:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**437**		5.01		mg/Kg			10/03/22 18:01	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-19830-1	East	114	100
890-3026-A-1-D MS	Matrix Spike	93	96
890-3026-A-1-E MSD	Matrix Spike Duplicate	95	97
LCS 880-35997/1-A	Lab Control Sample	88	96
LCSD 880-35997/2-A	Lab Control Sample Dup	89	97
MB 880-35997/5-A	Method Blank	94	85

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-19829-A-1-C MS	Matrix Spike	74	67 S1-
880-19829-A-1-D MSD	Matrix Spike Duplicate	78	73
880-19830-1	East	88	87
LCS 880-35755/2-A	Lab Control Sample	107	113
LCSD 880-35755/3-A	Lab Control Sample Dup	101	101
MB 880-35755/1-A	Method Blank	104	113

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35997/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35920 — **Prep Batch: 35997**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/03/22 13:34	10/03/22 22:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/03/22 13:34	10/03/22 22:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/03/22 13:34	10/03/22 22:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/03/22 13:34	10/03/22 22:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/03/22 13:34	10/03/22 22:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/03/22 13:34	10/03/22 22:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*10/03/22 13:34*	*10/03/22 22:00*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*10/03/22 13:34*	*10/03/22 22:00*	*1*

Lab Sample ID: LCS 880-35997/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35920 — **Prep Batch: 35997**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1071		mg/Kg		107	70 - 130		
Toluene			0.100	0.1071		mg/Kg		107	70 - 130		
Ethylbenzene			0.100	0.09944		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene			0.200	0.2049		mg/Kg		102	70 - 130		
o-Xylene			0.100	0.1039		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-35997/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35920 — **Prep Batch: 35997**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1072		mg/Kg		107	70 - 130	0	35
Toluene			0.100	0.1073		mg/Kg		107	70 - 130	0	35
Ethylbenzene			0.100	0.09953		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.2078		mg/Kg		104	70 - 130	1	35
o-Xylene			0.100	0.1051		mg/Kg		105	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-3026-A-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35920 — **Prep Batch: 35997**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.0998	0.09738		mg/Kg		98	70 - 130		
Toluene	<0.00201	U	0.0998	0.1003		mg/Kg		100	70 - 130		

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

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

Lab Sample ID: 890-3026-A-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35920 — **Prep Batch: 35997**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.0998	0.09562		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1967		mg/Kg		99	70 - 130
o-Xylene	<0.00201	U	0.0998	0.1000		mg/Kg		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 890-3026-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35920 — **Prep Batch: 35997**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.100	0.09537		mg/Kg		95	70 - 130	2	35
Toluene	<0.00201	U	0.100	0.09776		mg/Kg		98	70 - 130	3	35
Ethylbenzene	<0.00201	U	0.100	0.09210		mg/Kg		92	70 - 130	4	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1922		mg/Kg		96	70 - 130	2	35
o-Xylene	<0.00201	U	0.100	0.09755		mg/Kg		97	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 880-35755/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35738 — **Prep Batch: 35755**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/22 08:55	09/30/22 09:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/30/22 08:55*	*09/30/22 09:28*	*1*
o-Terphenyl	*113*		*70 - 130*	*09/30/22 08:55*	*09/30/22 09:28*	*1*

Lab Sample ID: LCS 880-35755/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35738 — **Prep Batch: 35755**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1023		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	995.8		mg/Kg		100	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

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

Lab Sample ID: LCS 880-35755/2-A
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35755

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-35755/3-A
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35755

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	939.2		mg/Kg		94	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	896.6		mg/Kg		90	70 - 130	10	20

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

Lab Sample ID: 880-19829-A-1-C MS
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 35755

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	727.0		mg/Kg		71	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	998	758.3		mg/Kg		74	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	74		70 - 130
o-Terphenyl	67	S1-	70 - 130

Lab Sample ID: 880-19829-A-1-D MSD
Matrix: Solid
Analysis Batch: 35738

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 35755

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	999	731.1		mg/Kg		72	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	827.6		mg/Kg		81	70 - 130	9	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	73		70 - 130

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35803/1-A
Matrix: Solid
Analysis Batch: 35998

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			10/03/22 15:59	1

Lab Sample ID: LCS 880-35803/2-A
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	243.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-35803/3-A
Matrix: Solid
Analysis Batch: 35998

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	245.3		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-19828-A-1-C MS
Matrix: Solid
Analysis Batch: 35998

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	251	F1	252	456.8	F1	mg/Kg		82	90 - 110		

Lab Sample ID: 880-19828-A-1-D MSD
Matrix: Solid
Analysis Batch: 35998

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	251	F1	252	457.2	F1	mg/Kg		82	90 - 110	0	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

GC VOA

Analysis Batch: 35920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19830-1	East	Total/NA	Solid	8021B	35997
MB 880-35997/5-A	Method Blank	Total/NA	Solid	8021B	35997
LCS 880-35997/1-A	Lab Control Sample	Total/NA	Solid	8021B	35997
LCSD 880-35997/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35997
890-3026-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	35997
890-3026-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35997

Prep Batch: 35997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19830-1	East	Total/NA	Solid	5035	
MB 880-35997/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35997/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35997/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3026-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-3026-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19830-1	East	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19830-1	East	Total/NA	Solid	8015B NM	35755
MB 880-35755/1-A	Method Blank	Total/NA	Solid	8015B NM	35755
LCS 880-35755/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35755
LCSD 880-35755/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35755
880-19829-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35755
880-19829-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35755

Prep Batch: 35755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19830-1	East	Total/NA	Solid	8015NM Prep	
MB 880-35755/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35755/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35755/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19829-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19829-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19830-1	East	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19830-1	East	Soluble	Solid	DI Leach	
MB 880-35803/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35803/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35803/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

HPLC/IC (Continued)

Leach Batch: 35803 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19828-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19828-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 35998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19830-1	East	Soluble	Solid	300.0	35803
MB 880-35803/1-A	Method Blank	Soluble	Solid	300.0	35803
LCS 880-35803/2-A	Lab Control Sample	Soluble	Solid	300.0	35803
LCSD 880-35803/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35803
880-19828-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	35803
880-19828-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35803

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

Client Sample ID: East

Date Collected: 09/29/22 10:00
Date Received: 09/29/22 16:10

Lab Sample ID: 880-19830-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35997	10/03/22 13:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35920	10/04/22 00:25	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36030	10/04/22 08:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35978	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35755	09/30/22 08:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 18:27	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	35803	09/30/22 10:58	SMC	EET MID
Soluble	Analysis	300.0		1			35998	10/03/22 18:01	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: Denton #5 SWD

Job ID: 880-19830-1
SDG: Lea Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-19830-1	East	Solid	09/29/22 10:00	09/29/22 16:10	0-6"

eurofins | Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No: 19830

www.xenco.com Page 1 of 1

Project Manager:	GRANT HUCKABAY	Bill to: (if different)	
Company Name:	FASKEN OIL AND RANCH, LTD.	Company Name:	
Address:	6101 HOLIDAY HILL RD.	Address:	
City, State ZIP:	MIDLAND, TX 79707	City, State ZIP:	
Phone	432-687-1777	Email:	granth@forl.com; addisong@forl.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other:

Project Name:	DENTON #5 SWD	Turn Around	
Project Number:		☐ Routine ☒ Rush	
Project Location	LEA Co. NM	Due Date:	3 DAY
Sampler's Name:	ADDISON GUEULER	TAT starts the day received by the lab, if received by 4.30pm	
PO #			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice	Yes No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR8
Cooler Custody Seals:	Yes No N/A	Correction Factor:	.20
Sample Custody Seals:	Yes No (N/A)	Temperature Reading	4.2
Total Containers:		Corrected Temperature:	4.4

Preservative Codes

None NO | DI Water H_2O
Cool Cool | MeOH Me
HCL HC | HNO_3 HN
H_2SO_4 H_2 | NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: Cl	TPH 8015M	BTEX 8021B	Sample Comments
EAST	S	9/21/22	10:00	0-6"	G	1		X	X	X	

880-19830 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			2		
3		9/29/22 1610	4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-19830-1
SDG Number: Lea Co, NM

Login Number: 19830
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 192824

CONDITIONS

Operator: FASKEN OIL & RANCH LTD 6101 Holiday Hill Rd Midland, TX 79707	OGRID: 151416
	Action Number: 192824
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Confirmation samples must be representatvie of no more than 400 square feet.	3/7/2023
bhall	Submit a complete report though the OCD Permitting website by 6/9/2023.	3/7/2023